



**Groundwater Sample Results,
Combined Level 2 and Level 4 Laboratory Report,
Electronic Data Deliverable, Data Validation Report,
and the Sample Location Report, SDG 1701851**

*Naval Weapons Industrial Reserve Plant Calverton
Riverhead, New York*

August 2019



January 18, 2018

Vista Work Order No. 1701851

Ms. Kristi Francisco
Tetra Tech
5700 Lake Wright Drive, Suite 309
Norfolk, VA 23502

Dear Ms. Francisco,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on December 05, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'NWIRP Calverton PFAS Investigation 112G08005-WE05'. The SDG Number is WE05.

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

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

Sincerely,

A handwritten signature in black ink that reads "Martha Maier". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

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.

SDG Number WE05

Vista Work Order No. 1701851

Case Narrative

Sample Condition on Receipt:

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

Analytical Notes:

Modified EPA Method 537

Samples "FT-PZ-462S-20171202" and "FT-PZ-453S-20171202" contained particulate and were centrifuged prior to extraction.

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

Holding Times

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

Quality Control

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

A Method Blank and Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 of the LOQ concentrations. The LCS/LCSD recoveries were within the acceptance criteria.

The extracts of all samples except "FT-PZ-462I-20171202" and the LCSD were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The results were similar in the second injection. The results from the re-injections have been reported. The raw data from the original analyses are included in the report.

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

In addition, the laboratory QC officer must read and sign a copy of the Quality Assurance Review Form displayed on the next page of this Attachment. Electronic deliverables are not considered to be complete without the accompanying Quality Assurance Review Form.

I John S. Anna, as the designated Quality Assurance Officer, hereby attest that all electronic deliverables have been thoroughly reviewed and are in agreement with the associated hardcopy data. The enclosed electronic files have been reviewed for accuracy (including significant figures), completeness and format. The laboratory will be responsible for any labor time necessary to correct enclosed electronic deliverables that have been found to be in error. I can be reached at (916) 678 1520 If there are any questions or problems with the enclosed electronic deliverables.

Signature: John S. Anna Title: QA Manager Date: 01/18/2018

Revision 9
ISG
08/18/16

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701851-01	FT-PZ-462S-20171202	02-Dec-17 08:50	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701851-02	FT-PZ-462I-20171202	02-Dec-17 08:52	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701851-03	FT-PZ-455S-20171202	02-Dec-17 10:36	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701851-04	FT-PZ-455I-20171202	02-Dec-17 10:45	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701851-05	FT-PZ-453S-20171202	02-Dec-17 12:26	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701851-06	FT-PZ-453S-FRB-20171202	02-Dec-17 12:26	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701851-07	FT-PZ-456I-FRB-20171204	04-Dec-17 08:50	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701851-08	FT-PZ-456I-20171204	04-Dec-17 08:50	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701851-09	FT-PZ-456S-20171204	04-Dec-17 08:55	05-Dec-17 11:15	HDPE Bottle, 250 mL HDPE Bottle, 250 mL

ANALYTICAL RESULTS

Sample ID: Method Blank					Modified EPA Method 537					
Client Data					Laboratory Data					
Name:	Tetra Tech	Matrix:	Aqueous		Lab Sample:	B7L0101-BLK1	Column:	BEH C18		
Project:	NWIRP Calverton PFAS Investigation 112G08005-W									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.895	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFHxA	ND	1.09	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFHpA	ND	0.296	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFHxS	ND	0.474	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFOA	ND	0.326	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFOS	ND	0.404	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFNA	ND	0.405	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFDA	ND	0.745	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
MeFOSAA	ND	0.825	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFUnA	ND	0.525	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
EtFOSAA	ND	0.685	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFDaA	ND	0.396	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFTTrDA	ND	0.247	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
PFTeDA	ND	0.378	2.50	4.00		B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	134	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C2-PFHxA	IS	134	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C4-PFHpA	IS	106	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
18O2-PFHxS	IS	112	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C2-PFOA	IS	98.3	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C8-PFOS	IS	93.7	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C5-PFNA	IS	93.3	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C2-PFDA	IS	92.6	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
d3-MeFOSAA	IS	56.6	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C2-PFUnA	IS	71.4	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
d5-EtFOSAA	IS	57.8	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C2-PFDaA	IS	69.9	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1
13C2-PFTeDA	IS	96.9	50 - 150			B7L0101	14-Dec-17	0.250 L	14-Jan-18 18:02	1

DL - Detection Limit

LOD - Limit of Detection
LOQ - Limit of quantitation

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

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

Sample ID: LCSD										Modified EPA Method 537						
Name: Tetra Tech				Lab Sample: B7L0101-BS1/B7L0101-BSD1				Date Extracted: 14-Dec-17								
Project: NWIRP Calverton PFAS Investigation 112G08005-				QC Batch: B7L0101				Column: BEH C18								
Matrix: Aqueous				Samp Size: 0.250/0.250 L												
Analyte	LCS (ng/L)	LCS Spike Amt	LCS % Rec	LCS Quals	LCSD (ng/L)	LCSD Spike Amt	LCSD % Rec	RPD	LCSD Quals	%Rec Limits	RPD Limits	LCS Analyzed	LCS Dil	LCSD Analyzed	LCSD Dil	
PFBS	45.2	40.0	113		37.3	40.0	93.2	19.3		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFHxA	37.4	40.0	93.5		33.9	40.0	84.8	9.83		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFHpA	40.2	40.0	100		33.6	40.0	84.0	17.8		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFHxS	46.4	40.0	116		39.3	40.0	98.3	16.4		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFOA	33.0	40.0	82.5		36.4	40.0	91.1	9.93		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFOS	36.6	40.0	91.6		40.0	40.0	99.9	8.71		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFNA	34.6	40.0	86.5		38.2	40.0	95.5	9.94		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFDA	50.9	40.0	127		34.1	40.0	85.4	39.4		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
MeFOSAA	36.4	40.0	91.0		28.1	40.0	70.4	25.6		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFUnA	40.7	40.0	102		38.6	40.0	96.6	5.10		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
EtFOSAA	44.2	40.0	111		29.8	40.0	74.6	38.9		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFDaA	36.5	40.0	91.2		44.9	40.0	112	20.8		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFTTrDA	32.7	40.0	81.7		40.8	40.0	102	22.0		60-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
PFTeDA	37.4	40.0	93.4		36.1	40.0	90.2	3.46		70-130		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
Labeled Standards	Type		LCS % Rec	LCS Quals			LCSD % Rec		LCSD Quals	Limits		LCS Analyzed	LCS Dil	LCSD Analyzed	LCSD Dil	
13C3-PFBS	IS		112				123			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C2-PFHxA	IS		94.2				120			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C4-PFHpA	IS		105				115			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
18O2-PFHxS	IS		104				118			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C2-PFOA	IS		103				112			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C8-PFOS	IS		107				123			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C5-PFNA	IS		93.6				104			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C2-PFDA	IS		81.2				88.3			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
d3-MeFOSAA	IS		93.0				80.1			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C2-PFUnA	IS		74.2				70.2			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
d5-EtFOSAA	IS		71.1				81.7			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C2-PFDaA	IS		79.3				70.5			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	
13C2-PFTeDA	IS		92.4				77.3			50-150		14-Jan-18 17:39	1	12-Jan-18 04:12	1	

Sample ID: FT-PZ-462S-20171202

Modified EPA Method 537

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701851-01	Column:	BEH C18	
Project:	NWIRP Calverton PFAS Investigation 112G08005-W			Date Collected:	02-Dec-17 08:50	Date Received:	05-Dec-17 11:15		
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	1.00	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFHxA	ND	1.22	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFHpA	ND	0.331	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFHxS	ND	0.530	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFOA	1.55	0.364	2.80	4.48	J	B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFOS	ND	0.452	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFNA	0.733	0.453	2.80	4.48	J	B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFDA	ND	0.834	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
MeFOSAA	ND	0.923	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFUnA	ND	0.588	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
EtFOSAA	ND	0.767	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFDaA	ND	0.443	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFTDA	ND	0.276	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
PFTeDA	ND	0.423	2.80	4.48		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	99.3	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C2-PFHxA	IS	101	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C4-PFHpA	IS	96.6	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
18O2-PFHxS	IS	113	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C2-PFOA	IS	105	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C8-PFOS	IS	97.1	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C5-PFNA	IS	89.3	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C2-PFDA	IS	67.9	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
d3-MeFOSAA	IS	100	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C2-PFUnA	IS	94.0	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
d5-EtFOSAA	IS	77.0	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C2-PFDaA	IS	70.1	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1
13C2-PFTeDA	IS	62.6	50 - 150		B7L0101	14-Dec-17	0.223 L	14-Jan-18 18:36	1

DL - Detection Limit

LOD - Limit of Detection
LOQ - Limit of quantitation

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

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

Sample ID: FT-PZ-462I-20171202

Modified EPA Method 537

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701851-02	Column:	BEH C18	
Project:	NWIRP Calverton PFAS Investigation 112G08005-W	Date Collected:	02-Dec-17 08:52		Date Received:	05-Dec-17 11:15			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.840	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFHxA	ND	1.08	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFHpA	ND	0.24J	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFHxS	ND	0.J71	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFOA	ND	0.32J	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFOS	ND	0.J01	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFNA	ND	0.J03	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFDA	ND	0.7J1	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
MeFOSAA	ND	0.821	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PF9 nA	ND	0.522	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
EtFOSAA	ND	0.181	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFDaA	ND	0.34J	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFTDA	ND	0.2JU	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
PFTeDA	ND	0.37U	2.J4	3.48		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	118	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13C2-PFHxA	IS	115	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13CJ-PFHpA	IS	118	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
18O2-PFHxS	IS	113	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13C2-PFOA	IS	108	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13C8-PFOS	IS	122	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13C5-PFNA	IS	47.5	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13C2-PFDA	IS	45.5	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
d3-MeFOSAA	IS	7J.4	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13C2-PF9 nA	IS	81.2	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
d5-EtFOSAA	IS	81.0	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13C2-PFDaA	IS	71.3	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1
13C2-PFTeDA	IS	73.0	50 - 150		B7L0101	1J-Dec-17	0.251 L	12-6an-18 05:14	1

DL - Detection Limit

LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-9 CL- Lower control limit - upper control limit
Results reported to the DL.

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

Sample ID: FT-PZ-455S-20171202

Modified EPA Method 537

Client Data					Laboratory Data				
Name:	hetra hecu	Matrix:	GroBnd. ater		Lab Sample:	1701851-OT	ColBnn:	HEw C18	
Project:	NWIRP Calverton PFAS Investigation 112G08005-W	Date Collected:	02-Dec-17 10:T4		Date Received:	05-Dec-17 11:15			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFHS	ND	0.838	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFwxA	ND	1.01	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFwpA	ND	0.280	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFwxS	ND	0.336	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PF9 A	0.135	0.108	2J17	TJ76	O	H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PF9 S	ND	0.182	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFNA	ND	0.183	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFDA	ND	0.704	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
MeF9 SAA	ND	0.782	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFUnA	ND	0.368	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
EtF9 SAA	ND	0.436	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFDaA	ND	0.175	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFhrDA	ND	0.213	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
PFheDA	ND	0.158	2J17	TJ76		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
1TC1-PFHS	IS	113	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC2-PFwxA	IS	101	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC3-PFwpA	IS	111	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
189 2-PFwxS	IS	101	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC2-PF9 A	IS	103	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC8-PF9 S	IS	123	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC5-PFNA	IS	88.0	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC2-PFDA	IS	81.0	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
dT-MeF9 SAA	IS	61.8	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC2-PFUnA	IS	64.1	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
d5-EtF9 SAA	IS	61.8	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC2-PFDaA	IS	81.1	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1
1TC2-PFheDA	IS	78.4	50 - 150		H7L0101	13-Dec-17	0.243 L	14-Jan-18 02:20	1

DL - Detection Limit

L9 D - Limit of Detection
L9 Q - Limit of quantitation

LCL-UCL- Lo. er control limit - Upper control limit
Results reported to the DLJ

When reported, PFwxS, PF9 A and PF9 S include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: FT-PZ-455I-20171202

Modified EPA Method 537

Client Data					Laboratory Data				
Name:	hetra hecu	Matrix:	GroBnd. ater		Lab Sample:	1701851-0T	ColBnn:	HEw C18	
Project:	NWIRP Calverton PFAS Investigation 112G08005-W	Date Collected:	02-Dec-17 10:T5		Date Received:	05-Dec-17 11:15			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFHS	ND	047J	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFwxA	ND	1406	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFwpA	ND	04288	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFwxS	ND	04462	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PF9 A	ND	0417	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PF9 S	ND	043J	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFNA	ND	0435	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFDA	ND	0426	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
MeF9 SAA	ND	0405	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFUnA	ND	04512	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
EtF9 SAA	ND	04668	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFDaA	ND	0486	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFhrDA	ND	042T1	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
PFheDA	ND	0468	24TT	J40		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
1JCJ-PFHS	IS	1T1	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JC2-PFwxA	IS	11J	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JCT-PFwpA	IS	108	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
189 2-PFwxS	IS	117	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JC2-PF9 A	IS	116	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JC8-PF9 S	IS	102	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JC5-PFNA	IS	334T	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JC2-PFDA	IS	100	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
dJ-MeF9 SAA	IS	884	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JC2-PFUnA	IS	7647	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
d5-EtF9 SAA	IS	8145	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JC2-PFDaA	IS	8J47	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1
1JC2-PFheDA	IS	3T48	50 - 150		H7L0101	1T-Dec-17	0456 L	16-Qn-18 02:J1	1

DL - Detection Limit

L9 D - Limit of Detection
L9 Q - Limit of quantitation

LCL-UCL- Lo. er control limit - Upper control limit
Results reported to tue DL4

Wuen reported, PFwxS, PF9 A and PF9 S inclBle botu linear and brancued isomers4
9 nly tue linear isomer is reported for all otuer analytes4

Sample ID: FT-PZ-452S-017L7010					d r f i l e f A P h d e t 3 r f 5 2 L					
Client Data					baoryatryMData					
Name:	Tetra Tech		Matrix:	Groundwater	Lab Sample:	1701851-05		Column:	BEH C18	
Project:	NWIRP Calverton PFAS Investigation 112G08005-W			Date Collected:	02-Dec-17 12:2.		Date Received:	05-Dec-17 11:15		
SDG:	WE05									
h n a l M e	C r n c. (n g / b)	D b	b O D	b O Q	Q u a l i f e y s	B a t c 3	A x t y a c t e f	S a m p S i z e	h n a l M e f	D i l u t i r n
PFBS	ND	04 . 1	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFHxA	ND	14 7	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFHpA	ND	04 1 7	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFHxS	ND	04 5 0 8	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PF9 A	04 J O	04 3 J	24 8	34 J	6	B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PF9 S	ND	04 3 O O	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFNA	ND	04 3 O 5	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFDA	ND	04 3 0 0	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
MeF9 SAA	ND	04 8 .	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFUnA	ND	04 5 . 3	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
EtF9 SAA	ND	04 7 O 5	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFDaA	ND	04 3 2 5	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFTDA	ND	04 2 . 5	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
PFTeDA	ND	04 3 0 5	24 8	34 J		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1
b a o e l e f S t a n f a y f s	T m e	% R e c r v e y M	b i m i t s	Q u a l i f e y s	B a t c 3	A x t y a c t e f	S a m p S i z e	h n a l M e f	D i l u t i r n	
1CC0-PFBS	IS	122	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC2-PFHxA	IS	112	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC3-PFHxA	IS	113	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
189 2-PFHxS	IS	105	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC2-PF9 A	IS	118	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC8-PF9 S	IS	122	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC5-PFNA	IS	117	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC2-PFDA	IS	JJ 4	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
dO-MeF9 SAA	IS	117	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC2-PFUnA	IS	105	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
d5-EtF9 SAA	IS	105	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC2-PFDaA	IS	112	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	
1CC2-PFTeDA	IS	12J	50 - 150		B7L0101	13-Dec-17	04 C O L	1. -6 a n -18 02:30	1	

DL - Detection Limit

L9 D - Limit of Detection

L9 Q - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit

Results reported to the DL4

When reported, PFHxS, PF9 A and PF9 S include both linear and branched isomers4

9 nly the linear isomer is reported for all other analytes4

Sample ID: FT-PZ-452S-F0 1 -71bob7L7					E MiliA3 Pc E et. M52o						
Client Data					rayMatMf Data						
Name:	hetra hecu		Matrix:	GroBnd. ater	Lab Sample:	1701851-0T		ColBnn:	HEw C18		
Project:	NWIRP Calverton PFAS Investigation 112G08005-W			Date Collected:	02-Dec-17 12:2T		Date Received:	05-Dec-17 11:15			
SDG:	WE05										
c nalf te	CM(g/n) Q u	Dr	r x D	r x s	s zalihiedO	1 at(. 3 %da(teA	Samp SiB	c nalf B	A	Dilz tiM	
PFHS	ND	0455	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFwxA	ND	140	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFwpA	ND	0482	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFwxS	ND	046J	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PF9 A	ND	0411	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PF9 S	ND	048T	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFNA	ND	0487	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFDA	ND	0412	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
MeF9 SAA	ND	0488	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFUnA	ND	0402	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
EtF9 SAA	ND	0455	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFDaA	ND	0478	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFhrDA	ND	04JT	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
PFheDA	ND	04T1	243	J42		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1	
r ayeleAStanAadAO	Tfpe	R 0 e(Medf	r imitO	s zalihiedO	1 at(. 3 %da(teA	Samp SiB	c nalf B	A	Dilz tiM		
1JCJ-PFHS	IS	125	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JC2-PFwxA	IS	112	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JCQ-PFwpA	IS	11T	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
189 2-PFwxS	IS	110	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JC2-PF9 A	IS	105	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JC8-PF9 S	IS	120	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JC5-PFNA	IS	102	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JC2-PFDA	IS	824	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
dJ-MeF9 SAA	IS	3T4	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JC2-PFUnA	IS	724	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
d5-EtF9 SAA	IS	774	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JC2-PFDaA	IS	304	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		
1JC2-PFheDA	IS	384	50 - 150		H7L0101 10-Dec-17	04T2 L	1T-6an-18 02:50		1		

DL - Detection Limit

L9 D - Limit of Detection

LCL-UCL- Lo. er control limit - Upper control limit

Wuen reported, PFwxS, PF9 A and PF9 S inclBle botu linear and brancued isomers4

L9 Q - Limit of qBantitation

ResBts reported to tue DL4

9 nly tue linear isomer is reported for all otuer analytes4

Sample ID: FT-PZ-462I-F0 1 -7Lbob7L4					E MiliA5 P3 E etc M 6. o					
Client Data					r ayMatMf Data					
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701851-07	Column:	BEH C18		
Project:	NWIRP Calverton PFAS Investigation 112G08005-W			Date Collected:	0. -Dec-17 08:50	Date Received:	05-Dec-17 11:15			
SDG:	WE05									
3 nalf te	CM(g/n) Q u	Dr	r x D	r x s	s zalihedO	1 at(c	5 %da(teA	Samp SiBe	3 nalf BeA	Dilz tiM
PFBS	ND	0482	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFHxA	ND	147	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFHpA	ND	0461	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFHxS	ND	04 J7	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PF9 A	ND	0421	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PF9 S	ND	0468	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFNA	ND	0466	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFDA	ND	0473	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
MeF9 SAA	ND	0413	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFUnA	ND	04518	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
EtF9 SAA	ND	0475	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFDaA	ND	0460	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFTDA	ND	042.3	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
PFTeDA	ND	0472	24 J	34.		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1
r ayeleA StanAadAO	Tfpe	R 0 e(Medf	r imitO	s zalihedO	1 at(c	5 %da(teA	Samp SiBe	3 nalf BeA	Dilz tiM	
13C3-PFBS	IS	118	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C2-PFHxA	IS	111	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C. -PFHpA	IS	10J	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
189 2-PFHxS	IS	6. 45	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C2-PF9 A	IS	10J	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C8-PF9 S	IS	11.	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C5-PFNA	IS	113	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C2-PFDA	IS	107	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
d3-MeF9 SAA	IS	8146	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C2-PFUnA	IS	103	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
d5-EtF9 SAA	IS	8840	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C2-PFDaA	IS	8748	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	
13C2-PFTeDA	IS	6141	50 - 150		B7L0101	1. -Dec-17	0425. L	1J-Qan-18 03:0J	1	

DL - Detection Limit

L9 D - Limit of Detection

LCL-UCL- Lower control limit - upper control limit

When reported, PFHxS, PF9 A and PF9 S include both linear and branched isomers4

L9 Q - Limit of quantitation

Results reported to the DL4

Only the linear isomer is reported for all other analytes4

Sample ID: FT-PZ-462I-017L7014					d r f i l e f A P h d e t 5 r f 63 L					
Client Data Name: Tetra TechMatrix: Groundwater Project: NWIRP Calverton PFAS Investigation 112G08005-W Date Collected: 0. -Dec-17 08:50 SDG: WE05					baoryatryMData Lab Sample: 1701851-08Column: BEH C18 Date Received: 05-Dec-17 11:15					
h nalMe	Crnc. (ng/b)	Db	bOD	bOQ	QualiKeys	Batc5	Axytactef	Samp Size	h nalMef	Dilutirn
PFBS	ND	048J	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFHxA	747	1405	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFHpA	. 4 6	048.	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFHxS	ND	04 55	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PF9 A	134	04812	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PF9 S	ND	0487	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFNA	747	048J	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFDA	ND	04715	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
MeF9 SAA	ND	047J2	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFUnA	ND	040.	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
EtF9 SAA	ND	04658	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFDaA	ND	04880	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFTDA	ND	04237	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
PFTeDA	ND	0462	24 0	34.		B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
baoelef Stanf ayf s	Tpe	% RecrveyM	bimits		QualiKeys	Batc5	Axytactef	Samp Size	h nalMef	Dilutirn
13C3-PFBS	IS	12.	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C2-PFHxA	IS	110	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C. -PFHpA	IS	112	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
189 2-PFHxS	IS	J84	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C2-PF9 A	IS	J747	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C8-PF9 S	IS	107	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C5-PFNA	IS	864	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C2-PFDA	IS	10J	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
d3-MeF9 SAA	IS	J34	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C2-PFUnA	IS	111	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
d5-EtF9 SAA	IS	107	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C2-PFDaA	IS	10.	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1
13C2-PFTeDA	IS	102	50 - 150			B7L0101	1. -Dec-17	0460 L	16-Qan-18 03:17	1

DL - Detection Limit

L9 D - Limit of Detection

L9 Q - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit

Results reported to the DL4

When reported, PFHxS, PF9 A and PF9 S include both linear and branched isomers4

9 nly the linear isomer is reported for all other analytes4

Sample ID: FT-PZ-462S-017L7014					d r f i e f A P h d e t 5 r f 63L					
Client Data Name:hetra hecuMatrix:GroBnd. ater Project:NWIRP Calverton PFAS Investigation 112G08005-W Date Collected:04-Dec-17 08:55 SDG:WE05					baoryatryMData Lab Sample:1701851-0TColBnn:HEw C18 Date Received:05-Dec-17 11:15					
h nalMe	Crnc. (ng/b)	Db	bOD	bOQ	QualiKeys	Batc5	Axytactef	Samp Size	h nalMef	Dilutirn
PFHS	ND	0J834	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFwxA	ND	1J05	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFwpA	ND	0J285	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFwxS	ND	0J457	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PF9 A	ND	0J614	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PF9 S	ND	0J6T0	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFNA	ND	0J6T1	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFDA	ND	0J71T	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
MeF9 SAA	ND	0J7T3	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFUnA	ND	0J507	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
EtF9 SAA	ND	0J31	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFDaA	ND	0J682	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFhrDA	ND	0J268	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
PFheDA	ND	0J634	2J41	6J83		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1
baoelef Stanf ayf s	TMe	% RecrveyM	bimits	QualiKeys	Batc5	Axytactef	Samp Size	h nalMef	Dilutirn	
16C6-PFHS	IS	143	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C2-PFwxA	IS	120	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C4-PFwpA	IS	122	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
189 2-PFwxS	IS	114	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C2-PF9 A	IS	112	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C8-PF9 S	IS	112	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C5-PFNA	IS	108	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C2-PFDA	IS	T2J7	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
d6-MeF9 SAA	IS	81J1	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C2-PFUnA	IS	88J0	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
d5-EtF9 SAA	IS	84J1	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C2-PFDaA	IS	71J6	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	
16C2-PFheDA	IS	80J1	50 - 150		H7L0101	14-Dec-17	0J25T L	13-Qan-18 06:2T	1	

DL - Detection Limit

L9 D - Limit of Detection

L9 Q - Limit of qBantitation

LCL-UCL- Lo. er control limit - Bpper control limit

ResBts reported to tue DLJ

Wuen reported, PFwxS, PF9 A and PF9 S inclBle botu linear and brancued isomersJ

9 nly tue linear isomer is reported for all otuer analytesJ

DATA QUALIFIERS & ABBREVIATIONS

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

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

CERTIFICATIONS

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
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	1322288
New Hampshire Environmental Accreditation Program	207717
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	014
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	9077
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.



CHAIN OF CUSTODY

For Laboratory Use Only
Work Order #: 1701851 Temp: 0.6 °C
Storage ID: WR-2 Storage Secured: Yes ☒ No ☐

Project ID: NWIRP Calverton PFAS Investigation

PO#: 112G08005-WE05

Sampler: Jacob Birkett
Lauren Donston
Beau Benfield
(name)

TAT (check one): ☒ 21 days
☐ 14 days ☐ 7 days Specify: _____
Standard: ☒ Rush (surcharge may apply)

Invoice to: Name Tetra Tech Company 5700 Lake Wright Dr. Suite 102 Address Norfolk City VA State 757-466-4902 Ph# 4902 Fax#

Relinquished by (printed name and signature) Jacob Birkett Date 12-4-17 Time 1600 Received by (printed name and signature) FedEx Date _____ Time _____
Relinquished by (printed name and signature) FedEx Date _____ Time _____ Received by (printed name and signature) Mariessa Sparks Date 12/05/17 Time 1146

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: _____

Tracking No.: 816291070477

Add Analysis(es) Requested

Container(s)

Mod. EPA Method 537

EPA Method 537 (DW only)

Sample ID	Date	Time	Location/Sample Description	Quantity	Type	Matrix	PFAS List 6	UCMR3 PFAS List 6	537 List 14	Full List of 28	Other, Please List	PFAS List 6	UCMR3 PFAS List 6	PFAS List 14	Comments
FT-PZ-462S-20171202	12-2-17	0850	FT-PZ-462S	2	P	AQ			X						
FT-PZ-462I-20171202	12-2-17	0852	462I	2	P	AQ			X						
FT-PZ-455S-20171202	12-2-17	1036	455S	2	P	AQ			X						
FT-PZ-455I-20171202	12-2-17	1045	455I	2	P	AQ			X						
FT-PZ-453S-20171202	12-2-17	1226	453S	2	P	AQ			X						
FT-PZ-453S-FRB-20171202	12-2-17	1226	453S	2	P	AQ			X						Field Reagent Blank
FT-PZ-456I-FRB-20171204	12-4-17	0850	456I	2	P	QA			X						Field Reagent Blank
FT-PZ-456I-20171204	12-4-17	0850	456I	2	P	AQ			X						
FT-PZ-456S-20171204	12-4-17	0855	456S	2	P	AQ			X						

Special Instructions/Comments: _____

SEND DOCUMENTATION AND RESULTS TO:

Name: Kristi Francisco
Company: Tetra Tech
Address: 5700 Lake Wright Dr. Suite 102
City: Norfolk State: VA Zip: 23502
Phone: 757-466-4902 Fax: _____
Email: Kristi.Francisco@tetra.tech.com

Container Types: P = HDPE, PJ = HDPE Jar

O = Other: _____

Bottle Preservation Type: T = Thiosulfate,

Trizma: _____

Matrix Types: AQ = Aqueous, DW = Drinking Water, EF = Effluent, PP = Pulp/Paper, SD = Sediment,

SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum, O = Other: _____

Sample Log-in Checklist

Vista Work Order #: 1701851 TAT Std

Samples Arrival:	Date/Time <u>12/05/17 1115</u>	Initials: <u>WWS</u>	Location: <u>WR-2</u> Shelf/Rack: <u>N/A</u>
Logged In:	Date/Time <u>12/05/17 2004</u>	Initials: <u>BAB</u>	Location: <u>WR-2</u> Shelf/Rack: <u>E7</u>
Delivered By:	☒ FedEx ☐ UPS ☐ On Trac ☐ GSO ☐ DHL ☐ Hand Delivered ☐ Other		
Preservation:	☒ Ice ☐ Blue Ice ☐ Dry Ice ☐ None		
Temp °C: <u>0.5</u> (uncorrected)	Time: <u>1144</u>	Thermometer ID: IR-1	
Temp °C: <u>0.6</u> (corrected)	Probe used: Yes ☐ No ☒		

		YES	NO	NA
Adequate Sample Volume Received? <u>A/B</u>		☒		
Holding Time Acceptable?		☒		
Shipping Container(s) Intact?		☒		
Shipping Custody Seals Intact?		☒		
Shipping Documentation Present?		☒		
Airbill	Trk # <u>8102 9107 0477</u>	☒		
Sample Container Intact?		☒		
Sample Custody Seals Intact?				☒
Chain of Custody / Sample Documentation Present?		☒		
COC Anomaly/Sample Acceptance Form completed?			☒	☒
If Chlorinated or Drinking Water Samples, Acceptable Preservation?				☒
Preservation Documented:	<u>Na₂S₂O₃</u> <u>Trizma</u> <u>None</u>	Yes	No	<u>NA</u>
Shipping Container	<u>Vista</u> <u>Client</u> <u>Retain</u> <u>Return</u> <u>Dispose</u>			

Comments:

EXTRACTION INFORMATION

Process Sheet

Workorder: **1701851**

Prep Expiration: 2017-Dec-16

Client: Tetra Tech

Workorder Due: 28-Dec-17 00:00

TAT: 23

Method: 537M PFAS DOD (LOQ as mRL)

Matrix: Aqueous

Prep Batch:

B7L0101

Prep Data Entered:

KL 12/16/17
Date and Initials

Version: 537 (14 Analyte)

DoD: DoD QSM 5.1

Initial Sequence:

SBA0042

LabSampleID	A/B	Prep Rec	Spike Rec	ClientSampleID	Comments	Location	Container
1701851-01	"A"	☒	☒	FT-PZ-462S-20171202		WR-2 E-7	HDPE Bottle, 250 mL
1701851-02		☒	☒	FT-PZ-462I-20171202		WR-2 E-7	HDPE Bottle, 250 mL
1701851-03		☒	☒	FT-PZ-455S-20171202		WR-2 E-7	HDPE Bottle, 250 mL
1701851-04		☒	☒	FT-PZ-455I-20171202		WR-2 E-7	HDPE Bottle, 250 mL
1701851-05		☒	☒	FT-PZ-453S-20171202		WR-2 E-7	HDPE Bottle, 250 mL
1701851-06		☒	☒	FT-PZ-453S-FRB-20171202		WR-2 E-7	HDPE Bottle, 250 mL
1701851-07		☒	☒	FT-PZ-456I-FRB-20171204		WR-2 E-7	HDPE Bottle, 250 mL
1701851-08		☒	☒	FT-PZ-456I-20171204		WR-2 E-7	HDPE Bottle, 250 mL
1701851-09		☒	☒	FT-PZ-456S-20171204		WR-2 E-7	HDPE Bottle, 250 mL

WO Comments: Provide all analytical runs.

MS/MSD per batch, if MS/MSD is not provided - LCS/LCSD.

Pre-Prep Check Out: HB 12/14/17Prep Check Out: NAPrep Reconciled Initials/Date: HB 12/14/17Pre-Prep Check In: NAPrep Check In: NASpike Reconciled Initials/Date: GRB 12/14/17VialBoxID: Lana Lana

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOQ as mRL)

B7L0101

Chemist: KC

Prep Date/Time: 14-Dec-17 10:37

Prepared using: LCMS - SPE Extraction-LCMS

1400
KC 12/14/17

Date/Initials: <u>HB 12/14/17</u>		BalanceID: <u>HRMS-8</u>							IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
Cen	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)			
☐	B7L0101-BLK1	5	2	0	3	NA	NA	(0.250) ✓	KC 12/14/17	GEB 12/14/17	7tz GEB 12/14/17
☐	B7L0101-BS1	5	2	0	3	↓	↓	(0.250) ✓			
☐	B7L0101-BSD1	5	2	0	3	↓	↓	(0.250) ✓			
☐	1701840-04	6	2	0	3	147.98	26.86	0.12110			
☐	1701840-05	6	2	0	3	141.97	26.85	0.11512			
☒	1701851-01 (A)	4	2	0	3	254.99 251.09	27.75	0.22334 ✓			
☐	1701851-02	4	2	0	3	279.04	27.73	0.25131 ✓			
☐	1701851-03	4	2	0	3	291.50	27.70	0.26380 ✓			
☐	1701851-04	4	2	0	3	284.07	27.70	0.26637 ✓			
☒	1701851-05	4	2	0	3	260.55	27.70	0.23285 ✓			
☐	1701851-06	4	2	0	3	289.33	27.74	0.26159 ✓	↓	↓	↓
☐	1701851-07	4	2	0	3	281.31	27.71	0.25360 ✓			
☐	1701851-08	4	2	0	3	298.22	27.81	0.26041 ✓			
☐	1701851-09	4	2	0	3	286.71	27.73	0.25899 ✓			

IS: <u>17L0402, 10µL (V4)</u>	SPE Chem: <u>STRATA X-AW 33µm 200mg 6mL</u>	Notes: (A) sample still deeply colored after centrifuging. No particulate came out of sample. HB 12/14/17 microcentrifuged sample but no particulate came out
IS SUP: <u>NA</u>	Ele SOLV: <u>0.5% NH4OH in MeOH/MeOH</u>	
NS: <u>17J1820, 10µL (V2)</u>	Final Volume(s): <u>1µL</u>	
RS: <u>17K2502, 10µL (V3)</u>		

Comments: Assume 1 g = 1 mL

Cen = Centrifuged 1701851

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOQ as mRL)

B7L0101

Chemist: KC

Prep Date/Time: 14-Dec-17 10:37

Prepared using: LCMS - SPE Extraction-LCMS

1400
2612/14/17

Date/Initials: <u>HB 12/14/17</u>		BalanceID: <u>HRM-8</u>									
Cen	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
☒	B7L0101-BLK1										
☐	B7L0101-BS1										
☐	B7L0101-BSD1										
☐	1701840-04										
☒	1701840-05										
☐	1701840-10	6	2	0	3	135.05	26.85	0.10920	KC GRB 12/14/17	GRB 12/14/17	HC GRB 12/14/17
☒	1701851-01										
☐	1701851-02										
☐	1701851-03										
☐	1701851-04										
☐	1701851-05										
☐	1701851-06										
☐	1701851-07										
☐	1701851-08										
☒	1701851-09										

IS: <u>17L0402, 10µL</u> (V4) IS SUP: <u>NA</u> NS: <u>17S1820, 10µL</u> (V1) RS: <u>17K2502, 10µL</u> (V3)	SPE Chem: <u>STATA X-AW 33µm 200mg 6mL</u> Ele SOLV: <u>0.5% NaOH in MeOH</u> / <u>MeOH</u> Final Volume(s): <u>1mL</u>	Notes:
--	---	--------

Comments: Assume 1 g = 1 mL

Cen = Centrifugal
Work Order 1701851

Batch: B7L0101

Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1701840-04	0.1211 ✓	NA	NA	1000	14-Dec-17 14:00	GRB			Aqueous	537M PFAS DOD (LOQ as
1701840-05	0.11512 ✓	T	T	1000	14-Dec-17 14:00	GRB			Aqueous	537M PFAS DOD (LOQ as
1701840-10	0.1082 ✓			1000	14-Dec-17 14:00	GRB			Aqueous	537M PFAS DOD (LOQ as
1701851-01	0.22334 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
1701851-02	0.25131 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
1701851-03	0.2638 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
1701851-04	0.25637 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
1701851-05	0.23285 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
1701851-06	0.26159 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
1701851-07	0.2536 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
1701851-08	0.26041 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
1701851-09	0.25898 ✓			1000	14-Dec-17 14:00	GRB			Groundwater	537M PFAS DOD (LOQ as
B7L0101-BLK1	0.25 ✓			1000	14-Dec-17 14:00	GRB				QC
B7L0101-BS1	0.25 ✓			1000	14-Dec-17 14:00	GRB	17J1820 ✓	10 ✓		QC
B7L0101-BSD1	0.25 ✓	↓	↓	1000	14-Dec-17 14:00	GRB	17J1820 ✓	10 ✓		QC

KC 12/16/17

SAMPLE DATA – MODIFIED EPA METHOD 537

Dataset: U:\Q4.PRO\results\180114M1\180114M1-24.qld

Last Altered: Monday, January 15, 2018 16:07:26 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:25:59 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_24, Date: 14-Jan-2018, Time: 18:02:13, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		9.46e2	0.250		2.60				
2	4 PFHxA	313.2 > 268.9		2.49e3	0.250		3.00				
3	5 PFHpA	363.0 > 318.9		5.05e3	0.250		3.54				
4	6 L-PFHxS	398.9 > 79.6	5.91e-1	6.68e2	0.250		3.68	3.59	0.0111		
5	9 L-PFOA	413 > 368.7	1.86e2	8.90e3	0.250		4.07	3.96	0.261	0.0223	
6	12 PFNA	463.0 > 418.8		7.35e3	0.250		4.54				
7	14 L-PFOS	499 > 79.9	9.33e-1	2.09e3	0.250		4.63	4.51	0.00558	0.0160	
8	16 PFDA	513 > 468.8		6.53e3	0.250		4.94				
9	18 N-MeFOSAA	570.1 > 419		1.31e3	0.250		5.10				
10	19 N-EtFOSAA	584.2 > 419		1.85e3	0.250		5.27				
11	20 PFUdA	563.0 > 518.9	4.13e1	6.56e3	0.250		5.30	5.18	0.0787		
12	22 PFDoA	612.9 > 569.0		4.61e3	0.250		5.60				

Dataset: U:\Q4.PRO\results\180114M1\180114M1-24.qld

Last Altered: Monday, January 15, 2018 16:07:26 Pacific Standard Time
Printed: Tuesday, January 16, 2018 15:26:09 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_24, Date: 14-Jan-2018, Time: 18:02:13, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.87e3	0.250		5.85				
2	25 PFTeDA	712.9 > 668.8		2.87e3	0.250		6.10				
3	33 13C3-PFBS	302. > 98.8	9.46e2	7.33e3	0.250	0.097	2.60	2.49	1.61	66.8534	133.7
4	34 13C2-PFHxA	315 > 269.8	2.49e3	7.33e3	0.250	0.633	3.00	2.92	4.24	26.7641	133.8
5	35 13C4-PFHpA	367.2 > 321.8	5.05e3	7.33e3	0.250	0.651	3.56	3.45	8.61	52.9245	105.8
6	36 18O2-PFHxS	403.0 > 102.6	6.68e2	1.83e3	0.250	0.326	3.68	3.59	4.57	56.2104	112.4
7	37 13C2-6:2 FTS	429.1 > 408.9	1.46e3	1.00e4	0.250	0.171	4.00	3.87	1.82	42.6973	85.4
8	38 13C2-PFOA	414.9 > 369.7	8.90e3	1.00e4	0.250	0.903	4.07	3.96	11.1	49.1525	98.3
9	39 13C5-PFNA	468.2 > 422.9	7.35e3	9.34e3	0.250	0.844	4.54	4.44	9.85	46.6656	93.3
10	40 13C8-PFOSA	506.1 > 77.7	6.85e2	1.02e4	0.250	0.165	4.61	4.50	0.838	20.2509	40.5
11	41 13C8-PFOS	507.0 > 79.9	2.09e3	2.43e3	0.250	0.920	4.62	4.52	10.8	46.8527	93.7
12	42 13C2-PFDA	515.1 > 469.9	6.53e3	6.76e3	0.250	1.044	4.82	4.84	12.1	46.2831	92.6
13	43 13C2-8:2 FTS	529.1 > 508.7	7.65e2	7.33e3	0.250	0.087	4.89	4.79	1.31	60.3257	120.7
14	44 d3-N-MeFOSAA	573.3 > 419	1.31e3	1.02e4	0.250	0.227	5.08	4.99	1.61	28.2914	56.6
15	45 d5-N-EtFOSAA	589.3 > 419	1.85e3	1.02e4	0.250	0.313	5.27	5.17	2.26	28.8820	57.8
16	46 13C2-PFUdA	565 > 519.8	6.56e3	1.02e4	0.250	0.899	5.28	5.19	8.02	35.6783	71.4
17	47 13C2-PFDoA	615.0 > 569.7	4.61e3	1.02e4	0.250	0.645	5.60	5.49	5.64	34.9585	69.9
18	49 13C2-PFTeDA	714.8 > 669.6	2.87e3	1.02e4	0.250	0.290	6.10	6.00	3.51	48.4405	96.9
19	55 13C5-PFHxA	318 > 272.9	7.33e3	7.33e3	0.250	1.000	3.00	2.92	12.5	50.0000	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.83e3	1.83e3	0.250	1.000	3.68	3.59	12.5	50.0000	100.0
21	57 13C8-PFOA	421.3 > 376	1.00e4	1.00e4	0.250	1.000	4.07	3.96	12.5	50.0000	100.0
22	58 13C9-PFNA	472.2 > 426.9	9.34e3	9.34e3	0.250	1.000	4.54	4.43	12.5	50.0000	100.0
23	59 13C4-PFOS	503 > 79.9	2.43e3	2.43e3	0.250	1.000	4.63	4.52	12.5	50.0000	100.0
24	60 13C6-PFDA	519.1 > 473.7	6.76e3	6.76e3	0.250	1.000	4.94	4.84	12.5	50.0000	100.0
25	61 13C7-PFUdA	570.1 > 524.8	1.02e4	1.02e4	0.250	1.000	5.28	5.19	12.5	50.0000	100.0
26	62 Total PFHxS	398.9 > 79.6	5.91e-1	6.68e2	0.250		3.50		0.000		
27	63 Total PFOA	413 > 368.7	1.86e2	8.90e3	0.250		3.90		0.261	0.0223	
28	64 Total PFOS	499 > 79.9	9.33e-1	2.09e3	0.250		4.50		0.00558	0.0160	
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.31e3	0.250		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	1.85e3	0.250		5.20		0.000		

Dataset: U:\Q4.PRO\results\180114M1\180114M1-24.qld

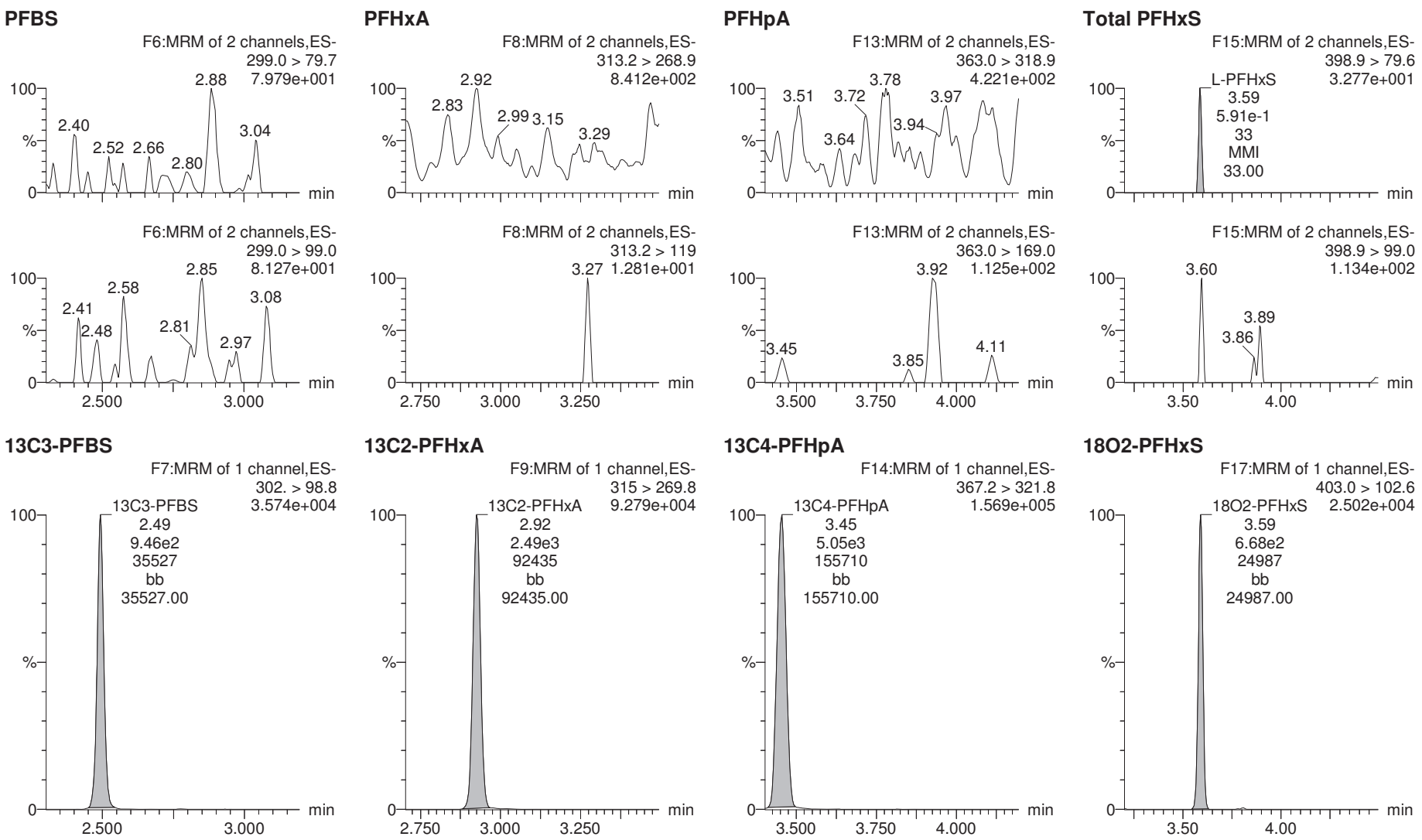
Last Altered: Monday, January 15, 2018 16:07:26 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:26:09 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_24, Date: 14-Jan-2018, Time: 18:02:13, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

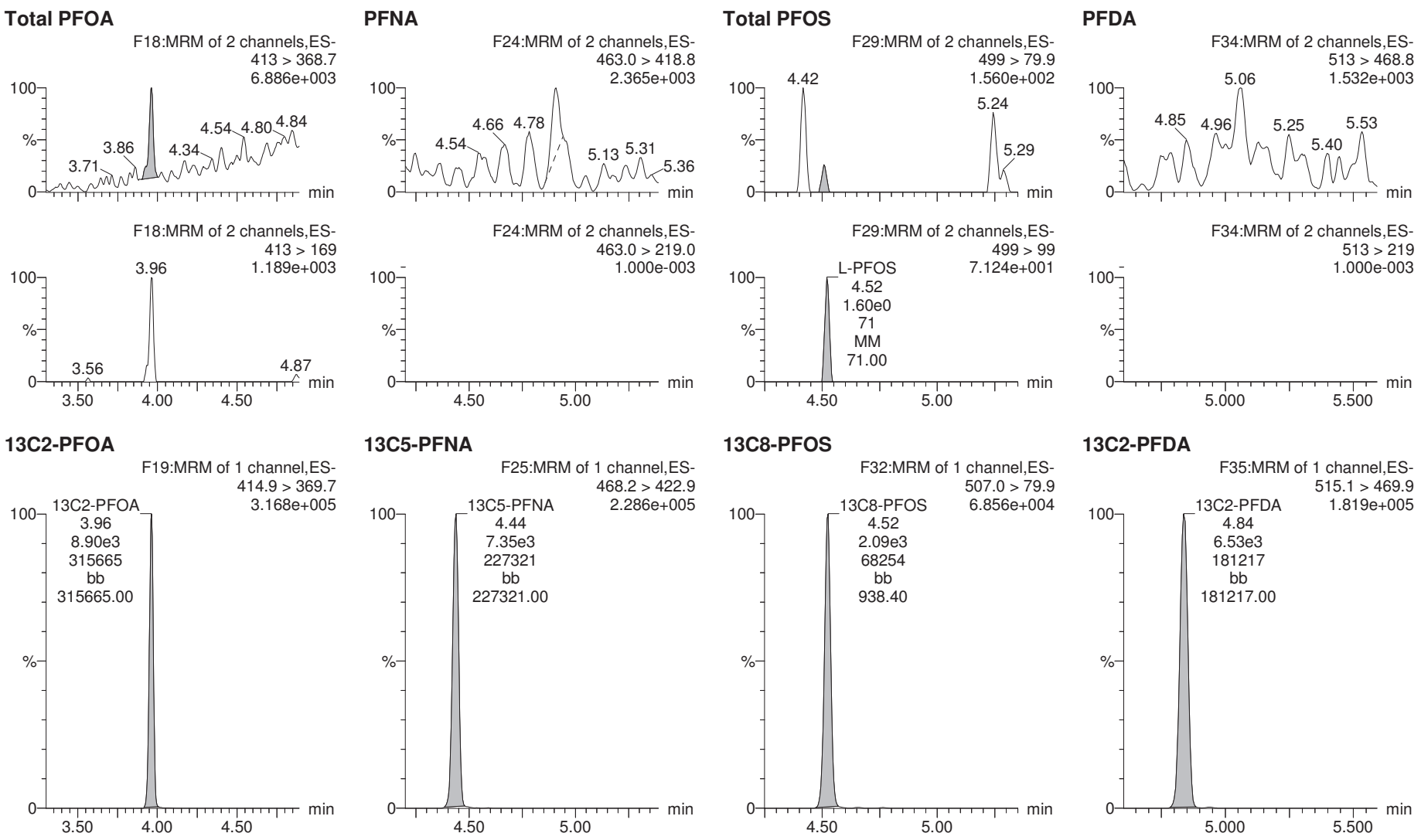


Dataset: U:\Q4.PRO\results\180114M1\180114M1-24.qld

Last Altered: Monday, January 15, 2018 16:07:26 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:26:09 Pacific Standard Time

Name: 180114M1_24, Date: 14-Jan-2018, Time: 18:02:13, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

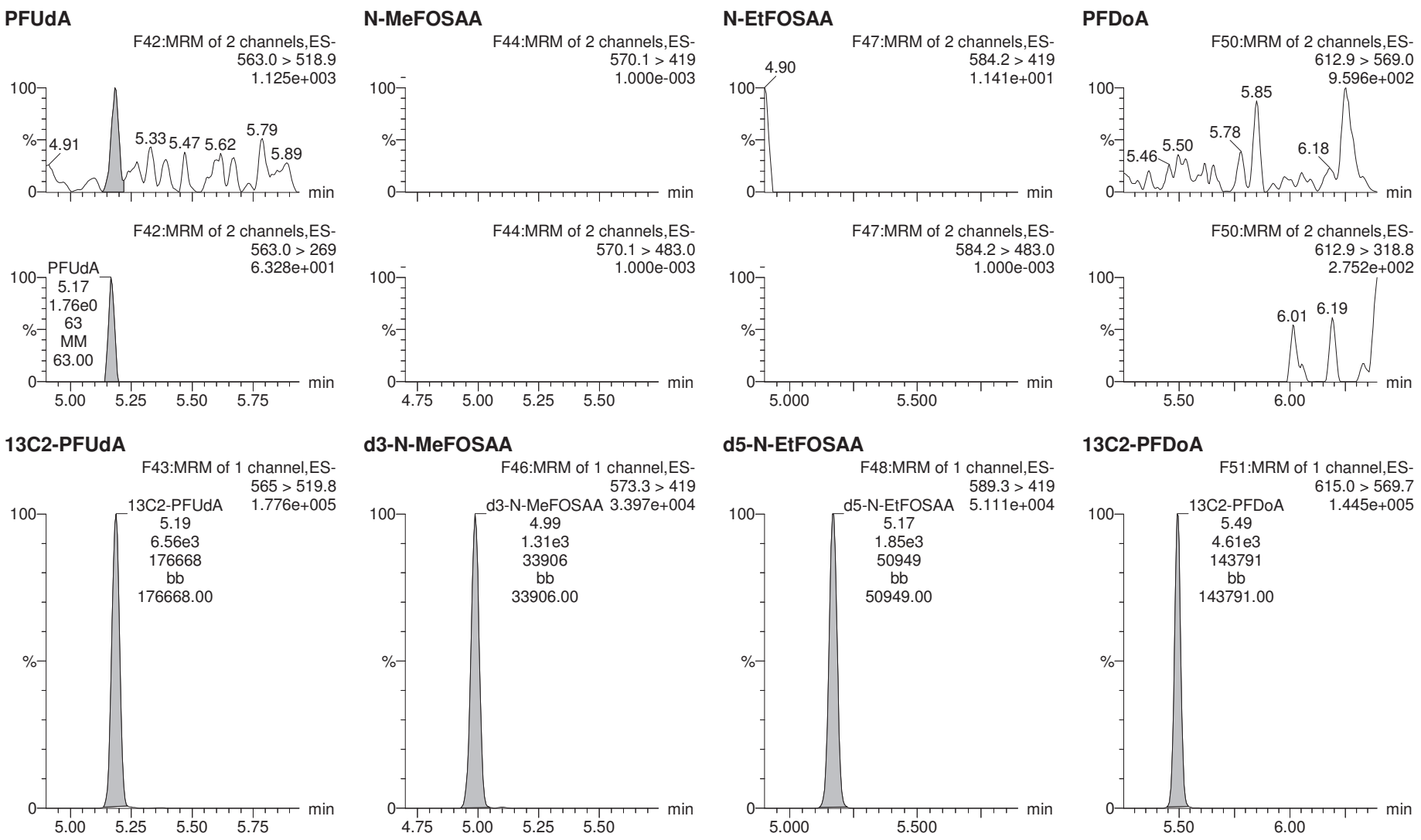


Dataset: U:\Q4.PRO\results\180114M1\180114M1-24.qld

Last Altered: Monday, January 15, 2018 16:07:26 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:26:09 Pacific Standard Time

Name: 180114M1_24, Date: 14-Jan-2018, Time: 18:02:13, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

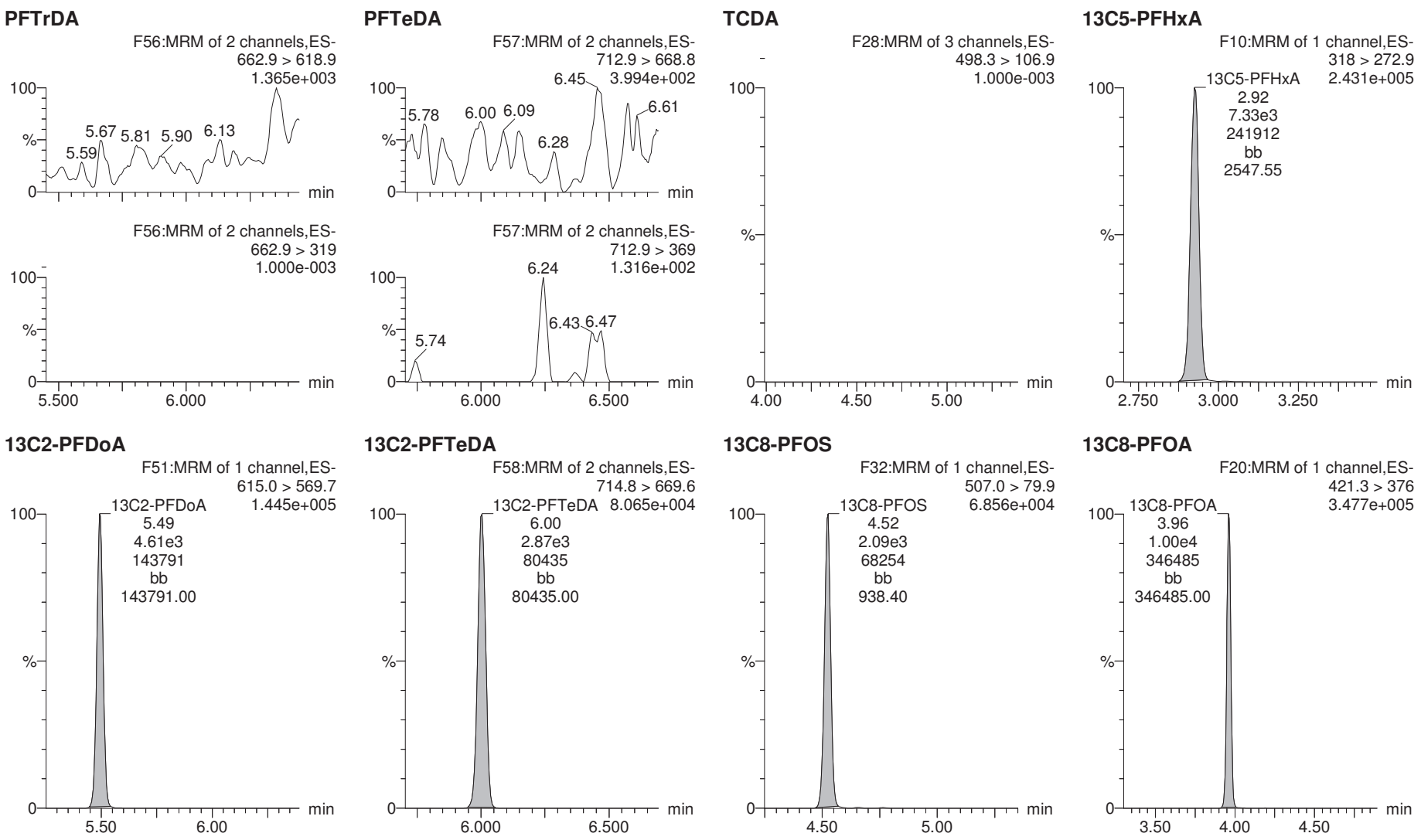


Dataset: U:\Q4.PRO\results\180114M1\180114M1-24.qld

Last Altered: Monday, January 15, 2018 16:07:26 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:26:09 Pacific Standard Time

Name: 180114M1_24, Date: 14-Jan-2018, Time: 18:02:13, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank



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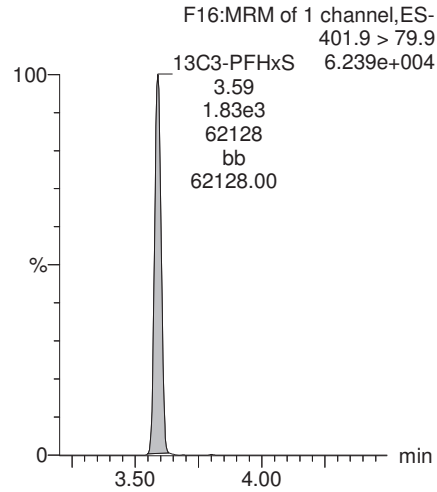
Rev'd: MM 1/16/18

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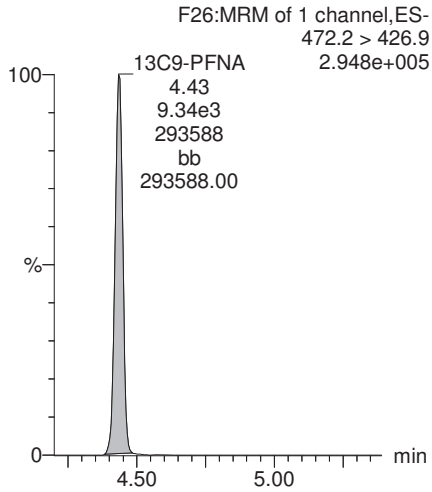
Last Altered: Monday, January 15, 2018 16:07:26 Pacific Standard Time
Printed: Tuesday, January 16, 2018 15:26:09 Pacific Standard Time

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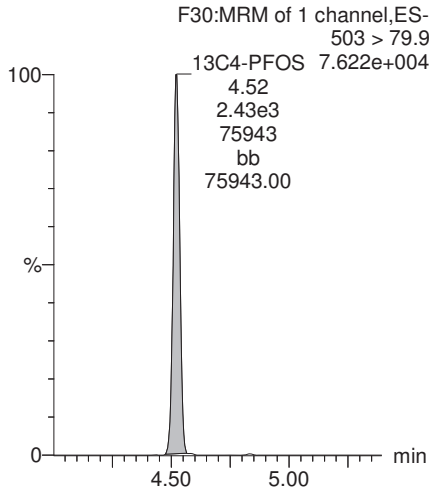
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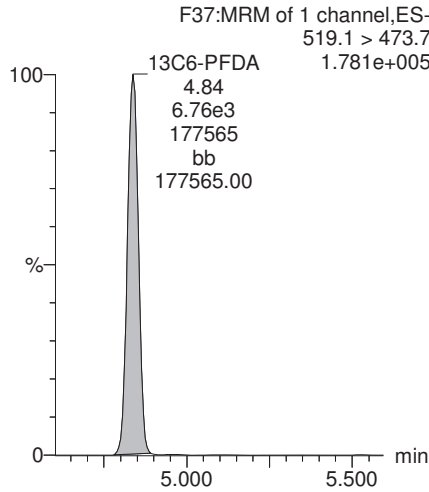
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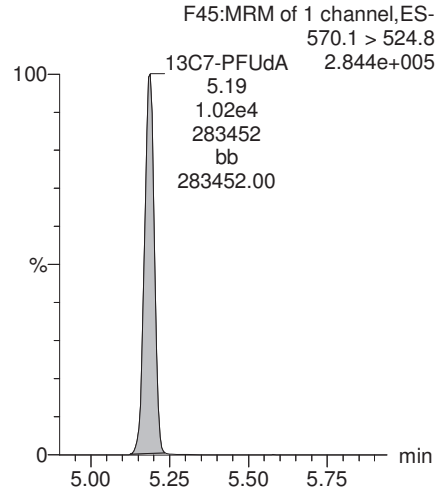
13C4-PFOS



13C6-PFDA



13C7-PFUdA



Dataset: U:\Q4.PRO\results\180114M1\180114M1-22.qld

Last Altered: Monday, January 15, 2018 16:04:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:24:12 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_22, Date: 14-Jan-2018, Time: 17:39:19, ID: B7L0101-BS1 OPR 0.25, Description: OPR

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7	1.70e3	9.84e2	0.250		2.60	2.50	21.6	45.2469	113.1
2	4 PFHxA	313.2 > 268.9	7.46e3	2.18e3	0.250		3.00	2.93	17.1	37.4119	93.5
3	5 PFHpA	363.0 > 318.9	6.48e3	6.23e3	0.250		3.54	3.45	13.0	40.1564	100.4
4	6 L-PFHxS	398.9 > 79.6	1.13e3	8.58e2	0.250		3.68	3.59	16.5	38.6165	96.5
5	9 L-PFOA	413 > 368.7	7.74e3	9.69e3	0.250		4.07	3.97	9.99	32.9917	82.5
6	12 PFNA	463.0 > 418.8	7.92e3	7.67e3	0.250		4.54	4.44	12.9	34.5837	86.5
7	14 L-PFOS	499 > 79.9	2.04e3	2.34e3	0.250		4.63	4.53	10.9	36.6409	91.6
8	16 PFDA	513 > 468.8	7.74e3	5.71e3	0.250		4.94	4.84	16.9	50.8942	127.2
9	18 N-MeFOSAA	570.1 > 419	2.73e3	1.75e3	0.250		5.10	4.99	19.6	36.3965	91.0
10	19 N-EtFOSAA	584.2 > 419	2.03e3	1.84e3	0.250		5.27	5.18	13.8	44.2203	110.6
11	20 PFUdA	563.0 > 518.9	5.30e3	5.51e3	0.250		5.30	5.19	12.0	40.6734	101.7
12	22 PFDoA	612.9 > 569.0	7.90e3	4.22e3	0.250		5.60	5.50	23.4	36.4670	91.2

Dataset: U:\Q4.PRO\results\180114M1\180114M1-22.qld

Last Altered: Monday, January 15, 2018 16:04:21 Pacific Standard Time
Printed: Tuesday, January 16, 2018 15:24:21 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_22, Date: 14-Jan-2018, Time: 17:39:19, ID: B7L0101-BS1 OPR 0.25, Description: OPR

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9	8.73e3	2.21e3	0.250		5.85	5.77	49.4	32.6863	81.7
2	25 PFTeDA	712.9 > 668.8	4.46e3	2.21e3	0.250		6.10	6.00	25.2	37.3644	93.4
3	33 13C3-PFBS	302. > 98.8	9.84e2	9.12e3	0.250	0.097	2.60	2.50	1.35	55.8744	111.7
4	34 13C2-PFHxA	315 > 269.8	2.18e3	9.12e3	0.250	0.633	3.00	2.93	2.99	18.8494	94.2
5	35 13C4-PFHpA	367.2 > 321.8	6.23e3	9.12e3	0.250	0.651	3.56	3.46	8.54	52.4882	105.0
6	36 18O2-PFHxS	403.0 > 102.6	8.58e2	2.53e3	0.250	0.326	3.68	3.59	4.23	52.0073	104.0
7	37 13C2-6:2 FTS	429.1 > 408.9	1.77e3	1.04e4	0.250	0.171	4.00	3.88	2.13	50.0579	100.1
8	38 13C2-PFOA	414.9 > 369.7	9.69e3	1.04e4	0.250	0.903	4.07	3.97	11.7	51.5852	103.2
9	39 13C5-PFNA	468.2 > 422.9	7.67e3	9.71e3	0.250	0.844	4.54	4.44	9.88	46.8144	93.6
10	40 13C8-PFOSA	506.1 > 77.7	8.00e2	8.26e3	0.250	0.165	4.61	4.51	1.21	29.2913	58.6
11	41 13C8-PFOS	507.0 > 79.9	2.34e3	2.38e3	0.250	0.920	4.62	4.52	12.3	53.4590	106.9
12	42 13C2-PFDA	515.1 > 469.9	5.71e3	6.74e3	0.250	1.044	4.82	4.84	10.6	40.5772	81.2
13	43 13C2-8:2 FTS	529.1 > 508.7	9.83e2	9.12e3	0.250	0.087	4.89	4.79	1.35	62.2789	124.6
14	44 d3-N-MeFOSAA	573.3 > 419	1.75e3	8.26e3	0.250	0.227	5.08	4.99	2.64	46.5235	93.0
15	45 d5-N-EtFOSAA	589.3 > 419	1.84e3	8.26e3	0.250	0.313	5.27	5.17	2.79	35.5689	71.1
16	46 13C2-PFUdA	565 > 519.8	5.51e3	8.26e3	0.250	0.899	5.28	5.19	8.34	37.0850	74.2
17	47 13C2-PFDoA	615.0 > 569.7	4.22e3	8.26e3	0.250	0.645	5.60	5.50	6.39	39.6532	79.3
18	49 13C2-PFTeDA	714.8 > 669.6	2.21e3	8.26e3	0.250	0.290	6.10	6.00	3.35	46.1849	92.4
19	55 13C5-PFHxA	318 > 272.9	9.12e3	9.12e3	0.250	1.000	3.00	2.93	12.5	50.0000	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.53e3	2.53e3	0.250	1.000	3.68	3.59	12.5	50.0000	100.0
21	57 13C8-PFOA	421.3 > 376	1.04e4	1.04e4	0.250	1.000	4.07	3.96	12.5	50.0000	100.0
22	58 13C9-PFNA	472.2 > 426.9	9.71e3	9.71e3	0.250	1.000	4.54	4.44	12.5	50.0000	100.0
23	59 13C4-PFOS	503 > 79.9	2.38e3	2.38e3	0.250	1.000	4.63	4.53	12.5	50.0000	100.0
24	60 13C6-PFDA	519.1 > 473.7	6.74e3	6.74e3	0.250	1.000	4.94	4.84	12.5	50.0000	100.0
25	61 13C7-PFUdA	570.1 > 524.8	8.26e3	8.26e3	0.250	1.000	5.28	5.19	12.5	50.0000	100.0
26	62 Total PFHxS	398.9 > 79.6	1.37e3	8.58e2	0.250		3.50		19.9	46.3681	
27	63 Total PFOA	413 > 368.7	7.74e3	9.69e3	0.250		3.90		9.99	32.9917	
28	64 Total PFOS	499 > 79.9	2.04e3	2.34e3	0.250		4.50		10.9	36.6409	
29	65 Total N-MeFOSAA	570.1 > 419	2.73e3	1.75e3	0.250		5.00		19.6	36.3965	
30	66 Total N-EtFOSAA	584.2 > 419	2.03e3	1.84e3	0.250		5.20		13.8	44.2203	

Dataset: U:\Q4.PRO\results\180114M1\180114M1-22.qld

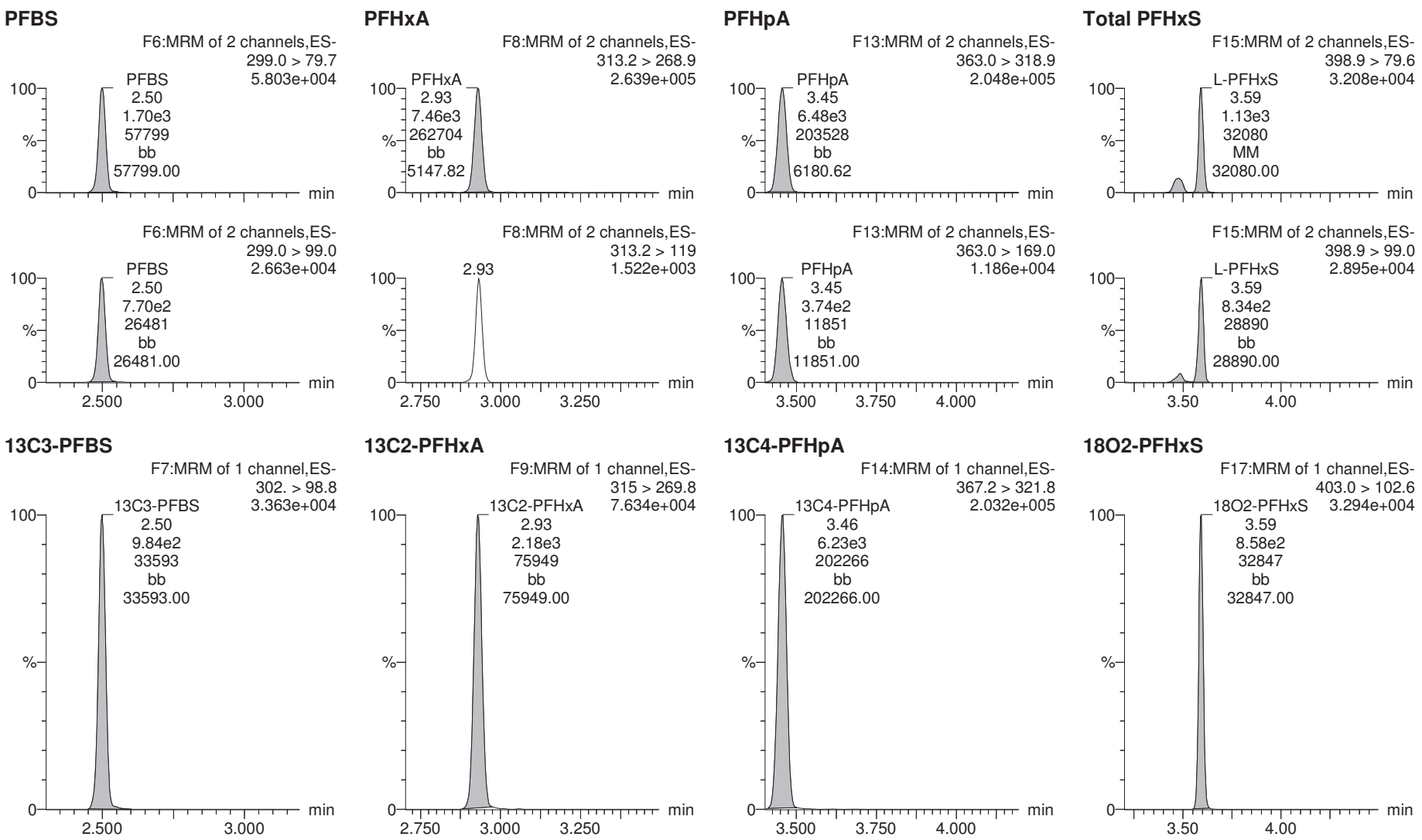
Last Altered: Monday, January 15, 2018 16:04:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:24:21 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_22, Date: 14-Jan-2018, Time: 17:39:19, ID: B7L0101-BS1 OPR 0.25, Description: OPR

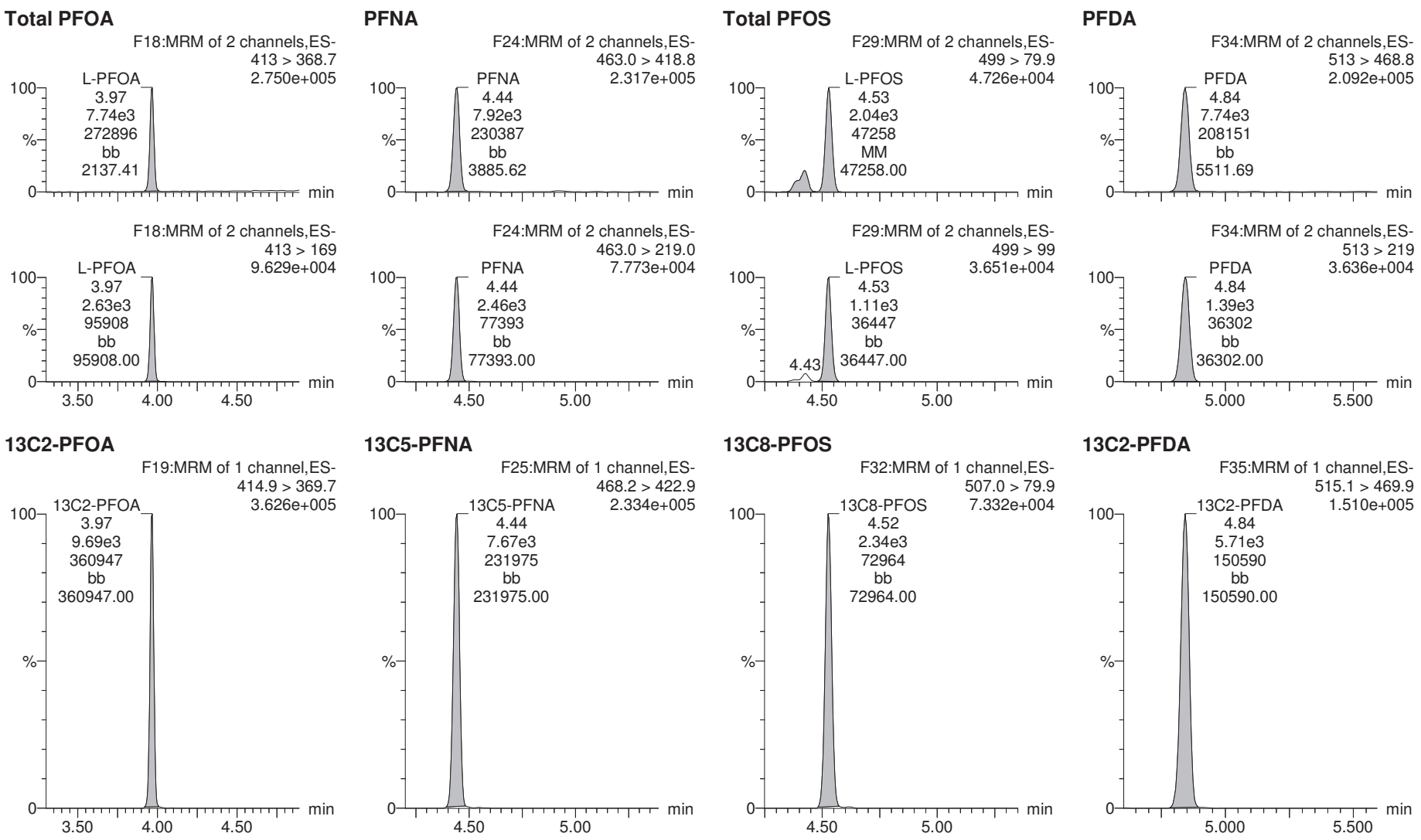


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Printed: Tuesday, January 16, 2018 15:24:21 Pacific Standard Time

Name: 180114M1_22, Date: 14-Jan-2018, Time: 17:39:19, ID: B7L0101-BS1 OPR 0.25, Description: OPR

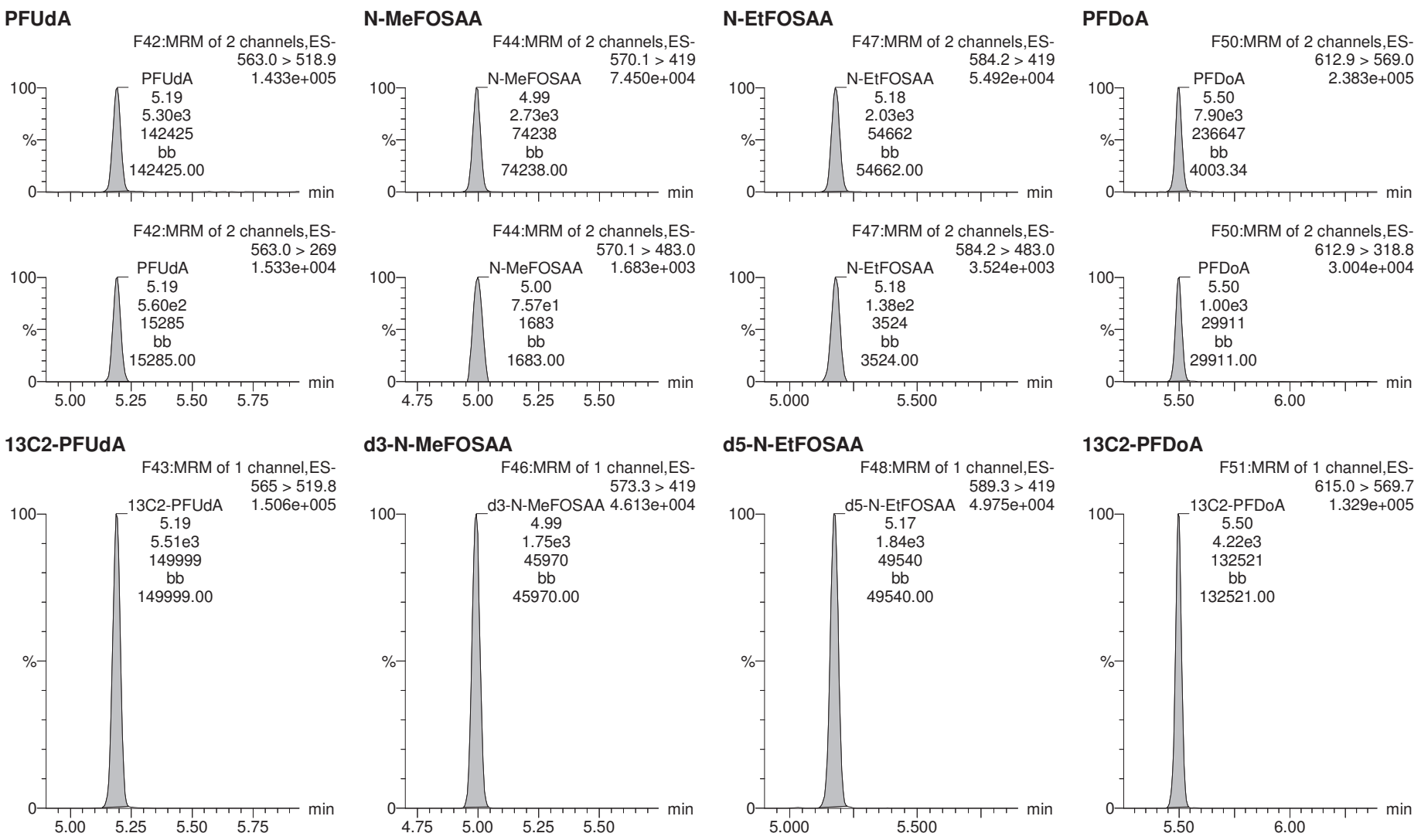


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Printed: Tuesday, January 16, 2018 15:24:21 Pacific Standard Time

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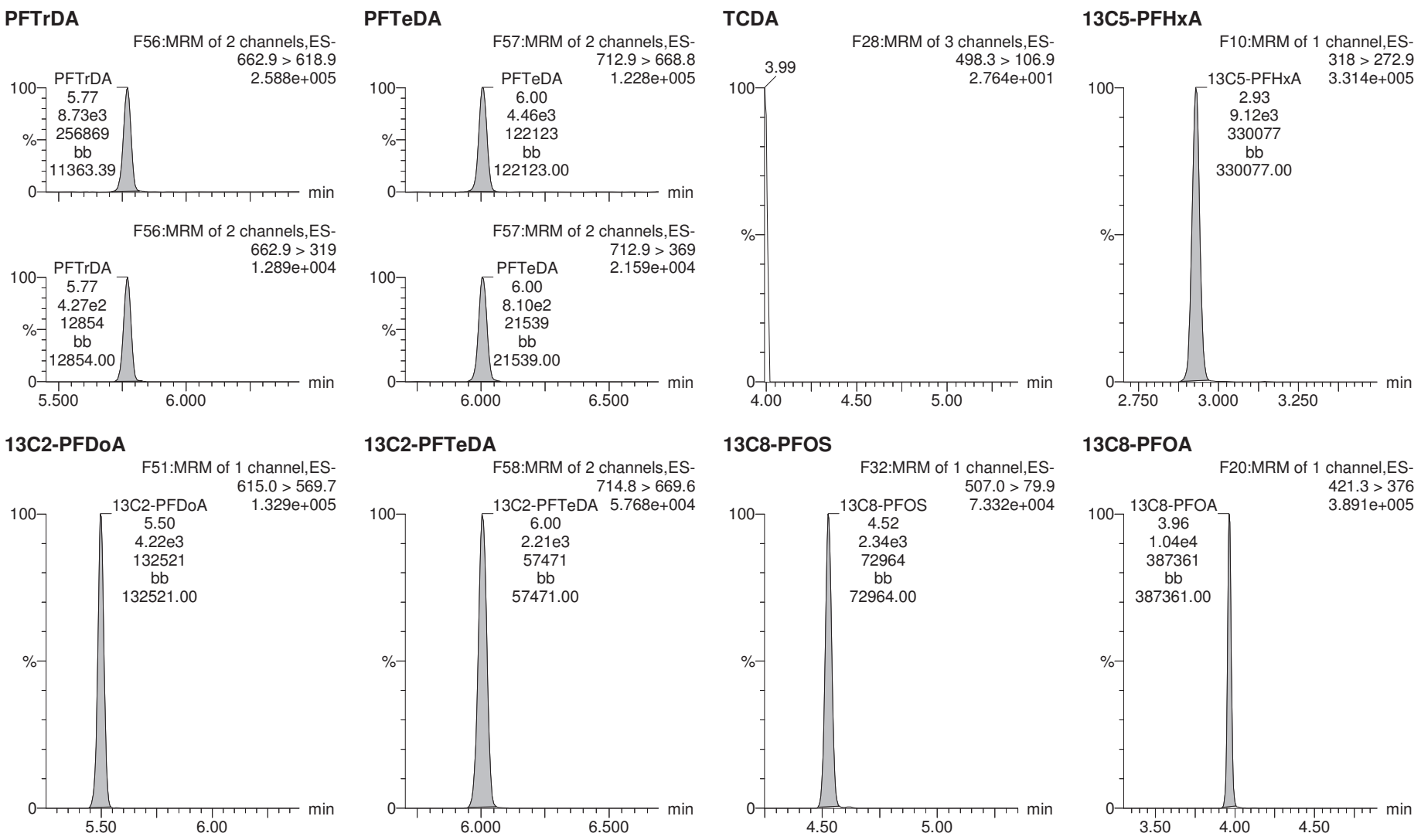


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Printed: Tuesday, January 16, 2018 15:24:21 Pacific Standard Time

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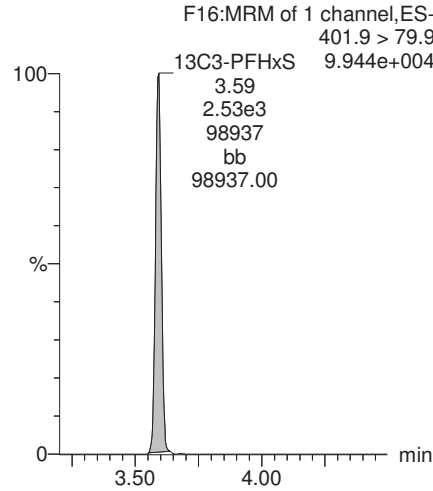
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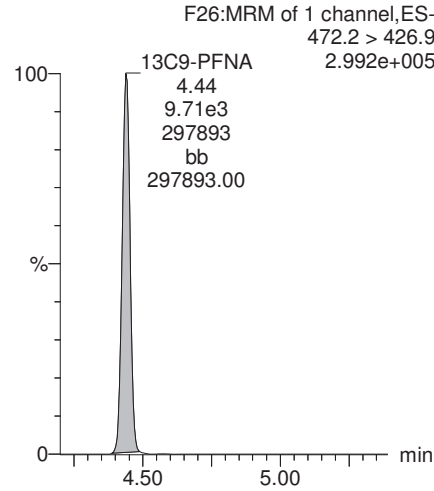
Printed: Tuesday, January 16, 2018 15:24:21 Pacific Standard Time

Name: 180114M1_22, Date: 14-Jan-2018, Time: 17:39:19, ID: B7L0101-BS1 OPR 0.25, Description: OPR

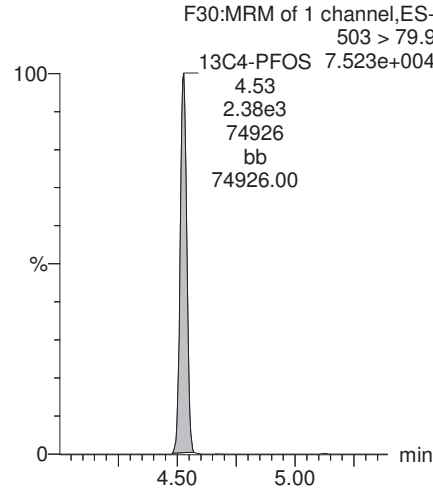
13C3-PFHxS



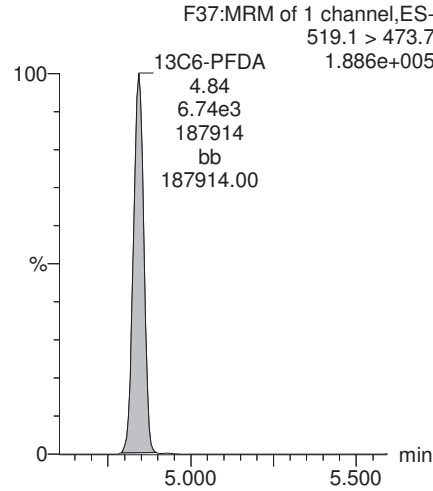
13C9-PFNA



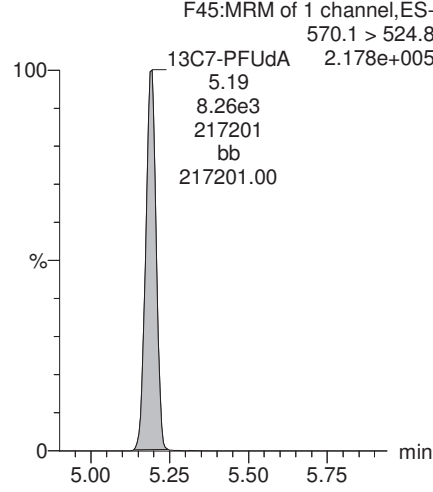
13C4-PFOS



13C6-PFDA



13C7-PFUdA



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-4.qld

Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:29:52 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818.mdb 09 Jan 2018 10:39:49

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7	1.39e3	8.73e2	0.250		2.66	2.59	19.9	37.2984	93.2
2	4 PFHxA	313.2 > 268.9	6.97e3	2.12e3	0.250		3.15	3.08	16.4	33.9050	84.8
3	5 PFHpA	363.0 > 318.9	5.70e3	5.17e3	0.250		3.78	3.70	13.8	33.5815	84.0
4	6 L-PFHxS	398.9 > 79.6	1.06e3	6.44e2	0.250		3.94	3.85	20.6	39.3334	98.3
5	9 L-PFOA	413 > 368.7	7.01e3	7.52e3	0.250		4.31	4.22	11.7	36.4381	91.1
6	12 PFNA	463.0 > 418.8	6.35e3	5.86e3	0.250		4.81	4.66	13.5	38.2009	95.5
7	14 L-PFOS	499 > 79.9	1.69e3	1.80e3	0.250		4.89	4.75	11.8	39.9793	99.9
8	16 PFDA	513 > 468.8	6.35e3	5.73e3	0.250		5.18	5.03	13.8	34.1428	85.4
9	18 N-MeFOSAA	570.1 > 419	2.19e3	1.96e3	0.250		5.32	5.18	14.0	28.1415	70.4
10	19 N-EtFOSAA	584.2 > 419	2.05e3	2.26e3	0.250		5.48	5.34	11.4	29.8334	74.6
11	20 PFUdA	563.0 > 518.9	4.86e3	4.76e3	0.250		5.50	5.36	12.7	38.6499	96.6
12	22 PFDoA	612.9 > 569.0	5.72e3	2.99e3	0.250		5.77	5.64	23.9	44.9304	112.3

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-4.qld

Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time
Printed: Tuesday, January 16, 2018 15:30:02 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818.mdb 09 Jan 2018 10:39:49

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9	5.83e3	2.99e3	0.250		6.00	5.89	24.4	40.7653	101.9
2	25 PFTeDA	712.9 > 668.8	3.28e3	1.54e3	0.250		6.22	6.11	26.6	36.0944	90.2
3	33 13C3-PFBS	302. > 98.8	8.73e2	7.42e3	0.250	0.095	2.77	2.59	1.47	61.7069	123.4
4	34 13C2-PFHxA	315 > 269.8	2.12e3	7.42e3	0.250	0.597	3.15	3.08	3.58	23.9742	119.9
5	35 13C4-PFHpA	367.2 > 321.8	5.17e3	7.42e3	0.250	0.604	3.78	3.70	8.72	57.6918	115.4
6	36 18O2-PFHxS	403.0 > 102.6	6.44e2	1.87e3	0.250	0.293	3.94	3.86	4.32	58.9204	117.8
7	37 13C2-6:2 FTS	429.1 > 408.9	1.66e3	7.36e3	0.250	0.215	4.25	4.17	2.81	52.3147	104.6
8	38 13C2-PFOA	414.9 > 369.7	7.52e3	7.36e3	0.250	0.916	4.31	4.22	12.8	55.8071	111.6
9	39 13C5-PFNA	468.2 > 422.9	5.86e3	6.93e3	0.250	0.817	4.81	4.66	10.6	51.7300	103.5
10	40 13C8-PFOSA	506.1 > 77.7	9.33e2	7.08e3	0.250	0.223	4.87	4.72	1.65	29.5664	59.1
11	41 13C8-PFOS	507.0 > 79.9	1.80e3	1.67e3	0.250	0.875	4.89	4.75	13.4	61.5013	123.0
12	42 13C2-PFDA	515.1 > 469.9	5.73e3	5.88e3	0.250	1.105	5.18	5.03	12.2	44.1256	88.3
13	43 13C2-8:2 FTS	529.1 > 508.7	9.35e2	7.42e3	0.250	0.101	5.15	5.00	1.57	62.4435	124.9
14	44 d3-N-MeFOSAA	573.3 > 419	1.96e3	7.08e3	0.250	0.345	5.32	5.18	3.46	40.0729	80.1
15	45 d5-N-EtFOSAA	589.3 > 419	2.26e3	7.08e3	0.250	0.390	5.47	5.34	3.99	40.8568	81.7
16	46 13C2-PFUdA	565 > 519.8	4.76e3	7.08e3	0.250	0.958	5.49	5.36	8.41	35.1184	70.2
17	47 13C2-PFDoA	615.0 > 569.7	2.99e3	7.08e3	0.250	0.599	5.77	5.64	5.28	35.2742	70.5
18	49 13C2-PFTeDA	714.8 > 669.6	1.54e3	7.08e3	0.250	0.282	6.22	6.11	2.72	38.6743	77.3
19	55 13C5-PFHxA	318 > 272.9	7.42e3	7.42e3	0.250	1.000	3.15	3.08	12.5	50.0000	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.87e3	1.87e3	0.250	1.000	4.02	3.85	12.5	50.0000	100.0
21	57 13C8-PFOA	421.3 > 376	7.36e3	7.36e3	0.250	1.000	4.38	4.22	12.5	50.0000	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.93e3	6.93e3	0.250	1.000	4.81	4.66	12.5	50.0000	100.0
23	59 13C4-PFOS	503 > 79.9	1.67e3	1.67e3	0.250	1.000	4.89	4.74	12.5	50.0000	100.0
24	60 13C6-PFDA	519.1 > 473.7	5.88e3	5.88e3	0.250	1.000	5.18	5.03	12.5	50.0000	100.0
25	61 13C7-PFUdA	570.1 > 524.8	7.08e3	7.08e3	0.250	1.000	5.49	5.36	12.5	50.0000	100.0
26	62 Total PFHxS	398.9 > 79.6	1.06e3	6.44e2	0.250		4.14		20.6	39.3334	
27	63 Total PFOA	413 > 368.7	7.01e3	7.52e3	0.250		4.51		11.7	36.4381	
28	64 Total PFOS	499 > 79.9	1.69e3	1.80e3	0.250		5.02		11.8	39.9793	
29	65 Total N-MeFOSAA	570.1 > 419	2.19e3	1.96e3	0.250		5.45		14.0	28.1415	
30	66 Total N-EtFOSAA	584.2 > 419	2.05e3	2.26e3	0.250		5.61		11.4	29.8334	

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-4.qld

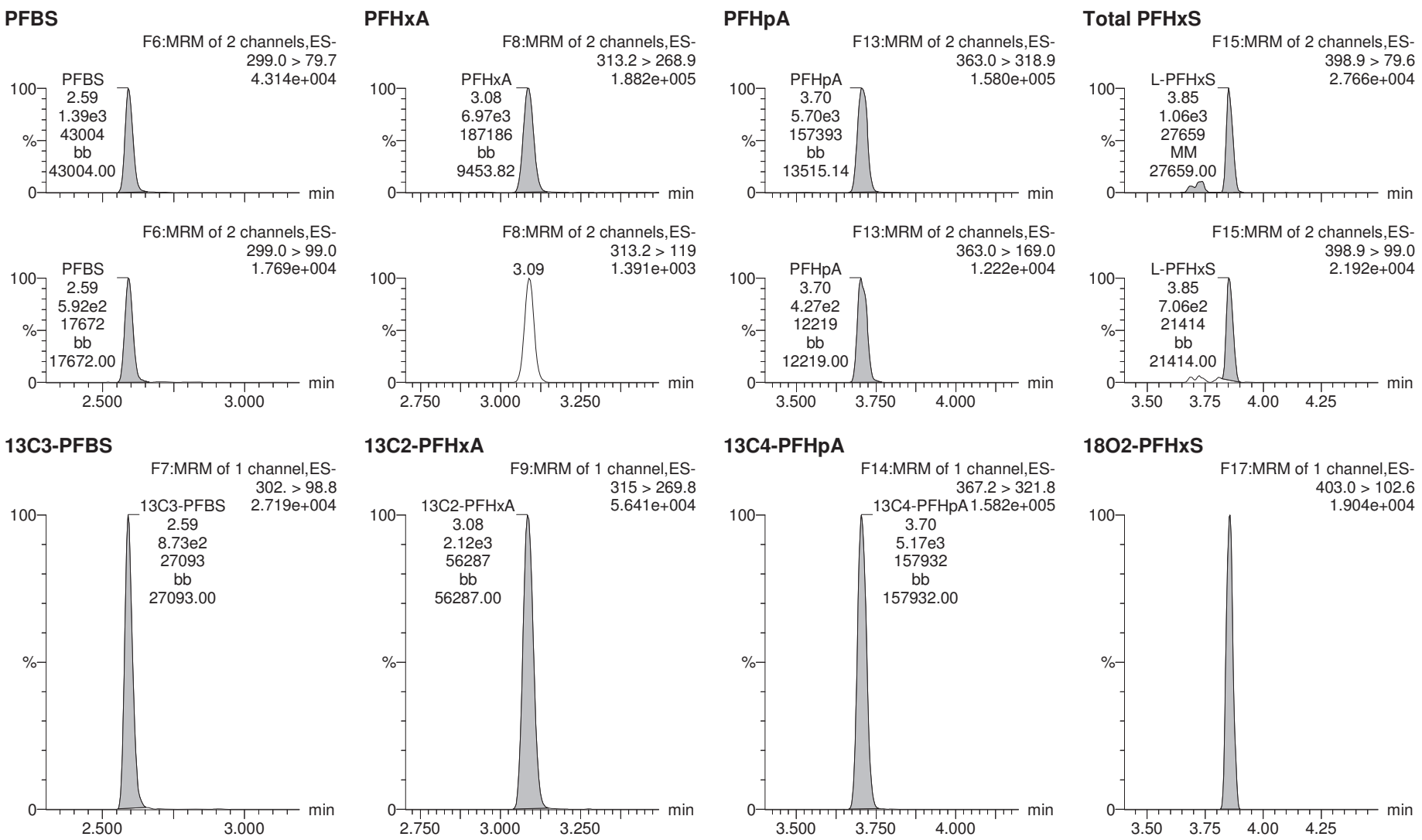
Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:30:02 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818.mdb 09 Jan 2018 10:39:49

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

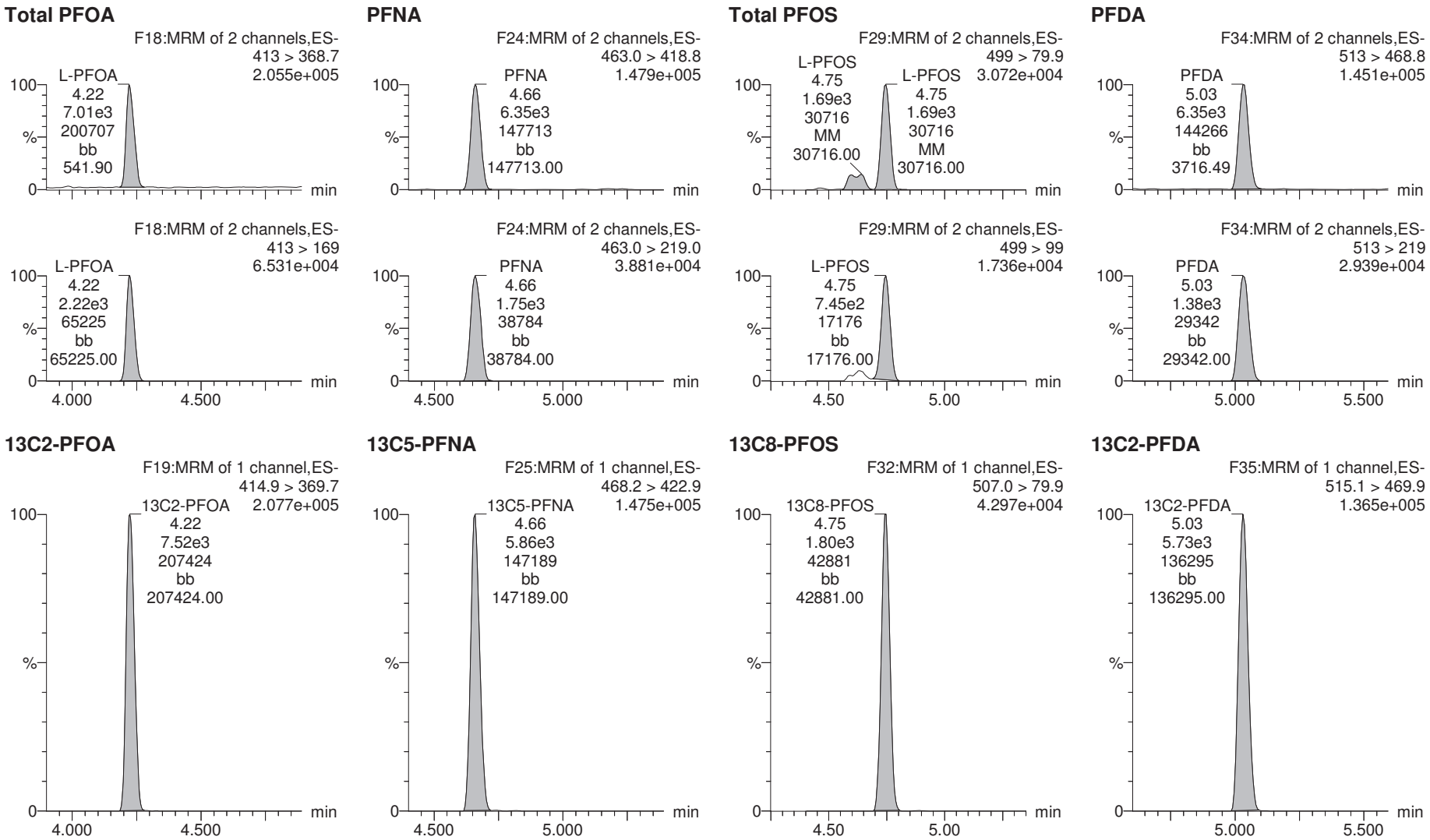


Dataset: U:\Q4.PRO\results\180111M2\1801111M2-4.qld

Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:30:02 Pacific Standard Time

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

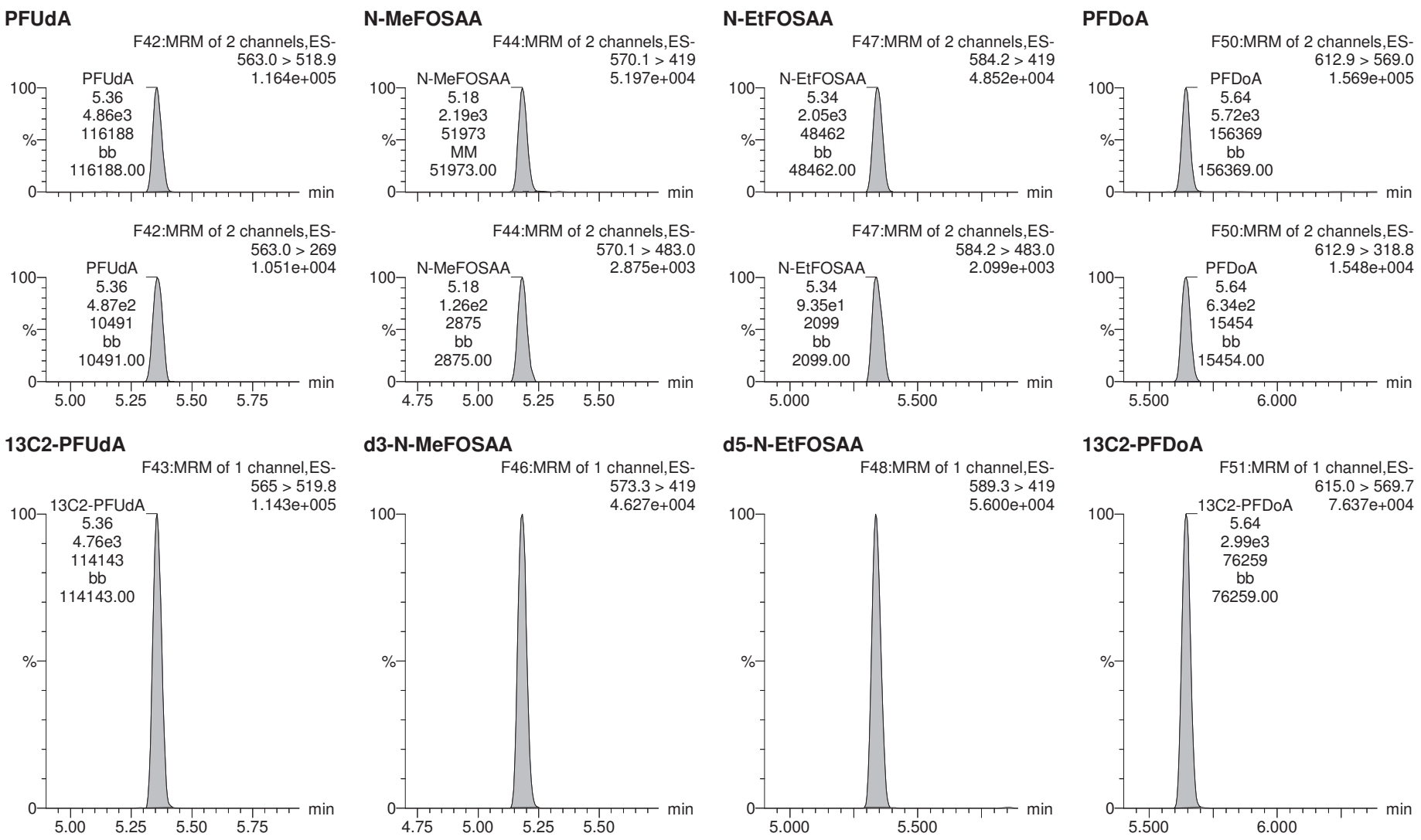


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Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:30:02 Pacific Standard Time

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

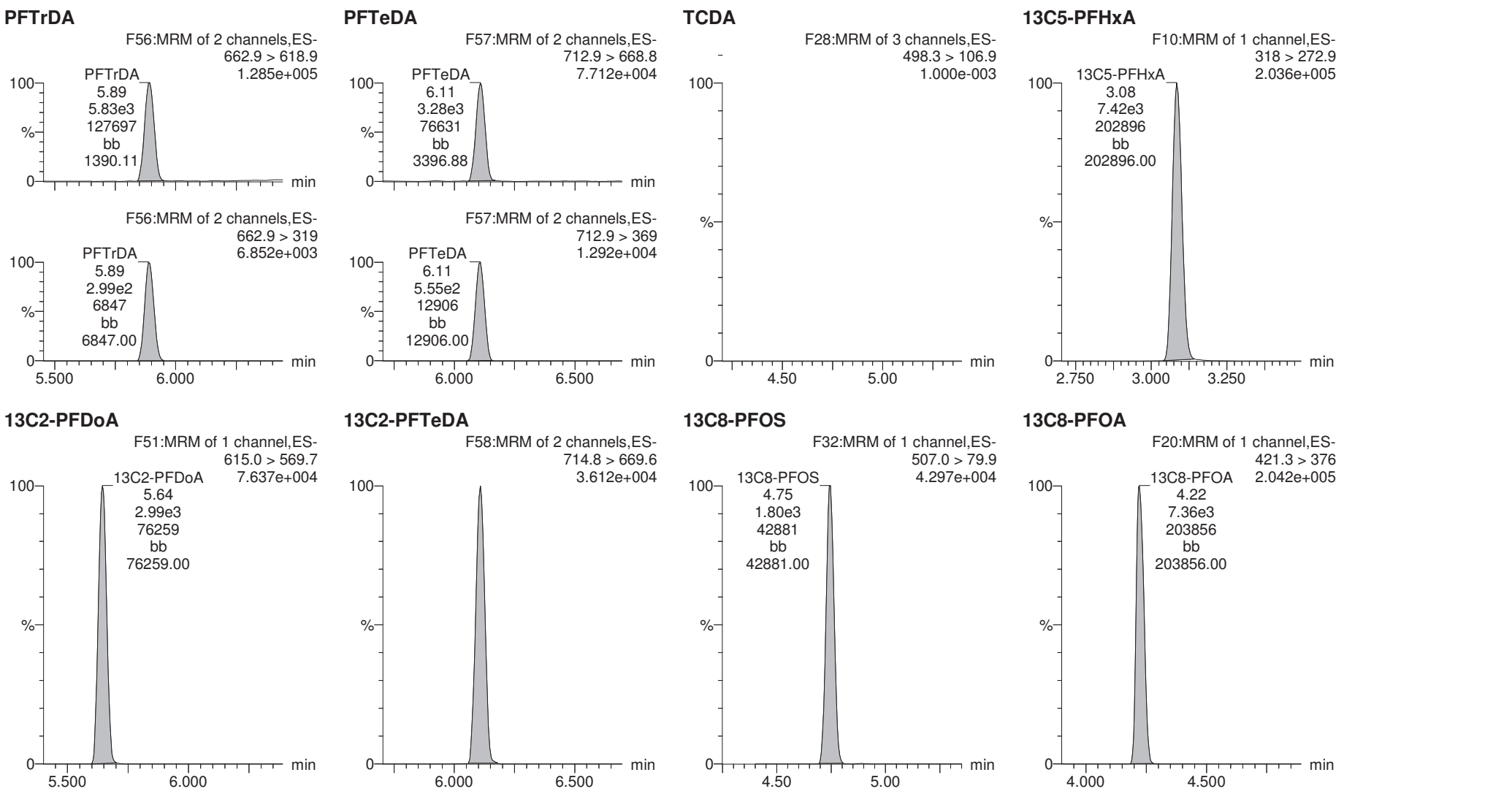


Dataset: U:\Q4.PRO\results\180111M2\1801111M2-4.qld

Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:30:02 Pacific Standard Time

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

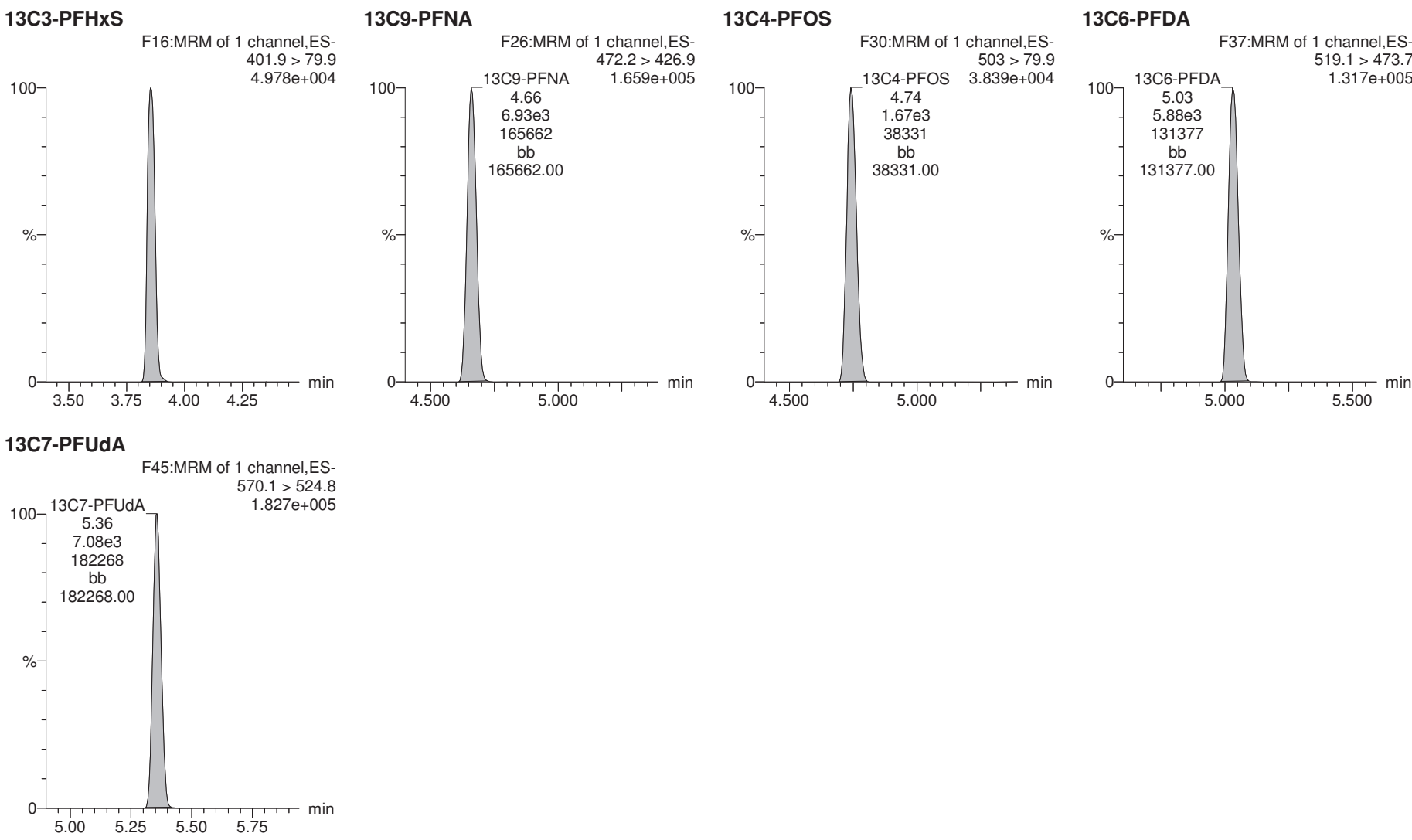


Dataset: U:\Q4.PRO\results\180111M2\1801111M2-4.qld

Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 15:30:02 Pacific Standard Time

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD



Dataset: U:\Q4.PRO\results\180114M1\180114M1-27.qld

Last Altered: Tuesday, January 16, 2018 10:25:42 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:26:43 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_27, Date: 14-Jan-2018, Time: 18:36:33, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		9.53e2	0.223		2.60				
2	4 PFHxA	313.2 > 268.9		2.53e3	0.223		3.00				
3	5 PFHpA	363.0 > 318.9		6.25e3	0.223		3.54				
4	6 L-PFHxS	398.9 > 79.6		8.52e2	0.223		3.68				
5	9 L-PFOA	413 > 368.7	4.47e2	8.39e3	0.223		4.07	3.95	0.665	1.5549	
6	12 PFNA	463.0 > 418.8	1.41e2	7.98e3	0.223		4.54	4.42	0.220	0.7334	
7	13 PFOSA	498.1 > 77.8		1.14e3	0.223		4.61				
8	16 PFDA	513 > 468.8		5.72e3	0.223		4.94				
9	18 N-MeFOSAA	570.1 > 419		2.15e3	0.223		5.10				
10	19 N-EtFOSAA	584.2 > 419		2.27e3	0.223		5.27				
11	20 PFUdA	563.0 > 518.9		7.97e3	0.223		5.30				
12	22 PFDoA	612.9 > 569.0		4.27e3	0.223		5.60				

Dataset: U:\Q4.PRO\results\180114M1\180114M1-27.qld

Last Altered: Tuesday, January 16, 2018 10:25:42 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:26:51 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_27, Date: 14-Jan-2018, Time: 18:36:33, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		1.71e3	0.223		5.85				
2	25 PFTeDA	712.9 > 668.8		1.71e3	0.223		6.10				
3	33 13C3-PFBS	302. > 98.8	9.53e2	9.94e3	0.223	0.097	2.60	2.48	1.20	55.5970	99.3
4	34 13C2-PFHxA	315 > 269.8	2.53e3	9.94e3	0.223	0.633	3.00	2.91	3.19	22.5294	100.6
5	35 13C4-PFHpA	367.2 > 321.8	6.25e3	9.94e3	0.223	0.651	3.56	3.44	7.86	54.0932	96.6
6	36 18O2-PFHxS	403.0 > 102.6	8.52e2	2.32e3	0.223	0.326	3.68	3.58	4.60	63.2634	113.0
7	37 13C2-6:2 FTS	429.1 > 408.9	1.79e3	8.86e3	0.223	0.171	4.00	3.86	2.52	66.2691	118.4
8	38 13C2-PFOA	414.9 > 369.7	8.39e3	8.86e3	0.223	0.903	4.07	3.95	11.8	58.7054	104.9
9	39 13C5-PFNA	468.2 > 422.9	7.98e3	1.06e4	0.223	0.844	4.54	4.42	9.42	49.9972	89.3
10	40 13C8-PFOSA	506.1 > 77.7	1.14e3	9.43e3	0.223	0.165	4.61	4.49	1.51	40.8428	73.0
11	41 13C8-PFOS	507.0 > 79.9	2.41e3	2.70e3	0.223	0.920	4.62	4.51	11.2	54.3364	97.1
12	42 13C2-PFDA	515.1 > 469.9	5.72e3	8.06e3	0.223	1.044	4.82	4.83	8.86	38.0061	67.9
13	43 13C2-8:2 FTS	529.1 > 508.7	6.72e2	9.94e3	0.223	0.087	4.89	4.77	0.845	43.7366	78.1
14	44 d3-N-MeFOSAA	573.3 > 419	2.15e3	9.43e3	0.223	0.227	5.08	4.98	2.85	56.0953	100.2
15	45 d5-N-EtFOSAA	589.3 > 419	2.27e3	9.43e3	0.223	0.313	5.27	5.16	3.01	43.0684	77.0
16	46 13C2-PFUDa	565 > 519.8	7.97e3	9.43e3	0.223	0.899	5.28	5.17	10.6	52.6075	94.0
17	47 13C2-PFDOa	615.0 > 569.7	4.27e3	9.43e3	0.223	0.645	5.60	5.48	5.66	39.2564	70.1
18	49 13C2-PFTeDA	714.8 > 669.6	1.71e3	9.43e3	0.223	0.290	6.10	5.99	2.27	35.0432	62.6
19	55 13C5-PFHxA	318 > 272.9	9.94e3	9.94e3	0.223	1.000	3.00	2.91	12.5	55.9685	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.32e3	2.32e3	0.223	1.000	3.68	3.58	12.5	55.9685	100.0
21	57 13C8-PFOA	421.3 > 376	8.86e3	8.86e3	0.223	1.000	4.07	3.95	12.5	55.9685	100.0
22	58 13C9-PFNA	472.2 > 426.9	1.06e4	1.06e4	0.223	1.000	4.54	4.42	12.5	55.9685	100.0
23	59 13C4-PFOS	503 > 79.9	2.70e3	2.70e3	0.223	1.000	4.63	4.51	12.5	55.9685	100.0
24	60 13C6-PFDA	519.1 > 473.7	8.06e3	8.06e3	0.223	1.000	4.94	4.83	12.5	55.9685	100.0
25	61 13C7-PFUDa	570.1 > 524.8	9.43e3	9.43e3	0.223	1.000	5.28	5.17	12.5	55.9685	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	8.52e2	0.223		3.50		0.000		
27	63 Total PFOA	413 > 368.7	4.47e2	8.39e3	0.223		3.90		0.665	1.5549	
28	64 Total PFOS	499 > 79.9	0.00e0	2.41e3	0.223		4.50		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.15e3	0.223		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.27e3	0.223		5.20		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	4.47e2		0.223		0.00		0.665	1.5549	

Dataset: U:\Q4.PRO\results\180114M1\180114M1-27.qld

Rev'd: MM 1/16/18

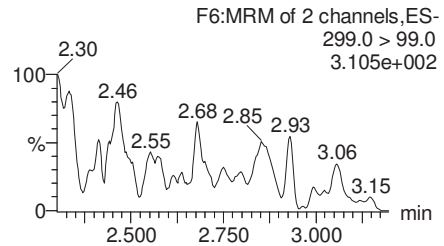
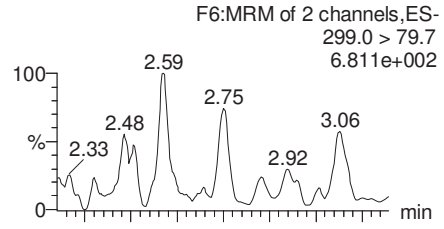
Last Altered: Tuesday, January 16, 2018 10:25:42 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:26:51 Pacific Standard Time

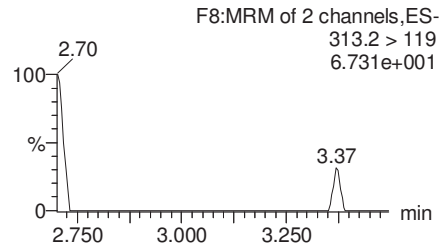
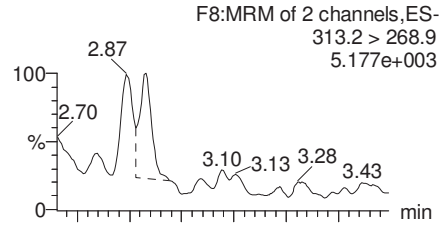
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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_27, Date: 14-Jan-2018, Time: 18:36:33, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

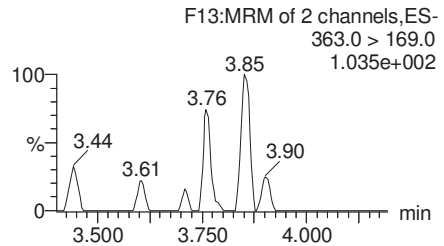
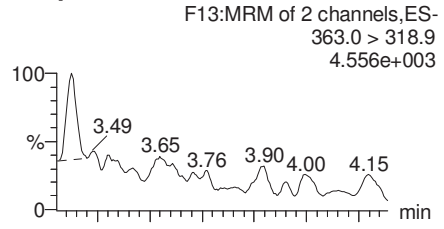
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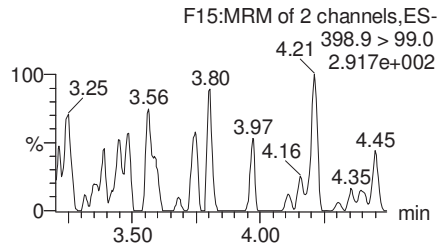
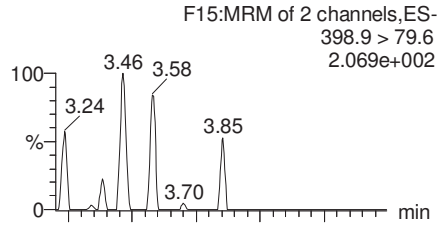
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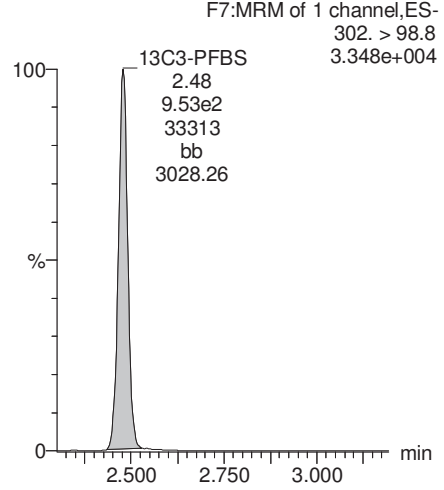
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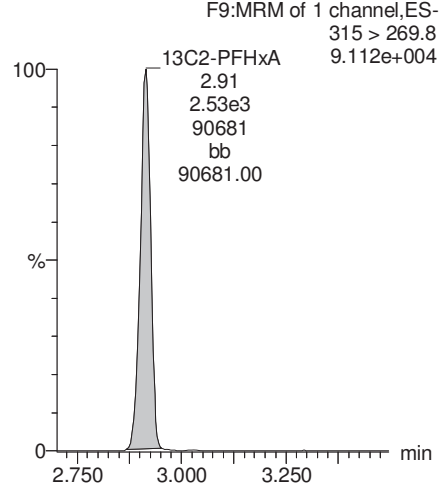
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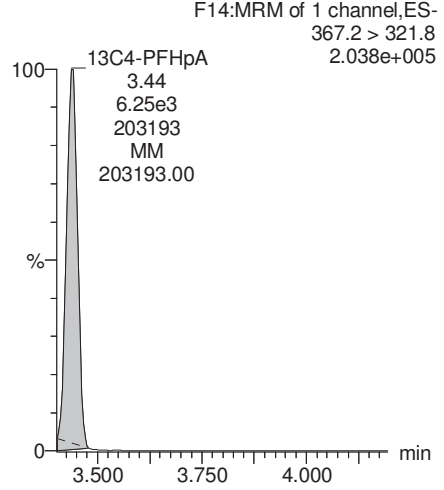
13C3-PFBS



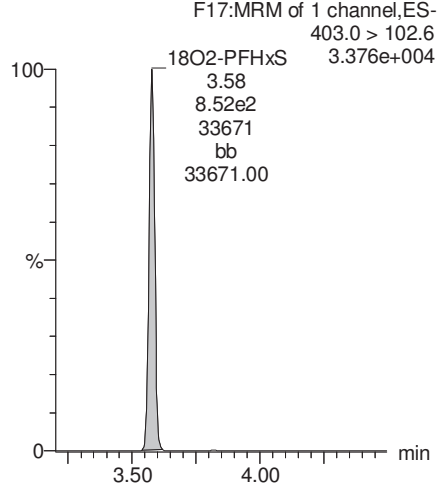
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

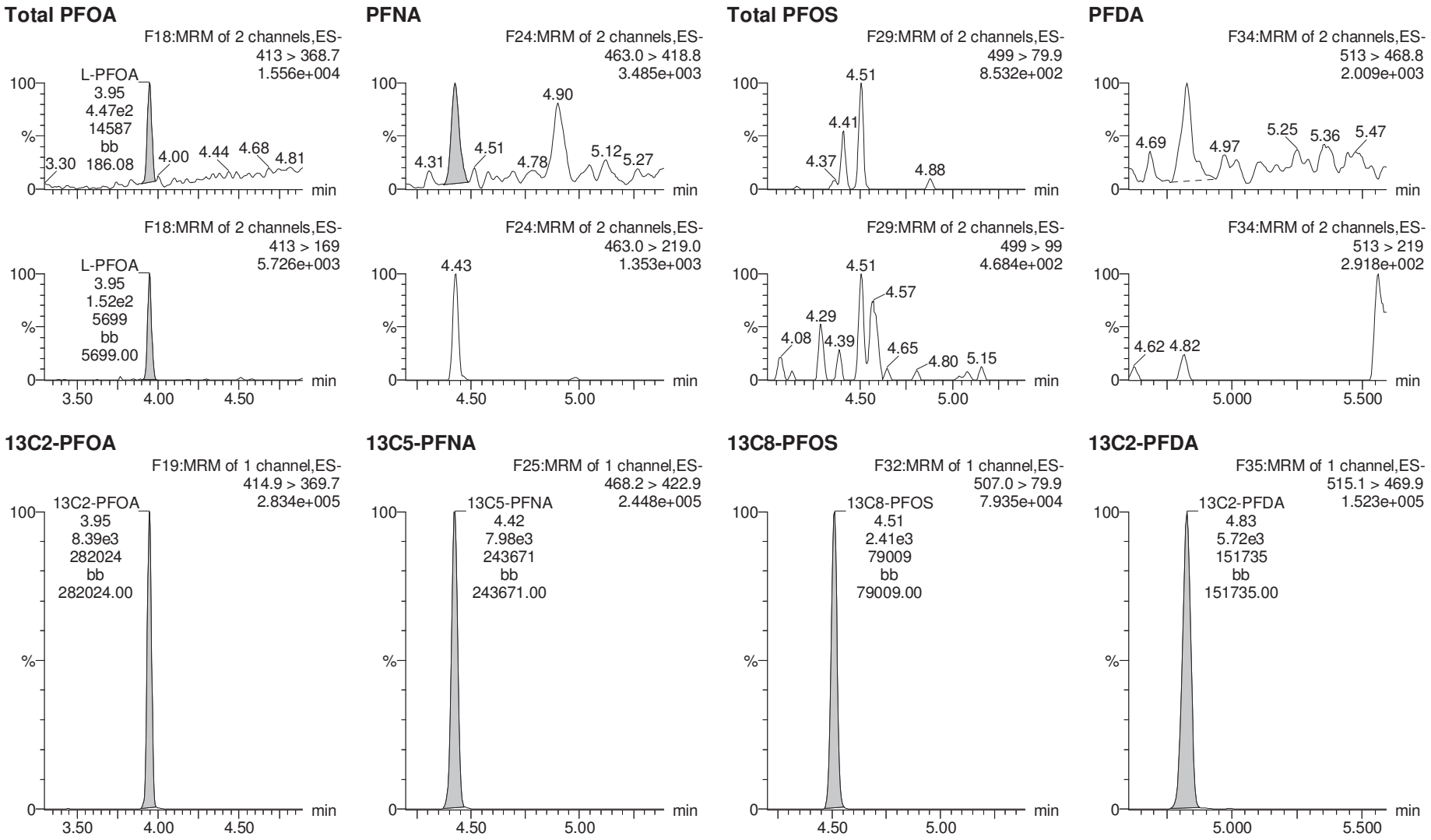


Dataset: U:\Q4.PRO\results\180114M1\180114M1-27.qld

Last Altered: Tuesday, January 16, 2018 10:25:42 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:26:51 Pacific Standard Time

Name: 180114M1_27, Date: 14-Jan-2018, Time: 18:36:33, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

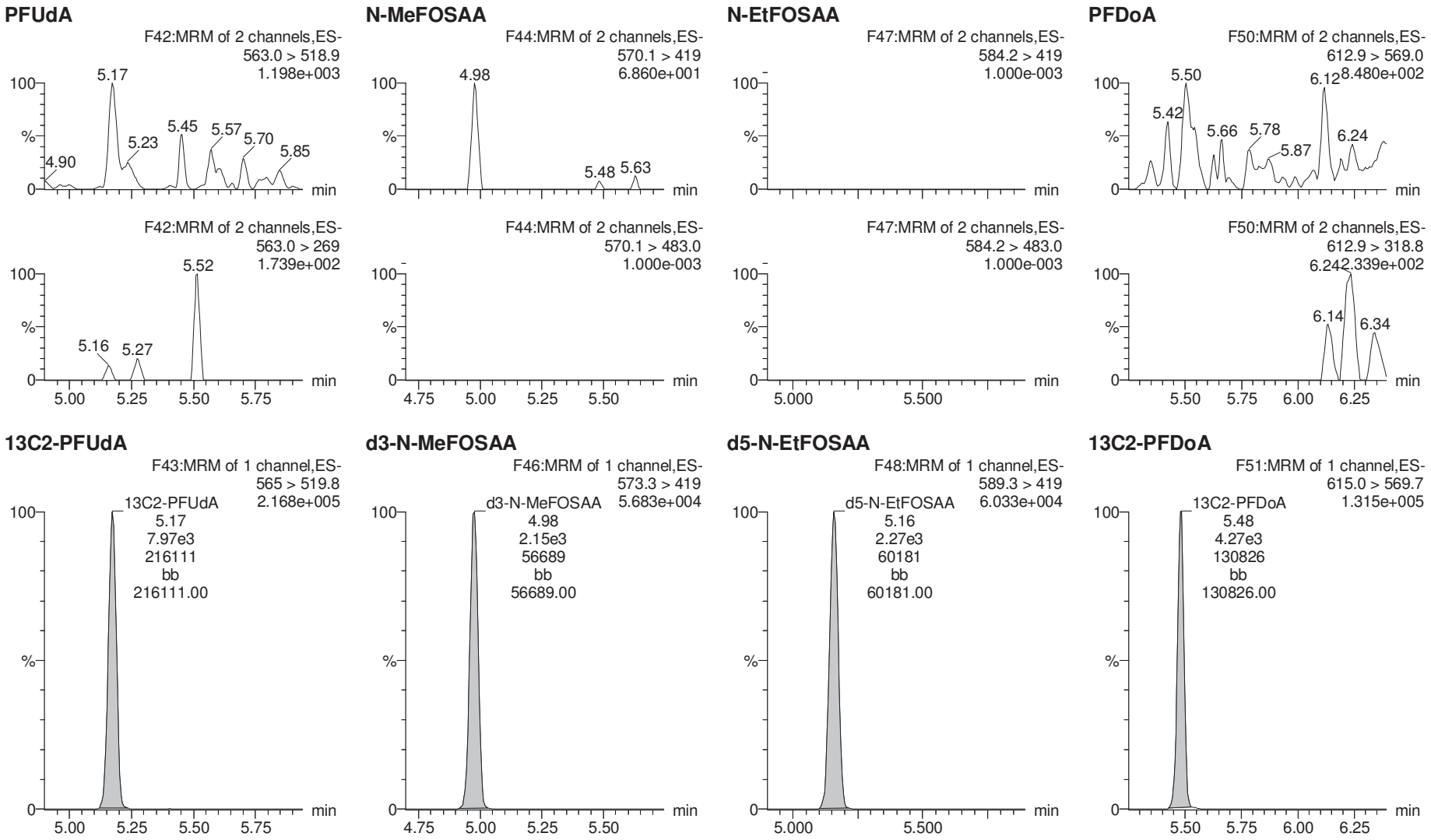


Dataset: U:\Q4.PRO\results\180114M1\180114M1-27.qld

Last Altered: Tuesday, January 16, 2018 10:25:42 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:26:51 Pacific Standard Time

Name: 180114M1_27, Date: 14-Jan-2018, Time: 18:36:33, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

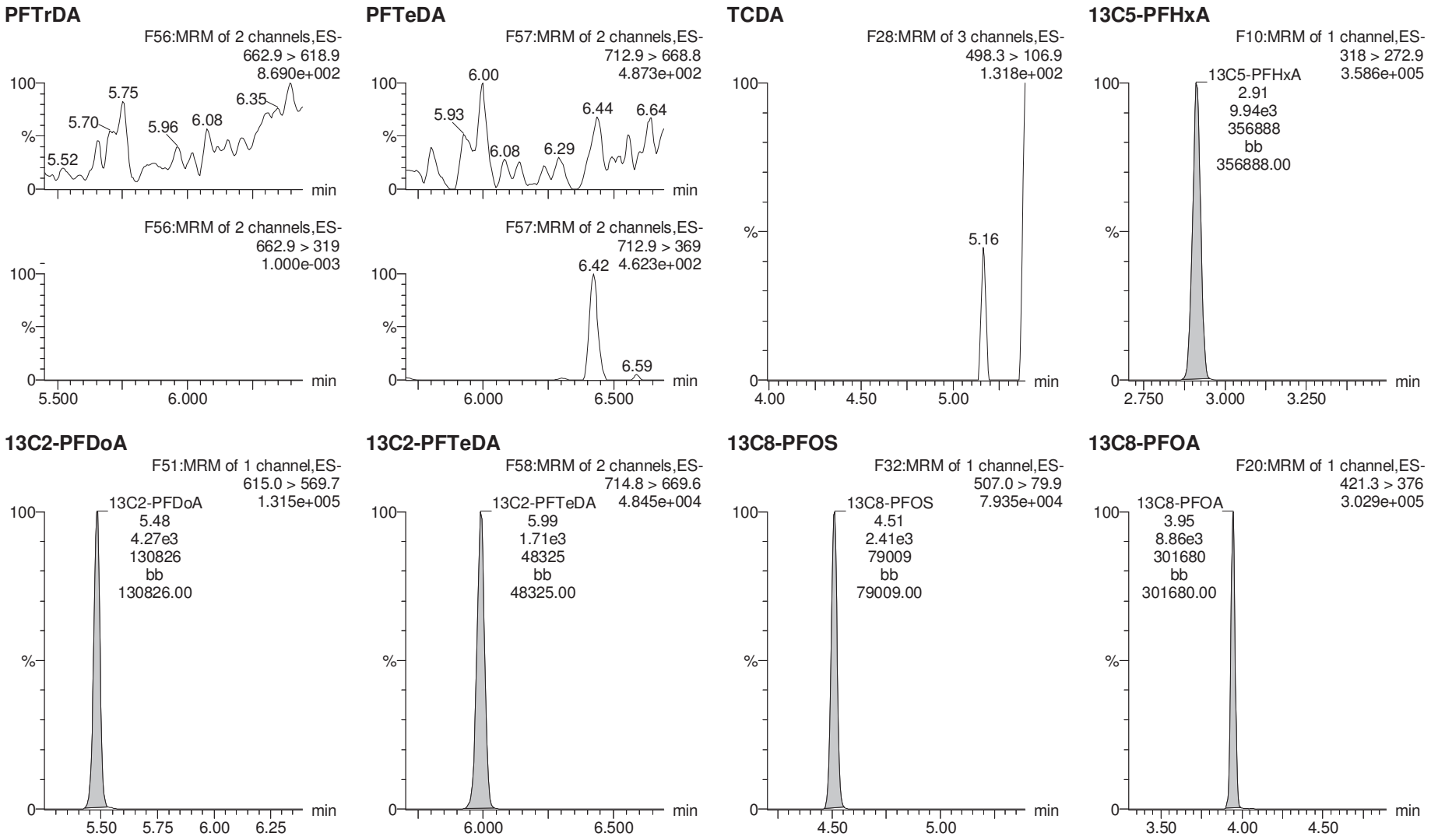


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Last Altered: Tuesday, January 16, 2018 10:25:42 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:26:51 Pacific Standard Time

Name: 180114M1_27, Date: 14-Jan-2018, Time: 18:36:33, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

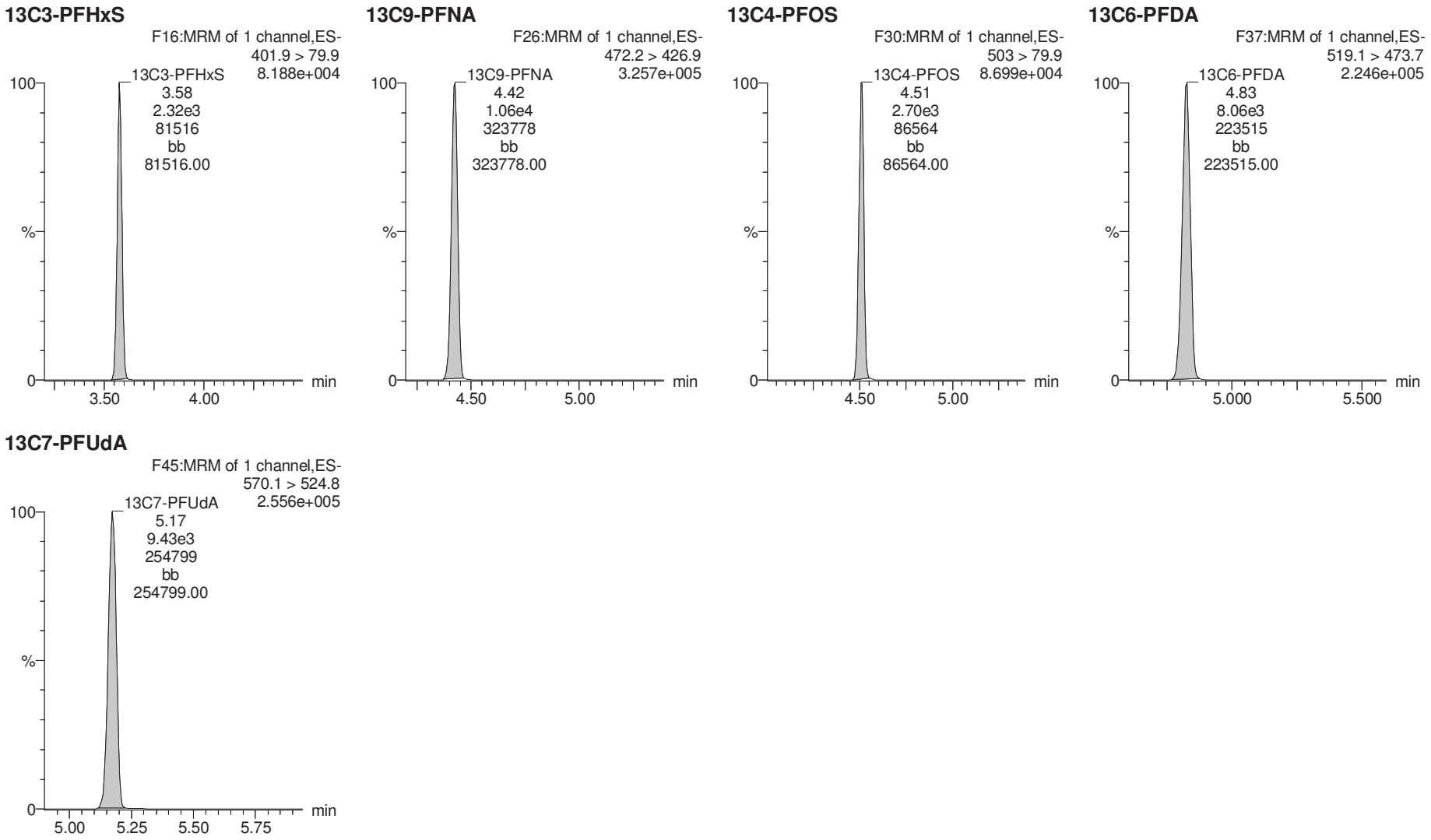


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Last Altered: Tuesday, January 16, 2018 10:25:42 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:26:51 Pacific Standard Time

Name: 180114M1_27, Date: 14-Jan-2018, Time: 18:36:33, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-10.qld

Last Altered: Tuesday, January 16, 2018 10:40:46 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:41:04 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_10, Date: 12-Jan-2018, Time: 05:19:28, ID: 1701851-02 FT-PZ-462I-20171202 0.25131, Description: FT-PZ-462I-20171202

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		8.11e2	0.251		2.66				
2	4	PFHxA	313.2 > 268.9		1.98e3	0.251		3.15				
3	5	PFHpA	363.0 > 318.9		5.17e3	0.251		3.78				
4	6	L-PFHxS	398.9 > 79.6		6.76e2	0.251		3.94				
5	9	L-PFOA	413 > 368.7		6.87e3	0.251		4.31				
6	12	PFNA	463.0 > 418.8		5.47e3	0.251		4.81				
7	13	PFOSA	498.1 > 77.8		9.62e2	0.251		4.87				
8	16	PFDA	513 > 468.8		5.27e3	0.251		5.18				
9	18	N-MeFOSAA	570.1 > 419		1.90e3	0.251		5.32				
10	19	N-EtFOSAA	584.2 > 419		2.33e3	0.251		5.48				
11	20	PFUdA	563.0 > 518.9		5.72e3	0.251		5.50				
12	22	PFDoA	612.9 > 569.0		3.14e3	0.251		5.77				

Dataset: U:\Q4.PRO\results\180111M2\180111M2-10.qld

Last Altered: Tuesday, January 16, 2018 10:40:46 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:42:45 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_10, Date: 12-Jan-2018, Time: 05:19:28, ID: 1701851-02 FT-PZ-462I-20171202 0.25131, Description: FT-PZ-462I-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTeDA	662.9 > 618.9		3.14e3	0.251		6.00				
2	25 PFTeDA	712.9 > 668.8		1.51e3	0.251		6.22				
3	33 13C3-PFBS	302. > 98.8	8.11e2	7.24e3	0.251	0.095	2.77	2.59	1.40	58.4678	117.5
4	34 13C2-PFHxA	315 > 269.8	1.98e3	7.24e3	0.251	0.597	3.15	3.08	3.42	22.7903	114.5
5	35 13C4-PFHpA	367.2 > 321.8	5.17e3	7.24e3	0.251	0.604	3.78	3.70	8.93	58.8248	118.3
6	36 18O2-PFHxS	403.0 > 102.6	6.76e2	2.05e3	0.251	0.293	3.94	3.85	4.12	55.9335	112.5
7	37 13C2-6:2 FTS	429.1 > 408.9	1.41e3	6.94e3	0.251	0.215	4.25	4.17	2.54	46.9516	94.4
8	38 13C2-PFOA	414.9 > 369.7	6.87e3	6.94e3	0.251	0.916	4.31	4.22	12.4	53.7507	108.1
9	39 13C5-PFNA	468.2 > 422.9	5.47e3	6.87e3	0.251	0.817	4.81	4.66	9.96	48.4797	97.5
10	40 13C8-PFOSA	506.1 > 77.7	9.62e2	7.35e3	0.251	0.223	4.87	4.71	1.64	29.1863	58.7
11	41 13C8-PFOS	507.0 > 79.9	1.88e3	1.77e3	0.251	0.875	4.89	4.74	13.3	60.4743	121.6
12	42 13C2-PFDA	515.1 > 469.9	5.27e3	4.99e3	0.251	1.105	5.18	5.04	13.2	47.5165	95.5
13	43 13C2-8:2 FTS	529.1 > 508.7	8.16e2	7.24e3	0.251	0.101	5.15	5.00	1.41	55.5774	111.7
14	44 d3-N-MeFOSAA	573.3 > 419	1.90e3	7.35e3	0.251	0.345	5.32	5.18	3.23	37.2565	74.9
15	45 d5-N-EtFOSAA	589.3 > 419	2.33e3	7.35e3	0.251	0.390	5.47	5.34	3.95	40.3040	81.0
16	46 13C2-PFUDa	565 > 519.8	5.72e3	7.35e3	0.251	0.958	5.49	5.35	9.73	40.4025	81.2
17	47 13C2-PFDOa	615.0 > 569.7	3.14e3	7.35e3	0.251	0.599	5.77	5.64	5.34	35.4625	71.3
18	49 13C2-PFTeDA	714.8 > 669.6	1.51e3	7.35e3	0.251	0.282	6.22	6.11	2.57	36.3068	73.0
19	55 13C5-PFHxA	318 > 272.9	7.24e3	7.24e3	0.251	1.000	3.15	3.08	12.5	49.7394	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.05e3	2.05e3	0.251	1.000	4.02	3.85	12.5	49.7394	100.0
21	57 13C8-PFOA	421.3 > 376	6.94e3	6.94e3	0.251	1.000	4.38	4.22	12.5	49.7394	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.87e3	6.87e3	0.251	1.000	4.81	4.66	12.5	49.7394	100.0
23	59 13C4-PFOS	503 > 79.9	1.77e3	1.77e3	0.251	1.000	4.89	4.74	12.5	49.7394	100.0
24	60 13C6-PFDA	519.1 > 473.7	4.99e3	4.99e3	0.251	1.000	5.18	5.04	12.5	49.7394	100.0
25	61 13C7-PFUDa	570.1 > 524.8	7.35e3	7.35e3	0.251	1.000	5.49	5.36	12.5	49.7394	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	6.76e2	0.251		3.80		0.000		
27	63 Total PFOA	413 > 368.7	0.00e0	6.87e3	0.251		4.51		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	1.88e3	0.251		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.90e3	0.251		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.33e3	0.251		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	0.00e0		0.251		0.00		0.000		

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-10.qld

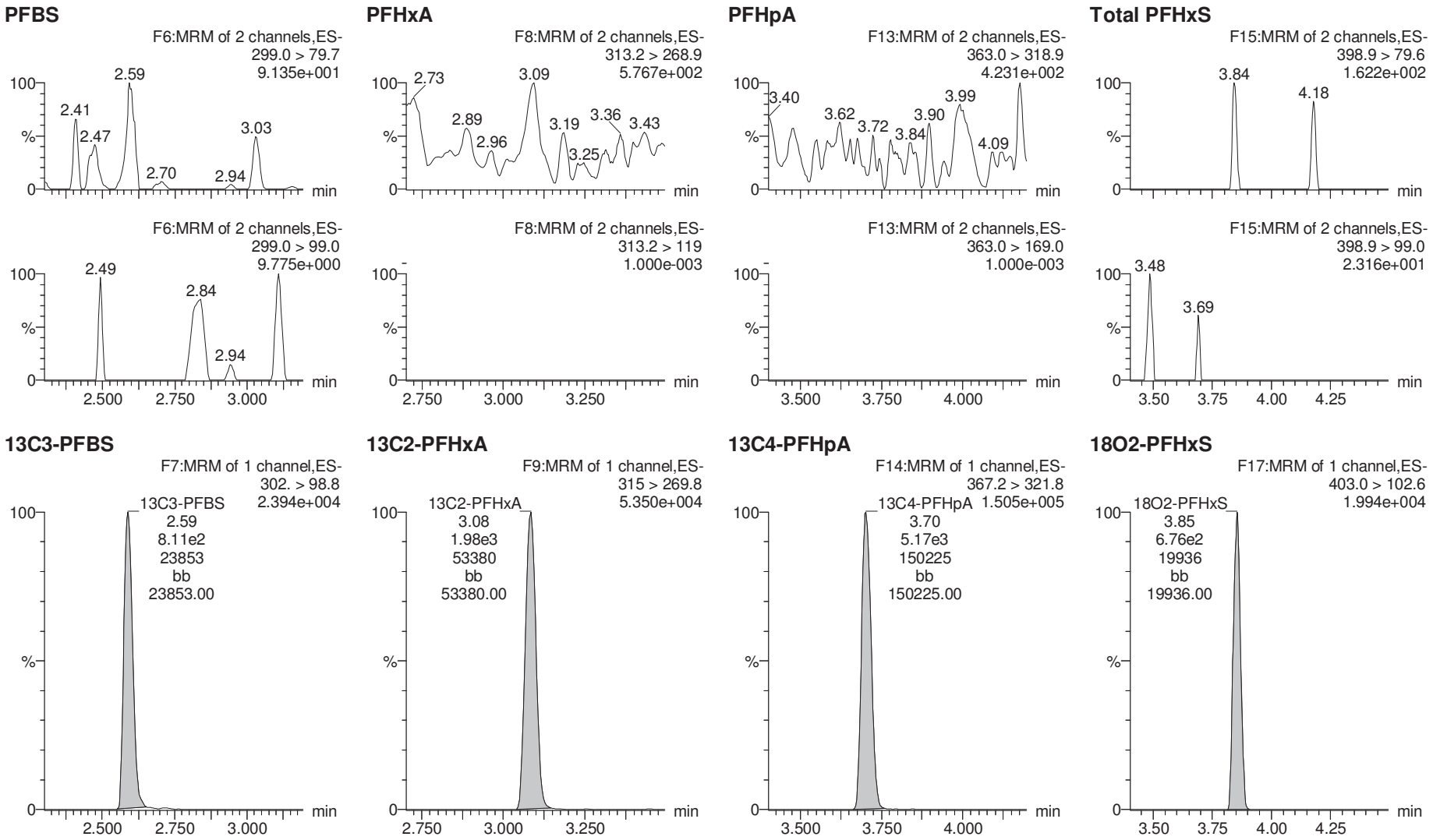
Last Altered: Tuesday, January 16, 2018 10:40:46 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:42:45 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_10, Date: 12-Jan-2018, Time: 05:19:28, ID: 1701851-02 FT-PZ-462I-20171202 0.25131, Description: FT-PZ-462I-20171202

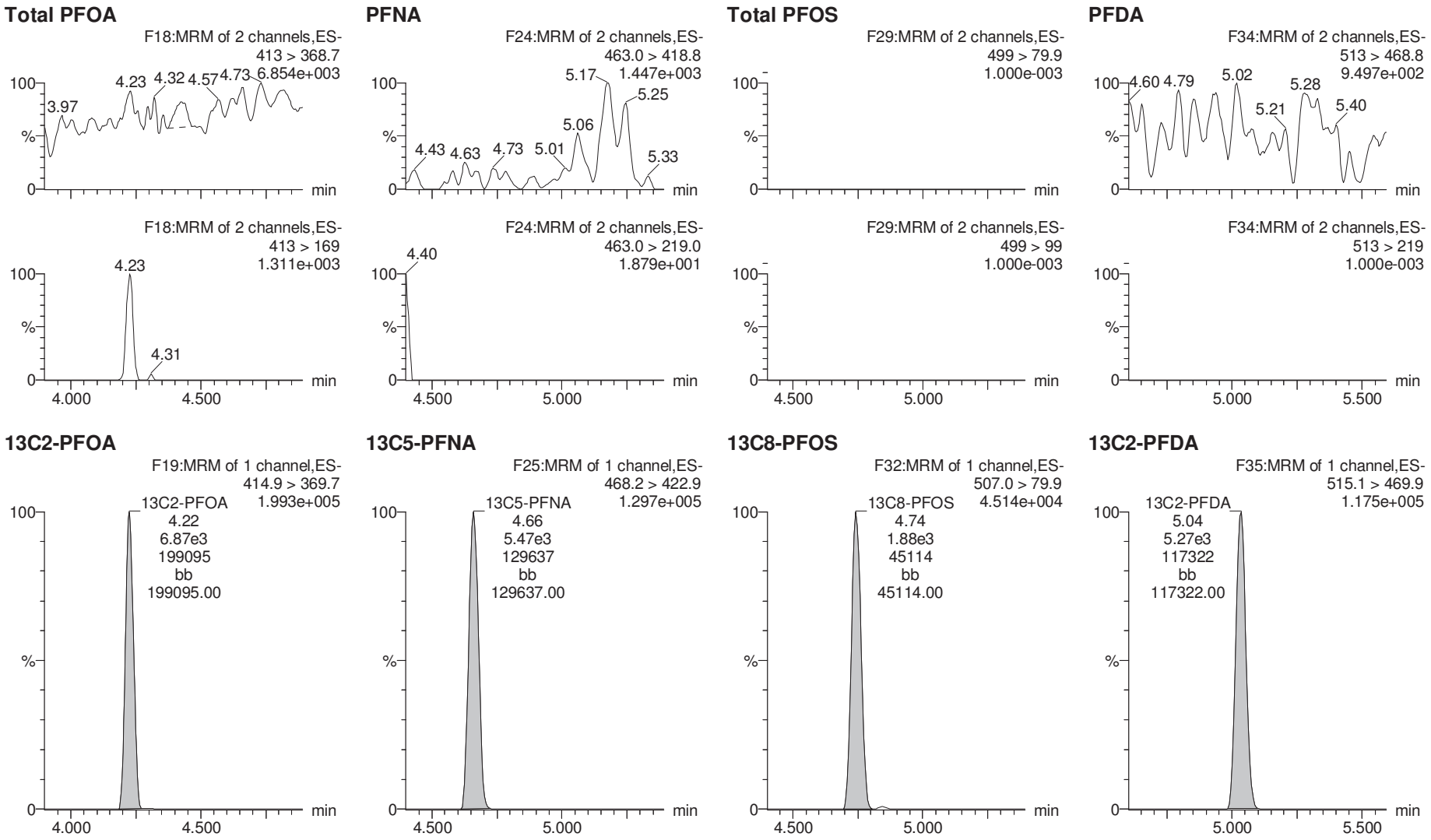


Dataset: U:\Q4.PRO\results\180111M2\180111M2-10.qld

Last Altered: Tuesday, January 16, 2018 10:40:46 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:42:45 Pacific Standard Time

Name: 180111M2_10, Date: 12-Jan-2018, Time: 05:19:28, ID: 1701851-02 FT-PZ-462I-20171202 0.25131, Description: FT-PZ-462I-20171202

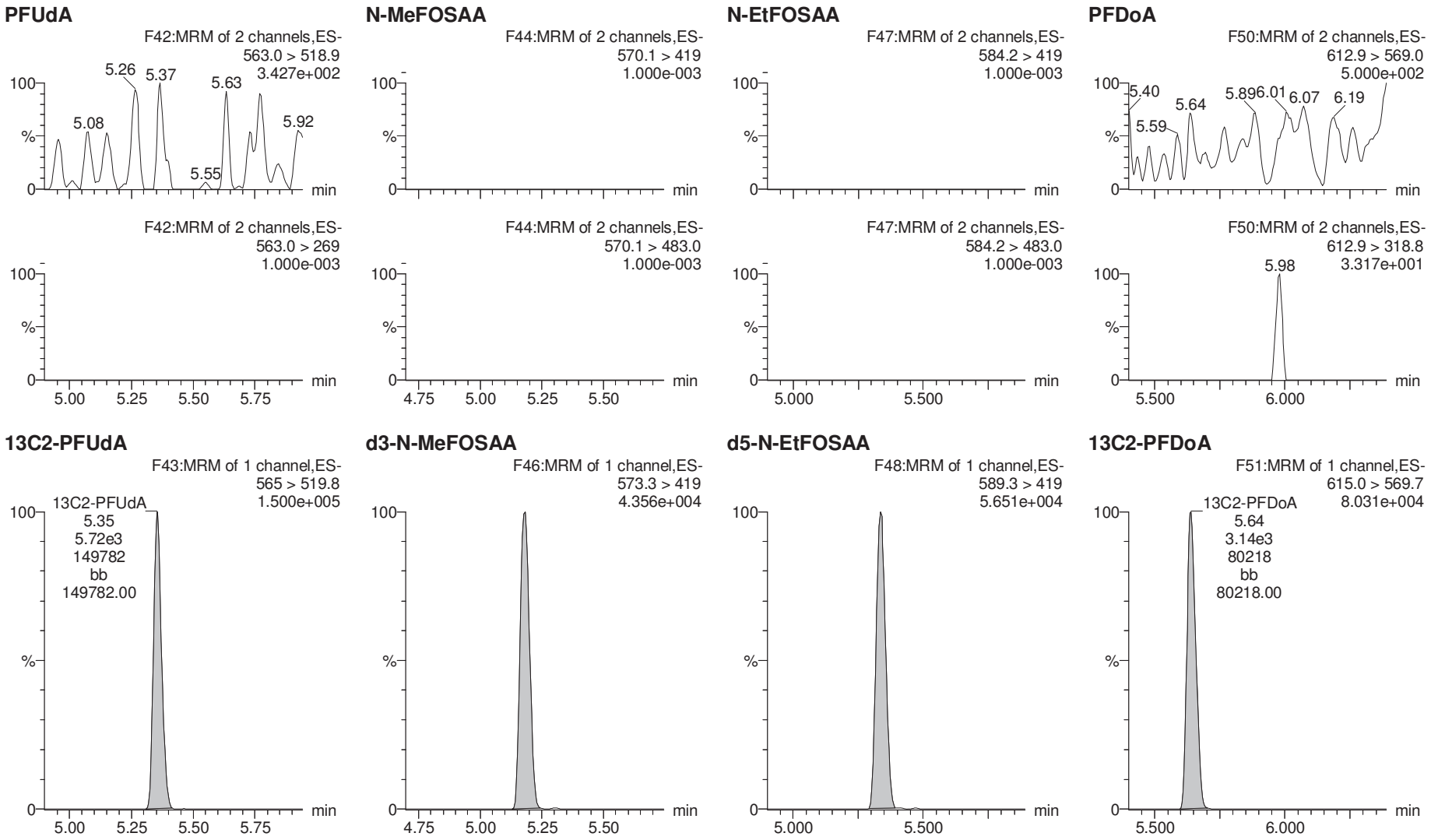


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Last Altered: Tuesday, January 16, 2018 10:40:46 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:42:45 Pacific Standard Time

Name: 180111M2_10, Date: 12-Jan-2018, Time: 05:19:28, ID: 1701851-02 FT-PZ-462I-20171202 0.25131, Description: FT-PZ-462I-20171202

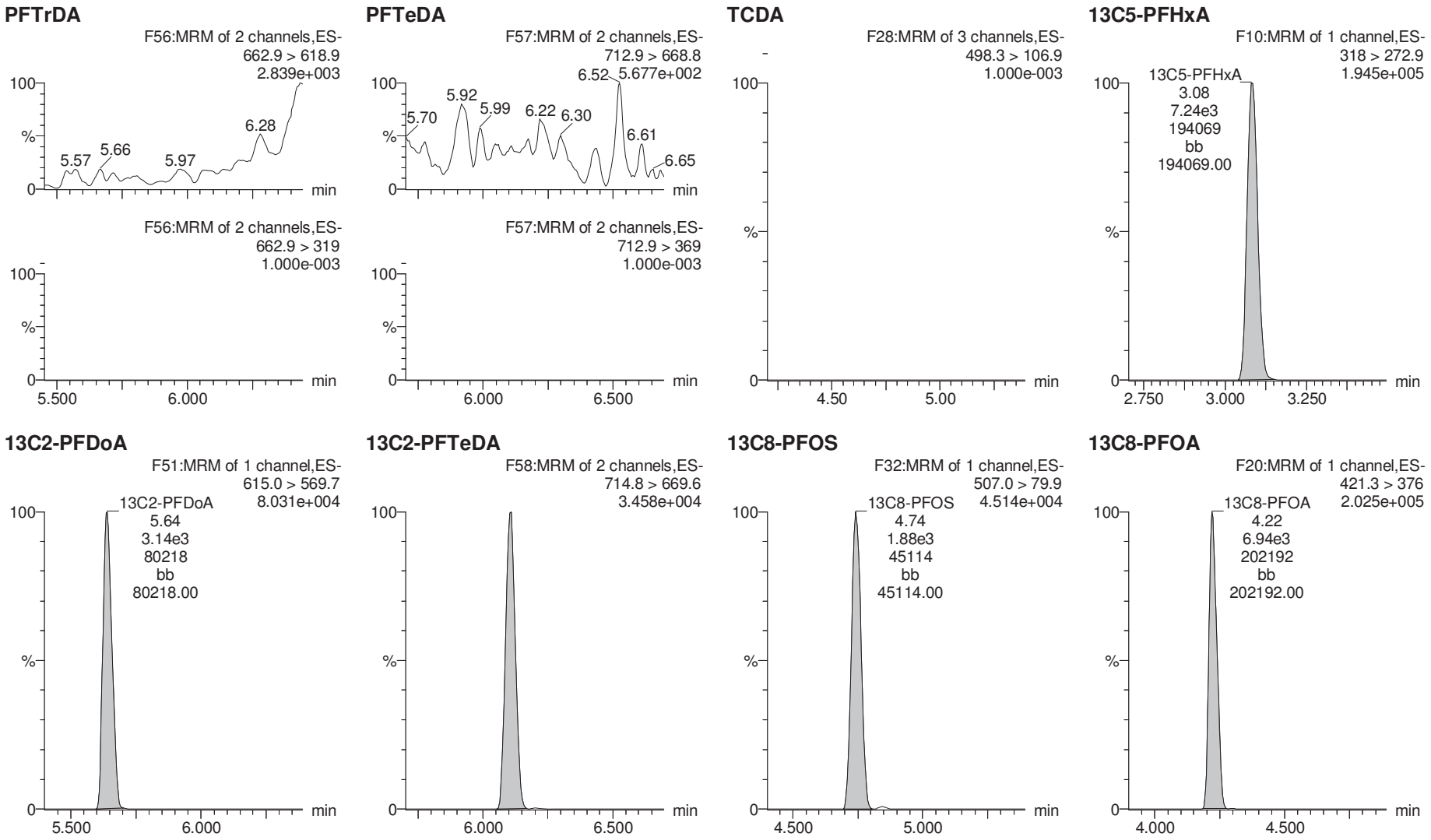


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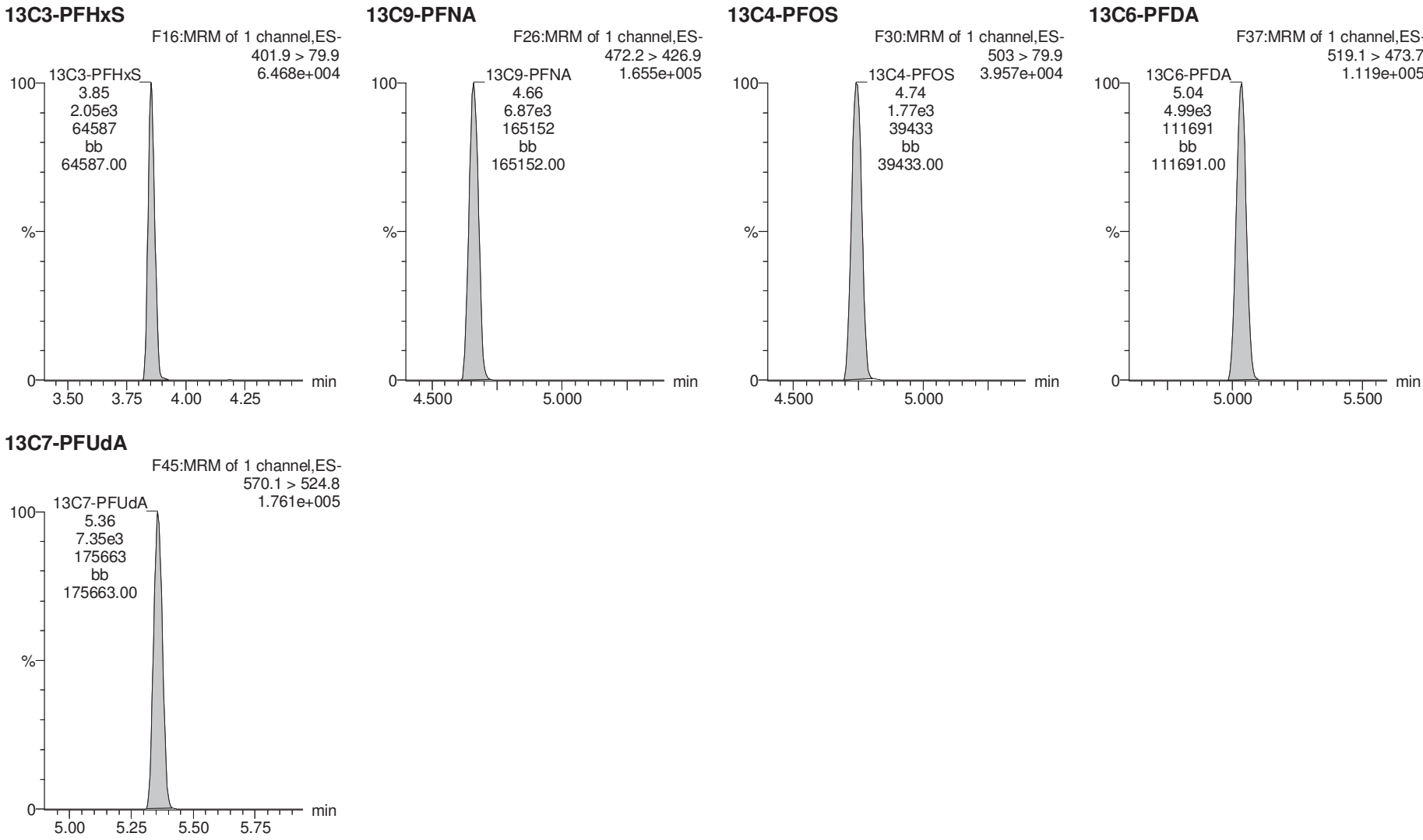
Last Altered: Tuesday, January 16, 2018 10:40:46 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:42:45 Pacific Standard Time

Name: 180111M2_10, Date: 12-Jan-2018, Time: 05:19:28, ID: 1701851-02 FT-PZ-462I-20171202 0.25131, Description: FT-PZ-462I-20171202



Name: 180111M2_10, **Date:** 12-Jan-2018, **Time:** 05:19:28, **ID:** 1701851-02 FT-PZ-462I-20171202 0.25131, **Description:** FT-PZ-462I-20171202



Dataset: U:\Q4.PRO\results\180115M2\180115M2-12.qld

Last Altered: Tuesday, January 16, 2018 11:28:58 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:29:23 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_12, Date: 16-Jan-2018, Time: 02:20:26, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		1.32e3	0.264		2.87				
2	4 PFHxA	313.2 > 268.9		2.67e3	0.264		3.36				
3	5 PFHpA	363.0 > 318.9		7.14e3	0.264		4.00				
4	6 L-PFHxS	398.9 > 79.6		8.20e2	0.264		4.14				
5	9 L-PFOA	413 > 368.7	3.33e2	9.11e3	0.264		4.50	4.38	0.457	0.3446	
6	12 PFNA	463.0 > 418.8		7.65e3	0.264		4.94				
7	13 PFOSA	498.1 > 77.8		1.03e3	0.264		5.00				
8	16 PFDA	513 > 468.8		6.35e3	0.264		5.31				
9	18 N-MeFOSAA	570.1 > 419		2.95e3	0.264		5.45				
10	19 N-EtFOSAA	584.2 > 419		3.20e3	0.264		5.60				
11	20 PFUdA	563.0 > 518.9		8.40e3	0.264		5.62				
12	22 PFDoA	612.9 > 569.0		5.59e3	0.264		5.91				

Dataset: U:\Q4.PRO\results\180115M2\180115M2-12.qld

Last Altered: Tuesday, January 16, 2018 11:28:58 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:29:32 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_12, Date: 16-Jan-2018, Time: 02:20:26, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		5.59e3	0.264		6.15				
2	25 PFTeDA	712.9 > 668.8		2.70e3	0.264		6.35				
3	33 13C3-PFBS	302. > 98.8	1.32e3	1.04e4	0.264	0.095	2.87	2.75	1.59	63.2546	133.5
4	34 13C2-PFHxA	315 > 269.8	2.67e3	1.04e4	0.264	0.636	3.36	3.24	3.22	19.1592	101.1
5	35 13C4-PFHpA	367.2 > 321.8	7.14e3	1.04e4	0.264	0.621	4.00	3.86	8.60	52.5309	110.9
6	36 18O2-PFHxS	403.0 > 102.6	8.20e2	2.42e3	0.264	0.336	4.14	4.00	4.24	47.8059	100.9
7	37 13C2-6:2 FTS	429.1 > 408.9	1.99e3	8.79e3	0.264	0.192	4.46	4.32	2.83	55.7459	117.6
8	38 13C2-PFOA	414.9 > 369.7	9.11e3	8.79e3	0.264	1.001	4.50	4.37	13.0	49.0369	103.5
9	39 13C5-PFNA	468.2 > 422.9	7.65e3	1.07e4	0.264	0.811	4.94	4.80	8.92	41.6848	88.0
10	40 13C8-PFOSA	506.1 > 77.7	1.03e3	9.26e3	0.264	0.196	5.00	4.87	1.39	26.7673	56.5
11	41 13C8-PFOS	507.0 > 79.9	2.74e3	2.57e3	0.264	0.862	5.02	4.88	13.4	58.7646	124.0
12	42 13C2-PFDA	515.1 > 469.9	6.35e3	7.87e3	0.264	0.996	5.31	5.17	10.1	38.3695	81.0
13	43 13C2-8:2 FTS	529.1 > 508.7	1.35e3	1.04e4	0.264	0.103	5.28	5.15	1.63	60.0693	126.8
14	44 d3-N-MeFOSAA	573.3 > 419	2.95e3	9.26e3	0.264	0.340	5.45	5.32	3.99	44.4641	93.8
15	45 d5-N-EtFOSAA	589.3 > 419	3.20e3	9.26e3	0.264	0.377	5.60	5.47	4.32	43.4885	91.8
16	46 13C2-PFUDa	565 > 519.8	8.40e3	9.26e3	0.264	0.944	5.62	5.49	11.3	45.5422	96.1
17	47 13C2-PFDOa	615.0 > 569.7	5.59e3	9.26e3	0.264	0.726	5.91	5.77	7.54	39.3794	83.1
18	49 13C2-PFTeDA	714.8 > 669.6	2.70e3	9.26e3	0.264	0.371	6.35	6.23	3.65	37.2425	78.6
19	55 13C5-PFHxA	318 > 272.9	1.04e4	1.04e4	0.264	1.000	3.36	3.24	12.5	47.3844	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.42e3	2.42e3	0.264	1.000	4.14	4.00	12.5	47.3844	100.0
21	57 13C8-PFOA	421.3 > 376	8.79e3	8.79e3	0.264	1.000	4.50	4.37	12.5	47.3844	100.0
22	58 13C9-PFNA	472.2 > 426.9	1.07e4	1.07e4	0.264	1.000	4.94	4.80	12.5	47.3844	100.0
23	59 13C4-PFOS	503 > 79.9	2.57e3	2.57e3	0.264	1.000	5.02	4.88	12.5	47.3844	100.0
24	60 13C6-PFDA	519.1 > 473.7	7.87e3	7.87e3	0.264	1.000	5.31	5.18	12.5	47.3844	100.0
25	61 13C7-PFUDa	570.1 > 524.8	9.26e3	9.26e3	0.264	1.000	5.62	5.49	12.5	47.3844	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	8.20e2	0.264		4.14		0.000		
27	63 Total PFOA	413 > 368.7	3.33e2	9.11e3	0.264		4.51		0.457	0.3446	
28	64 Total PFOS	499 > 79.9	0.00e0	2.74e3	0.264		5.02		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.95e3	0.264		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	3.20e3	0.264		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	3.33e2		0.264		0.00		0.457	0.3446	

Dataset: U:\Q4.PRO\results\180115M2\180115M2-12.qld

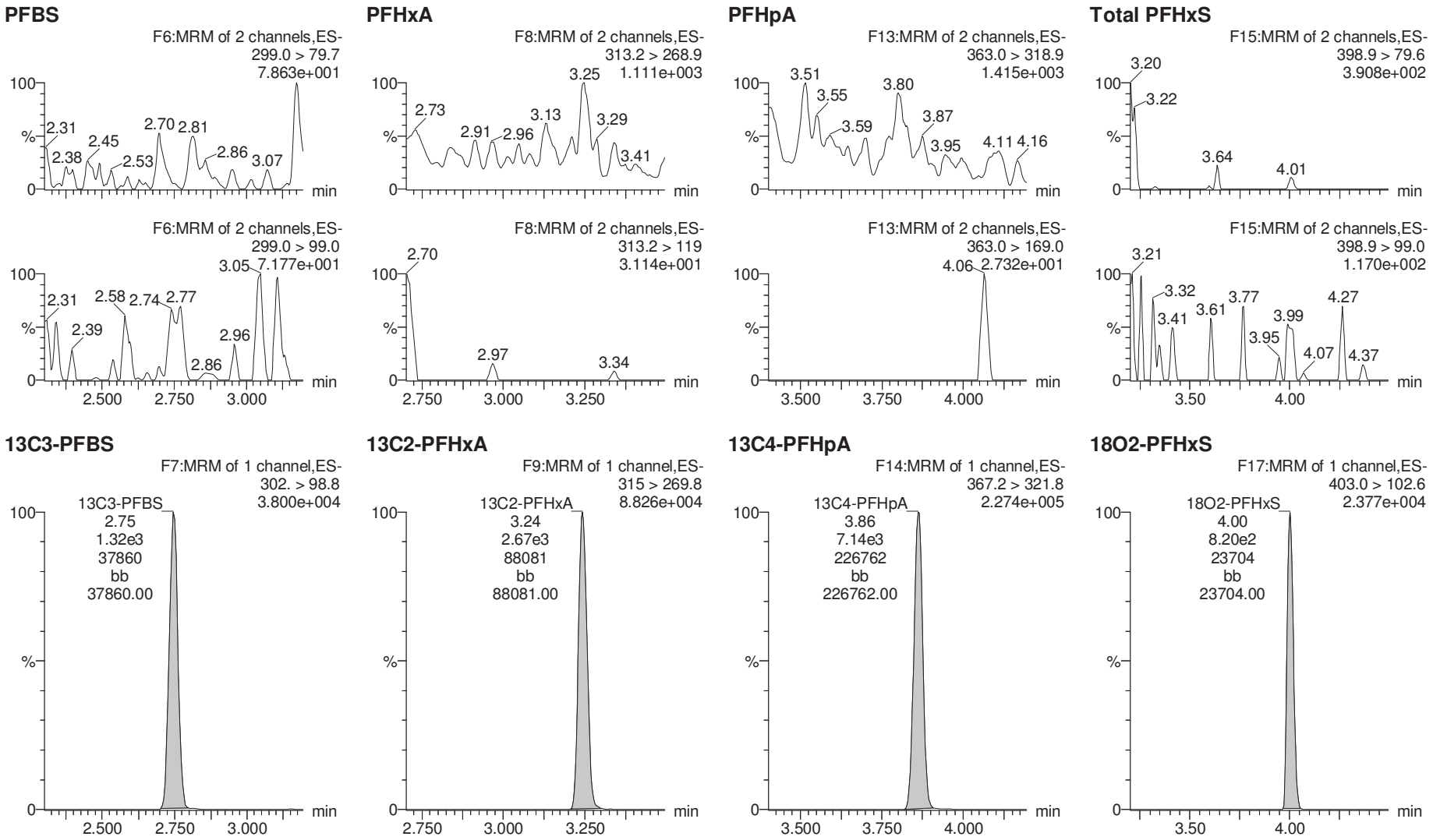
Last Altered: Tuesday, January 16, 2018 11:28:58 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:29:32 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_12, Date: 16-Jan-2018, Time: 02:20:26, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

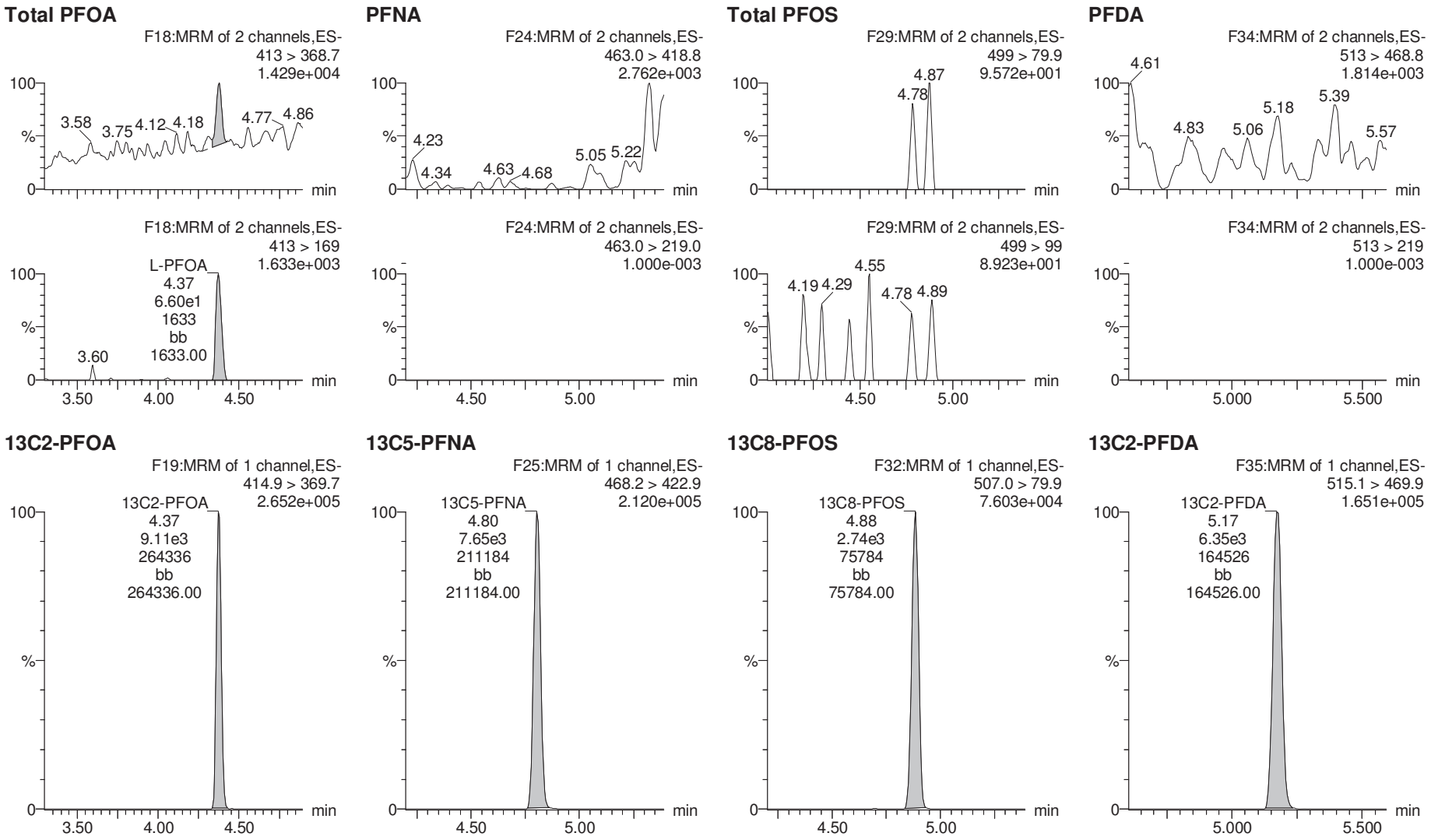


Dataset: U:\Q4.PRO\results\180115M2\180115M2-12.qld

Last Altered: Tuesday, January 16, 2018 11:28:58 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:29:32 Pacific Standard Time

Name: 180115M2_12, Date: 16-Jan-2018, Time: 02:20:26, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

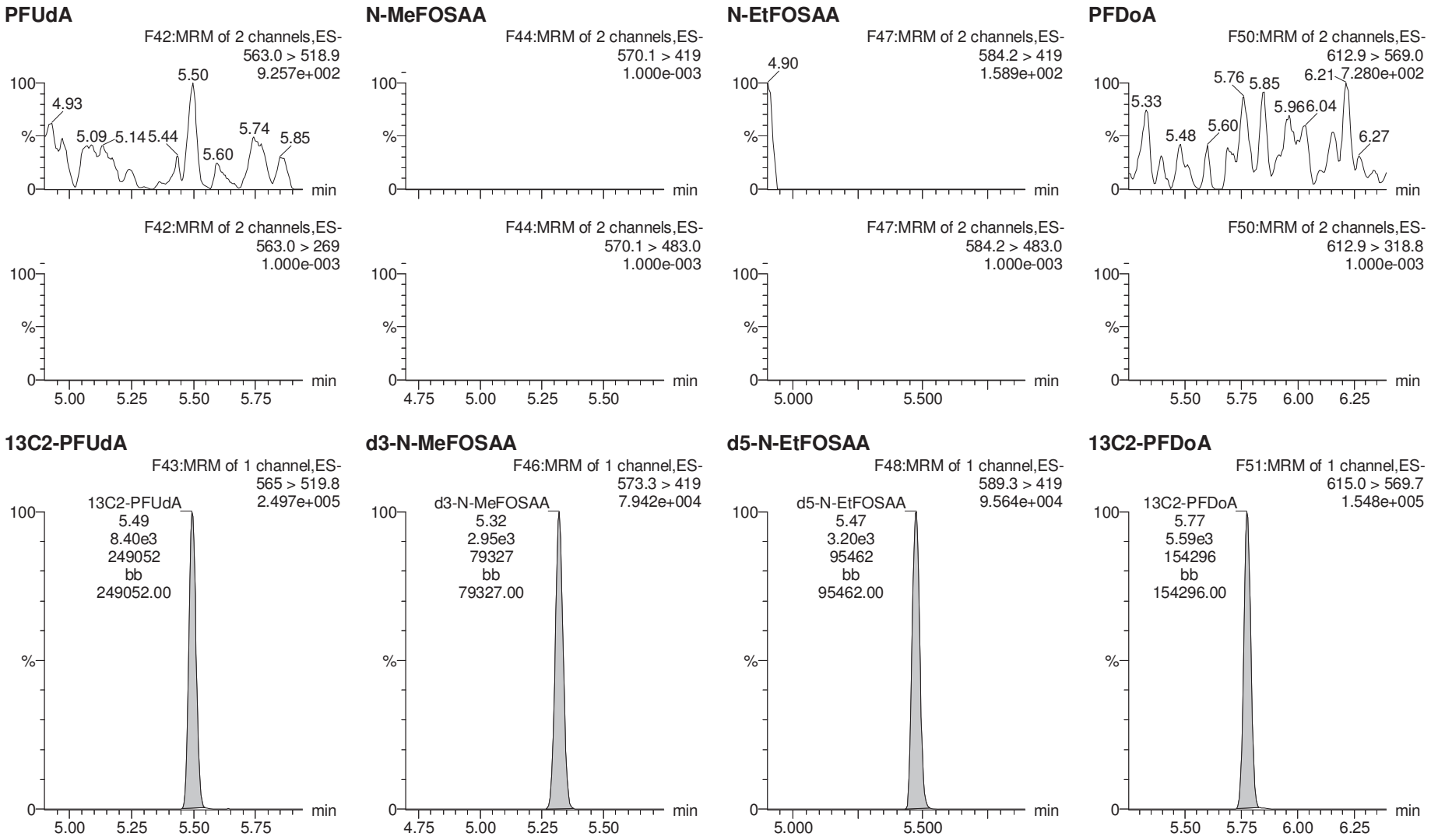


Dataset: U:\Q4.PRO\results\180115M2\180115M2-12.qld

Last Altered: Tuesday, January 16, 2018 11:28:58 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:29:32 Pacific Standard Time

Name: 180115M2_12, Date: 16-Jan-2018, Time: 02:20:26, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

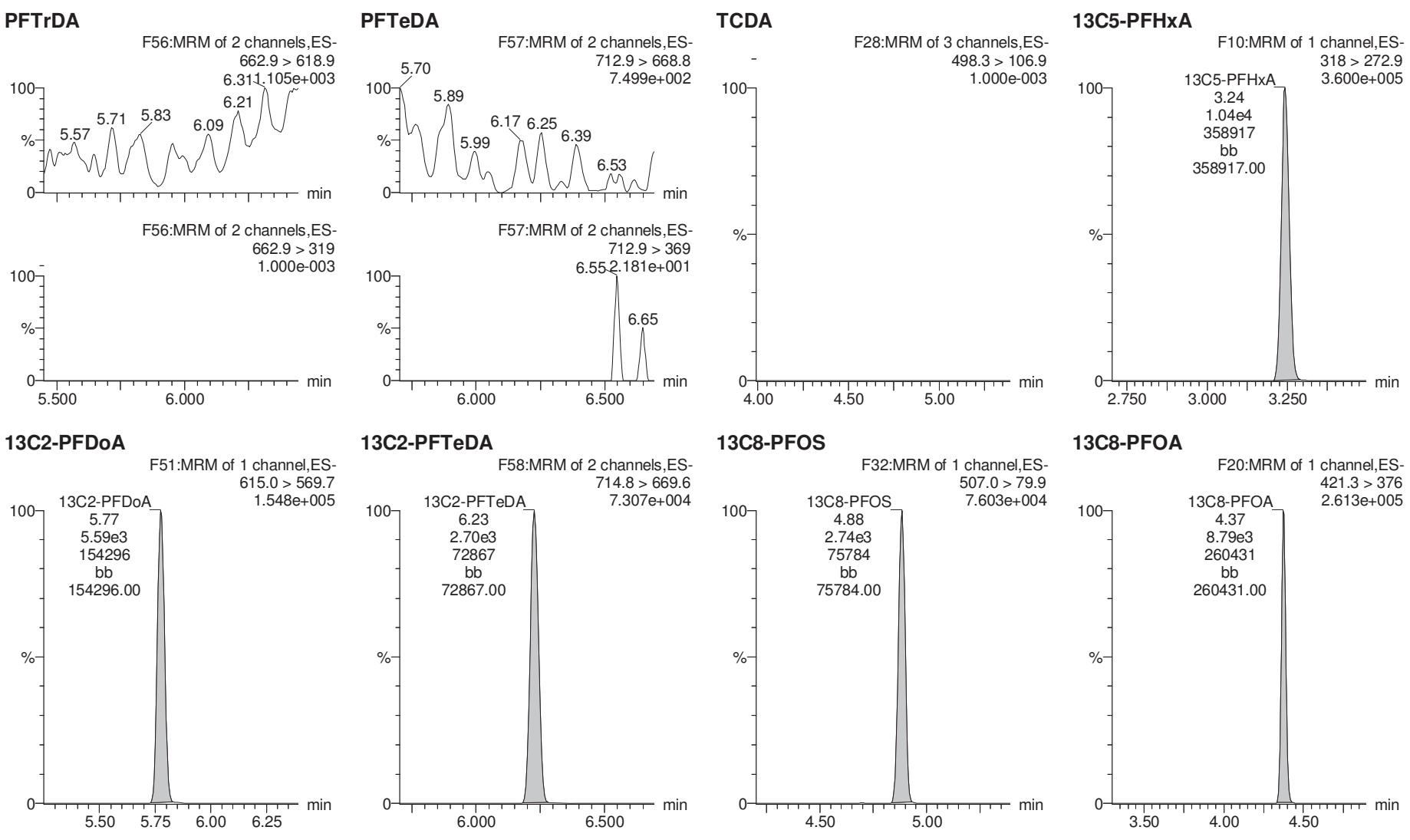


Dataset: U:\Q4.PRO\results\180115M2\180115M2-12.qld

Last Altered: Tuesday, January 16, 2018 11:28:58 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:29:32 Pacific Standard Time

Name: 180115M2_12, Date: 16-Jan-2018, Time: 02:20:26, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

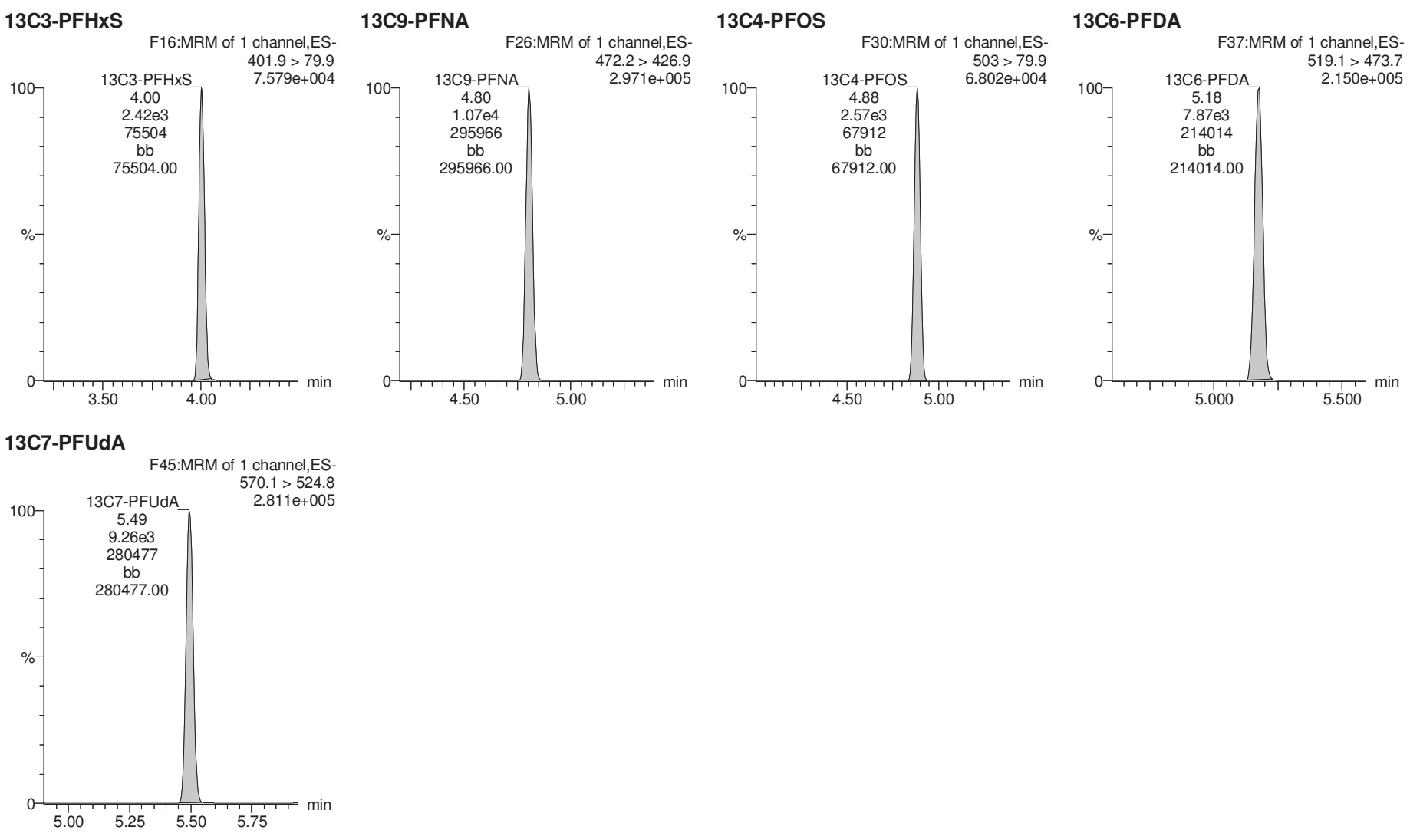


Dataset: U:\Q4.PRO\results\180115M2\180115M2-12.qld

Last Altered: Tuesday, January 16, 2018 11:28:58 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:29:32 Pacific Standard Time

Name: 180115M2_12, Date: 16-Jan-2018, Time: 02:20:26, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202



Dataset: U:\Q4.PRO\results\180115M2\180115M2-13.qld

Last Altered: Tuesday, January 16, 2018 11:31:45 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:40:45 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_13, Date: 16-Jan-2018, Time: 02:31:52, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		1.35e3	0.256		2.87				
2	4 PFHxA	313.2 > 268.9		2.90e3	0.256		3.36				
3	5 PFHpA	363.0 > 318.9		6.76e3	0.256		4.00				
4	6 L-PFHxS	398.9 > 79.6		1.04e3	0.256		4.14				
5	9 L-PFOA	413 > 368.7	1.64e2	1.03e4	0.256		4.50	4.37	0.199		
6	12 PFNA	463.0 > 418.8		7.93e3	0.256		4.94				
7	13 PFOSA	498.1 > 77.8		1.15e3	0.256		5.00				
8	16 PFDA	513 > 468.8		7.12e3	0.256		5.31				
9	18 N-MeFOSAA	570.1 > 419		2.93e3	0.256		5.45				
10	19 N-EtFOSAA	584.2 > 419		3.00e3	0.256		5.60				
11	20 PFUdA	563.0 > 518.9		7.08e3	0.256		5.62				
12	22 PFDoA	612.9 > 569.0		5.94e3	0.256		5.91				

Dataset: U:\Q4.PRO\results\180115M2\180115M2-13.qld

Last Altered: Tuesday, January 16, 2018 11:31:45 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:40:56 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_13, Date: 16-Jan-2018, Time: 02:31:52, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		5.94e3	0.256		6.15				
2	25 PFTeDA	712.9 > 668.8		3.44e3	0.256		6.35				
3	33 13C3-PFBS	302. > 98.8	1.35e3	1.01e4	0.256	0.095	2.87	2.75	1.67	68.5793	140.7
4	34 13C2-PFHxA	315 > 269.8	2.90e3	1.01e4	0.256	0.636	3.36	3.24	3.58	21.9634	112.6
5	35 13C4-PFHpA	367.2 > 321.8	6.76e3	1.01e4	0.256	0.621	4.00	3.86	8.36	52.5473	107.8
6	36 18O2-PFHxS	403.0 > 102.6	1.04e3	2.64e3	0.256	0.336	4.14	4.00	4.92	57.1931	117.3
7	37 13C2-6:2 FTS	429.1 > 408.9	1.69e3	8.86e3	0.256	0.192	4.46	4.32	2.39	48.3617	99.2
8	38 13C2-PFOA	414.9 > 369.7	1.03e4	8.86e3	0.256	1.001	4.50	4.37	14.5	56.6396	116.2
9	39 13C5-PFNA	468.2 > 422.9	7.93e3	9.84e3	0.256	0.811	4.94	4.80	10.1	48.4528	99.4
10	40 13C8-PFOSA	506.1 > 77.7	1.15e3	9.78e3	0.256	0.196	5.00	4.87	1.47	29.0993	59.7
11	41 13C8-PFOS	507.0 > 79.9	2.74e3	3.11e3	0.256	0.862	5.02	4.88	11.0	49.7071	101.9
12	42 13C2-PFDA	515.1 > 469.9	7.12e3	7.12e3	0.256	0.996	5.31	5.18	12.5	48.9728	100.4
13	43 13C2-8:2 FTS	529.1 > 508.7	9.33e2	1.01e4	0.256	0.103	5.28	5.15	1.15	43.7016	89.6
14	44 d3-N-MeFOSAA	573.3 > 419	2.93e3	9.78e3	0.256	0.340	5.45	5.32	3.74	42.9629	88.1
15	45 d5-N-EtFOSAA	589.3 > 419	3.00e3	9.78e3	0.256	0.377	5.60	5.47	3.84	39.7212	81.5
16	46 13C2-PFUDa	565 > 519.8	7.08e3	9.78e3	0.256	0.944	5.62	5.49	9.05	37.4159	76.7
17	47 13C2-PFDOa	615.0 > 569.7	5.94e3	9.78e3	0.256	0.726	5.91	5.77	7.59	40.7953	83.7
18	49 13C2-PFTeDA	714.8 > 669.6	3.44e3	9.78e3	0.256	0.371	6.35	6.23	4.40	46.2080	94.8
19	55 13C5-PFHxA	318 > 272.9	1.01e4	1.01e4	0.256	1.000	3.36	3.24	12.5	48.7577	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.64e3	2.64e3	0.256	1.000	4.14	4.00	12.5	48.7577	100.0
21	57 13C8-PFOA	421.3 > 376	8.86e3	8.86e3	0.256	1.000	4.50	4.37	12.5	48.7577	100.0
22	58 13C9-PFNA	472.2 > 426.9	9.84e3	9.84e3	0.256	1.000	4.94	4.80	12.5	48.7577	100.0
23	59 13C4-PFOS	503 > 79.9	3.11e3	3.11e3	0.256	1.000	5.02	4.88	12.5	48.7577	100.0
24	60 13C6-PFDA	519.1 > 473.7	7.12e3	7.12e3	0.256	1.000	5.31	5.18	12.5	48.7577	100.0
25	61 13C7-PFUDa	570.1 > 524.8	9.78e3	9.78e3	0.256	1.000	5.62	5.49	12.5	48.7577	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	1.04e3	0.256		4.14		0.000		
27	63 Total PFOA	413 > 368.7	1.64e2	1.03e4	0.256		4.51		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	2.74e3	0.256		5.02		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.93e3	0.256		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	3.00e3	0.256		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	1.64e2		0.256		0.00		0.000		

Dataset: U:\Q4.PRO\results\180115M2\180115M2-13.qld

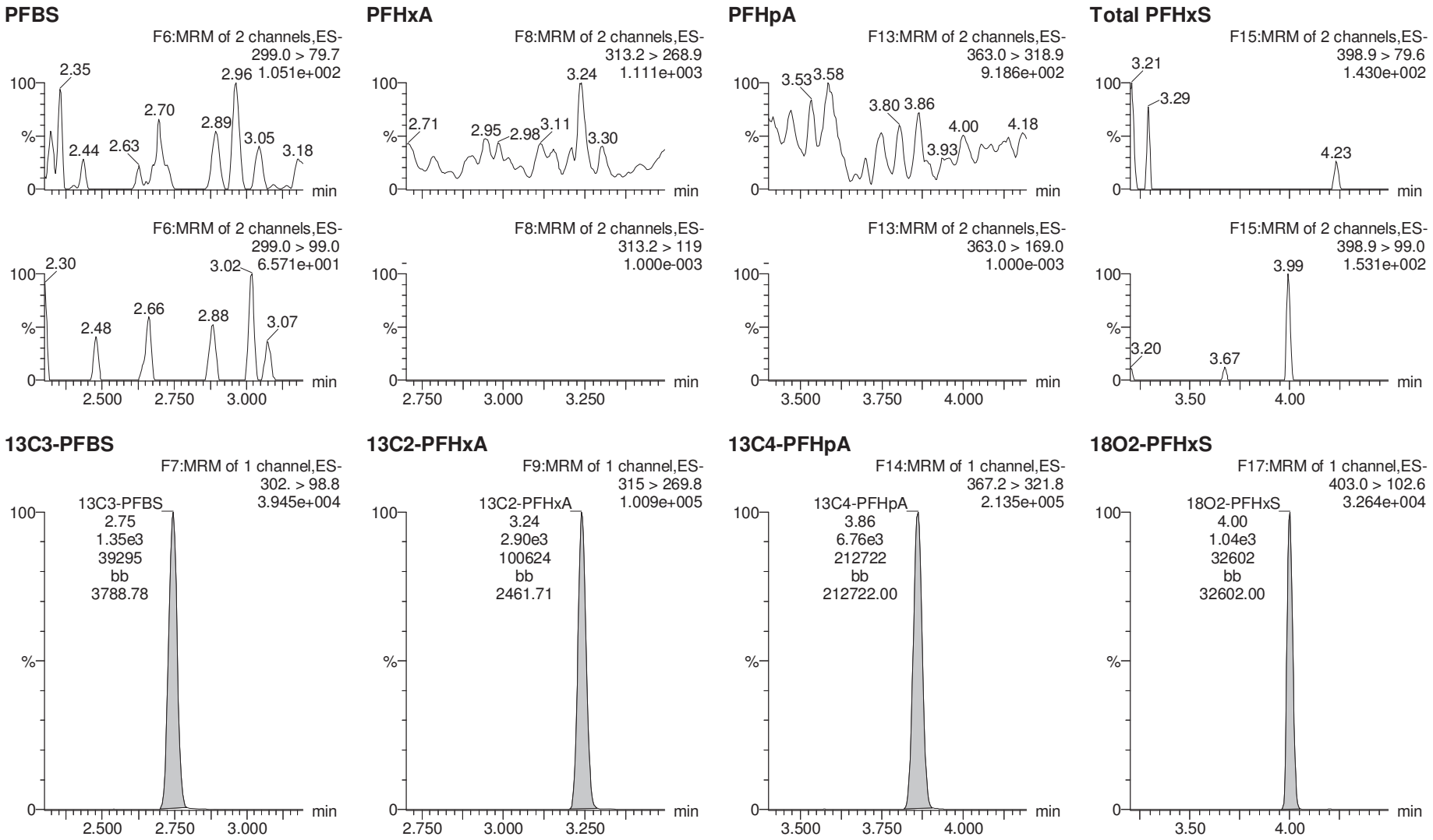
Last Altered: Tuesday, January 16, 2018 11:31:45 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:40:56 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_13, Date: 16-Jan-2018, Time: 02:31:52, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

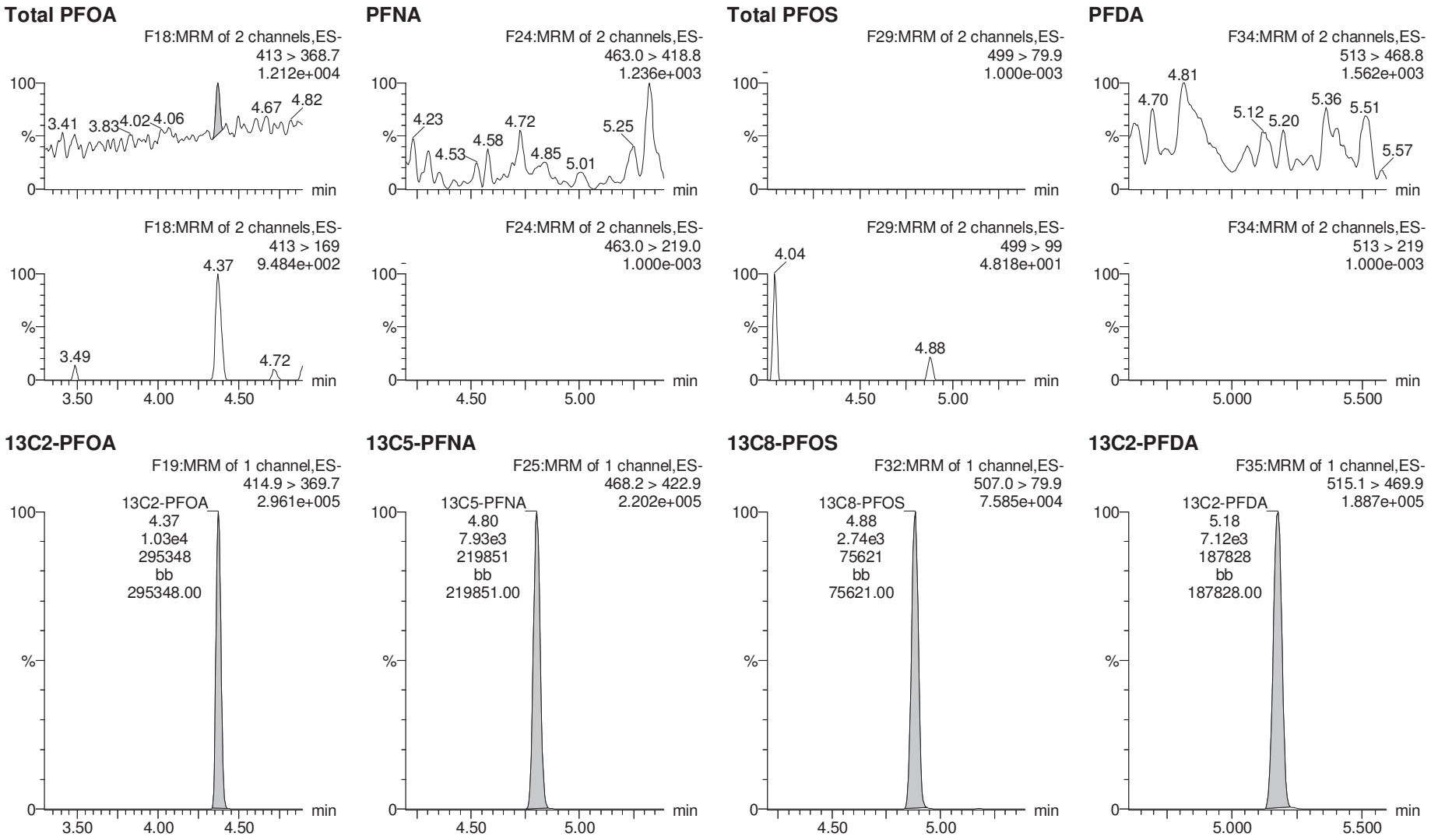


Dataset: U:\Q4.PRO\results\180115M2\180115M2-13.qld

Last Altered: Tuesday, January 16, 2018 11:31:45 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:40:56 Pacific Standard Time

Name: 180115M2_13, Date: 16-Jan-2018, Time: 02:31:52, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

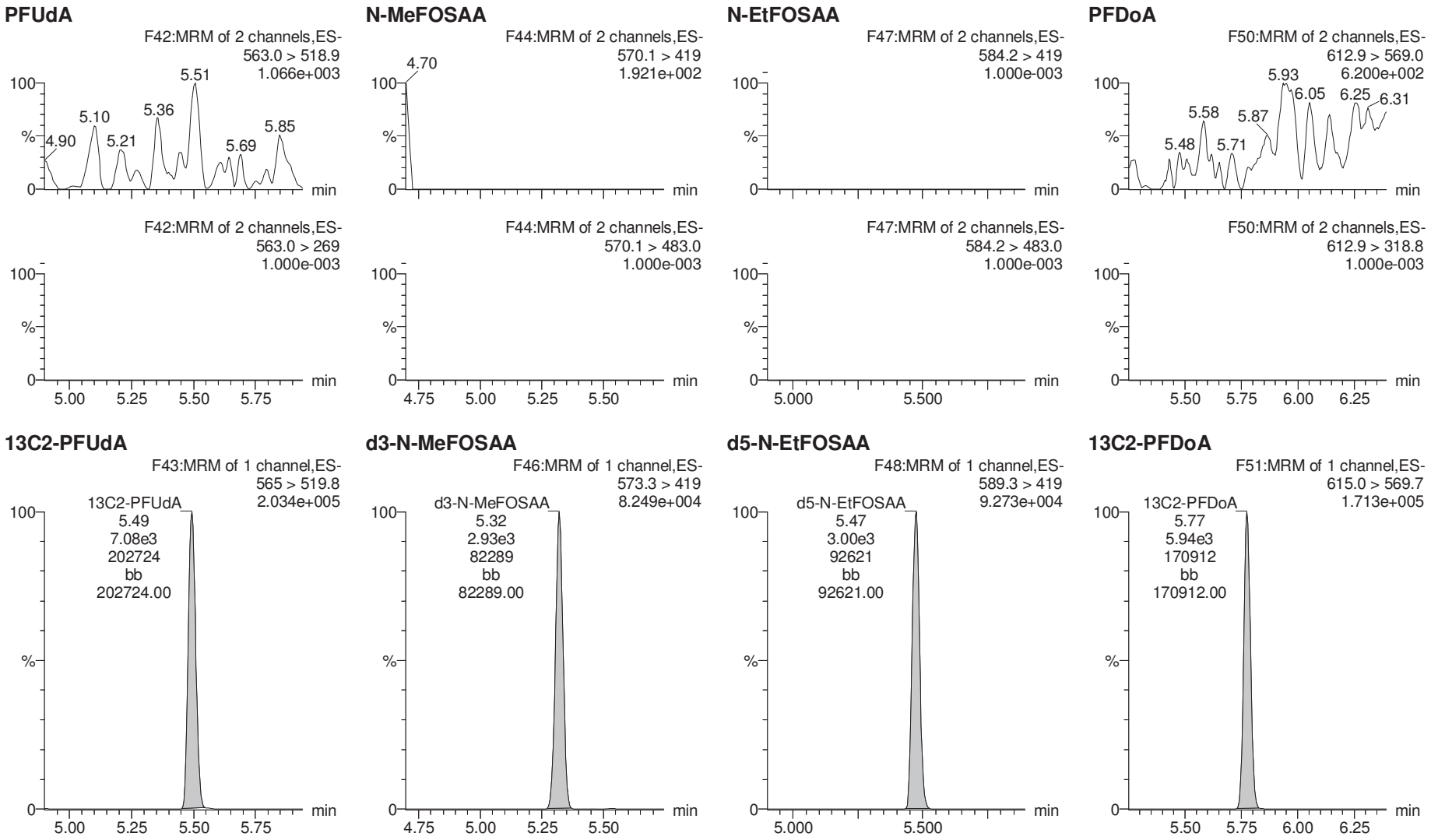


Dataset: U:\Q4.PRO\results\180115M2\180115M2-13.qld

Last Altered: Tuesday, January 16, 2018 11:31:45 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:40:56 Pacific Standard Time

Name: 180115M2_13, Date: 16-Jan-2018, Time: 02:31:52, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

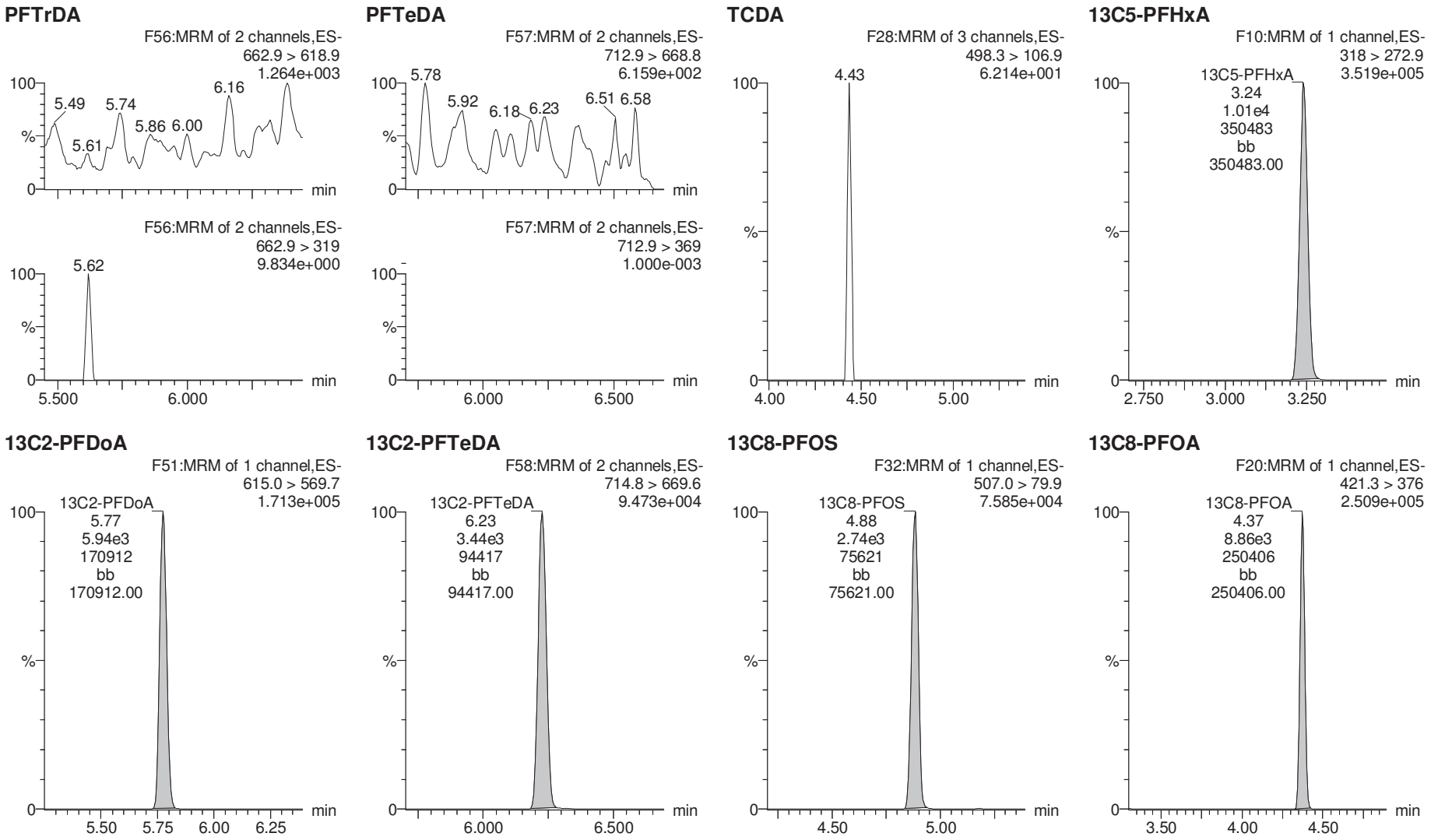


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Last Altered: Tuesday, January 16, 2018 11:31:45 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:40:56 Pacific Standard Time

Name: 180115M2_13, Date: 16-Jan-2018, Time: 02:31:52, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

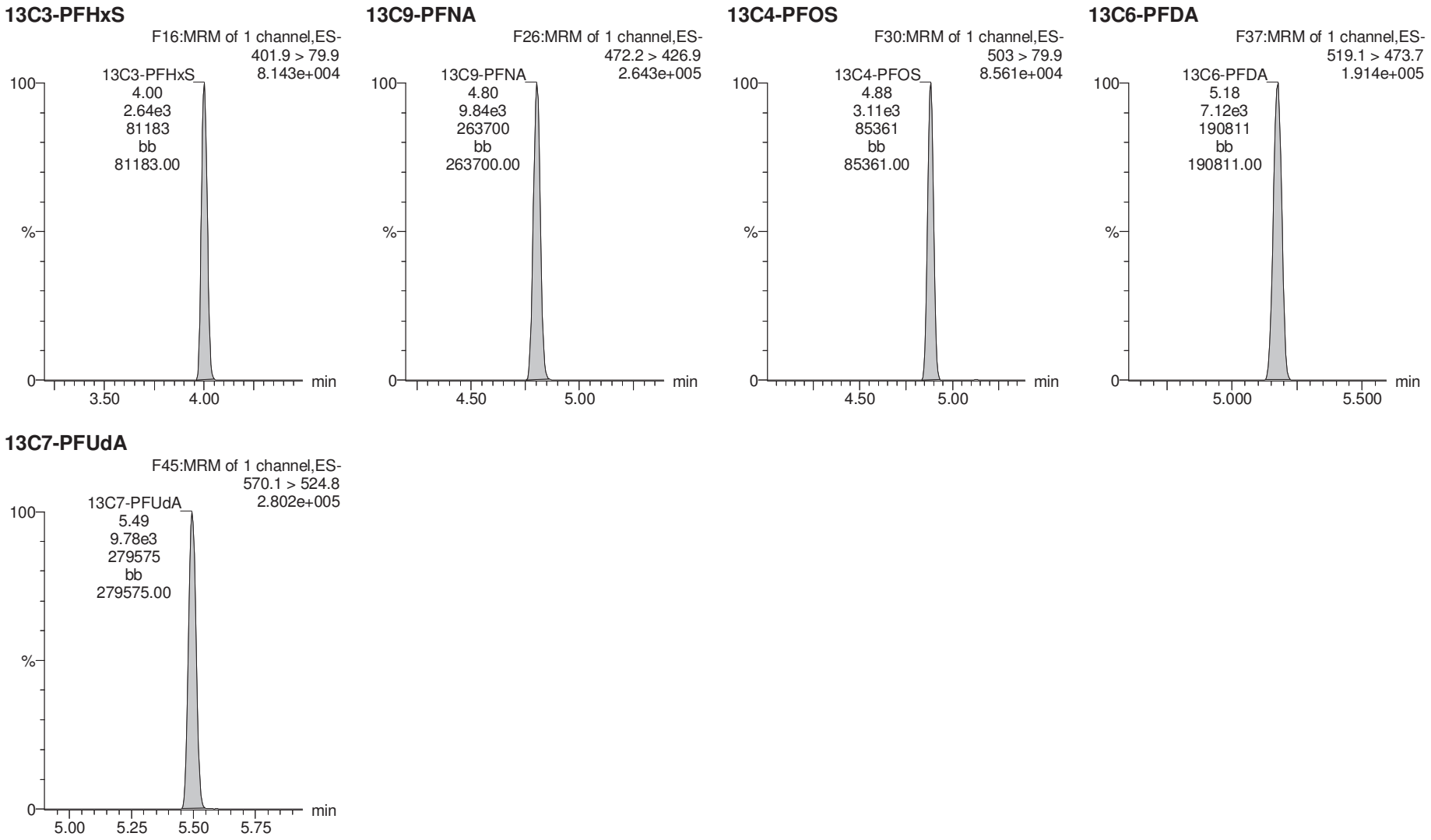


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Last Altered: Tuesday, January 16, 2018 11:31:45 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:40:56 Pacific Standard Time

Name: 180115M2_13, Date: 16-Jan-2018, Time: 02:31:52, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202



Dataset: U:\Q4.PRO\results\180115M2\180115M2-14.qld

Last Altered: Tuesday, January 16, 2018 11:42:27 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:42:58 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_14, Date: 16-Jan-2018, Time: 02:43:19, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		1.12e3	0.233		2.87				
2	4 PFHxA	313.2 > 268.9		2.75e3	0.233		3.36				
3	5 PFHpA	363.0 > 318.9		6.83e3	0.233		4.00				
4	6 L-PFHxS	398.9 > 79.6		8.24e2	0.233		4.14				
5	9 L-PFOA	413 > 368.7	4.37e2	1.02e4	0.233		4.50	4.37	0.536	0.6930	
6	12 PFNA	463.0 > 418.8		8.37e3	0.233		4.94				
7	13 PFOSA	498.1 > 77.8		8.75e2	0.233		5.00				
8	16 PFDA	513 > 468.8		7.14e3	0.233		5.31				
9	18 N-MeFOSAA	570.1 > 419		3.12e3	0.233		5.45				
10	19 N-EtFOSAA	584.2 > 419		3.11e3	0.233		5.60				
11	20 PFUdA	563.0 > 518.9		9.95e3	0.233		5.62				
12	22 PFDoA	612.9 > 569.0		6.39e3	0.233		5.91				

Dataset: U:\Q4.PRO\results\180115M2\180115M2-14.qld

Last Altered: Tuesday, January 16, 2018 11:42:27 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:43:08 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_14, Date: 16-Jan-2018, Time: 02:43:19, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		6.39e3	0.233		6.15				
2	25 PFTeDA	712.9 > 668.8		3.74e3	0.233		6.35				
3	33 13C3-PFBS	302. > 98.8	1.12e3	9.66e3	0.233	0.095	2.87	2.74	1.45	65.3144	121.7
4	34 13C2-PFHxA	315 > 269.8	2.75e3	9.66e3	0.233	0.636	3.36	3.24	3.55	23.9873	111.7
5	35 13C4-PFHpA	367.2 > 321.8	6.83e3	9.66e3	0.233	0.621	4.00	3.86	8.84	61.1419	113.9
6	36 18O2-PFHxS	403.0 > 102.6	8.24e2	2.35e3	0.233	0.336	4.14	4.00	4.39	56.2000	104.7
7	37 13C2-6:2 FTS	429.1 > 408.9	1.86e3	8.60e3	0.233	0.192	4.46	4.32	2.70	60.2222	112.2
8	38 13C2-PFOA	414.9 > 369.7	1.02e4	8.60e3	0.233	1.001	4.50	4.37	14.8	63.4375	118.2
9	39 13C5-PFNA	468.2 > 422.9	8.37e3	8.81e3	0.233	0.811	4.94	4.80	11.9	62.8576	117.1
10	40 13C8-PFOSA	506.1 > 77.7	8.75e2	7.83e3	0.233	0.196	5.00	4.87	1.40	30.5475	56.9
11	41 13C8-PFOS	507.0 > 79.9	2.34e3	2.23e3	0.233	0.862	5.02	4.88	13.1	65.4513	121.9
12	42 13C2-PFDA	515.1 > 469.9	7.14e3	7.23e3	0.233	0.996	5.31	5.18	12.3	53.2496	99.2
13	43 13C2-8:2 FTS	529.1 > 508.7	1.09e3	9.66e3	0.233	0.103	5.28	5.15	1.41	58.8054	109.5
14	44 d3-N-MeFOSAA	573.3 > 419	3.12e3	7.83e3	0.233	0.340	5.45	5.32	4.98	62.9680	117.3
15	45 d5-N-EtFOSAA	589.3 > 419	3.11e3	7.83e3	0.233	0.377	5.60	5.47	4.96	56.4969	105.2
16	46 13C2-PFUDa	565 > 519.8	9.95e3	7.83e3	0.233	0.944	5.62	5.49	15.9	72.2968	134.7
17	47 13C2-PFDOa	615.0 > 569.7	6.39e3	7.83e3	0.233	0.726	5.91	5.78	10.2	60.2891	112.3
18	49 13C2-PFTeDA	714.8 > 669.6	3.74e3	7.83e3	0.233	0.371	6.35	6.23	5.96	68.9557	128.5
19	55 13C5-PFHxA	318 > 272.9	9.66e3	9.66e3	0.233	1.000	3.36	3.24	12.5	53.6826	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.35e3	2.35e3	0.233	1.000	4.14	4.00	12.5	53.6826	100.0
21	57 13C8-PFOA	421.3 > 376	8.60e3	8.60e3	0.233	1.000	4.50	4.37	12.5	53.6826	100.0
22	58 13C9-PFNA	472.2 > 426.9	8.81e3	8.81e3	0.233	1.000	4.94	4.80	12.5	53.6826	100.0
23	59 13C4-PFOS	503 > 79.9	2.23e3	2.23e3	0.233	1.000	5.02	4.88	12.5	53.6826	100.0
24	60 13C6-PFDA	519.1 > 473.7	7.23e3	7.23e3	0.233	1.000	5.31	5.18	12.5	53.6826	100.0
25	61 13C7-PFUDa	570.1 > 524.8	7.83e3	7.83e3	0.233	1.000	5.62	5.49	12.5	53.6826	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	8.24e2	0.233		4.14		0.000		
27	63 Total PFOA	413 > 368.7	4.37e2	1.02e4	0.233		4.51		0.536	0.6930	
28	64 Total PFOS	499 > 79.9	0.00e0	2.34e3	0.233		5.02		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	3.12e3	0.233		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	3.11e3	0.233		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	4.37e2		0.233		0.00		0.536	0.6930	

Dataset: U:\Q4.PRO\results\180115M2\180115M2-14.qld

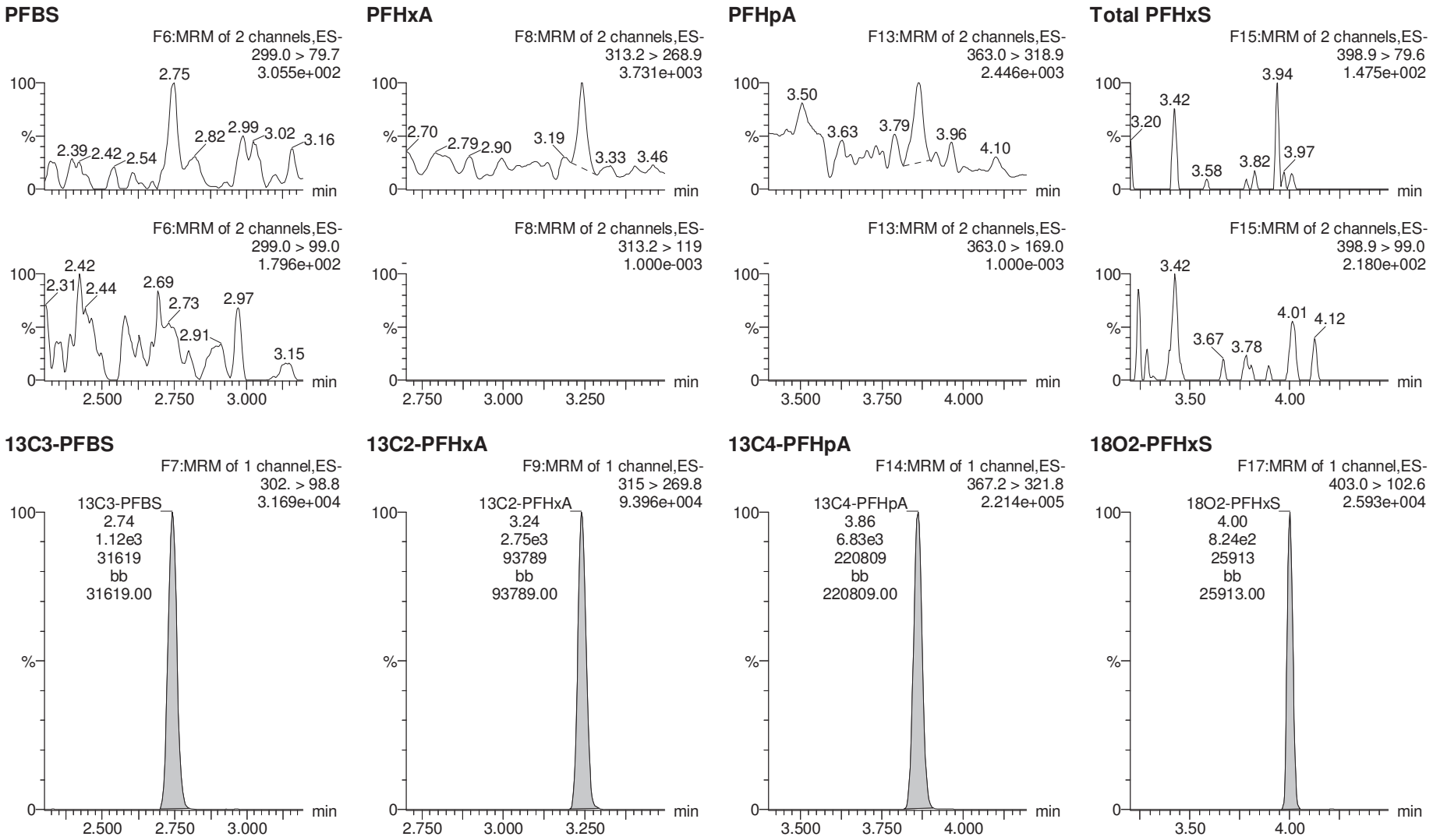
Last Altered: Tuesday, January 16, 2018 11:42:27 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:43:08 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_14, Date: 16-Jan-2018, Time: 02:43:19, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

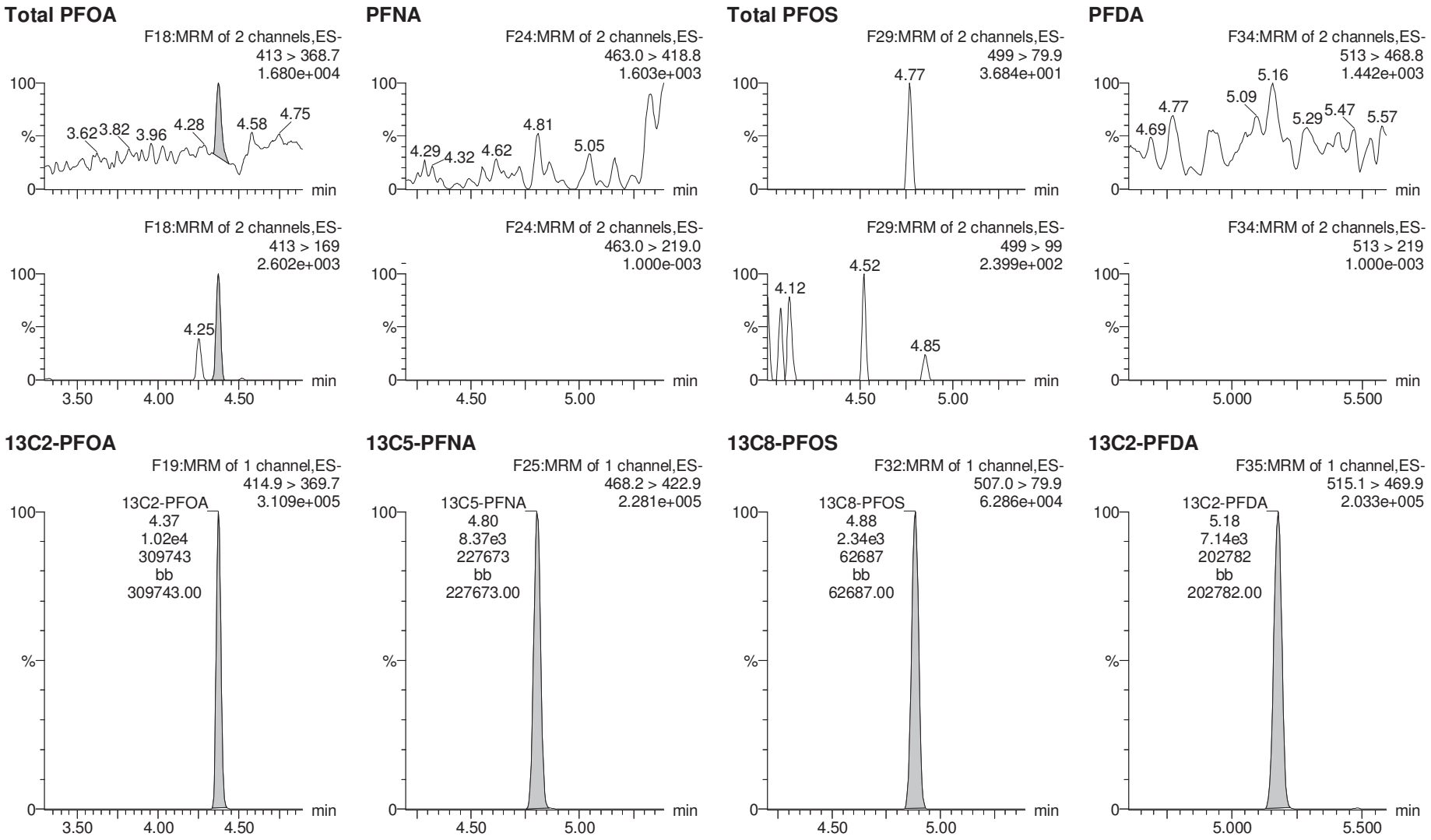


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Last Altered: Tuesday, January 16, 2018 11:42:27 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:43:08 Pacific Standard Time

Name: 180115M2_14, Date: 16-Jan-2018, Time: 02:43:19, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

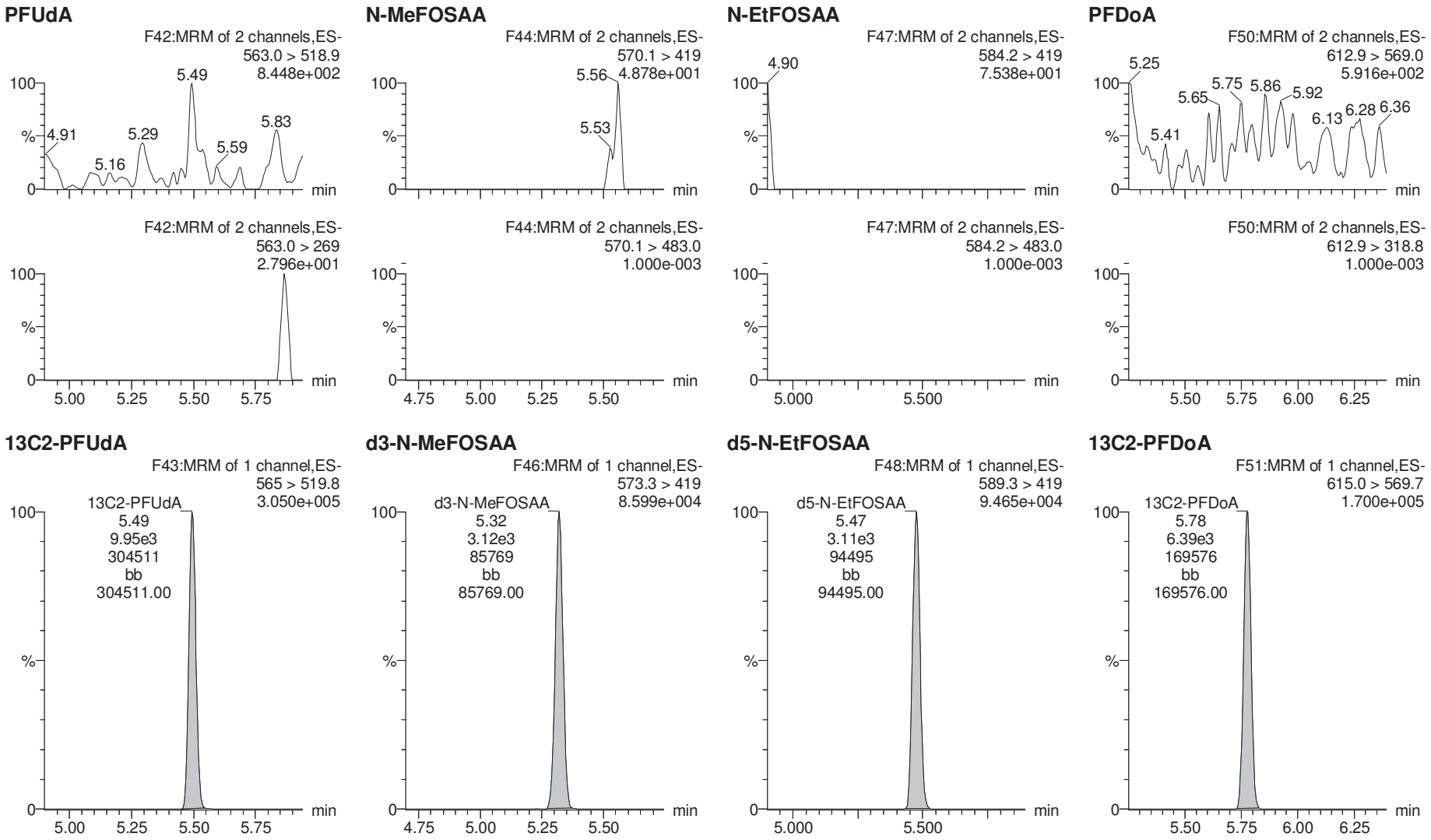


Dataset: U:\Q4.PRO\results\180115M2\180115M2-14.qld

Last Altered: Tuesday, January 16, 2018 11:42:27 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:43:08 Pacific Standard Time

Name: 180115M2_14, Date: 16-Jan-2018, Time: 02:43:19, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

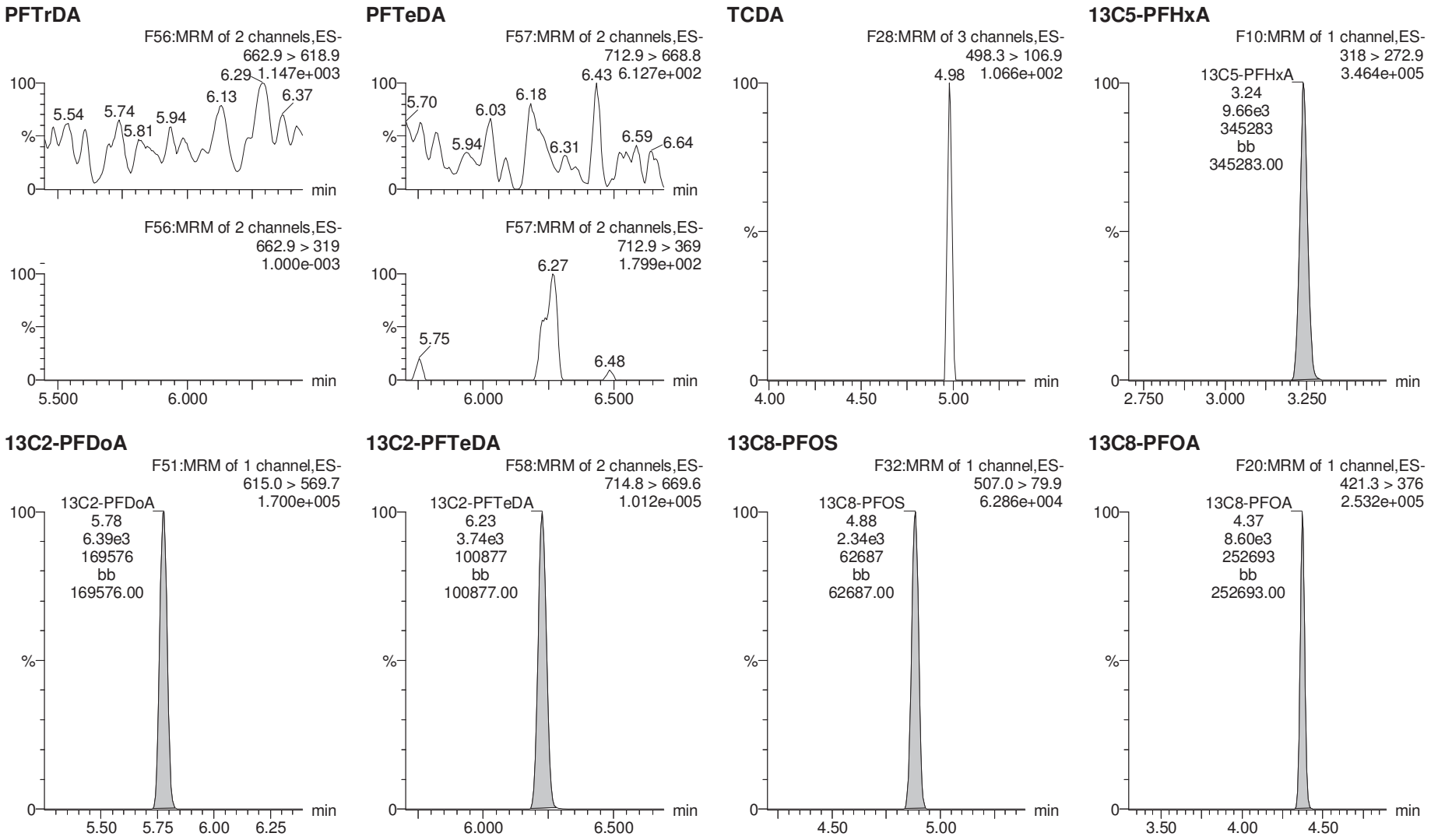


Dataset: U:\Q4.PRO\results\180115M2\180115M2-14.qld

Last Altered: Tuesday, January 16, 2018 11:42:27 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:43:08 Pacific Standard Time

Name: 180115M2_14, Date: 16-Jan-2018, Time: 02:43:19, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

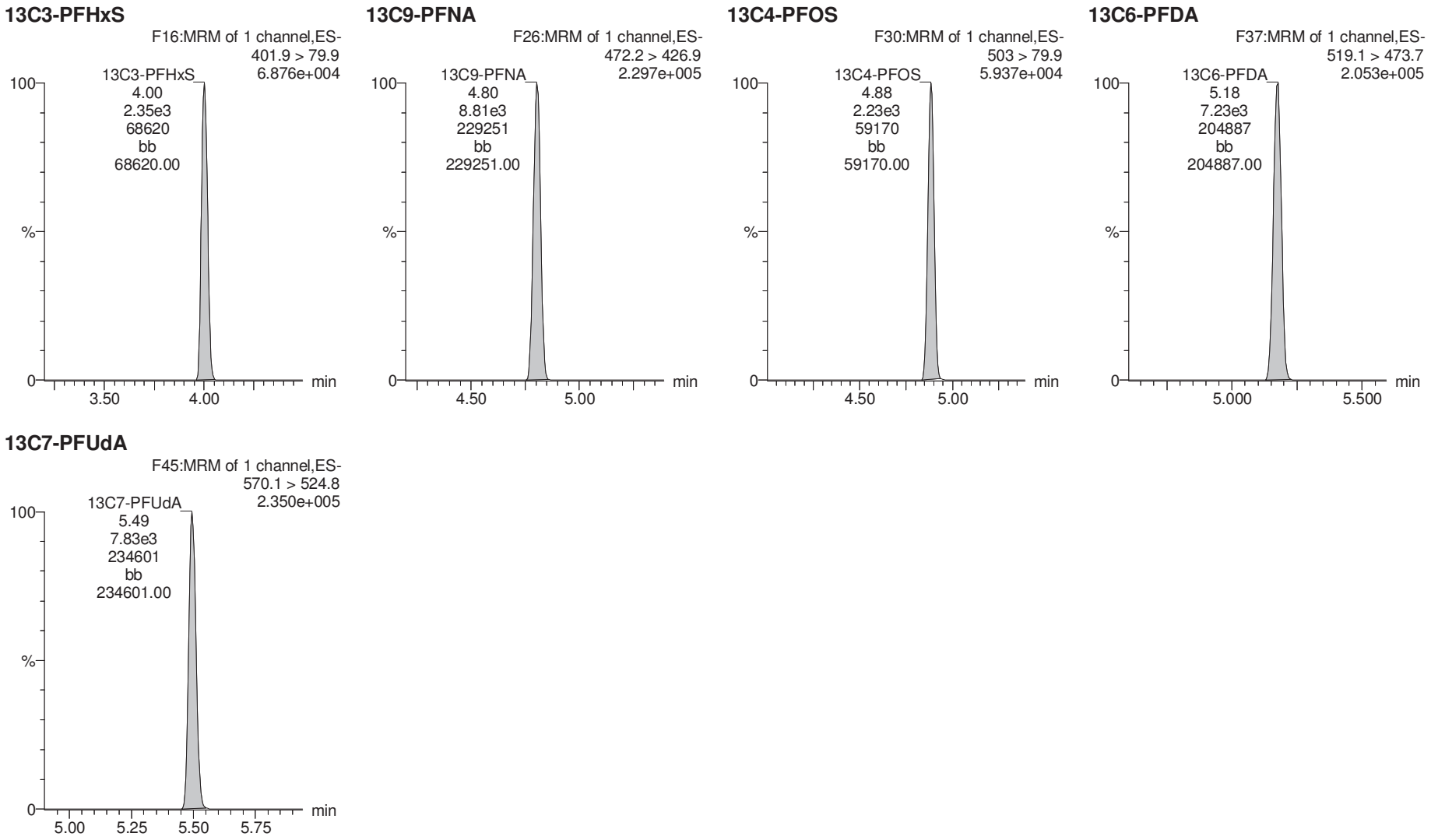


Dataset: U:\Q4.PRO\results\180115M2\180115M2-14.qld

Last Altered: Tuesday, January 16, 2018 11:42:27 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:43:08 Pacific Standard Time

Name: 180115M2_14, Date: 16-Jan-2018, Time: 02:43:19, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202



Dataset: U:\Q4.PRO\results\180115M2\180115M2-15.qld

Last Altered: Tuesday, January 16, 2018 11:45:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:45:52 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_15, Date: 16-Jan-2018, Time: 02:54:46, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		1.33e3	0.262		2.87				
2	4 PFHxA	313.2 > 268.9		3.19e3	0.262		3.36				
3	5 PFHpA	363.0 > 318.9		8.10e3	0.262		4.00				
4	6 L-PFHxS	398.9 > 79.6	5.80e0	9.58e2	0.262		4.14	4.01	0.0757	0.0676	
5	9 L-PFOA	413 > 368.7		1.09e4	0.262		4.50				
6	12 PFNA	463.0 > 418.8		9.02e3	0.262		4.94				
7	13 PFOSA	498.1 > 77.8		1.29e3	0.262		5.00				
8	16 PFDA	513 > 468.8		7.65e3	0.262		5.31				
9	18 N-MeFOSAA	570.1 > 419		3.83e3	0.262		5.45				
10	19 N-EtFOSAA	584.2 > 419		3.42e3	0.262		5.60				
11	20 PFUdA	563.0 > 518.9		8.03e3	0.262		5.62				
12	22 PFDoA	612.9 > 569.0		7.67e3	0.262		5.91				

Dataset: U:\Q4.PRO\results\180115M2\180115M2-15.qld

Last Altered: Tuesday, January 16, 2018 11:45:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:46:05 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_15, Date: 16-Jan-2018, Time: 02:54:46, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		7.67e3	0.262		6.15				
2	25 PFTeDA	712.9 > 668.8		4.30e3	0.262		6.35				
3	33 13C3-PFBS	302. > 98.8	1.33e3	1.12e4	0.262	0.095	2.87	2.75	1.48	59.7115	125.0
4	34 13C2-PFHxA	315 > 269.8	3.19e3	1.12e4	0.262	0.636	3.36	3.24	3.55	21.3279	111.6
5	35 13C4-PFHpA	367.2 > 321.8	8.10e3	1.12e4	0.262	0.621	4.00	3.86	9.02	55.5380	116.2
6	36 18O2-PFHxS	403.0 > 102.6	9.58e2	2.51e3	0.262	0.336	4.14	4.01	4.76	54.2147	113.5
7	37 13C2-6:2 FTS	429.1 > 408.9	2.76e3	1.03e4	0.262	0.192	4.46	4.32	3.34	66.2886	138.7
8	38 13C2-PFOA	414.9 > 369.7	1.09e4	1.03e4	0.262	1.001	4.50	4.38	13.2	50.2777	105.2
9	39 13C5-PFNA	468.2 > 422.9	9.02e3	1.09e4	0.262	0.811	4.94	4.81	10.3	48.5783	101.7
10	40 13C8-PFOSA	506.1 > 77.7	1.29e3	1.17e4	0.262	0.196	5.00	4.87	1.38	26.9040	56.3
11	41 13C8-PFOS	507.0 > 79.9	2.50e3	2.34e3	0.262	0.862	5.02	4.88	13.3	59.1564	123.8
12	42 13C2-PFDA	515.1 > 469.9	7.65e3	9.37e3	0.262	0.996	5.31	5.18	10.2	39.1677	82.0
13	43 13C2-8:2 FTS	529.1 > 508.7	1.31e3	1.12e4	0.262	0.103	5.28	5.15	1.46	54.3235	113.7
14	44 d3-N-MeFOSAA	573.3 > 419	3.83e3	1.17e4	0.262	0.340	5.45	5.32	4.09	46.0371	96.3
15	45 d5-N-EtFOSAA	589.3 > 419	3.42e3	1.17e4	0.262	0.377	5.60	5.47	3.65	37.0094	77.5
16	46 13C2-PFUdA	565 > 519.8	8.03e3	1.17e4	0.262	0.944	5.62	5.50	8.58	34.7458	72.7
17	47 13C2-PFDoA	615.0 > 569.7	7.67e3	1.17e4	0.262	0.726	5.91	5.78	8.20	43.1536	90.3
18	49 13C2-PFTeDA	714.8 > 669.6	4.30e3	1.17e4	0.262	0.371	6.35	6.23	4.59	47.2627	98.9
19	55 13C5-PFHxA	318 > 272.9	1.12e4	1.12e4	0.262	1.000	3.36	3.24	12.5	47.7847	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.51e3	2.51e3	0.262	1.000	4.14	4.01	12.5	47.7847	100.0
21	57 13C8-PFOA	421.3 > 376	1.03e4	1.03e4	0.262	1.000	4.50	4.37	12.5	47.7847	100.0
22	58 13C9-PFNA	472.2 > 426.9	1.09e4	1.09e4	0.262	1.000	4.94	4.81	12.5	47.7847	100.0
23	59 13C4-PFOS	503 > 79.9	2.34e3	2.34e3	0.262	1.000	5.02	4.88	12.5	47.7847	100.0
24	60 13C6-PFDA	519.1 > 473.7	9.37e3	9.37e3	0.262	1.000	5.31	5.18	12.5	47.7847	100.0
25	61 13C7-PFUdA	570.1 > 524.8	1.17e4	1.17e4	0.262	1.000	5.62	5.50	12.5	47.7847	100.0
26	62 Total PFHxS	398.9 > 79.6	5.80e0	9.58e2	0.262		4.14		0.0757	0.0676	
27	63 Total PFOA	413 > 368.7	0.00e0	1.09e4	0.262		4.51		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	2.50e3	0.262		5.02		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	3.83e3	0.262		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	3.42e3	0.262		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	0.00e0		0.262		0.00		0.000		

Dataset: U:\Q4.PRO\results\180115M2\180115M2-15.qld

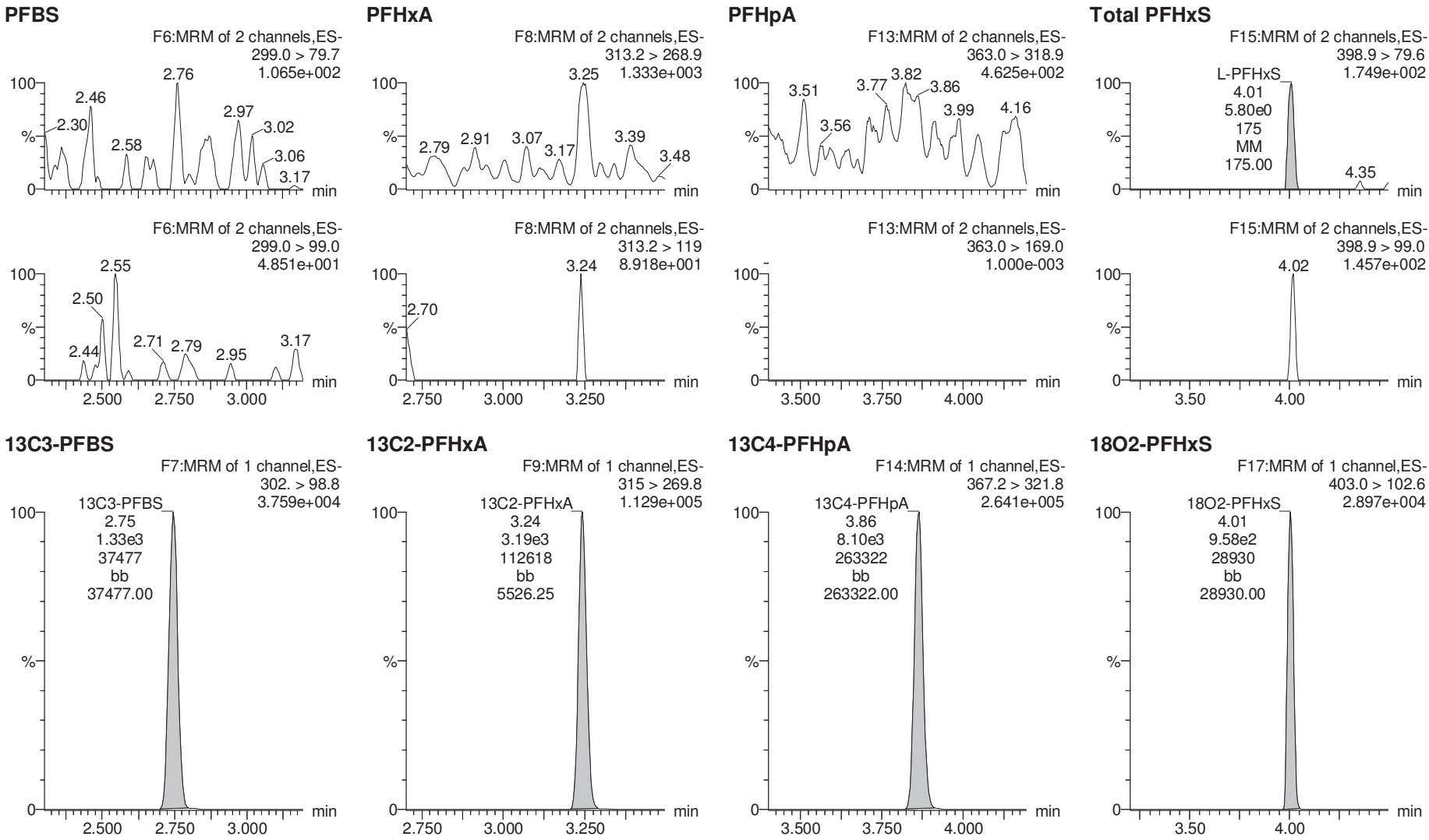
Last Altered: Tuesday, January 16, 2018 11:45:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:46:05 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_15, Date: 16-Jan-2018, Time: 02:54:46, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

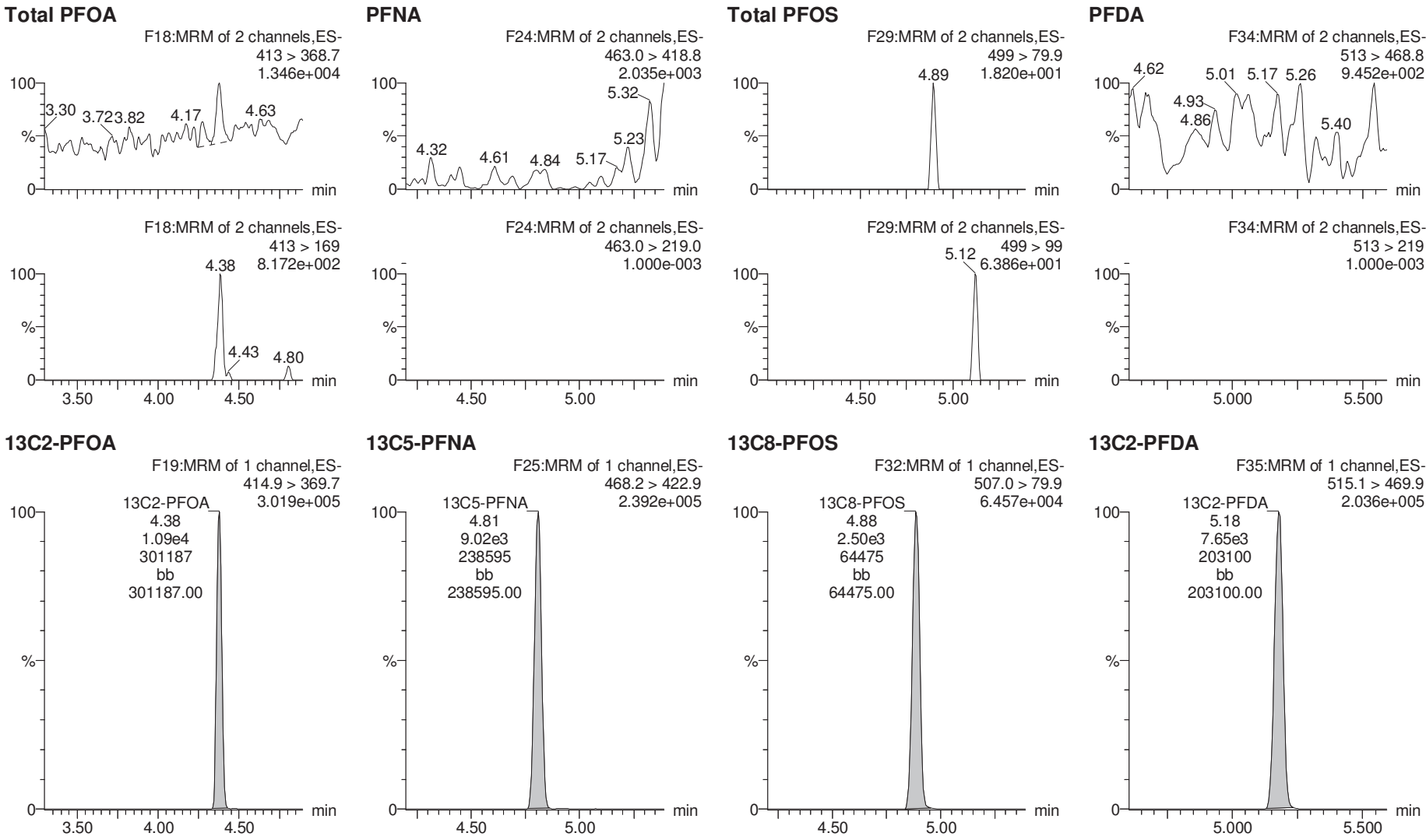


Dataset: U:\Q4.PRO\results\180115M2\180115M2-15.qld

Last Altered: Tuesday, January 16, 2018 11:45:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:46:05 Pacific Standard Time

Name: 180115M2_15, Date: 16-Jan-2018, Time: 02:54:46, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

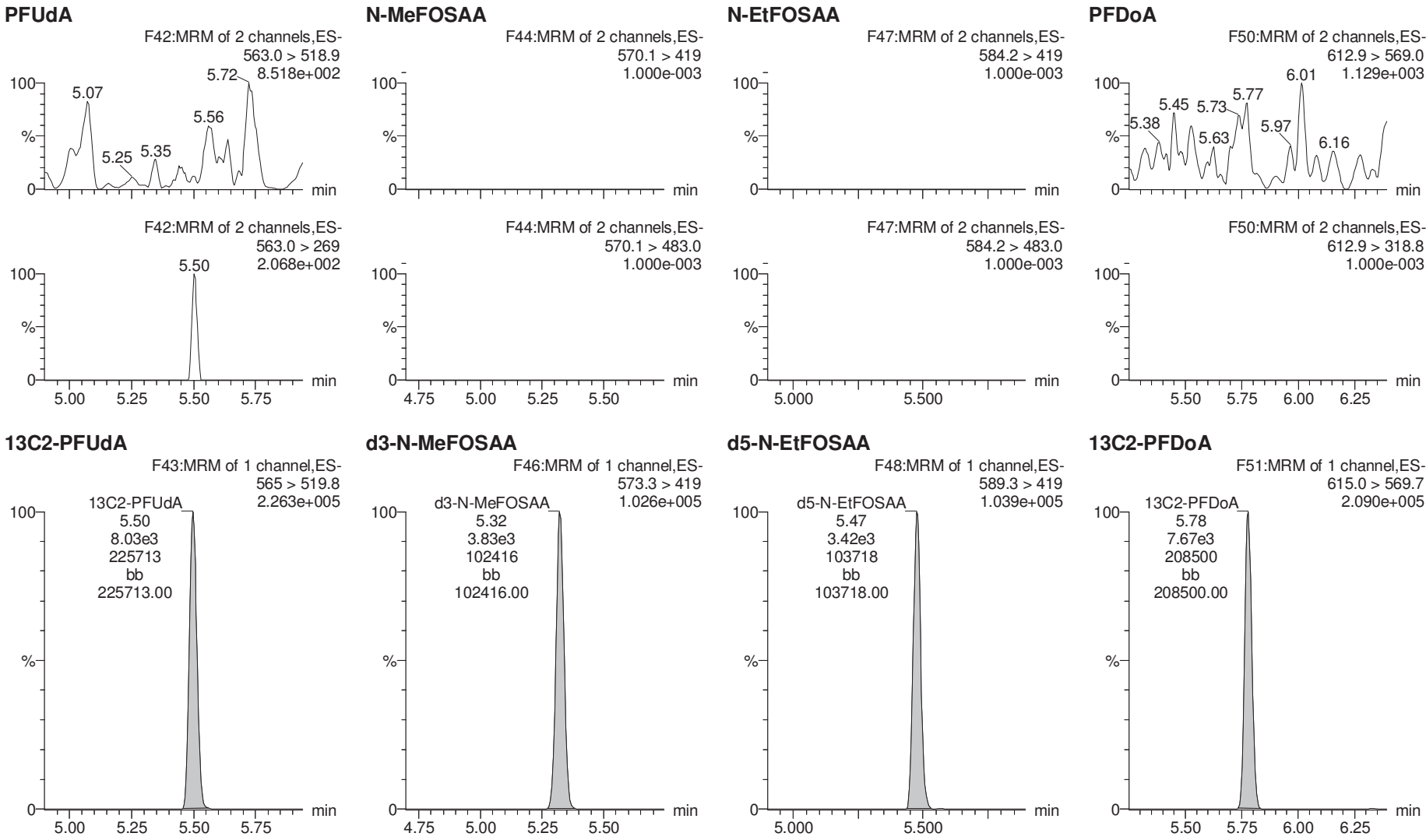


Dataset: U:\Q4.PRO\results\180115M2\180115M2-15.qld

Last Altered: Tuesday, January 16, 2018 11:45:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:46:05 Pacific Standard Time

Name: 180115M2_15, Date: 16-Jan-2018, Time: 02:54:46, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

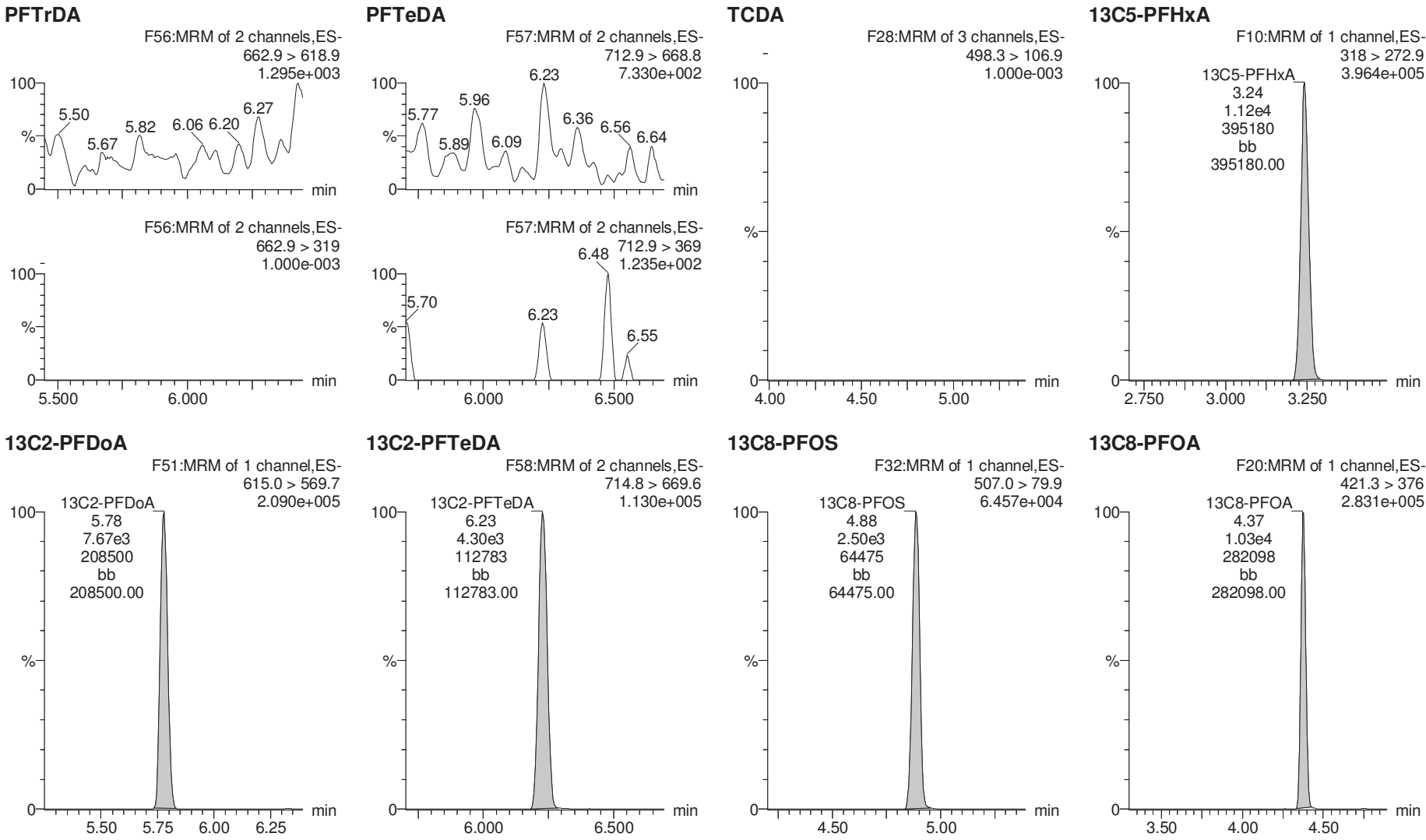


Dataset: U:\Q4.PRO\results\180115M2\180115M2-15.qld

Last Altered: Tuesday, January 16, 2018 11:45:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:46:05 Pacific Standard Time

Name: 180115M2_15, Date: 16-Jan-2018, Time: 02:54:46, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

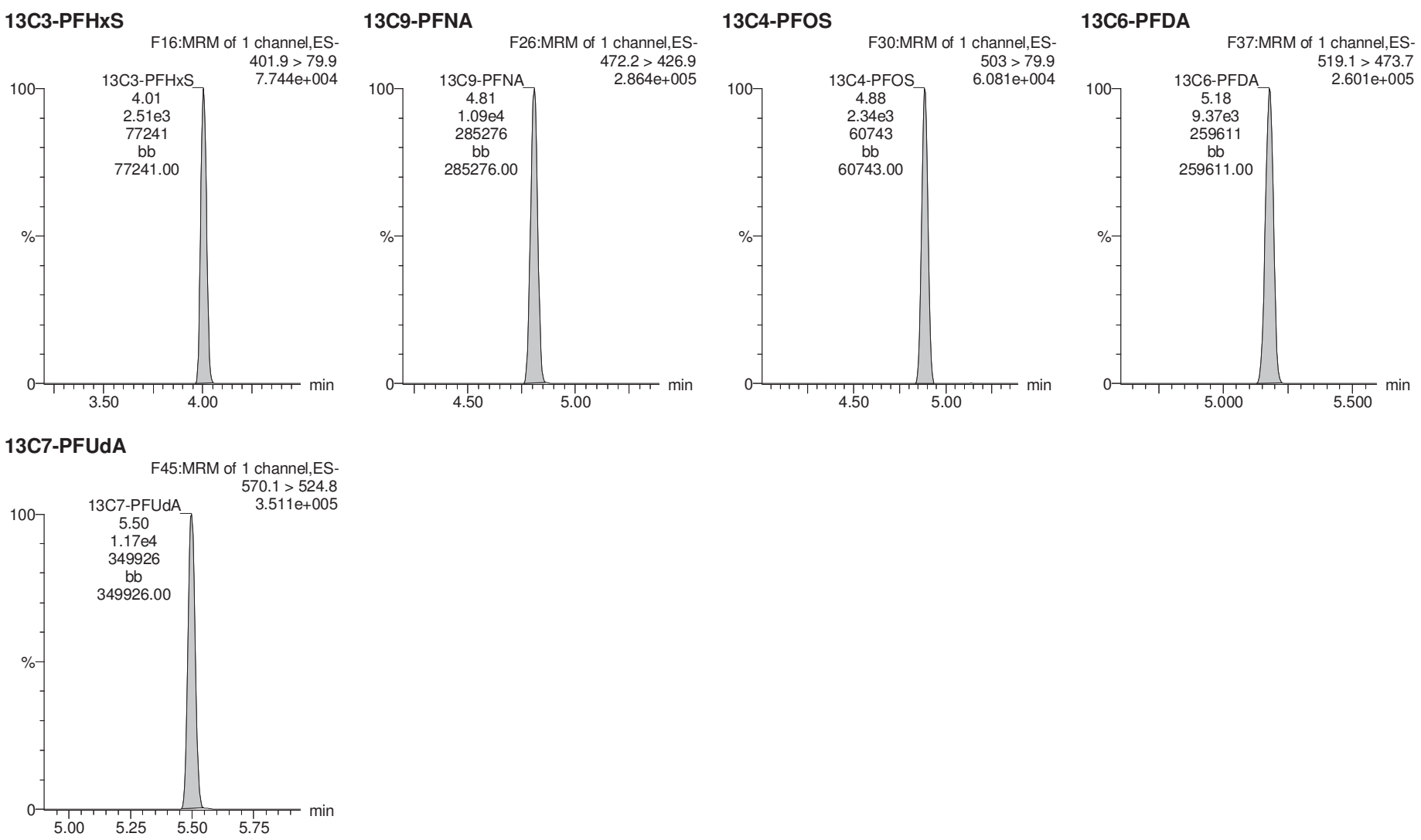


Dataset: U:\Q4.PRO\results\180115M2\180115M2-15.qld

Last Altered: Tuesday, January 16, 2018 11:45:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:46:05 Pacific Standard Time

Name: 180115M2_15, Date: 16-Jan-2018, Time: 02:54:46, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202



Dataset: U:\Q4.PRO\results\180115M2\180115M2-16.qld

Last Altered: Tuesday, January 16, 2018 11:48:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:49:00 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_16, Date: 16-Jan-2018, Time: 03:06:13, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		9.96e2	0.254		2.87				
2	4 PFHxA	313.2 > 268.9		2.50e3	0.254		3.36				
3	5 PFHpA	363.0 > 318.9		5.83e3	0.254		4.00				
4	6 L-PFHxS	398.9 > 79.6		7.23e2	0.254		4.14				
5	9 L-PFOA	413 > 368.7		9.97e3	0.254		4.50				
6	12 PFNA	463.0 > 418.8		6.95e3	0.254		4.94				
7	13 PFOSA	498.1 > 77.8		9.38e2	0.254		5.00				
8	16 PFDA	513 > 468.8		7.74e3	0.254		5.31				
9	18 N-MeFOSAA	570.1 > 419		2.51e3	0.254		5.45				
10	19 N-EtFOSAA	584.2 > 419		2.99e3	0.254		5.60				
11	20 PFUdA	563.0 > 518.9		8.73e3	0.254		5.62				
12	22 PFDoA	612.9 > 569.0		5.75e3	0.254		5.91				

Dataset: U:\Q4.PRO\results\180115M2\180115M2-16.qld

Last Altered: Tuesday, January 16, 2018 11:48:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:49:10 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_16, Date: 16-Jan-2018, Time: 03:06:13, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		5.75e3	0.254		6.15				
2	25 PFTeDA	712.9 > 668.8		3.05e3	0.254		6.35				
3	33 13C3-PFBS	302. > 98.8	9.96e2	8.86e3	0.254	0.095	2.87	2.75	1.41	58.3333	118.3
4	34 13C2-PFHxA	315 > 269.8	2.50e3	8.86e3	0.254	0.636	3.36	3.24	3.52	21.8265	110.7
5	35 13C4-PFHpA	367.2 > 321.8	5.83e3	8.86e3	0.254	0.621	4.00	3.86	8.23	52.2706	106.0
6	36 18O2-PFHxS	403.0 > 102.6	7.23e2	2.28e3	0.254	0.336	4.14	4.01	3.97	46.6009	94.5
7	37 13C2-6:2 FTS	429.1 > 408.9	1.59e3	9.40e3	0.254	0.192	4.46	4.32	2.11	43.2030	87.7
8	38 13C2-PFOA	414.9 > 369.7	9.97e3	9.40e3	0.254	1.001	4.50	4.38	13.3	52.2388	106.0
9	39 13C5-PFNA	468.2 > 422.9	6.95e3	7.59e3	0.254	0.811	4.94	4.81	11.5	55.7032	113.0
10	40 13C8-PFOSA	506.1 > 77.7	9.38e2	9.02e3	0.254	0.196	5.00	4.87	1.30	26.1054	53.0
11	41 13C8-PFOS	507.0 > 79.9	2.16e3	2.20e3	0.254	0.862	5.02	4.88	12.3	56.3294	114.3
12	42 13C2-PFDA	515.1 > 469.9	7.74e3	7.25e3	0.254	0.996	5.31	5.18	13.3	52.7856	107.1
13	43 13C2-8:2 FTS	529.1 > 508.7	9.16e2	8.86e3	0.254	0.103	5.28	5.15	1.29	49.5203	100.5
14	44 d3-N-MeFOSAA	573.3 > 419	2.51e3	9.02e3	0.254	0.340	5.45	5.32	3.48	40.3749	81.9
15	45 d5-N-EtFOSAA	589.3 > 419	2.99e3	9.02e3	0.254	0.377	5.60	5.47	4.14	43.3718	88.0
16	46 13C2-PFUDa	565 > 519.8	8.73e3	9.02e3	0.254	0.944	5.62	5.49	12.1	50.5685	102.6
17	47 13C2-PFDOa	615.0 > 569.7	5.75e3	9.02e3	0.254	0.726	5.91	5.78	7.97	43.2638	87.8
18	49 13C2-PFTeDA	714.8 > 669.6	3.05e3	9.02e3	0.254	0.371	6.35	6.23	4.23	44.8919	91.1
19	55 13C5-PFHxA	318 > 272.9	8.86e3	8.86e3	0.254	1.000	3.36	3.24	12.5	49.2902	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.28e3	2.28e3	0.254	1.000	4.14	4.01	12.5	49.2902	100.0
21	57 13C8-PFOA	421.3 > 376	9.40e3	9.40e3	0.254	1.000	4.50	4.38	12.5	49.2902	100.0
22	58 13C9-PFNA	472.2 > 426.9	7.59e3	7.59e3	0.254	1.000	4.94	4.81	12.5	49.2902	100.0
23	59 13C4-PFOS	503 > 79.9	2.20e3	2.20e3	0.254	1.000	5.02	4.88	12.5	49.2902	100.0
24	60 13C6-PFDA	519.1 > 473.7	7.25e3	7.25e3	0.254	1.000	5.31	5.18	12.5	49.2902	100.0
25	61 13C7-PFUDa	570.1 > 524.8	9.02e3	9.02e3	0.254	1.000	5.62	5.49	12.5	49.2902	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	7.23e2	0.254		4.14		0.000		
27	63 Total PFOA	413 > 368.7	0.00e0	9.97e3	0.254		4.51		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	2.16e3	0.254		5.02		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.51e3	0.254		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.99e3	0.254		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	0.00e0		0.254		0.00		0.000		

Dataset: U:\Q4.PRO\results\180115M2\180115M2-16.qld

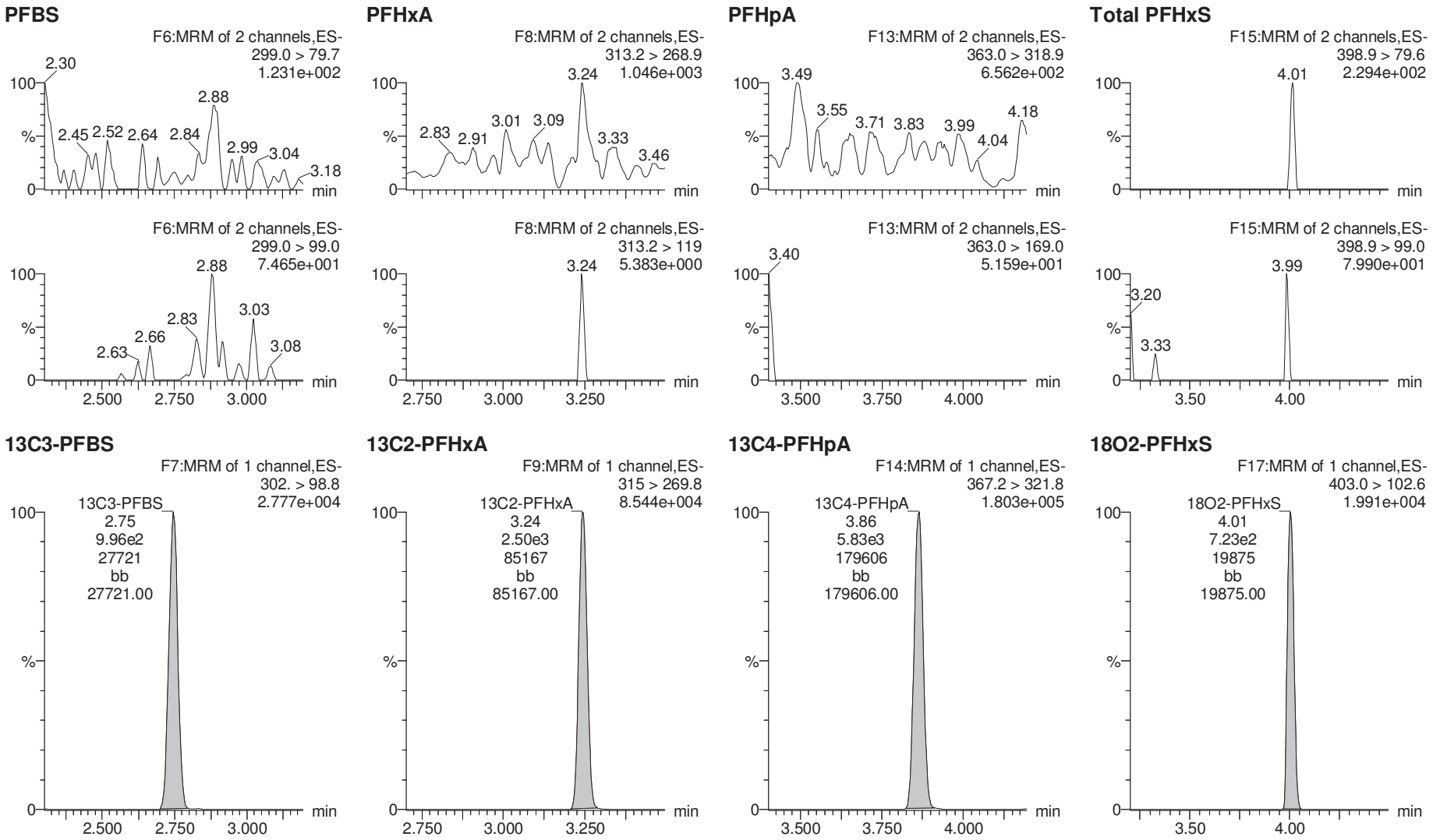
Last Altered: Tuesday, January 16, 2018 11:48:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:49:10 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_16, Date: 16-Jan-2018, Time: 03:06:13, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

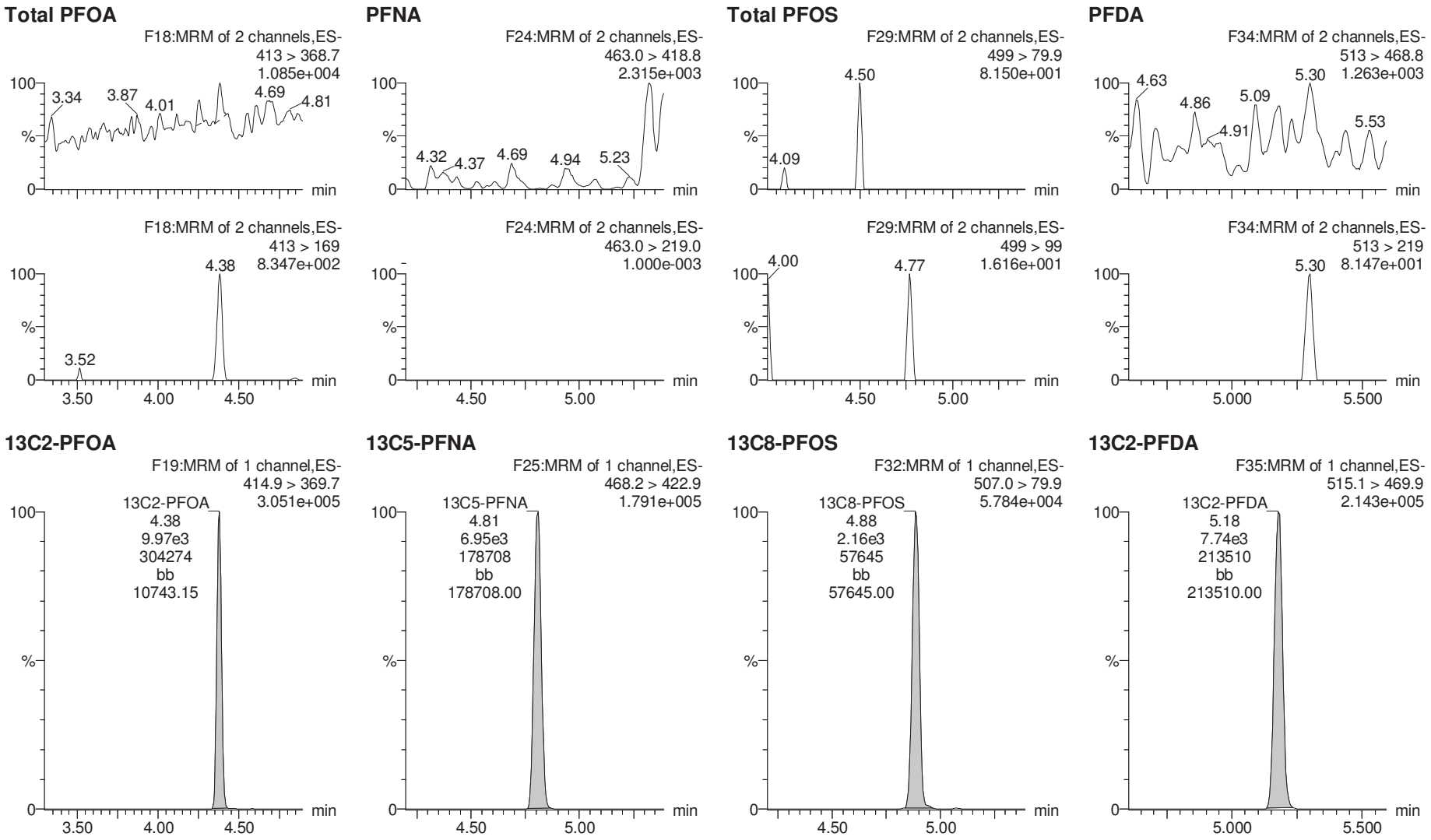


Dataset: U:\Q4.PRO\results\180115M2\180115M2-16.qld

Last Altered: Tuesday, January 16, 2018 11:48:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:49:10 Pacific Standard Time

Name: 180115M2_16, Date: 16-Jan-2018, Time: 03:06:13, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

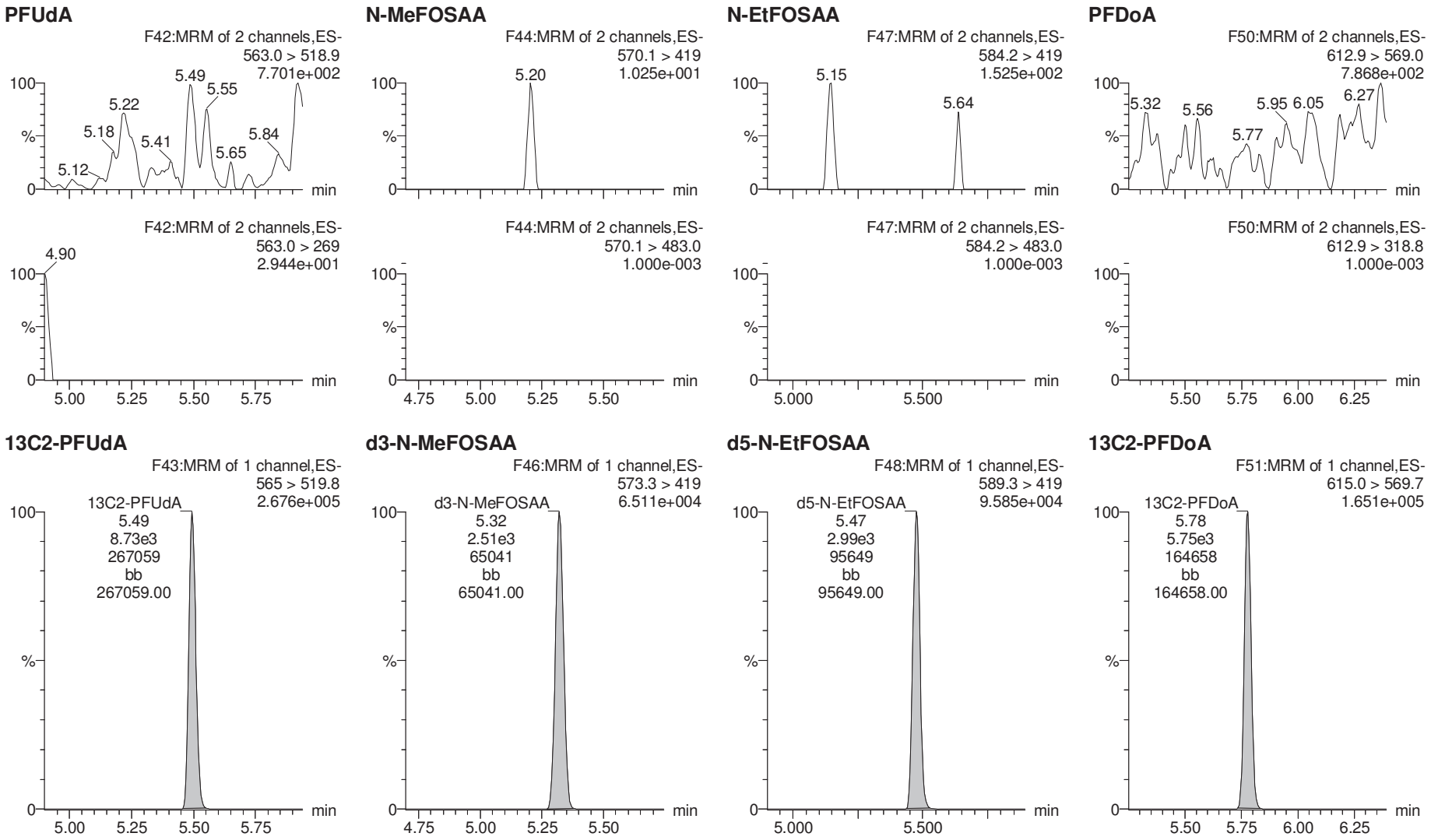


Dataset: U:\Q4.PRO\results\180115M2\180115M2-16.qld

Last Altered: Tuesday, January 16, 2018 11:48:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:49:10 Pacific Standard Time

Name: 180115M2_16, Date: 16-Jan-2018, Time: 03:06:13, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

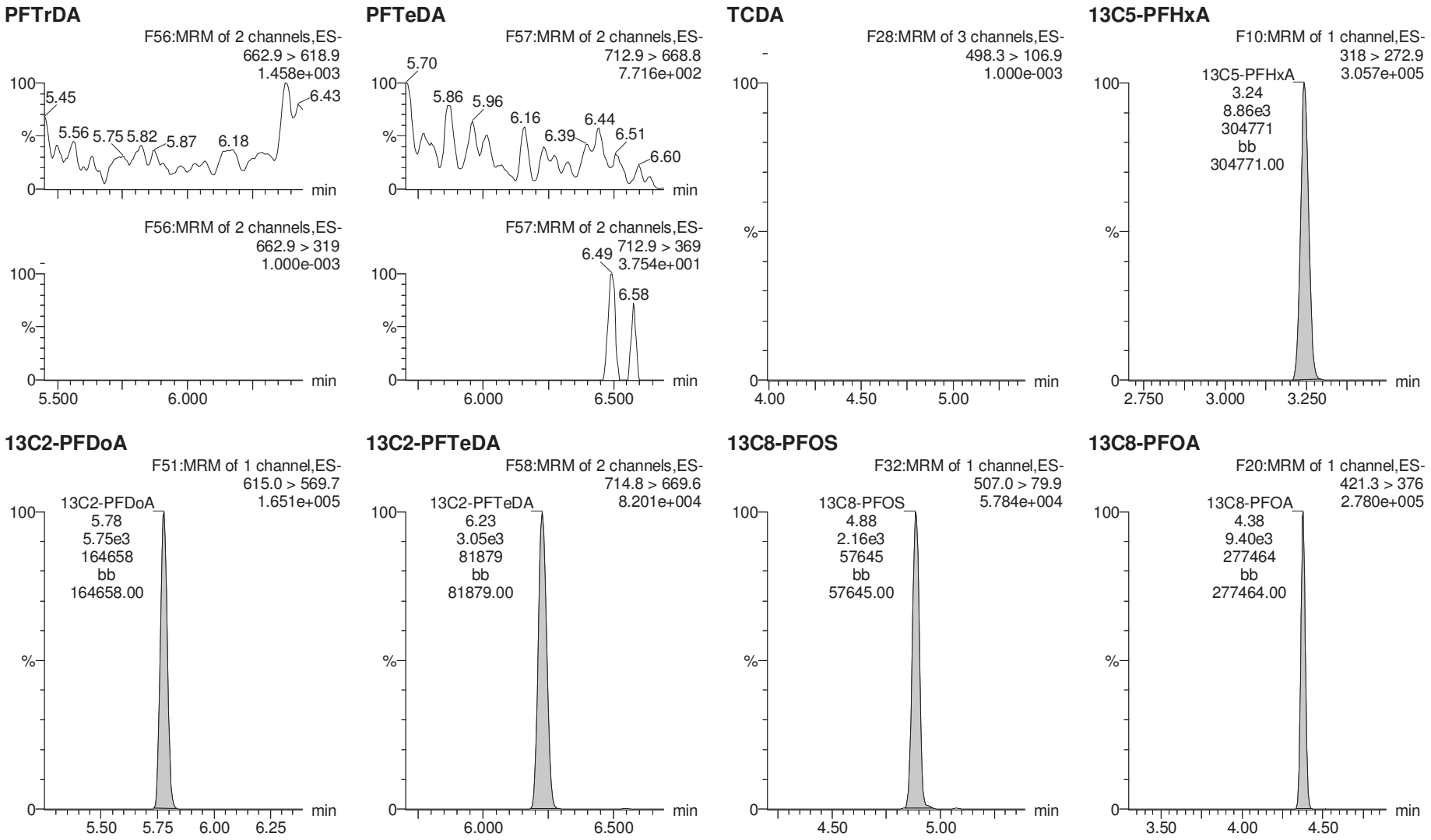


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Last Altered: Tuesday, January 16, 2018 11:48:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:49:10 Pacific Standard Time

Name: 180115M2_16, Date: 16-Jan-2018, Time: 03:06:13, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

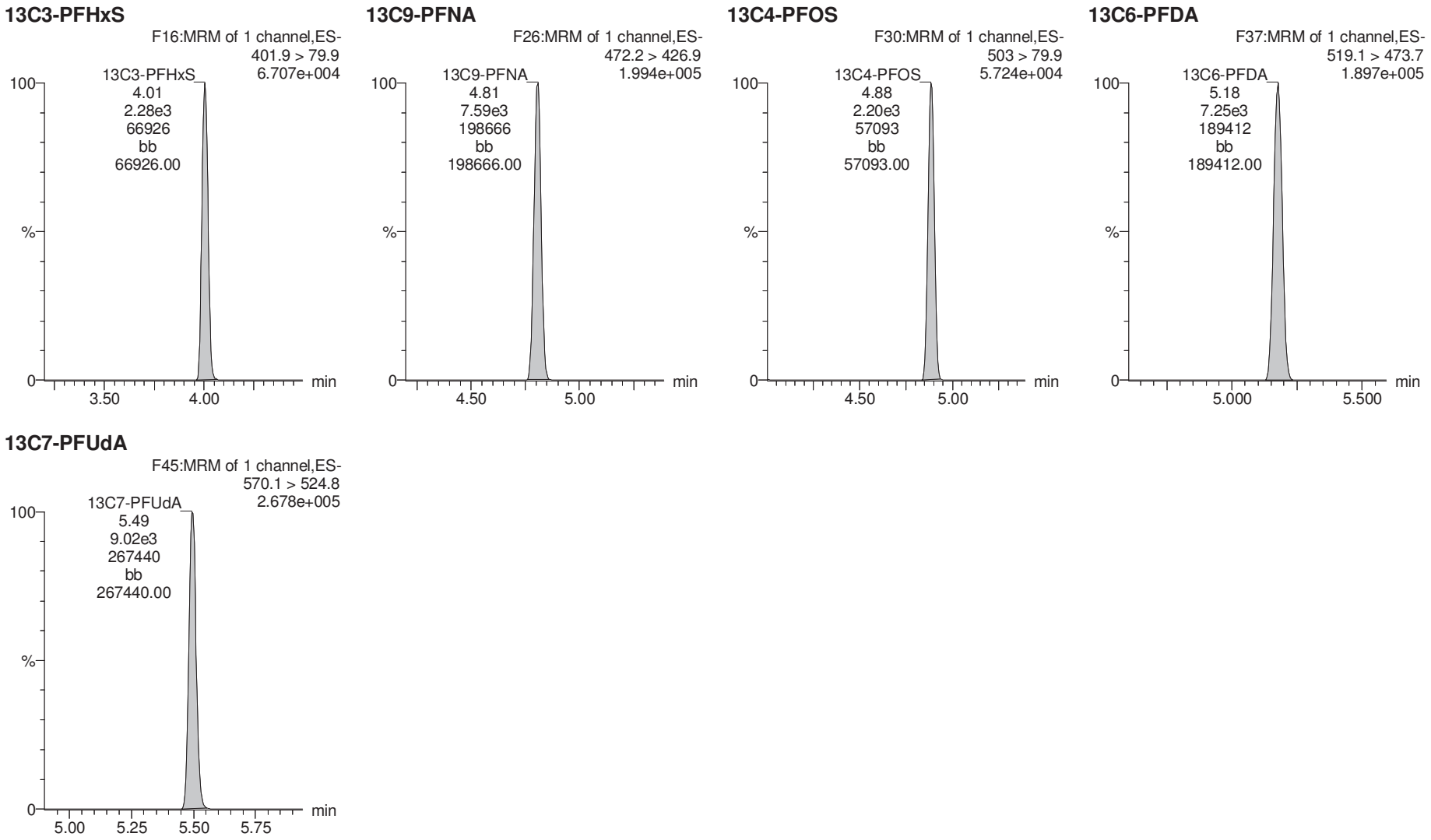


Dataset: U:\Q4.PRO\results\180115M2\180115M2-16.qld

Last Altered: Tuesday, January 16, 2018 11:48:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:49:10 Pacific Standard Time

Name: 180115M2_16, Date: 16-Jan-2018, Time: 03:06:13, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204



Dataset: U:\Q4.PRO\results\180115M2\180115M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:54:17 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:54:40 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_17, Date: 16-Jan-2018, Time: 03:17:39, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		1.25e3	0.260		2.87				
2	4 PFHxA	313.2 > 268.9	1.92e3	2.96e3	0.260		3.36	3.24	3.25	7.0679	
3	5 PFHpA	363.0 > 318.9	9.87e2	7.35e3	0.260		4.00	3.86	1.68	4.4579	
4	6 L-PFHxS	398.9 > 79.6	1.17e1	8.62e2	0.260		4.14	4.00	0.170	0.2401	
5	9 L-PFOA	413 > 368.7	2.96e3	9.38e3	0.260		4.50	4.37	3.94	12.2879	
6	12 PFNA	463.0 > 418.8	1.51e3	7.55e3	0.260		4.94	4.80	2.50	7.1703	
7	13 PFOSA	498.1 > 77.8		1.55e3	0.260		5.00				
8	16 PFDA	513 > 468.8		7.07e3	0.260		5.31				
9	18 N-MeFOSAA	570.1 > 419		3.02e3	0.260		5.45				
10	19 N-EtFOSAA	584.2 > 419		3.82e3	0.260		5.60				
11	20 PFUdA	563.0 > 518.9		9.95e3	0.260		5.62				
12	22 PFDoA	612.9 > 569.0		7.16e3	0.260		5.91				

Dataset: U:\Q4.PRO\results\180115M2\180115M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:54:17 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:54:51 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_17, Date: 16-Jan-2018, Time: 03:17:39, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		7.16e3	0.260		6.15				
2	25 PFTeDA	712.9 > 668.8		3.61e3	0.260		6.35				
3	33 13C3-PFBS	302. > 98.8	1.25e3	1.06e4	0.260	0.095	2.87	2.75	1.47	59.4979	124.0
4	34 13C2-PFHxA	315 > 269.8	2.96e3	1.06e4	0.260	0.636	3.36	3.24	3.49	21.0766	109.8
5	35 13C4-PFHpA	367.2 > 321.8	7.35e3	1.06e4	0.260	0.621	4.00	3.86	8.67	53.6272	111.7
6	36 18O2-PFHxS	403.0 > 102.6	8.62e2	2.61e3	0.260	0.336	4.14	4.00	4.13	47.2727	98.5
7	37 13C2-6:2 FTS	429.1 > 408.9	1.80e3	9.59e3	0.260	0.192	4.46	4.32	2.35	46.8276	97.6
8	38 13C2-PFOA	414.9 > 369.7	9.38e3	9.59e3	0.260	1.001	4.50	4.37	12.2	46.8814	97.7
9	39 13C5-PFNA	468.2 > 422.9	7.55e3	1.08e4	0.260	0.811	4.94	4.80	8.75	41.4161	86.3
10	40 13C8-PFOSA	506.1 > 77.7	1.55e3	9.51e3	0.260	0.196	5.00	4.87	2.04	39.9176	83.2
11	41 13C8-PFOS	507.0 > 79.9	2.37e3	2.56e3	0.260	0.862	5.02	4.88	11.6	51.5481	107.4
12	42 13C2-PFDA	515.1 > 469.9	7.07e3	6.50e3	0.260	0.996	5.31	5.17	13.6	52.4083	109.2
13	43 13C2-8:2 FTS	529.1 > 508.7	9.46e2	1.06e4	0.260	0.103	5.28	5.15	1.12	41.6234	86.7
14	44 d3-N-MeFOSAA	573.3 > 419	3.02e3	9.51e3	0.260	0.340	5.45	5.32	3.96	44.7862	93.3
15	45 d5-N-EtFOSAA	589.3 > 419	3.82e3	9.51e3	0.260	0.377	5.60	5.47	5.02	51.2032	106.7
16	46 13C2-PFUdA	565 > 519.8	9.95e3	9.51e3	0.260	0.944	5.62	5.49	13.1	53.2078	110.8
17	47 13C2-PFDoA	615.0 > 569.7	7.16e3	9.51e3	0.260	0.726	5.91	5.77	9.41	49.7422	103.6
18	49 13C2-PFTeDA	714.8 > 669.6	3.61e3	9.51e3	0.260	0.371	6.35	6.23	4.75	49.1115	102.3
19	55 13C5-PFHxA	318 > 272.9	1.06e4	1.06e4	0.260	1.000	3.36	3.24	12.5	48.0012	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.61e3	2.61e3	0.260	1.000	4.14	4.00	12.5	48.0012	100.0
21	57 13C8-PFOA	421.3 > 376	9.59e3	9.59e3	0.260	1.000	4.50	4.37	12.5	48.0012	100.0
22	58 13C9-PFNA	472.2 > 426.9	1.08e4	1.08e4	0.260	1.000	4.94	4.80	12.5	48.0012	100.0
23	59 13C4-PFOS	503 > 79.9	2.56e3	2.56e3	0.260	1.000	5.02	4.88	12.5	48.0012	100.0
24	60 13C6-PFDA	519.1 > 473.7	6.50e3	6.50e3	0.260	1.000	5.31	5.17	12.5	48.0012	100.0
25	61 13C7-PFUdA	570.1 > 524.8	9.51e3	9.51e3	0.260	1.000	5.62	5.49	12.5	48.0012	100.0
26	62 Total PFHxS	398.9 > 79.6	1.17e1	8.62e2	0.260		4.14		0.170	0.2401	
27	63 Total PFOA	413 > 368.7	3.43e3	9.38e3	0.260		4.51		4.58	13.2548	
28	64 Total PFOS	499 > 79.9	0.00e0	2.37e3	0.260		5.02		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	3.02e3	0.260		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	3.82e3	0.260		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	3.43e3		0.260		0.00		4.58	13.2548	

Dataset: U:\Q4.PRO\results\180115M2\180115M2-17.qld

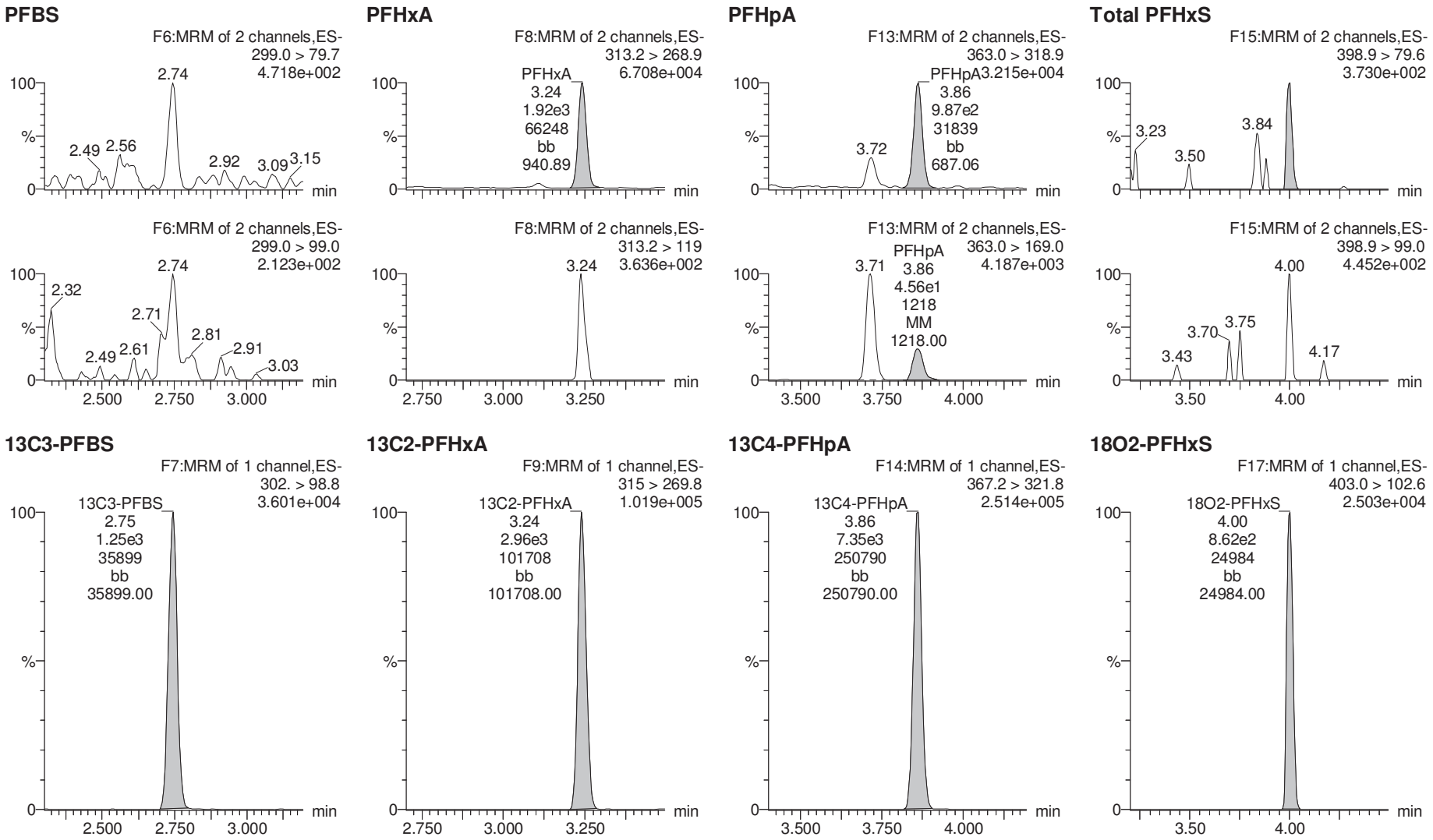
Last Altered: Tuesday, January 16, 2018 11:54:17 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:54:51 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_17, Date: 16-Jan-2018, Time: 03:17:39, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

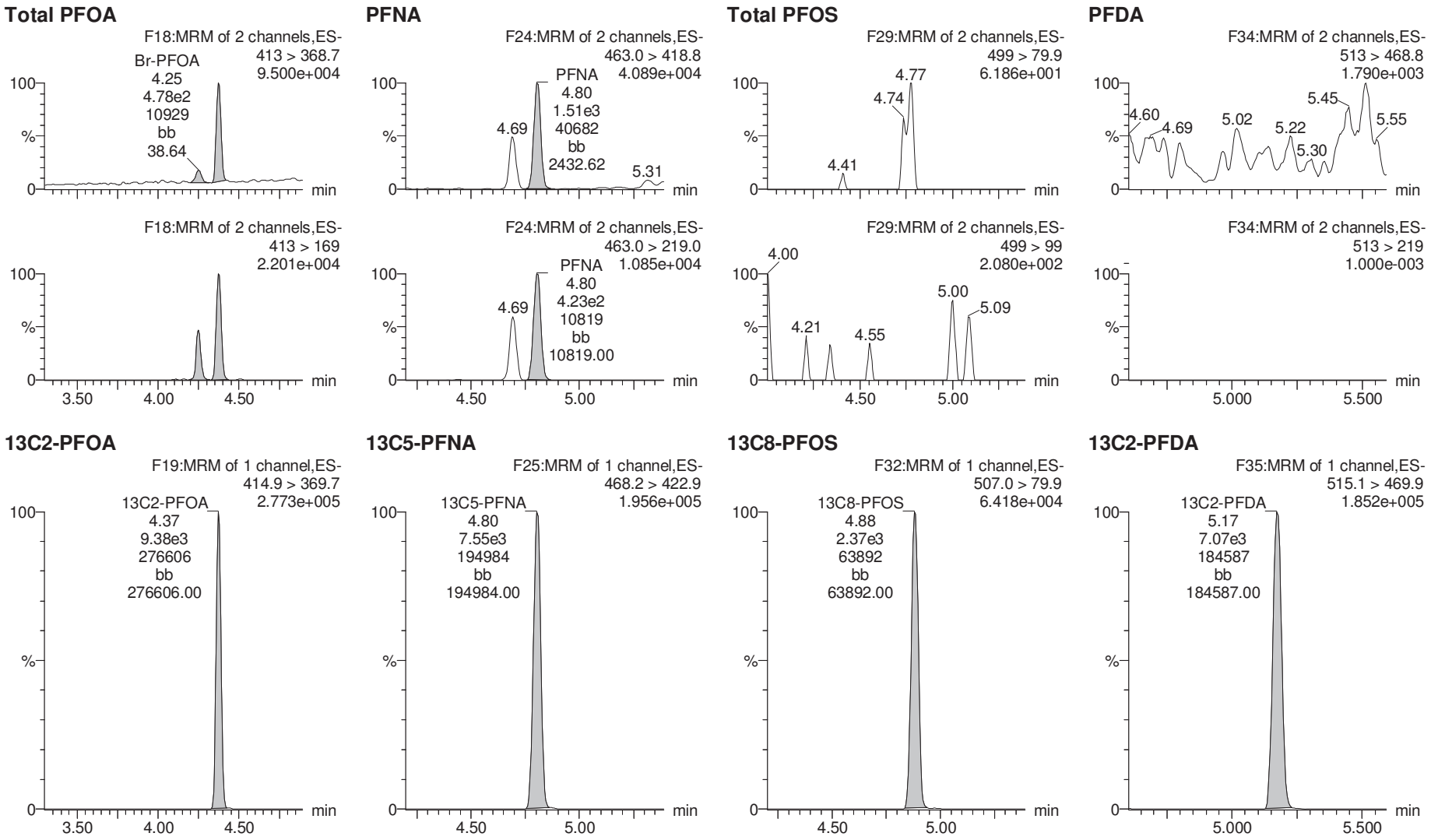


Dataset: U:\Q4.PRO\results\180115M2\180115M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:54:17 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:54:51 Pacific Standard Time

Name: 180115M2_17, Date: 16-Jan-2018, Time: 03:17:39, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

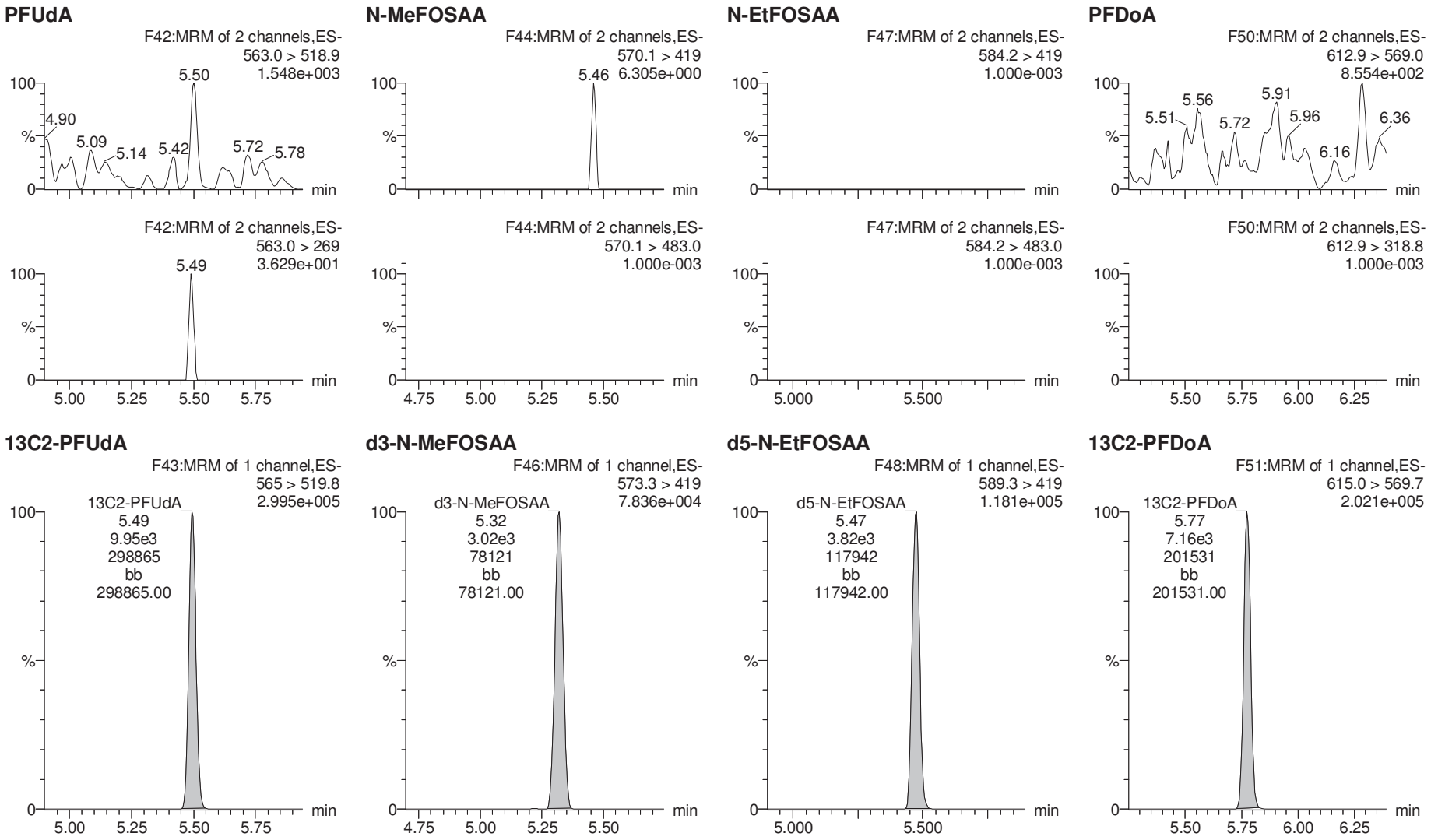


Dataset: U:\Q4.PRO\results\180115M2\180115M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:54:17 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:54:51 Pacific Standard Time

Name: 180115M2_17, Date: 16-Jan-2018, Time: 03:17:39, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

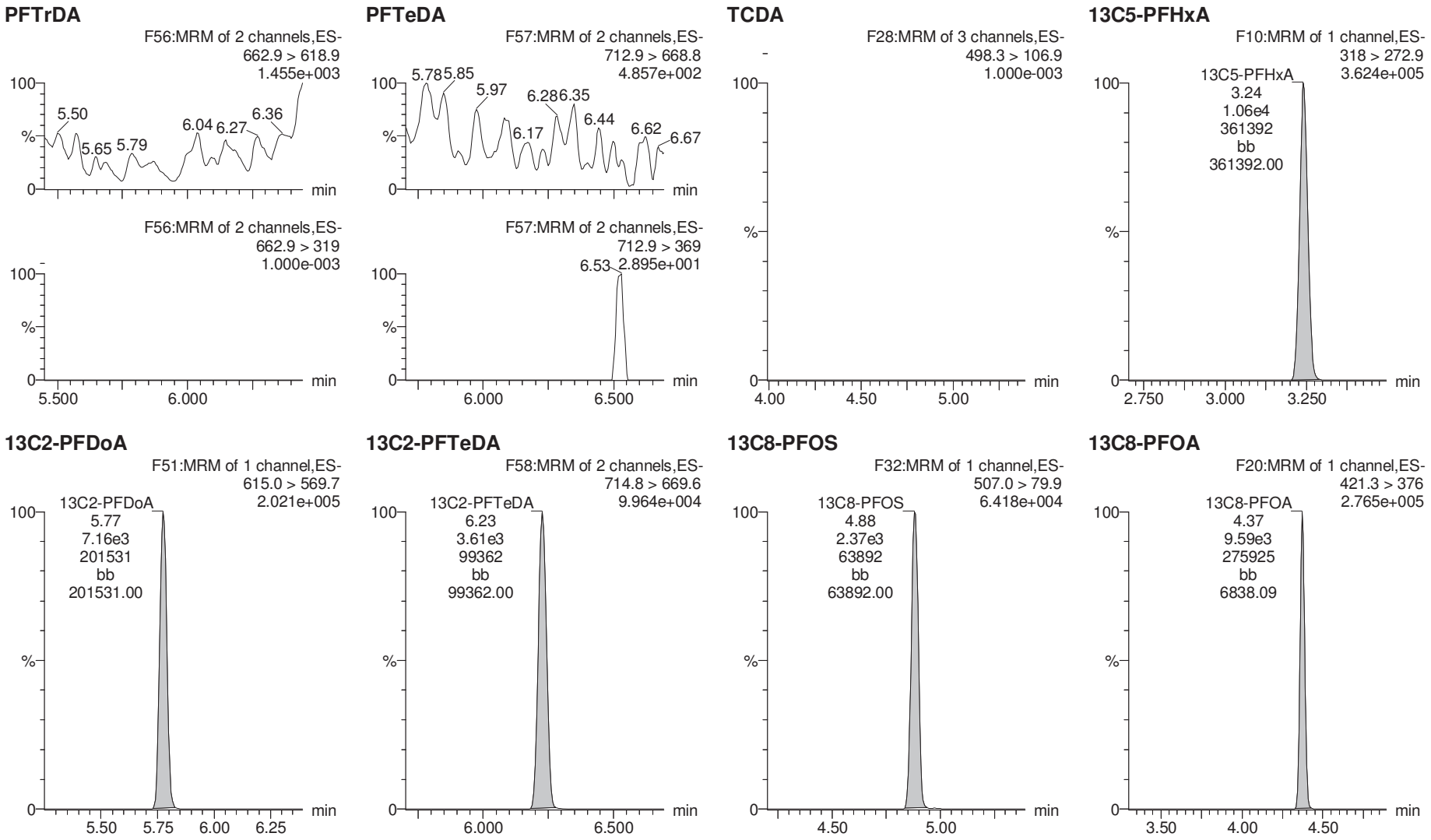


Dataset: U:\Q4.PRO\results\180115M2\180115M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:54:17 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:54:51 Pacific Standard Time

Name: 180115M2_17, Date: 16-Jan-2018, Time: 03:17:39, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

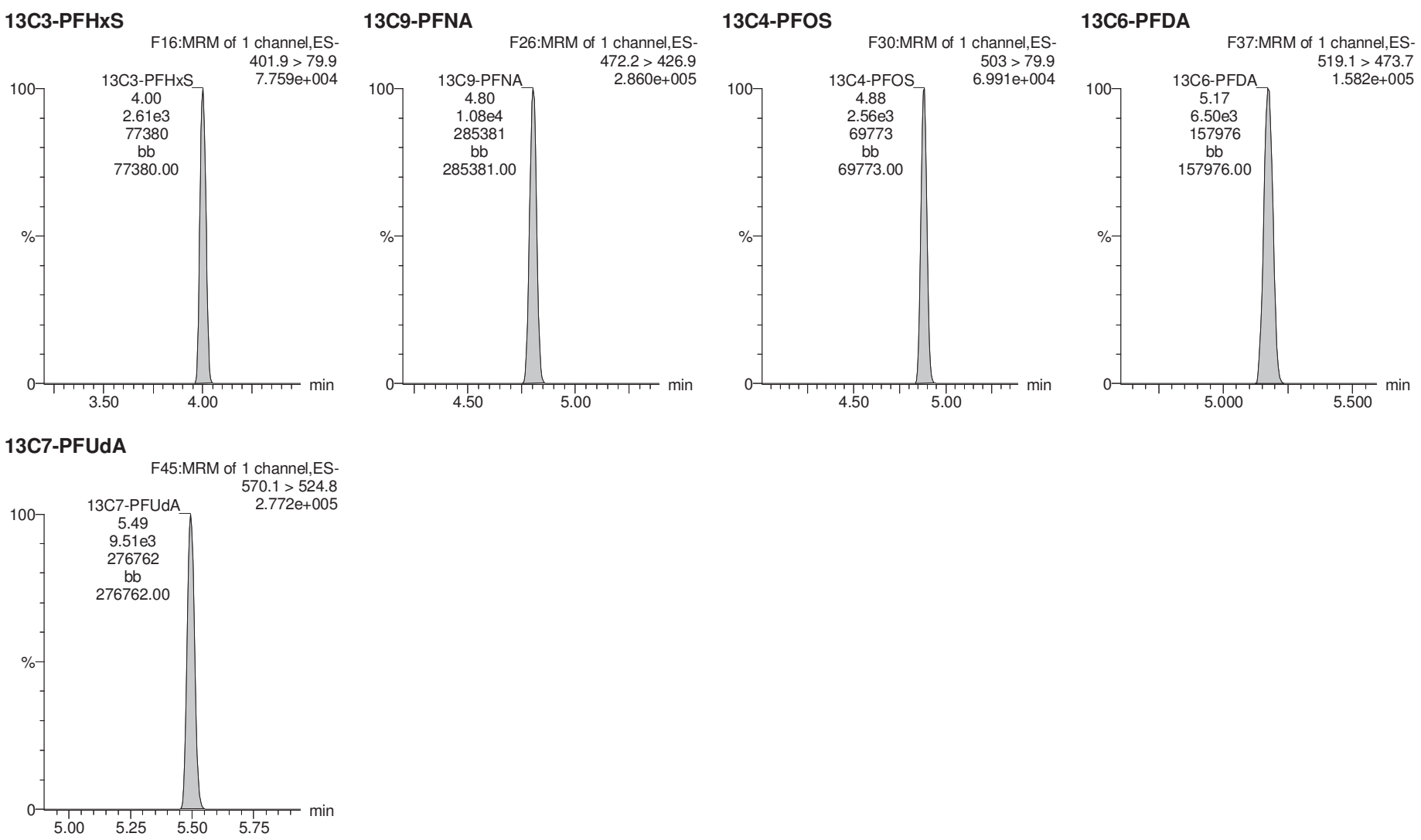


Dataset: U:\Q4.PRO\results\180115M2\180115M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:54:17 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:54:51 Pacific Standard Time

Name: 180115M2_17, Date: 16-Jan-2018, Time: 03:17:39, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204



Dataset: U:\Q4.PRO\results\180115M2\180115M2-18.qld

Last Altered: Tuesday, January 16, 2018 11:56:06 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:57:00 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_18, Date: 16-Jan-2018, Time: 03:29:06, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		1.27e3	0.259		2.87				
2	4 PFHxA	313.2 > 268.9		2.80e3	0.259		3.36				
3	5 PFHpA	363.0 > 318.9		6.93e3	0.259		4.00				
4	6 L-PFHxS	398.9 > 79.6		9.43e2	0.259		4.14				
5	9 L-PFOA	413 > 368.7		1.04e4	0.259		4.50				
6	12 PFNA	463.0 > 418.8		7.79e3	0.259		4.94				
7	13 PFOSA	498.1 > 77.8		1.25e3	0.259		5.00				
8	16 PFDA	513 > 468.8		6.99e3	0.259		5.31				
9	18 N-MeFOSAA	570.1 > 419		2.86e3	0.259		5.45				
10	19 N-EtFOSAA	584.2 > 419		3.29e3	0.259		5.60				
11	20 PFUdA	563.0 > 518.9		8.63e3	0.259		5.62				
12	22 PFDoA	612.9 > 569.0		5.38e3	0.259		5.91				

Dataset: U:\Q4.PRO\results\180115M2\180115M2-18.qld

Last Altered: Tuesday, January 16, 2018 11:56:06 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:57:08 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_18, Date: 16-Jan-2018, Time: 03:29:06, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		5.38e3	0.259		6.15				
2	25 PFTeDA	712.9 > 668.8		3.09e3	0.259		6.35				
3	33 13C3-PFBS	302. > 98.8	1.27e3	9.17e3	0.259	0.095	2.87	2.75	1.73	70.3255	145.7
4	34 13C2-PFHxA	315 > 269.8	2.80e3	9.17e3	0.259	0.636	3.36	3.24	3.82	23.1781	120.1
5	35 13C4-PFHpA	367.2 > 321.8	6.93e3	9.17e3	0.259	0.621	4.00	3.86	9.45	58.7777	121.8
6	36 18O2-PFHxS	403.0 > 102.6	9.43e2	2.47e3	0.259	0.336	4.14	4.01	4.78	54.9577	113.9
7	37 13C2-6:2 FTS	429.1 > 408.9	1.81e3	9.26e3	0.259	0.192	4.46	4.32	2.44	48.9789	101.5
8	38 13C2-PFOA	414.9 > 369.7	1.04e4	9.26e3	0.259	1.001	4.50	4.37	14.0	54.0434	112.0
9	39 13C5-PFNA	468.2 > 422.9	7.79e3	8.88e3	0.259	0.811	4.94	4.81	11.0	52.2148	108.2
10	40 13C8-PFOSA	506.1 > 77.7	1.25e3	1.04e4	0.259	0.196	5.00	4.87	1.50	29.4753	61.1
11	41 13C8-PFOS	507.0 > 79.9	2.08e3	2.17e3	0.259	0.862	5.02	4.88	12.0	53.8058	111.5
12	42 13C2-PFDA	515.1 > 469.9	6.99e3	7.57e3	0.259	0.996	5.31	5.18	11.5	44.7644	92.7
13	43 13C2-8:2 FTS	529.1 > 508.7	1.27e3	9.17e3	0.259	0.103	5.28	5.15	1.73	65.0146	134.7
14	44 d3-N-MeFOSAA	573.3 > 419	2.86e3	1.04e4	0.259	0.340	5.45	5.32	3.44	39.1266	81.1
15	45 d5-N-EtFOSAA	589.3 > 419	3.29e3	1.04e4	0.259	0.377	5.60	5.47	3.96	40.5735	84.1
16	46 13C2-PFUdA	565 > 519.8	8.63e3	1.04e4	0.259	0.944	5.62	5.50	10.4	42.4878	88.0
17	47 13C2-PFDoA	615.0 > 569.7	5.38e3	1.04e4	0.259	0.726	5.91	5.78	6.47	34.4027	71.3
18	49 13C2-PFTeDA	714.8 > 669.6	3.09e3	1.04e4	0.259	0.371	6.35	6.23	3.72	38.6591	80.1
19	55 13C5-PFHxA	318 > 272.9	9.17e3	9.17e3	0.259	1.000	3.36	3.24	12.5	48.2663	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.47e3	2.47e3	0.259	1.000	4.14	4.01	12.5	48.2663	100.0
21	57 13C8-PFOA	421.3 > 376	9.26e3	9.26e3	0.259	1.000	4.50	4.37	12.5	48.2663	100.0
22	58 13C9-PFNA	472.2 > 426.9	8.88e3	8.88e3	0.259	1.000	4.94	4.81	12.5	48.2663	100.0
23	59 13C4-PFOS	503 > 79.9	2.17e3	2.17e3	0.259	1.000	5.02	4.89	12.5	48.2663	100.0
24	60 13C6-PFDA	519.1 > 473.7	7.57e3	7.57e3	0.259	1.000	5.31	5.18	12.5	48.2663	100.0
25	61 13C7-PFUdA	570.1 > 524.8	1.04e4	1.04e4	0.259	1.000	5.62	5.49	12.5	48.2663	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	9.43e2	0.259		4.14		0.000		
27	63 Total PFOA	413 > 368.7	0.00e0	1.04e4	0.259		4.51		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	2.08e3	0.259		5.02		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.86e3	0.259		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	3.29e3	0.259		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	0.00e0		0.259		0.00		0.000		

Dataset: U:\Q4.PRO\results\180115M2\180115M2-18.qld

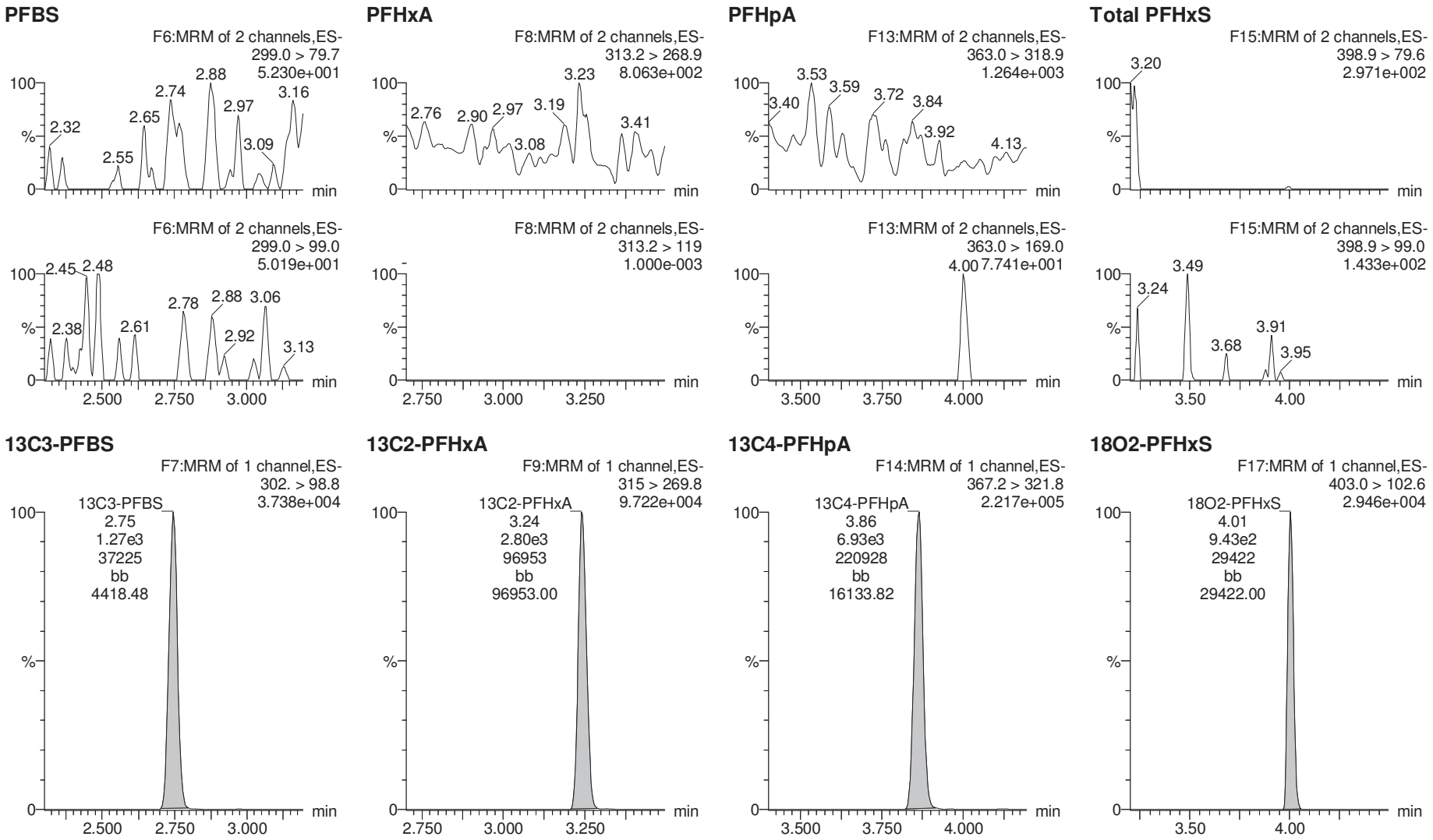
Last Altered: Tuesday, January 16, 2018 11:56:06 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:57:08 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_18, Date: 16-Jan-2018, Time: 03:29:06, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

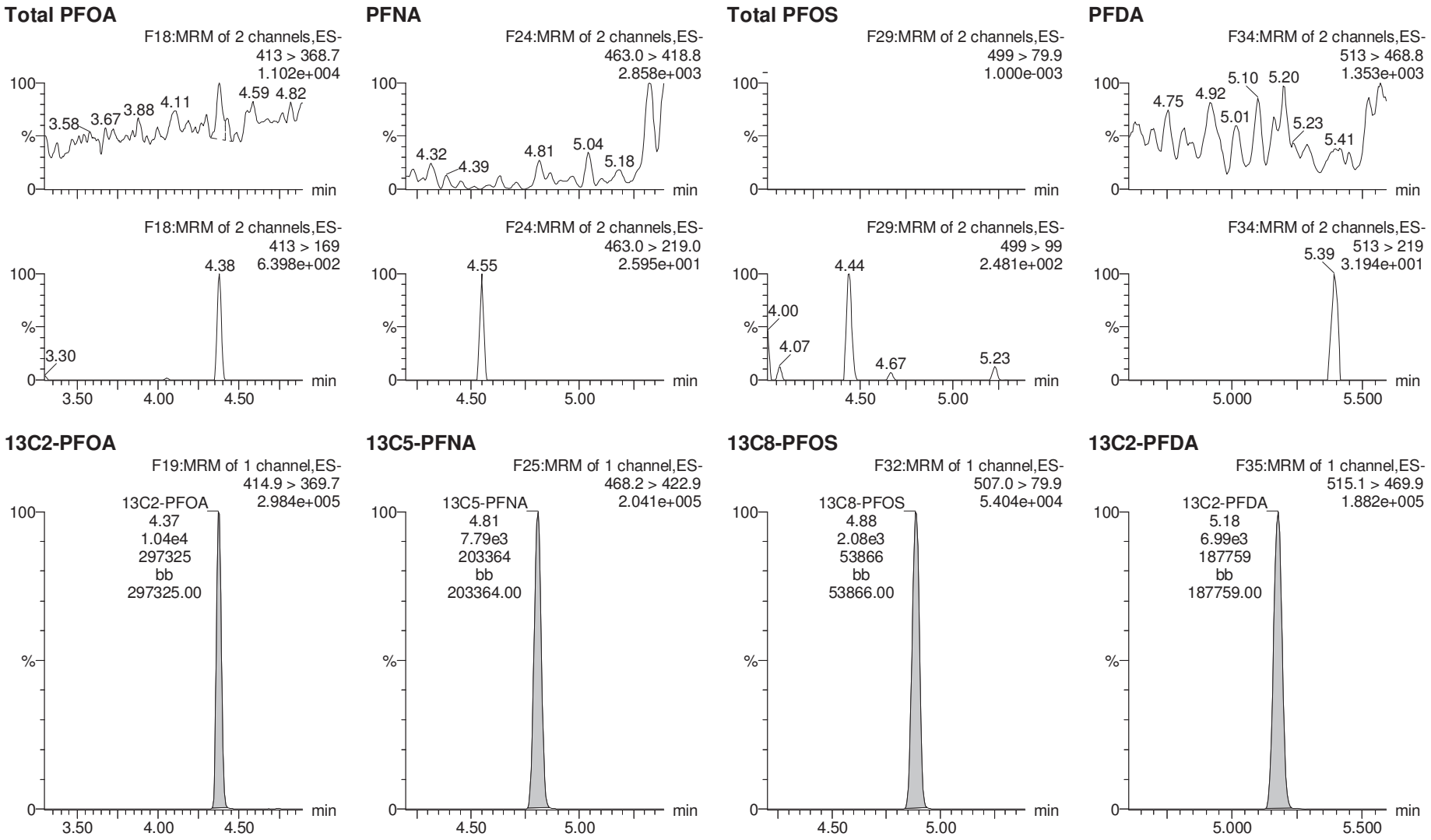


Dataset: U:\Q4.PRO\results\180115M2\180115M2-18.qld

Last Altered: Tuesday, January 16, 2018 11:56:06 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:57:08 Pacific Standard Time

Name: 180115M2_18, Date: 16-Jan-2018, Time: 03:29:06, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

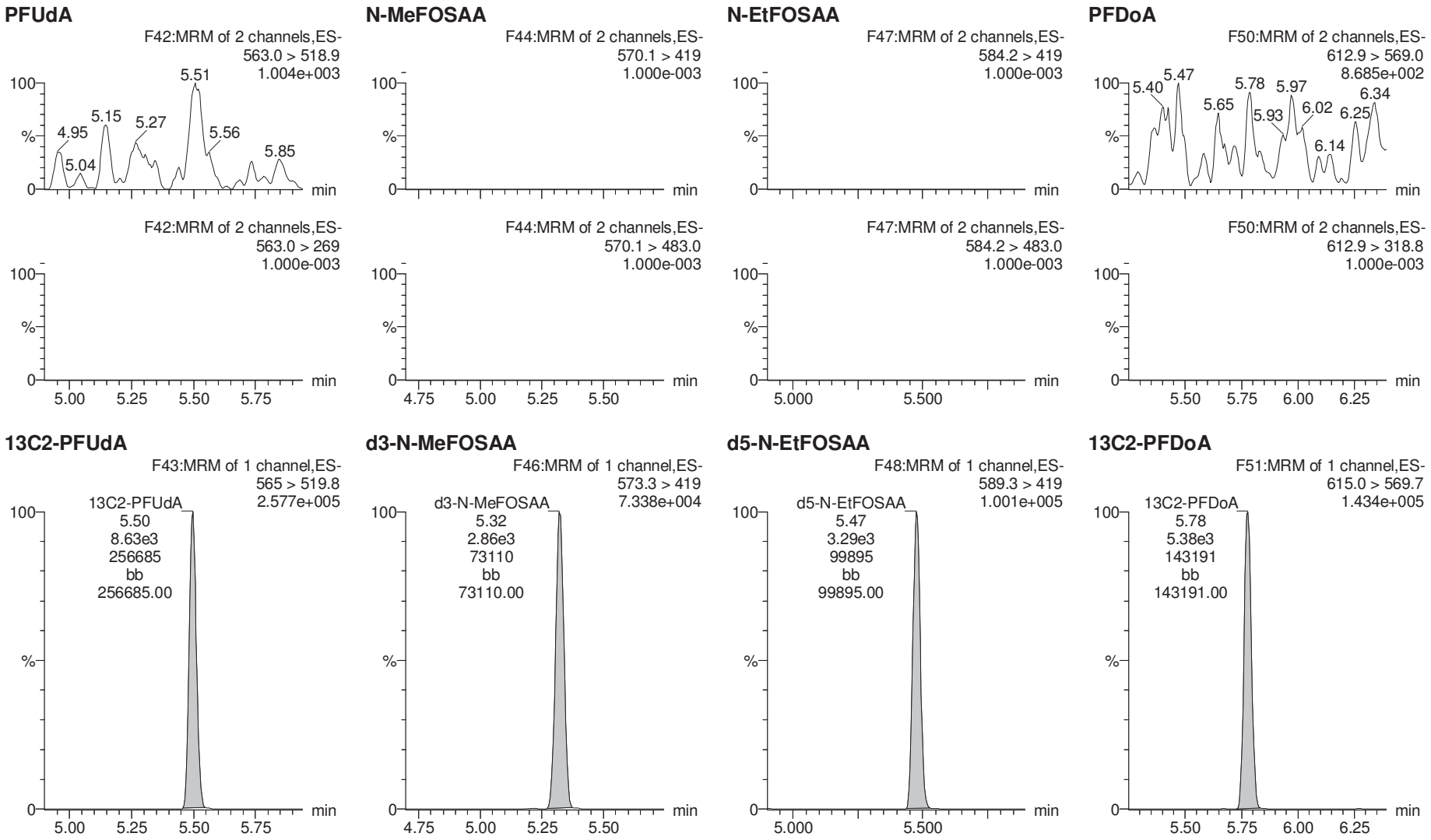


Dataset: U:\Q4.PRO\results\180115M2\180115M2-18.qld

Last Altered: Tuesday, January 16, 2018 11:56:06 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:57:08 Pacific Standard Time

Name: 180115M2_18, Date: 16-Jan-2018, Time: 03:29:06, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

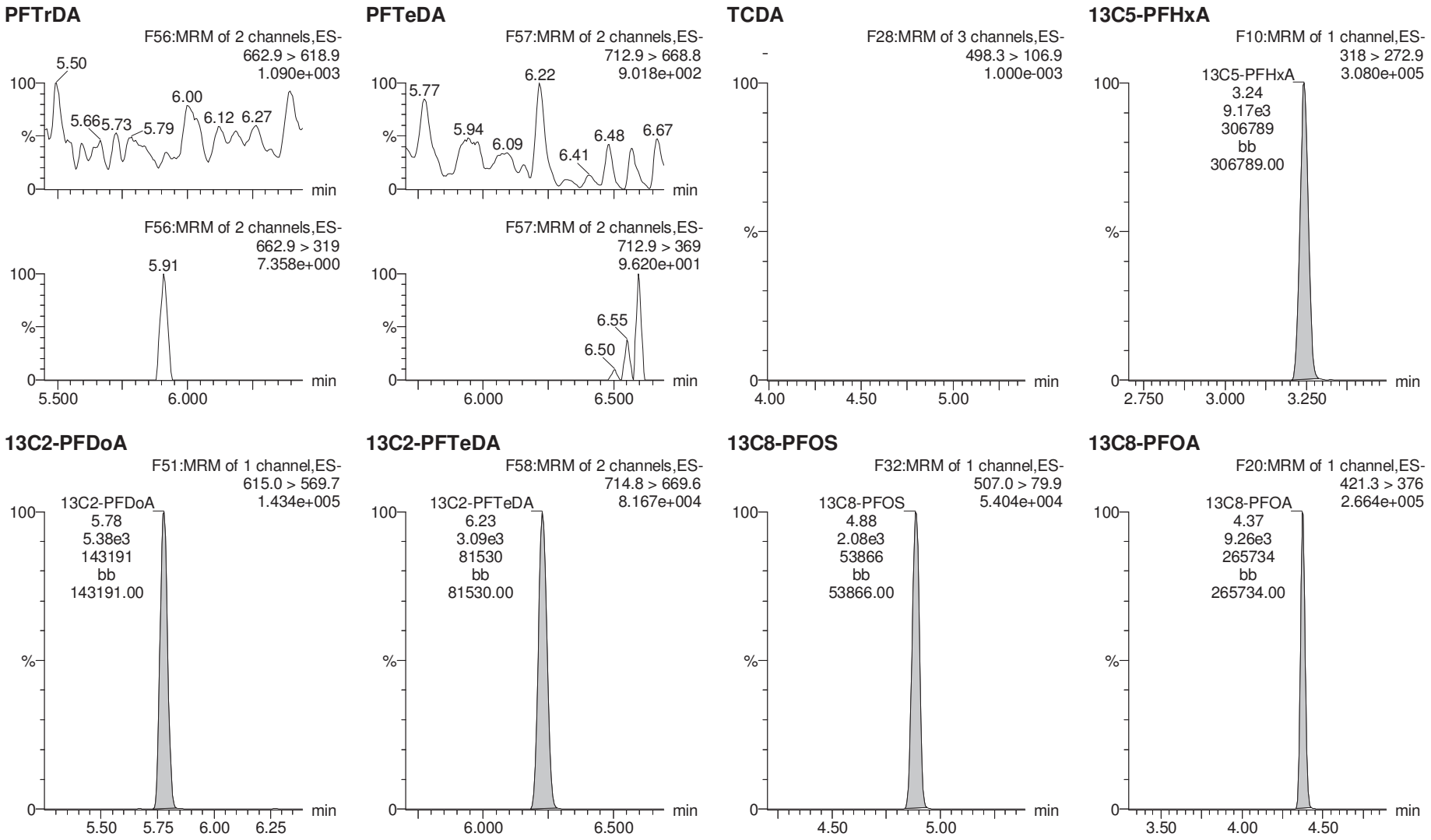


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Last Altered: Tuesday, January 16, 2018 11:56:06 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:57:08 Pacific Standard Time

Name: 180115M2_18, Date: 16-Jan-2018, Time: 03:29:06, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

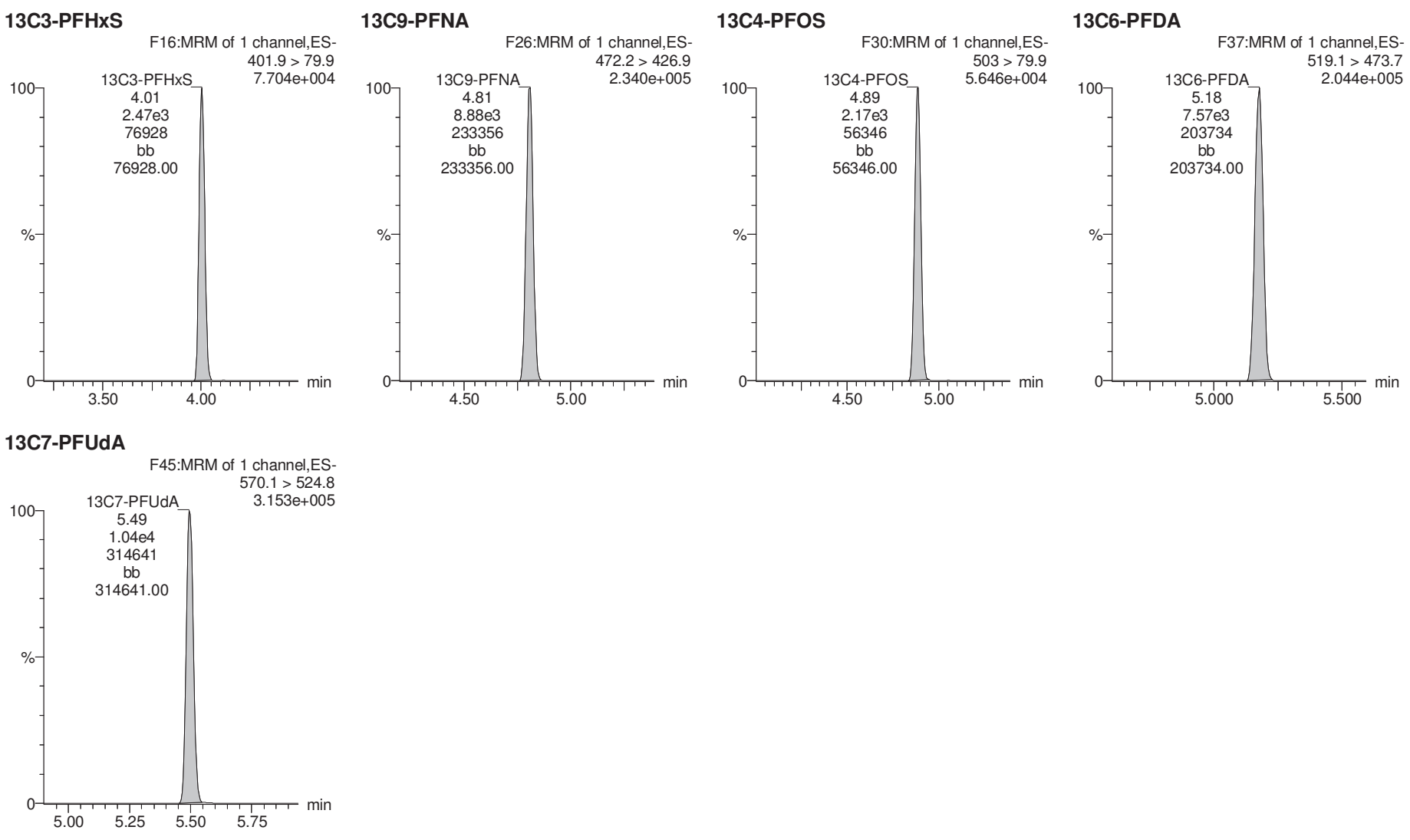


Dataset: U:\Q4.PRO\results\180115M2\180115M2-18.qld

Last Altered: Tuesday, January 16, 2018 11:56:06 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:57:08 Pacific Standard Time

Name: 180115M2_18, Date: 16-Jan-2018, Time: 03:29:06, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204



UNREPORTED RUNS

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-5.qld

Last Altered: Tuesday, January 16, 2018 10:59:16 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:59:37 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_5, Date: 12-Jan-2018, Time: 04:23:34, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		7.00e2	0.250		2.66				
2	4	PFHxA	313.2 > 268.9		1.80e3	0.250		3.15				
3	5	PFHpA	363.0 > 318.9		4.13e3	0.250		3.78				
4	6	L-PFHxS	398.9 > 79.6		5.07e2	0.250		3.94				
5	9	L-PFOA	413 > 368.7	1.55e2	5.68e3	0.250		4.31	4.23	0.341	0.4928	
6	12	PFNA	463.0 > 418.8		4.69e3	0.250		4.81				
7	13	PFOSA	498.1 > 77.8		4.78e2	0.250		4.87				
8	16	PFDA	513 > 468.8		3.37e3	0.250		5.18				
9	18	N-MeFOSAA	570.1 > 419		1.48e3	0.250		5.32				
10	19	N-EtFOSAA	584.2 > 419		1.64e3	0.250		5.48				
11	20	PFUdA	563.0 > 518.9		3.91e3	0.250		5.50				
12	22	PFDoA	612.9 > 569.0		2.28e3	0.250		5.77				

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180111M2\180111M2-5.qld

Last Altered: Tuesday, January 16, 2018 10:59:16 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:59:47 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_5, Date: 12-Jan-2018, Time: 04:23:34, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.28e3	0.250		6.00				
2	25 PFTeDA	712.9 > 668.8		1.20e3	0.250		6.22				
3	33 13C3-PFBS	302. > 98.8	7.00e2	6.74e3	0.250	0.095	2.77	2.59	1.30	54.4298	108.9
4	34 13C2-PFHxA	315 > 269.8	1.80e3	6.74e3	0.250	0.597	3.15	3.08	3.33	22.3414	111.7
5	35 13C4-PFHpA	367.2 > 321.8	4.13e3	6.74e3	0.250	0.604	3.78	3.70	7.66	50.6957	101.4
6	36 18O2-PFHxS	403.0 > 102.6	5.07e2	1.63e3	0.250	0.293	3.94	3.86	3.89	53.1328	106.3
7	37 13C2-6:2 FTS	429.1 > 408.9	1.10e3	6.15e3	0.250	0.215	4.25	4.17	2.25	41.7310	83.5
8	38 13C2-PFOA	414.9 > 369.7	5.68e3	6.15e3	0.250	0.916	4.31	4.22	11.5	50.4264	100.9
9	39 13C5-PFNA	468.2 > 422.9	4.69e3	6.40e3	0.250	0.817	4.81	4.66	9.16	44.8137	89.6
10	40 13C8-PFOSA	506.1 > 77.7	4.78e2	4.86e3	0.250	0.223	4.87	4.72	1.23	22.0521	44.1
11	41 13C8-PFOS	507.0 > 79.9	1.21e3	1.85e3	0.250	0.875	4.89	4.75	8.16	37.3326	74.7
12	42 13C2-PFDA	515.1 > 469.9	3.37e3	3.56e3	0.250	1.105	5.18	5.04	11.8	42.7593	85.5
13	43 13C2-8:2 FTS	529.1 > 508.7	5.49e2	6.74e3	0.250	0.101	5.15	5.00	1.02	40.3846	80.8
14	44 d3-N-MeFOSAA	573.3 > 419	1.48e3	4.86e3	0.250	0.345	5.32	5.18	3.80	44.0656	88.1
15	45 d5-N-EtFOSAA	589.3 > 419	1.64e3	4.86e3	0.250	0.390	5.47	5.34	4.20	43.0835	86.2
16	46 13C2-PFUDa	565 > 519.8	3.91e3	4.86e3	0.250	0.958	5.49	5.36	10.1	42.0013	84.0
17	47 13C2-PFDOa	615.0 > 569.7	2.28e3	4.86e3	0.250	0.599	5.77	5.64	5.87	39.1981	78.4
18	49 13C2-PFTeDA	714.8 > 669.6	1.20e3	4.86e3	0.250	0.282	6.22	6.11	3.09	43.9109	87.8
19	55 13C5-PFHxA	318 > 272.9	6.74e3	6.74e3	0.250	1.000	3.15	3.08	12.5	50.0000	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.63e3	1.63e3	0.250	1.000	4.02	3.85	12.5	50.0000	100.0
21	57 13C8-PFOA	421.3 > 376	6.15e3	6.15e3	0.250	1.000	4.38	4.22	12.5	50.0000	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.40e3	6.40e3	0.250	1.000	4.81	4.65	12.5	50.0000	100.0
23	59 13C4-PFOS	503 > 79.9	1.85e3	1.85e3	0.250	1.000	4.89	4.74	12.5	50.0000	100.0
24	60 13C6-PFDA	519.1 > 473.7	3.56e3	3.56e3	0.250	1.000	5.18	5.03	12.5	50.0000	100.0
25	61 13C7-PFUDa	570.1 > 524.8	4.86e3	4.86e3	0.250	1.000	5.49	5.36	12.5	50.0000	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	5.07e2	0.250		3.80		0.000		
27	63 Total PFOA	413 > 368.7	1.55e2	5.68e3	0.250		4.51		0.341	0.4928	
28	64 Total PFOS	499 > 79.9	0.00e0	1.21e3	0.250		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.48e3	0.250		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	1.64e3	0.250		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	1.55e2		0.250		0.00		0.341	0.4928	

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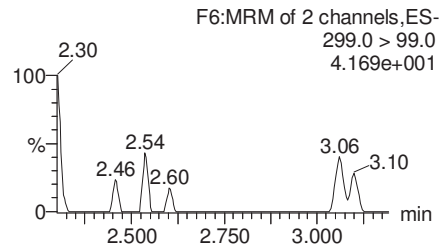
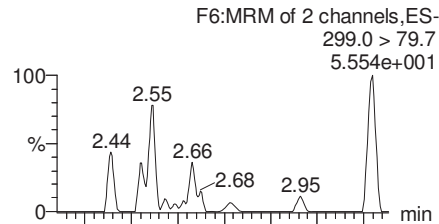
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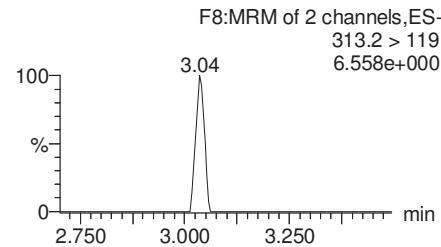
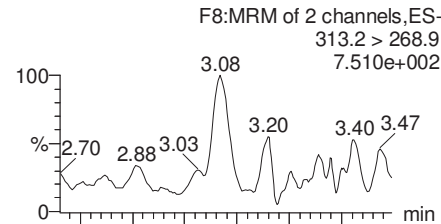
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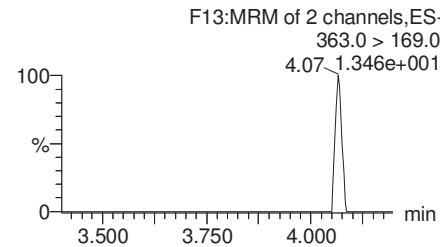
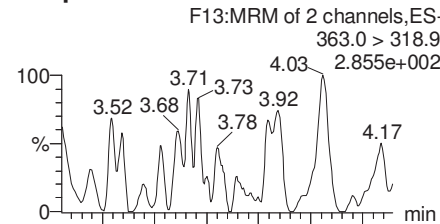
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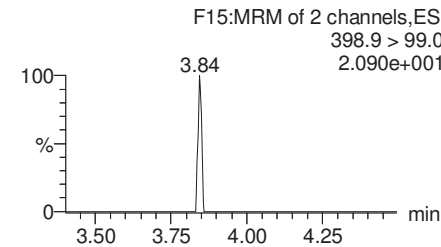
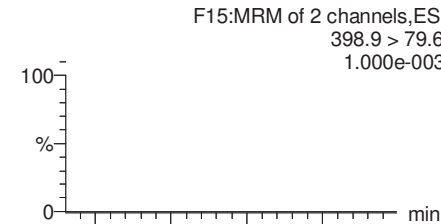
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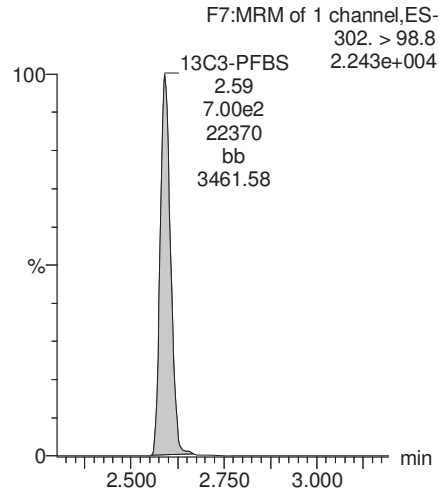
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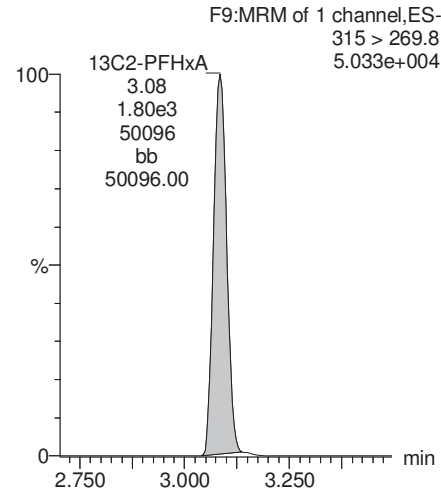
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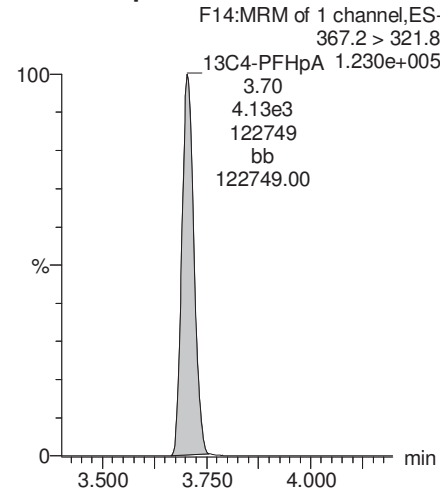
13C3-PFBS



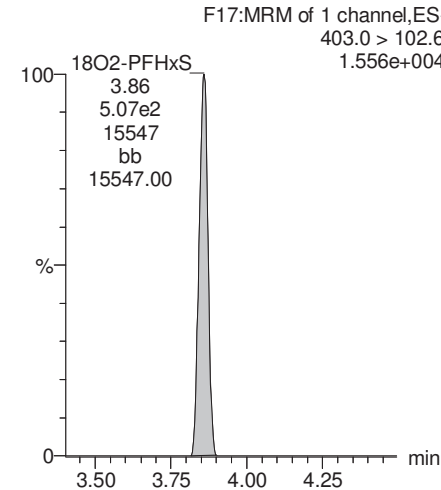
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13C4-PFHpA



18O2-PFHxS

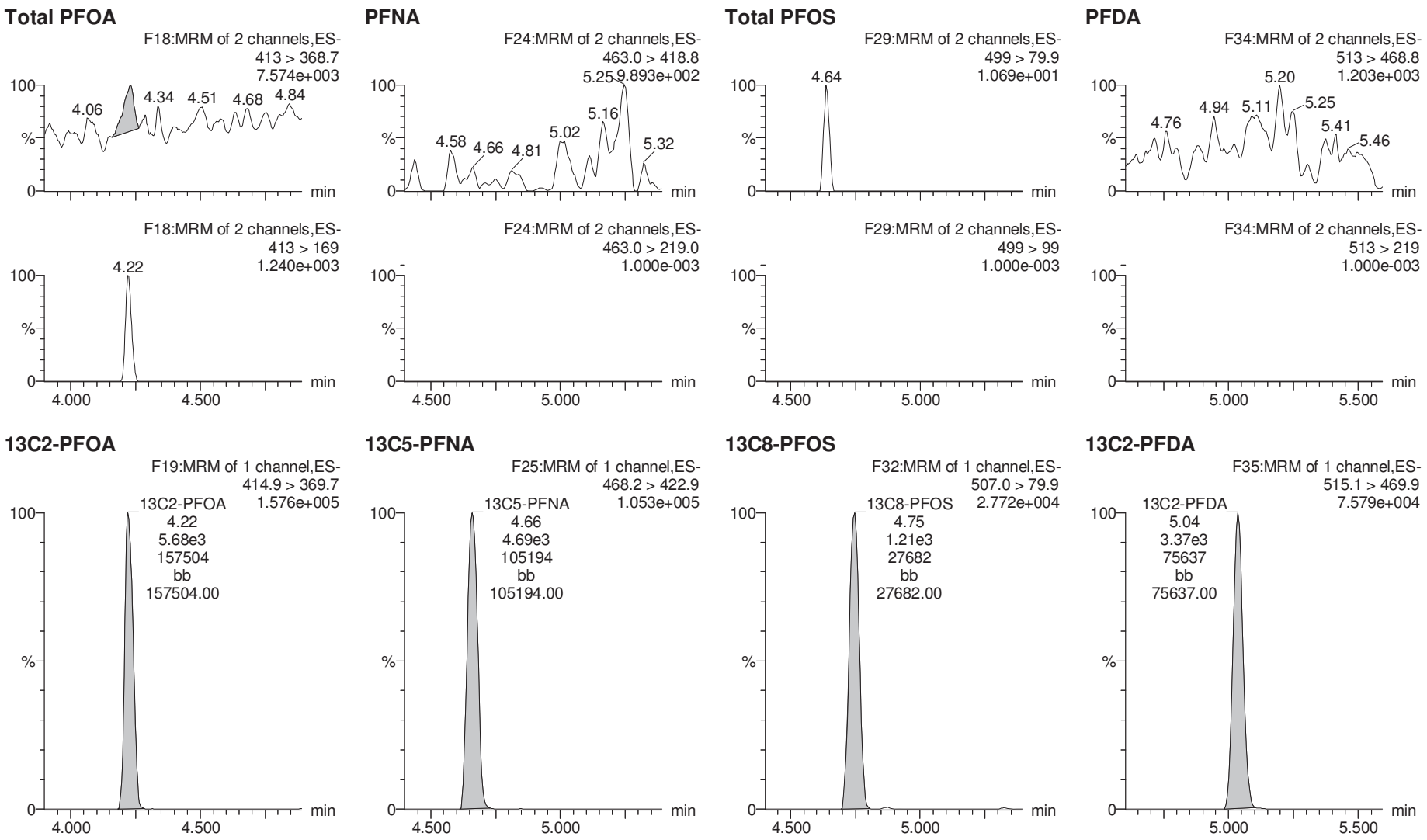


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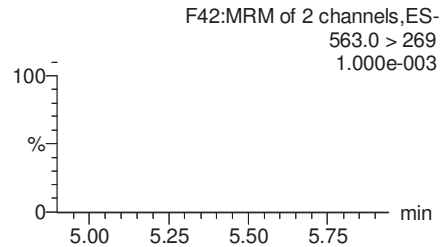
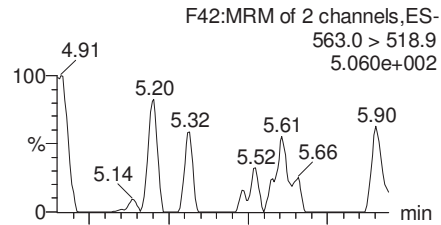
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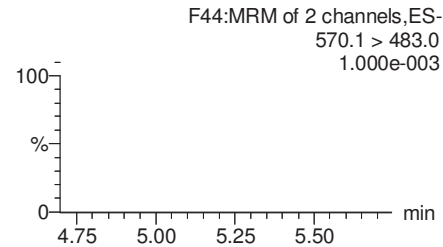
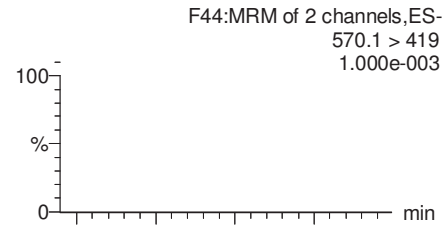
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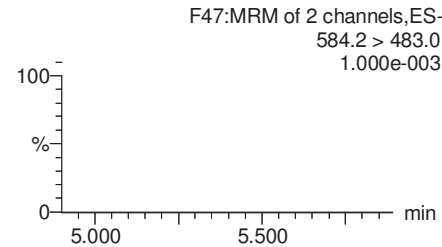
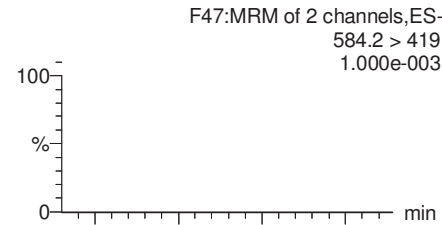
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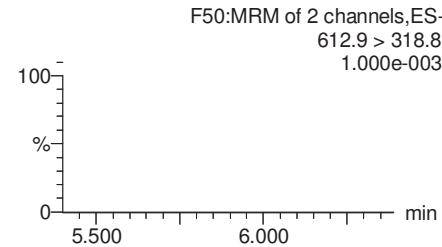
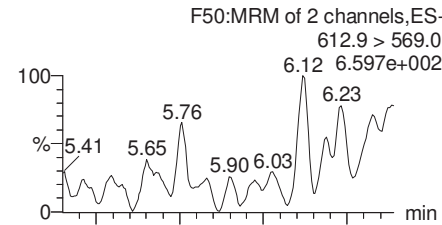
N-MeFOSAA



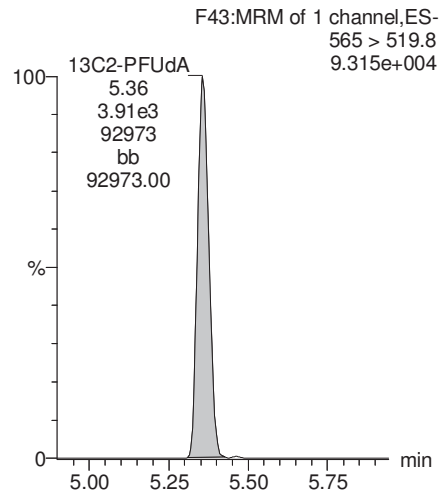
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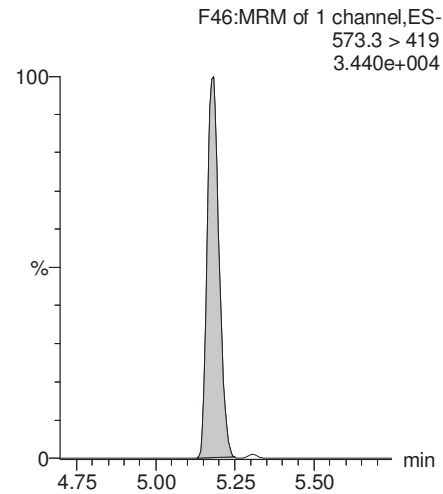
PFDaA



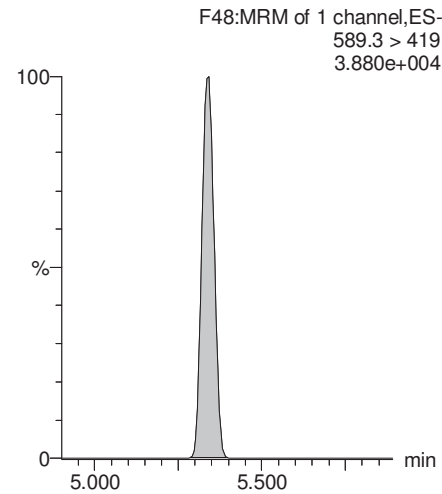
13C2-PFUdA



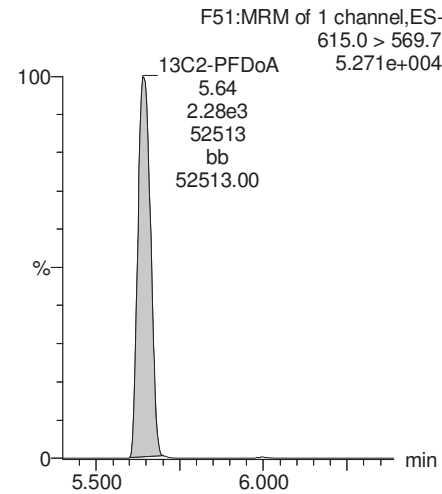
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDaA

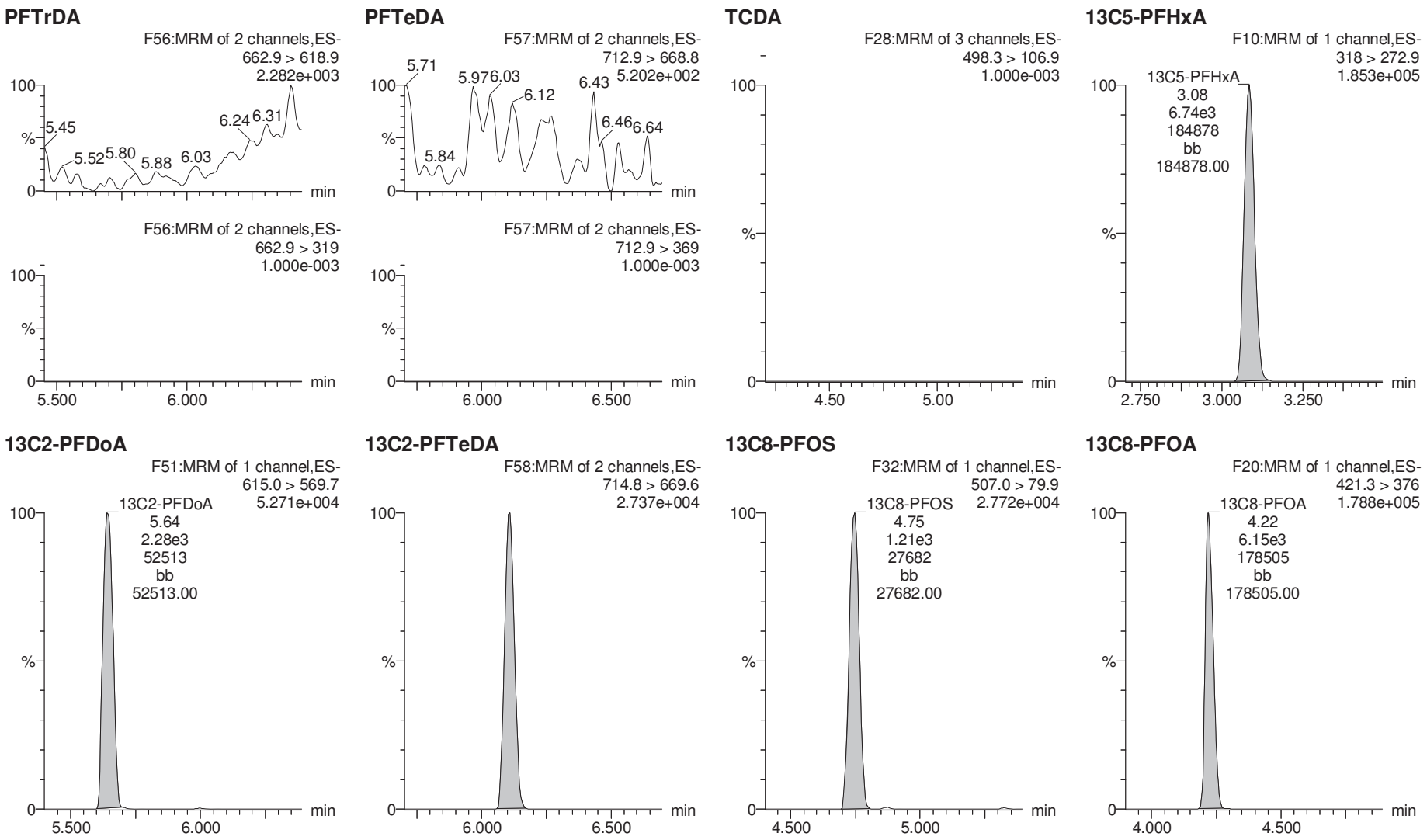


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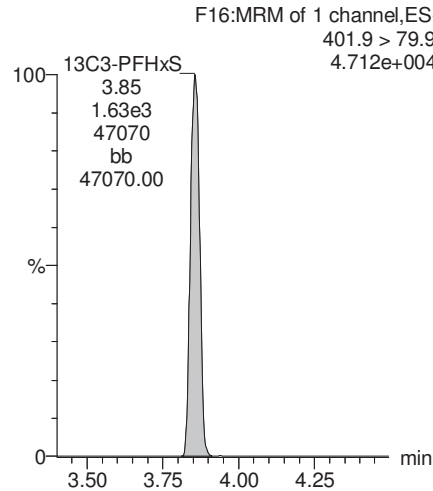
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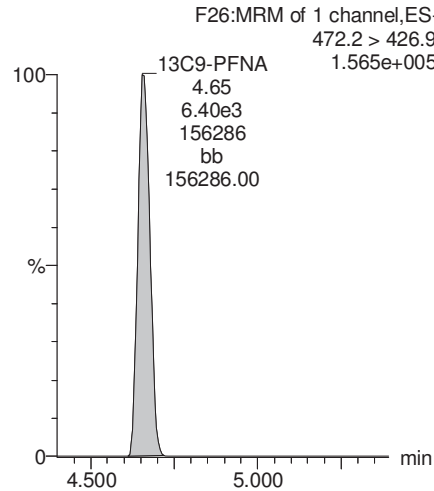
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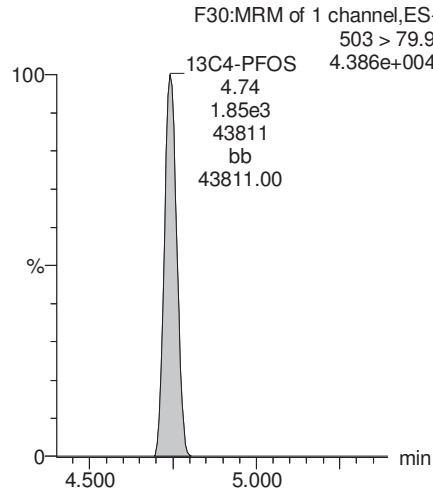
13C3-PFHxS



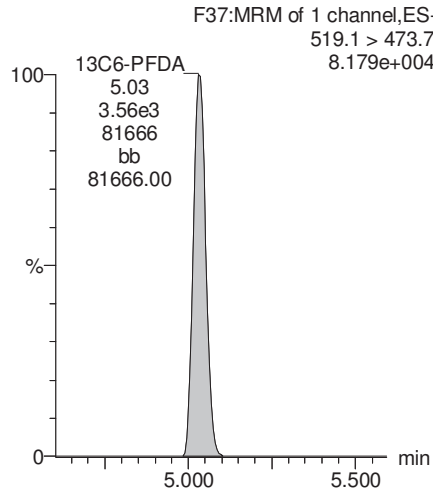
13C9-PFNA



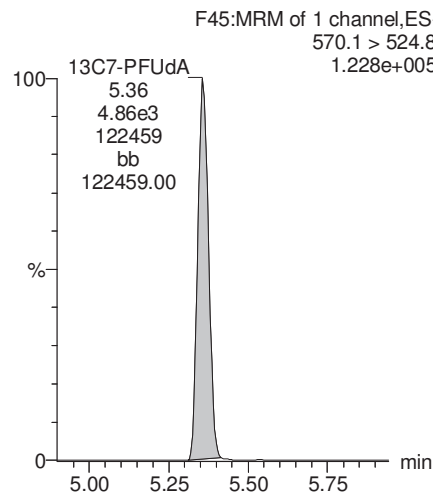
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-3.qld

Last Altered: Tuesday, January 16, 2018 10:34:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:36:04 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_3, Date: 12-Jan-2018, Time: 04:01:09, ID: B7L0101-BS1 OPR 0.25, Description: OPR

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7	1.19e3	7.04e2	0.250		2.66	2.60	21.1	39.5900	
2	4	PFHxA	313.2 > 268.9	5.95e3	1.73e3	0.250		3.15	3.09	17.2	35.6202	
3	5	PFHpA	363.0 > 318.9	4.77e3	4.21e3	0.250		3.78	3.71	14.2	34.6036	
4	6	L-PFHxS	398.9 > 79.6	7.24e2	5.47e2	0.250		3.94	3.86	16.5	31.5923	
5	9	L-PFOA	413 > 368.7	5.80e3	5.97e3	0.250		4.31	4.23	12.2	38.0163	
6	12	PFNA	463.0 > 418.8	5.19e3	4.89e3	0.250		4.81	4.66	13.3	37.4524	
7	13	PFOSA	498.1 > 77.8	5.28e2	6.13e2	0.250		4.87	4.72	10.8	32.8042	
8	16	PFDA	513 > 468.8	4.29e3	4.55e3	0.250		5.18	5.04	11.8	29.2466	
9	18	N-MeFOSAA	570.1 > 419	1.93e3	1.32e3	0.250		5.32	5.19	18.3	36.7873	
10	19	N-EtFOSAA	584.2 > 419	1.55e3	1.63e3	0.250		5.48	5.35	11.9	31.2972	
11	20	PFUdA	563.0 > 518.9	4.04e3	3.86e3	0.250		5.50	5.36	13.1	39.5889	
12	22	PFDoA	612.9 > 569.0	4.38e3	2.42e3	0.250		5.77	5.65	22.7	42.5909	

Dataset: U:\Q4.PRO\results\180111M2\180111M2-3.qld

Last Altered: Tuesday, January 16, 2018 10:34:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:36:17 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_3, Date: 12-Jan-2018, Time: 04:01:09, ID: B7L0101-BS1 OPR 0.25, Description: OPR

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTeDA	662.9 > 618.9	4.94e3	2.42e3	0.250		6.00	5.89	25.5	42.6607	
2	25 PFTeDA	712.9 > 668.8	2.65e3	1.23e3	0.250		6.22	6.11	27.1	36.7104	
3	33 13C3-PFBS	302. > 98.8	7.04e2	6.19e3	0.250	0.095	2.77	2.59	1.42	59.6540	119.3
4	34 13C2-PFHxA	315 > 269.8	1.73e3	6.19e3	0.250	0.597	3.15	3.09	3.49	23.3719	116.9
5	35 13C4-PFHpA	367.2 > 321.8	4.21e3	6.19e3	0.250	0.604	3.78	3.71	8.49	56.2081	112.4
6	36 18O2-PFHxS	403.0 > 102.6	5.47e2	1.69e3	0.250	0.293	3.94	3.86	4.05	55.2181	110.4
7	37 13C2-6:2 FTS	429.1 > 408.9	1.09e3	5.63e3	0.250	0.215	4.25	4.17	2.43	45.1696	90.3
8	38 13C2-PFOA	414.9 > 369.7	5.97e3	5.63e3	0.250	0.916	4.31	4.23	13.3	57.9002	115.8
9	39 13C5-PFNA	468.2 > 422.9	4.89e3	5.94e3	0.250	0.817	4.81	4.66	10.3	50.3945	100.8
10	40 13C8-PFOSA	506.1 > 77.7	6.13e2	6.30e3	0.250	0.223	4.87	4.73	1.22	21.8143	43.6
11	41 13C8-PFOS	507.0 > 79.9	1.44e3	1.48e3	0.250	0.875	4.89	4.75	12.1	55.5573	111.1
12	42 13C2-PFDA	515.1 > 469.9	4.55e3	3.98e3	0.250	1.105	5.18	5.04	14.3	51.7905	103.6
13	43 13C2-8:2 FTS	529.1 > 508.7	6.15e2	6.19e3	0.250	0.101	5.15	5.01	1.24	49.2754	98.6
14	44 d3-N-MeFOSAA	573.3 > 419	1.32e3	6.30e3	0.250	0.345	5.32	5.19	2.62	30.3301	60.7
15	45 d5-N-EtFOSAA	589.3 > 419	1.63e3	6.30e3	0.250	0.390	5.47	5.34	3.23	33.1041	66.2
16	46 13C2-PFUDa	565 > 519.8	3.86e3	6.30e3	0.250	0.958	5.49	5.36	7.66	32.0020	64.0
17	47 13C2-PFDOa	615.0 > 569.7	2.42e3	6.30e3	0.250	0.599	5.77	5.65	4.80	32.0349	64.1
18	49 13C2-PFTeDA	714.8 > 669.6	1.23e3	6.30e3	0.250	0.282	6.22	6.11	2.43	34.5604	69.1
19	55 13C5-PFHxA	318 > 272.9	6.19e3	6.19e3	0.250	1.000	3.15	3.09	12.5	50.0000	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.69e3	1.69e3	0.250	1.000	4.02	3.86	12.5	50.0000	100.0
21	57 13C8-PFOA	421.3 > 376	5.63e3	5.63e3	0.250	1.000	4.38	4.23	12.5	50.0000	100.0
22	58 13C9-PFNA	472.2 > 426.9	5.94e3	5.94e3	0.250	1.000	4.81	4.66	12.5	50.0000	100.0
23	59 13C4-PFOS	503 > 79.9	1.48e3	1.48e3	0.250	1.000	4.89	4.75	12.5	50.0000	100.0
24	60 13C6-PFDA	519.1 > 473.7	3.98e3	3.98e3	0.250	1.000	5.18	5.04	12.5	50.0000	100.0
25	61 13C7-PFUDa	570.1 > 524.8	6.30e3	6.30e3	0.250	1.000	5.49	5.36	12.5	50.0000	100.0
26	62 Total PFHxS	398.9 > 79.6	7.85e2	5.47e2	0.250		3.80		17.9	34.6198	
27	63 Total PFOA	413 > 368.7	5.80e3	5.97e3	0.250		4.51		12.2	38.0163	
28	64 Total PFOS	499 > 79.9	1.18e3	1.44e3	0.250		4.75		10.2	34.4944	
29	65 Total N-MeFOSAA	570.1 > 419	1.93e3	1.32e3	0.250		5.45		18.3	36.7873	
30	66 Total N-EtFOSAA	584.2 > 419	1.55e3	1.63e3	0.250		5.61		11.9	31.2972	
31	68 Total PFOA+PFOS	499 > 79.9,41...	6.98e3		0.250		0.00		22.4	72.5107	

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Dataset: U:\Q4.PRO\results\180111M2\1801111M2-3.qld

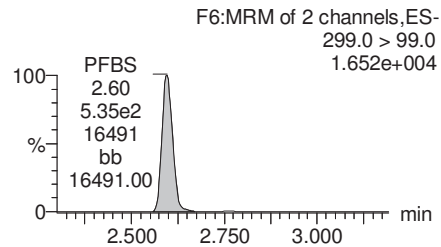
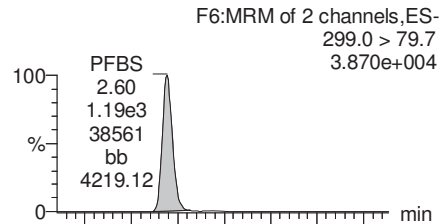
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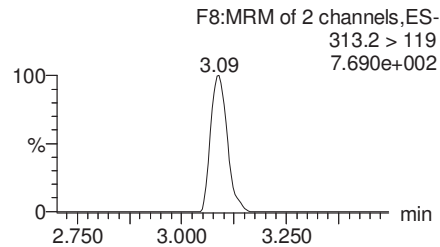
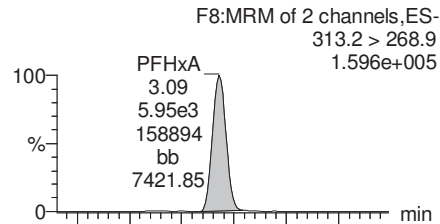
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Name: 180111M2_3, Date: 12-Jan-2018, Time: 04:01:09, ID: B7L0101-BS1 OPR 0.25, Description: OPR

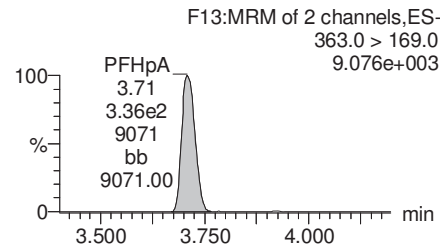
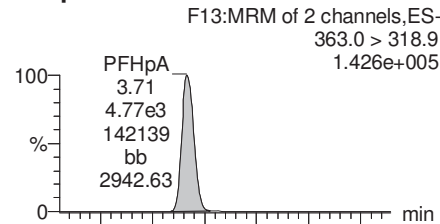
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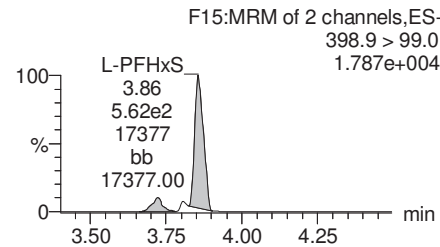
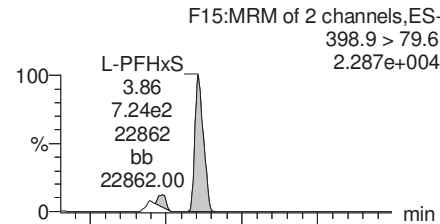
PFHxA



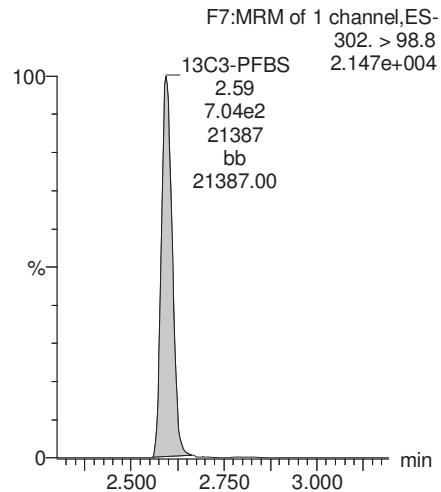
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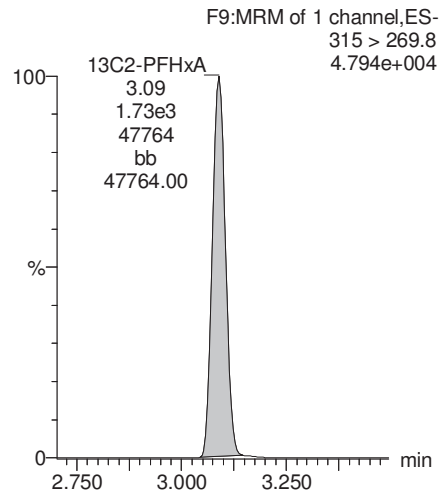
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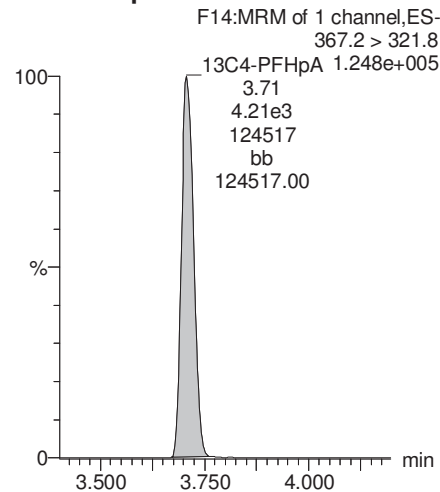
13C3-PFBS



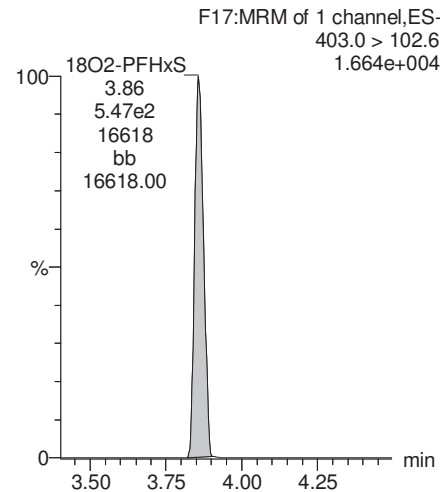
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

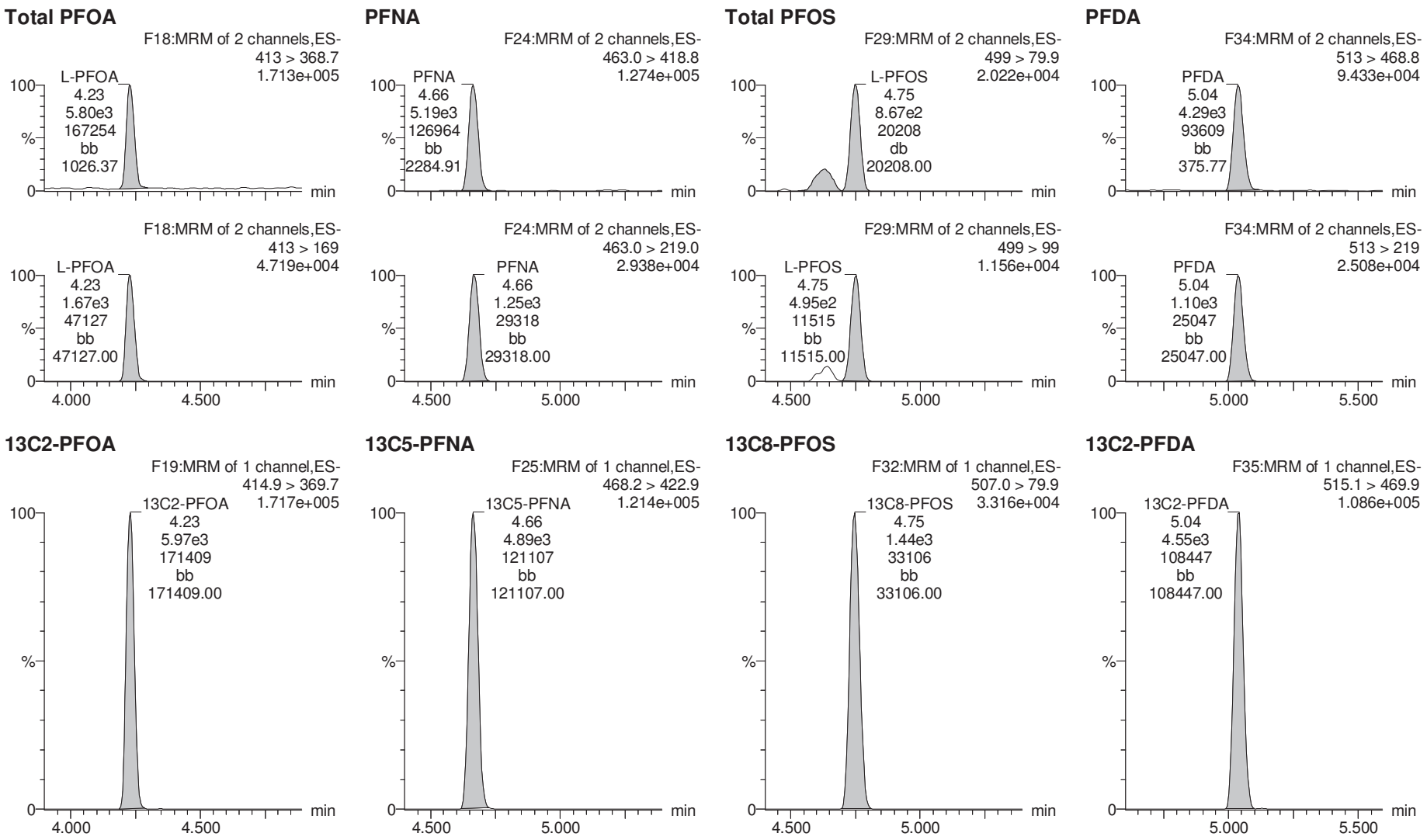


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Printed: Tuesday, January 16, 2018 10:36:17 Pacific Standard Time

Name: 180111M2_3, Date: 12-Jan-2018, Time: 04:01:09, ID: B7L0101-BS1 OPR 0.25, Description: OPR



13C2-PFOA

F19:MRM of 1 channel,ES-414.9 > 369.7
1.717e+005

13C2-PFOA

4.23
5.97e3
171409
bb
171409.00

13C5-PFNA

F25:MRM of 1 channel,ES-468.2 > 422.9
1.214e+005

13C5-PFNA

4.66
4.89e3
121107
bb
121107.00

13C8-PFOS

F32:MRM of 1 channel,ES-507.0 > 79.9
3.316e+004

13C8-PFOS

4.75
1.44e3
33106
bb
33106.00

13C2-PFDA

F35:MRM of 1 channel,ES-515.1 > 469.9
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13C2-PFDA

5.04
4.55e3
108447
bb
108447.00

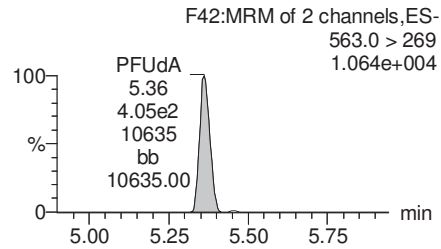
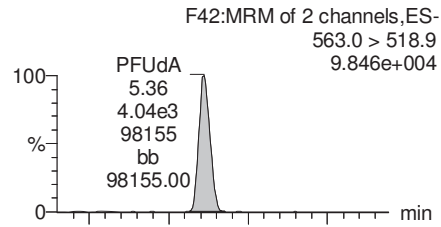
Vista Analytical Laboratory

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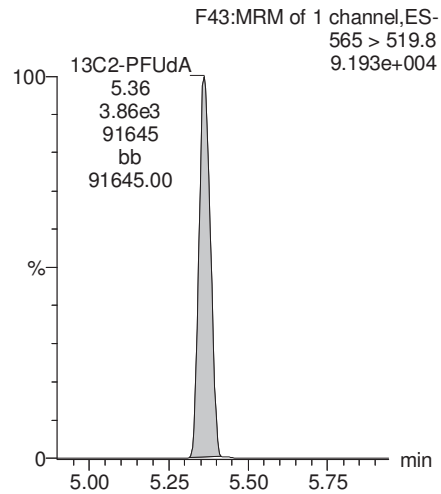
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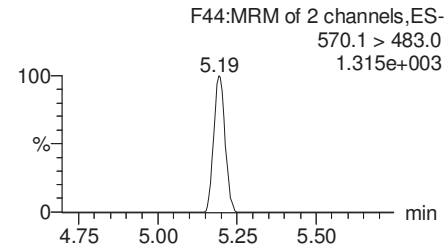
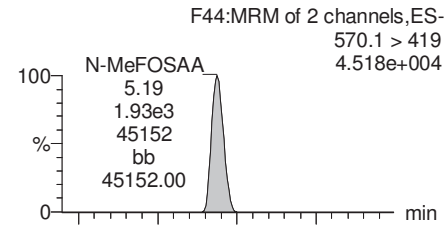
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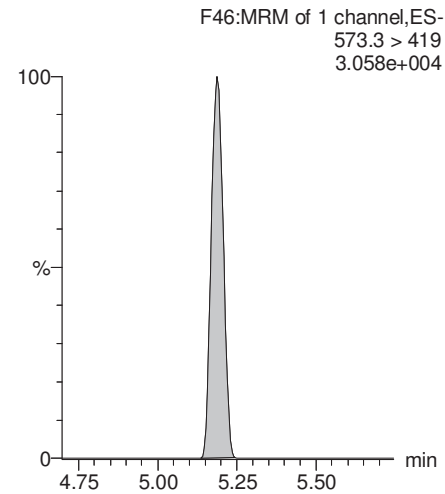
13C2-PFUdA



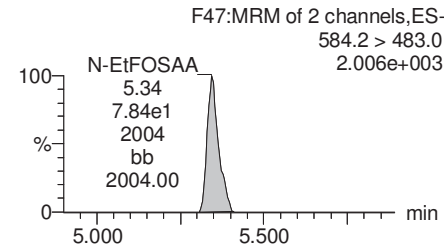
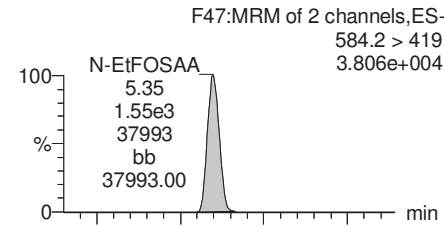
N-MeFOSAA



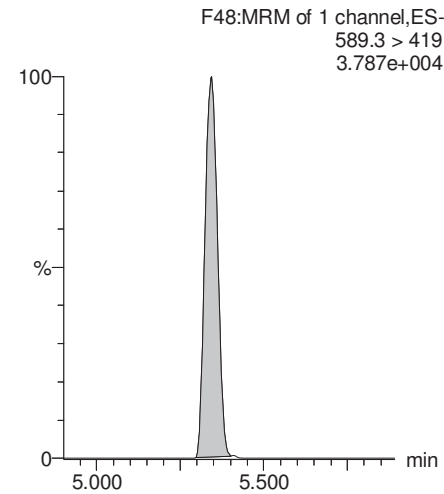
d3-N-MeFOSAA



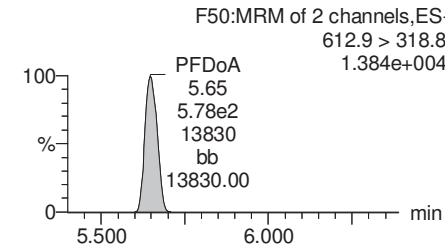
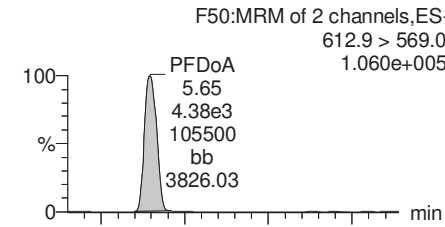
N-EtFOSAA



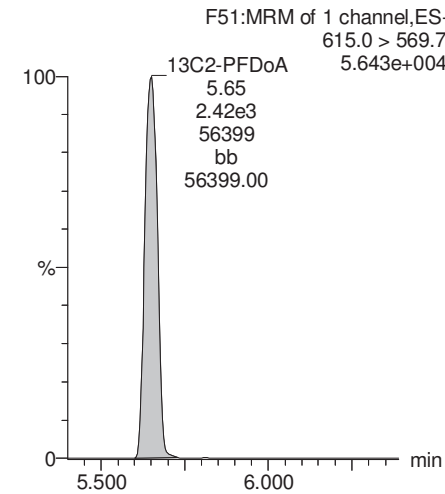
d5-N-EtFOSAA



PFDaA



13C2-PFDaA



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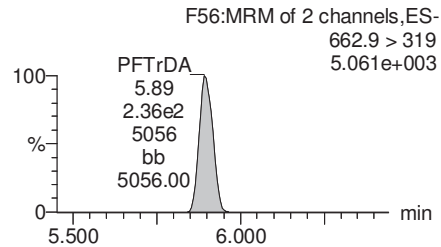
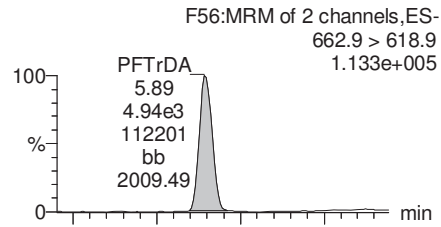
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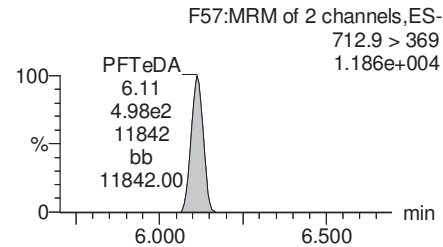
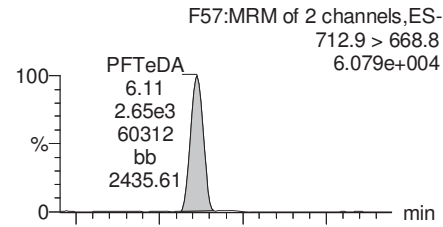
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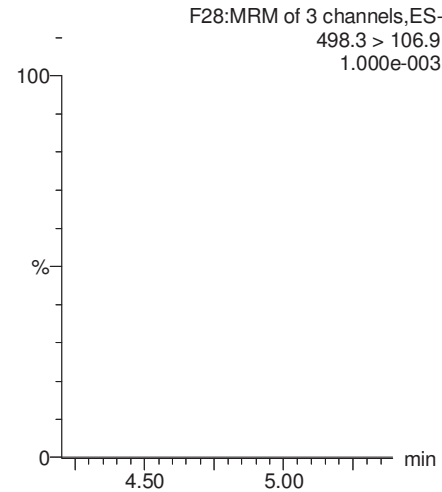
PFTrDA



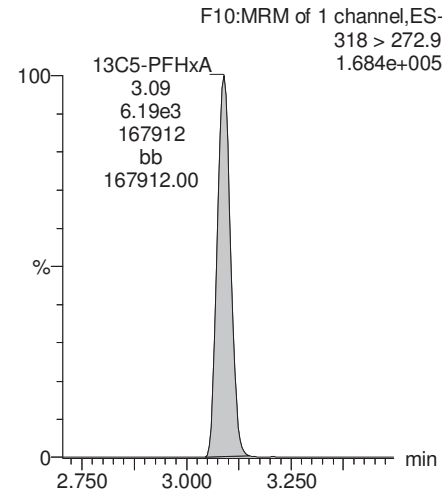
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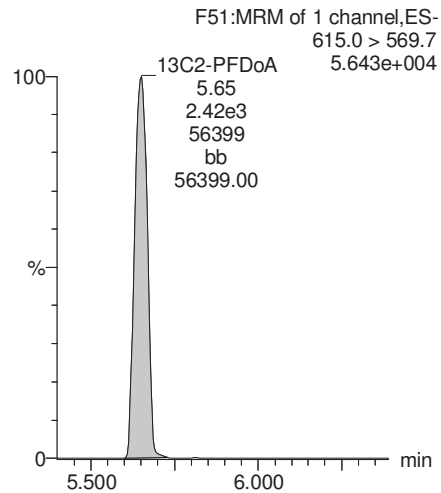
TCDA



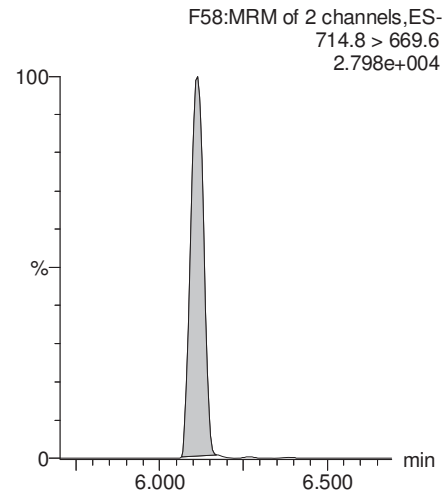
13C5-PFHxA



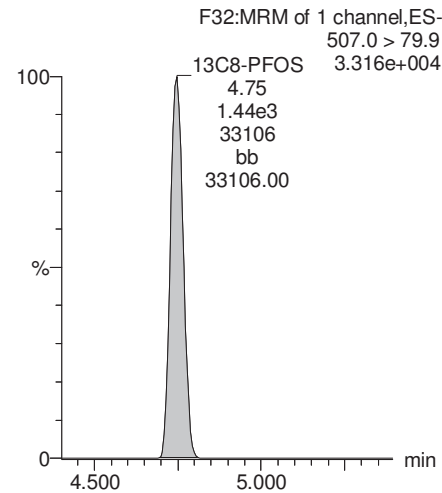
13C2-PFDoA



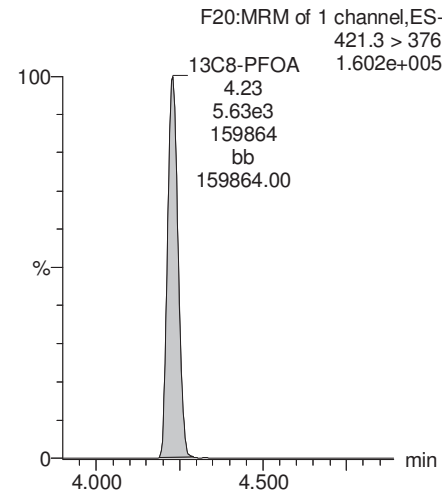
13C2-PFTeDA



13C8-PFOS



13C8-PFOA



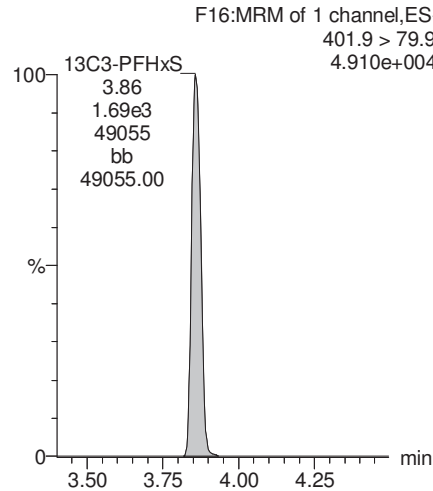
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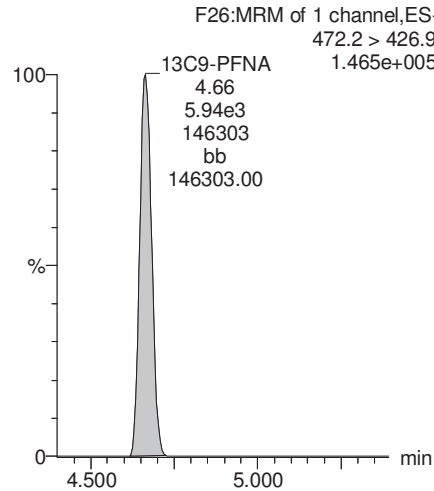
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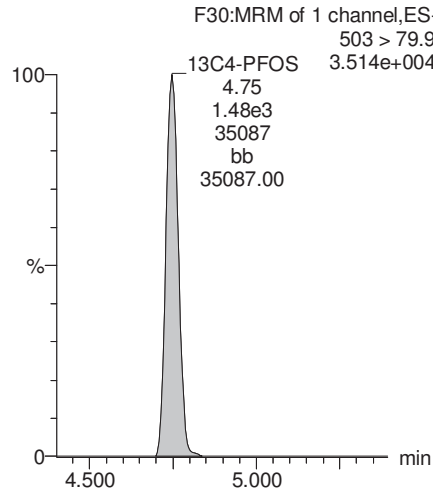
13C3-PFHxS



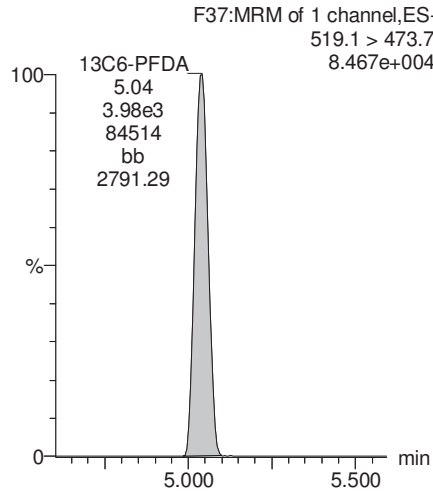
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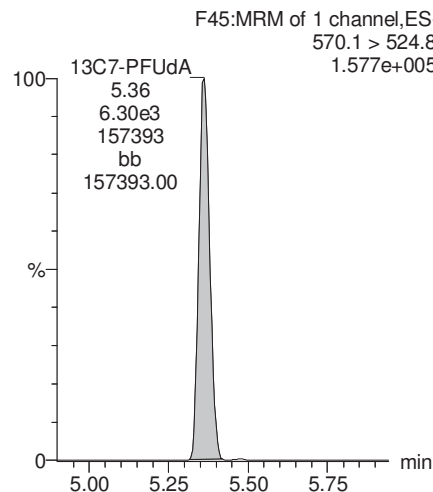
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-4.qld

Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:56:41 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818.mdb 09 Jan 2018 10:39:49

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7	1.39e3	8.73e2	0.250		2.66	2.59	19.9	37.2984	93.2
2	4	PFHxA	313.2 > 268.9	6.97e3	2.12e3	0.250		3.15	3.08	16.4	33.9050	84.8
3	5	PFHpA	363.0 > 318.9	5.70e3	5.17e3	0.250		3.78	3.70	13.8	33.5815	84.0
4	6	L-PFHxS	398.9 > 79.6	1.06e3	6.44e2	0.250		3.94	3.85	20.6	39.3334	98.3
5	9	L-PFOA	413 > 368.7	7.01e3	7.52e3	0.250		4.31	4.22	11.7	36.4381	91.1
6	12	PFNA	463.0 > 418.8	6.35e3	5.86e3	0.250		4.81	4.66	13.5	38.2009	95.5
7	13	PFOSA	498.1 > 77.8	7.71e2	9.33e2	0.250		4.87	4.72	10.3	31.4681	78.7
8	16	PFDA	513 > 468.8	6.35e3	5.73e3	0.250		5.18	5.03	13.8	34.1428	85.4
9	18	N-MeFOSAA	570.1 > 419	2.19e3	1.96e3	0.250		5.32	5.18	14.0	28.1415	70.4
10	19	N-EtFOSAA	584.2 > 419	2.05e3	2.26e3	0.250		5.48	5.34	11.4	29.8334	74.6
11	20	PFUdA	563.0 > 518.9	4.86e3	4.76e3	0.250		5.50	5.36	12.7	38.6499	96.6
12	22	PFDoA	612.9 > 569.0	5.72e3	2.99e3	0.250		5.77	5.64	23.9	44.9304	112.3

Dataset: U:\Q4.PRO\results\180111M2\180111M2-4.qld

Last Altered: Monday, January 15, 2018 15:27:21 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9	5.83e3	2.99e3	0.250		6.00	5.89	24.4	40.7653	101.9
2	25 PFTeDA	712.9 > 668.8	3.28e3	1.54e3	0.250		6.22	6.11	26.6	36.0944	90.2
3	33 13C3-PFBS	302. > 98.8	8.73e2	7.42e3	0.250	0.095	2.77	2.59	1.47	61.7069	123.4
4	34 13C2-PFHxA	315 > 269.8	2.12e3	7.42e3	0.250	0.597	3.15	3.08	3.58	23.9742	119.9
5	35 13C4-PFHpA	367.2 > 321.8	5.17e3	7.42e3	0.250	0.604	3.78	3.70	8.72	57.6918	115.4
6	36 18O2-PFHxS	403.0 > 102.6	6.44e2	1.87e3	0.250	0.293	3.94	3.86	4.32	58.9204	117.8
7	37 13C2-6:2 FTS	429.1 > 408.9	1.66e3	7.36e3	0.250	0.215	4.25	4.17	2.81	52.3147	104.6
8	38 13C2-PFOA	414.9 > 369.7	7.52e3	7.36e3	0.250	0.916	4.31	4.22	12.8	55.8071	111.6
9	39 13C5-PFNA	468.2 > 422.9	5.86e3	6.93e3	0.250	0.817	4.81	4.66	10.6	51.7300	103.5
10	40 13C8-PFOSA	506.1 > 77.7	9.33e2	7.08e3	0.250	0.223	4.87	4.72	1.65	29.5664	59.1
11	41 13C8-PFOS	507.0 > 79.9	1.80e3	1.67e3	0.250	0.875	4.89	4.75	13.4	61.5013	123.0
12	42 13C2-PFDA	515.1 > 469.9	5.73e3	5.88e3	0.250	1.105	5.18	5.03	12.2	44.1256	88.3
13	43 13C2-8:2 FTS	529.1 > 508.7	9.35e2	7.42e3	0.250	0.101	5.15	5.00	1.57	62.4435	124.9
14	44 d3-N-MeFOSAA	573.3 > 419	1.96e3	7.08e3	0.250	0.345	5.32	5.18	3.46	40.0729	80.1
15	45 d5-N-EtFOSAA	589.3 > 419	2.26e3	7.08e3	0.250	0.390	5.47	5.34	3.99	40.8568	81.7
16	46 13C2-PFUdA	565 > 519.8	4.76e3	7.08e3	0.250	0.958	5.49	5.36	8.41	35.1184	70.2
17	47 13C2-PFDoA	615.0 > 569.7	2.99e3	7.08e3	0.250	0.599	5.77	5.64	5.28	35.2742	70.5
18	49 13C2-PFTeDA	714.8 > 669.6	1.54e3	7.08e3	0.250	0.282	6.22	6.11	2.72	38.6743	77.3
19	55 13C5-PFHxA	318 > 272.9	7.42e3	7.42e3	0.250	1.000	3.15	3.08	12.5	50.0000	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.87e3	1.87e3	0.250	1.000	4.02	3.85	12.5	50.0000	100.0
21	57 13C8-PFOA	421.3 > 376	7.36e3	7.36e3	0.250	1.000	4.38	4.22	12.5	50.0000	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.93e3	6.93e3	0.250	1.000	4.81	4.66	12.5	50.0000	100.0
23	59 13C4-PFOS	503 > 79.9	1.67e3	1.67e3	0.250	1.000	4.89	4.74	12.5	50.0000	100.0
24	60 13C6-PFDA	519.1 > 473.7	5.88e3	5.88e3	0.250	1.000	5.18	5.03	12.5	50.0000	100.0
25	61 13C7-PFUdA	570.1 > 524.8	7.08e3	7.08e3	0.250	1.000	5.49	5.36	12.5	50.0000	100.0
26	62 Total PFHxS	398.9 > 79.6	1.06e3	6.44e2	0.250		4.14		20.6	39.3334	
27	63 Total PFOA	413 > 368.7	7.01e3	7.52e3	0.250		4.51		11.7	36.4381	
28	64 Total PFOS	499 > 79.9	1.69e3	1.80e3	0.250		5.02		11.8	39.9793	
29	65 Total N-MeFOSAA	570.1 > 419	2.19e3	1.96e3	0.250		5.45		14.0	28.1415	
30	66 Total N-EtFOSAA	584.2 > 419	2.05e3	2.26e3	0.250		5.61		11.4	29.8334	
31	68 Total PFOA+PFOS	499 > 79.9,41...	8.70e3		0.250		0.00		23.4	76.4174	

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Dataset: U:\Q4.PRO\results\180111M2\1801111M2-4.qld

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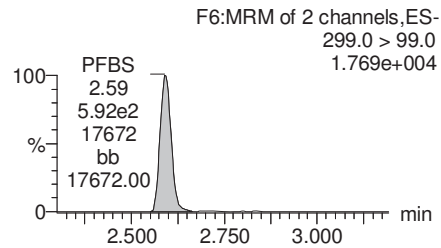
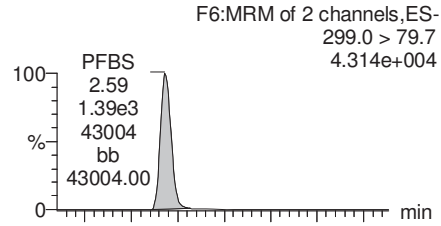
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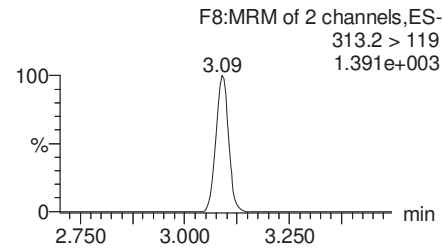
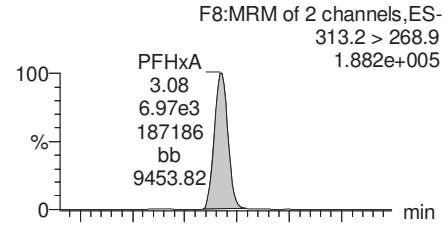
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Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

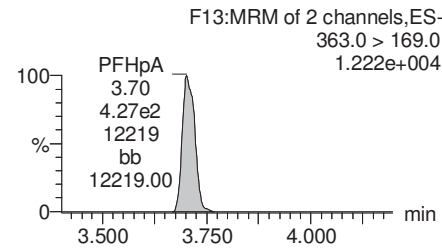
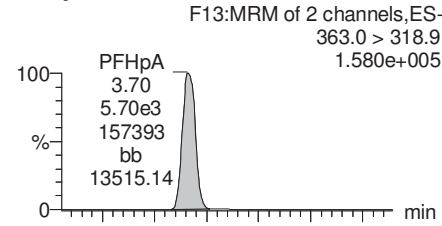
PFBS



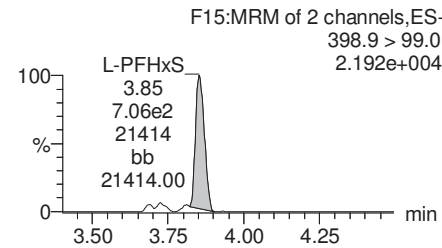
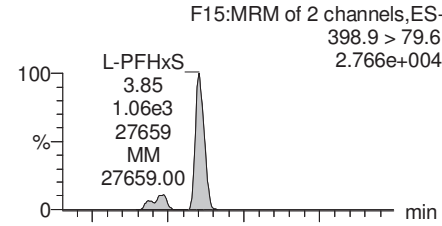
PFHxA



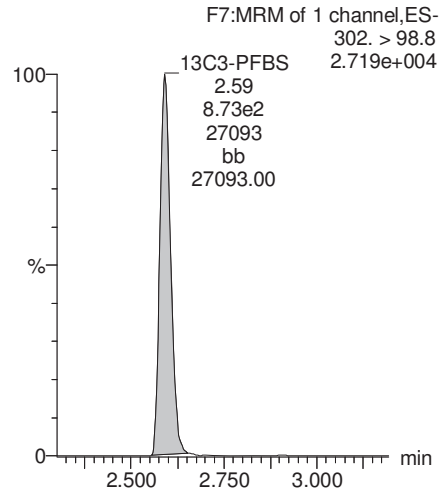
PFHpA



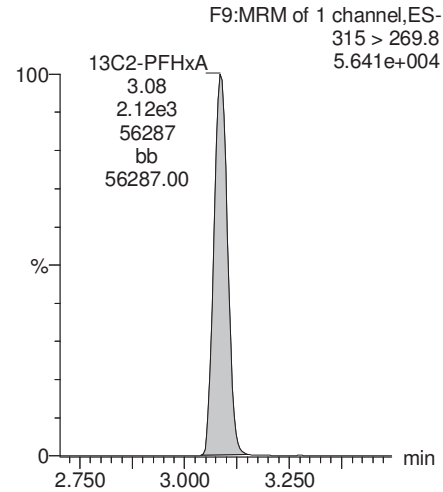
Total PFHxS



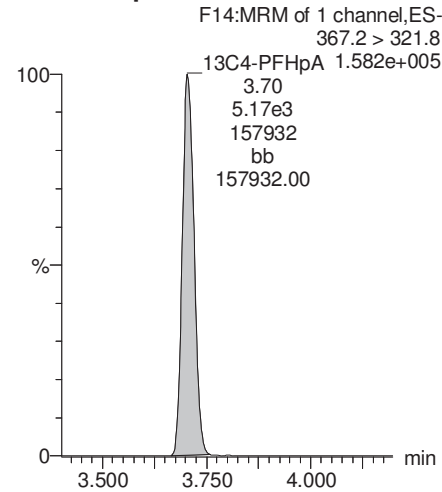
13C3-PFBS



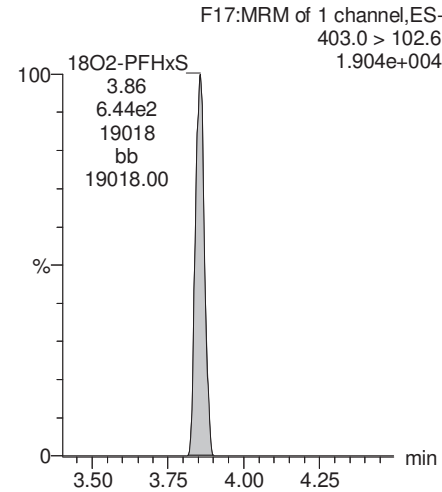
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13C4-PFHpA



18O2-PFHxS

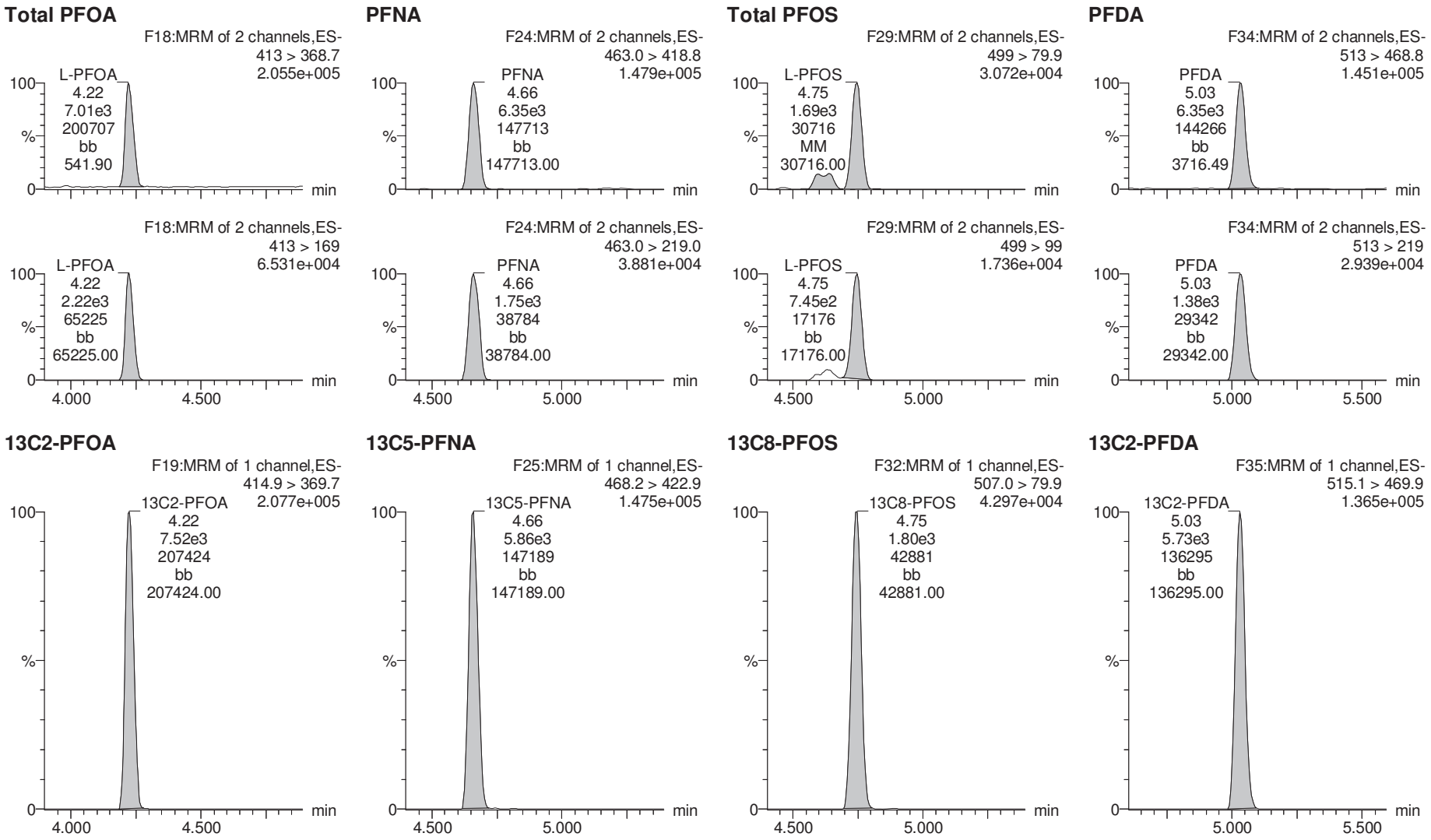


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Printed: Tuesday, January 16, 2018 10:56:52 Pacific Standard Time

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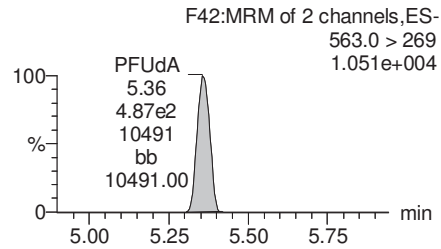
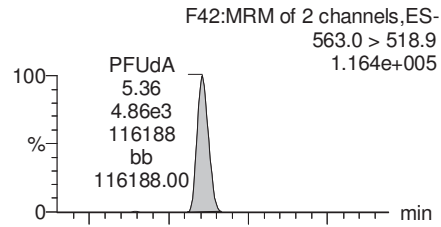
Vista Analytical Laboratory

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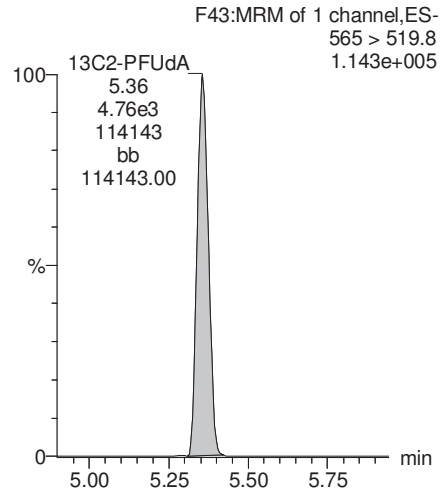
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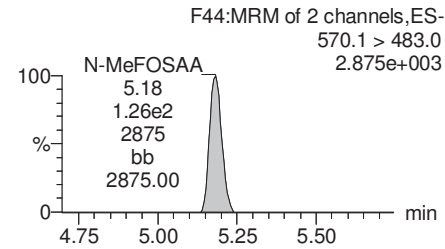
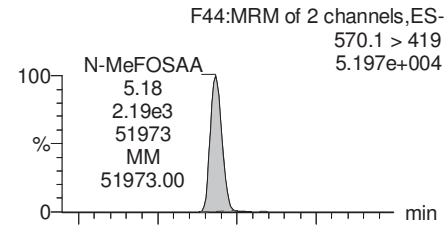
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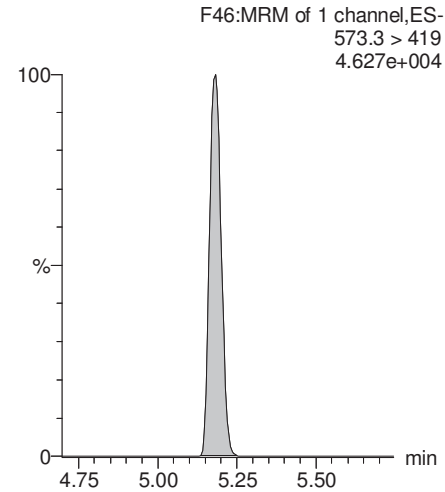
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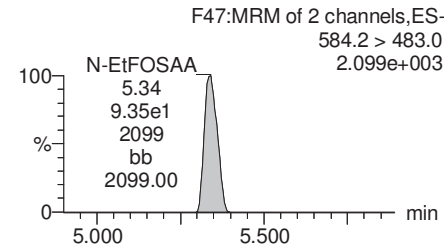
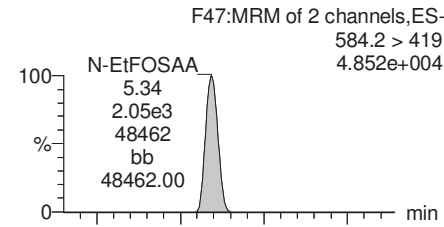
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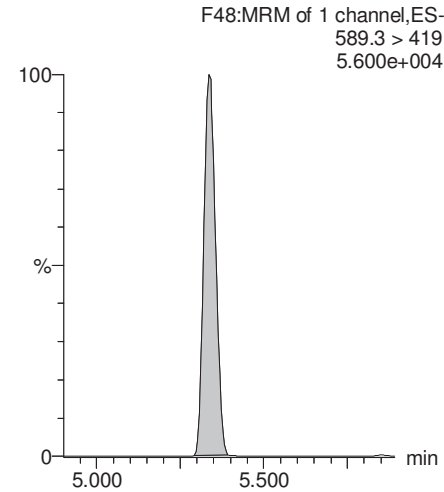
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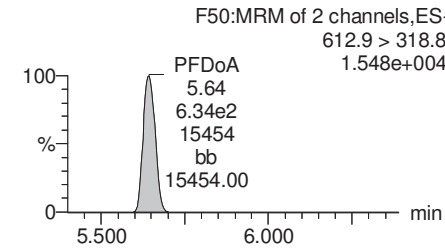
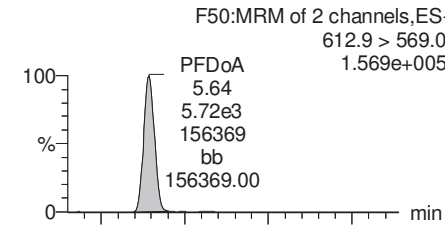
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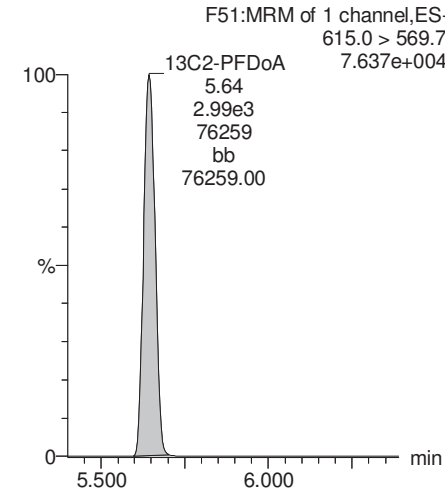
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PFDoA



13C2-PFDoA

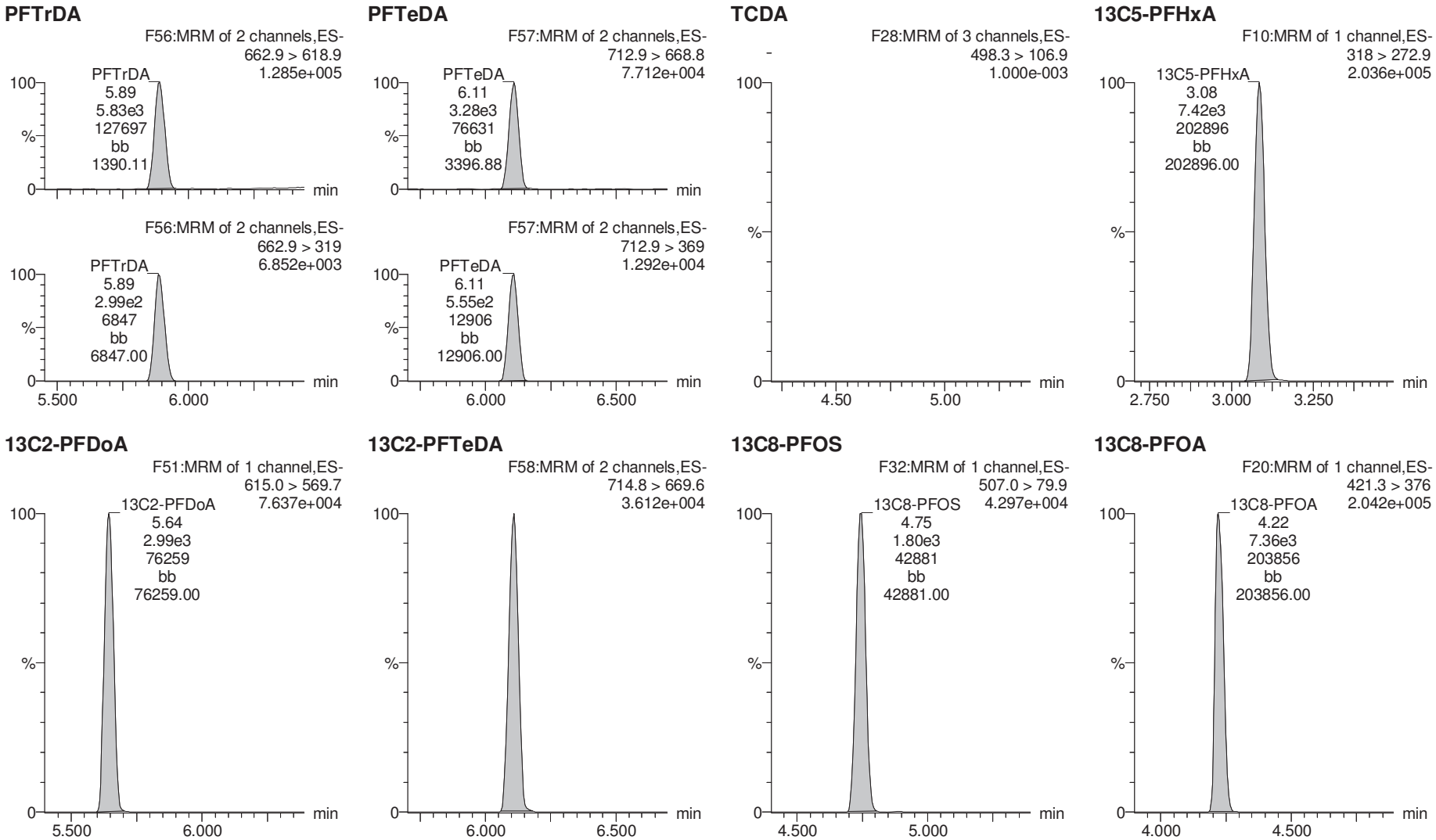


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Printed: Tuesday, January 16, 2018 10:56:52 Pacific Standard Time

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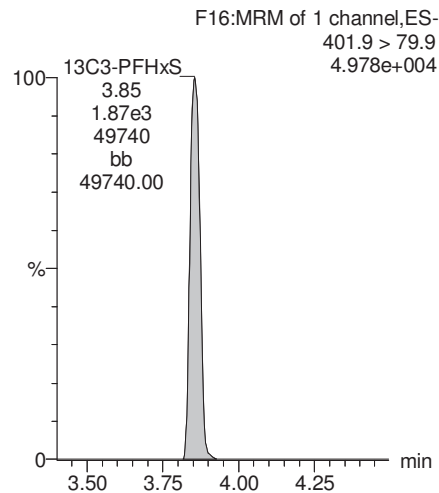


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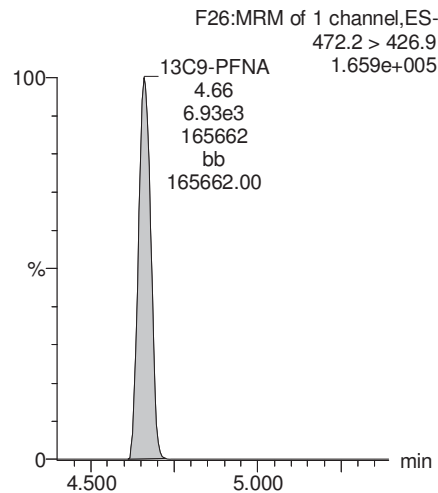
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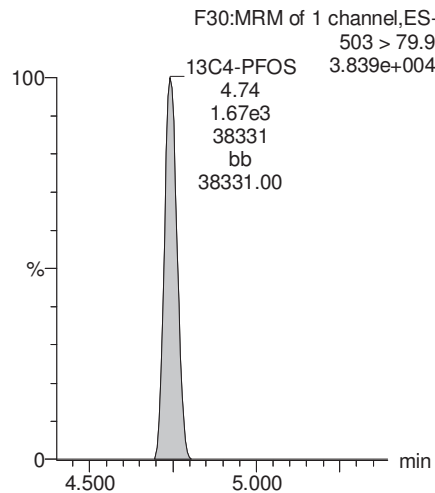
13C3-PFHxS



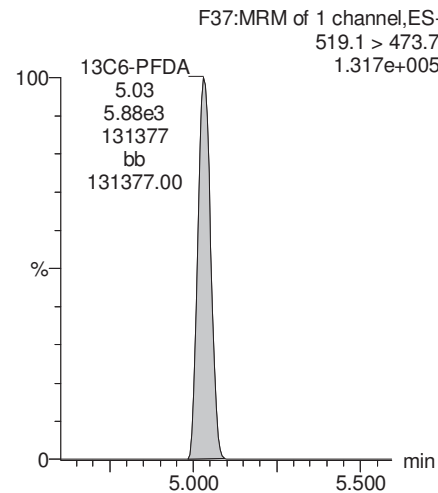
13C9-PFNA



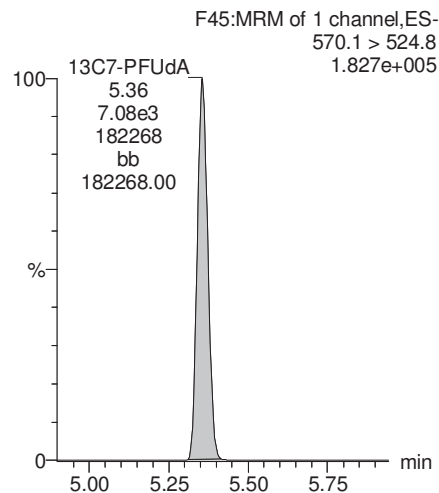
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 11:13:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:13:28 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_9, Date: 12-Jan-2018, Time: 05:08:18, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		6.72e2	0.223		2.66				
2	4 PFHxA	313.2 > 268.9	1.05e2	1.71e3	0.223		3.15	2.98	0.306	0.7639	
3	5 PFHpA	363.0 > 318.9		4.20e3	0.223		3.78				
4	6 L-PFHxS	398.9 > 79.6		5.35e2	0.223		3.94				
5	9 L-PFOA	413 > 368.7	4.01e2	5.84e3	0.223		4.31	4.23	0.858	2.3887	
6	12 PFNA	463.0 > 418.8	1.58e2	4.98e3	0.223		4.81	4.66	0.396	1.2326	
7	13 PFOSA	498.1 > 77.8		9.07e2	0.223		4.87				
8	16 PFDA	513 > 468.8		3.66e3	0.223		5.18				
9	18 N-MeFOSAA	570.1 > 419		1.33e3	0.223		5.32				
10	19 N-EtFOSAA	584.2 > 419		2.02e3	0.223		5.48				
11	20 PFUdA	563.0 > 518.9		5.20e3	0.223		5.50				
12	22 PFDoA	612.9 > 569.0		3.09e3	0.223		5.77				

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Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 11:13:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:13:38 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_9, Date: 12-Jan-2018, Time: 05:08:18, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		3.09e3	0.223		6.00				
2	25 PFTeDA	712.9 > 668.8		8.75e2	0.223		6.22				
3	33 13C3-PFBS	302. > 98.8	6.72e2	7.13e3	0.223	0.095	2.77	2.59	1.18	55.3087	98.8
4	34 13C2-PFHxA	315 > 269.8	1.71e3	7.13e3	0.223	0.597	3.15	3.08	2.99	22.4707	100.4
5	35 13C4-PFHpA	367.2 > 321.8	4.20e3	7.13e3	0.223	0.604	3.78	3.70	7.35	54.4672	97.3
6	36 18O2-PFHxS	403.0 > 102.6	5.35e2	1.68e3	0.223	0.293	3.94	3.85	3.99	60.9619	108.9
7	37 13C2-6:2 FTS	429.1 > 408.9	1.17e3	6.43e3	0.223	0.215	4.25	4.17	2.27	47.2322	84.4
8	38 13C2-PFOA	414.9 > 369.7	5.84e3	6.43e3	0.223	0.916	4.31	4.23	11.4	55.5327	99.2
9	39 13C5-PFNA	468.2 > 422.9	4.98e3	6.18e3	0.223	0.817	4.81	4.66	10.1	55.1515	98.5
10	40 13C8-PFOSA	506.1 > 77.7	9.07e2	6.45e3	0.223	0.223	4.87	4.72	1.76	35.2963	63.1
11	41 13C8-PFOS	507.0 > 79.9	1.43e3	1.67e3	0.223	0.875	4.89	4.74	10.7	54.6434	97.6
12	42 13C2-PFDA	515.1 > 469.9	3.66e3	4.21e3	0.223	1.105	5.18	5.03	10.9	44.0081	78.6
13	43 13C2-8:2 FTS	529.1 > 508.7	5.56e2	7.13e3	0.223	0.101	5.15	5.01	0.974	43.2146	77.2
14	44 d3-N-MeFOSAA	573.3 > 419	1.33e3	6.45e3	0.223	0.345	5.32	5.18	2.58	33.4880	59.8
15	45 d5-N-EtFOSAA	589.3 > 419	2.02e3	6.45e3	0.223	0.390	5.47	5.34	3.91	44.8264	80.1
16	46 13C2-PFUDa	565 > 519.8	5.20e3	6.45e3	0.223	0.958	5.49	5.36	10.1	47.0785	84.1
17	47 13C2-PFDOa	615.0 > 569.7	3.09e3	6.45e3	0.223	0.599	5.77	5.64	5.99	44.8003	80.0
18	49 13C2-PFTeDA	714.8 > 669.6	8.75e2	6.45e3	0.223	0.282	6.22	6.10	1.69	26.9376	48.1
19	55 13C5-PFHxA	318 > 272.9	7.13e3	7.13e3	0.223	1.000	3.15	3.08	12.5	55.9685	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.68e3	1.68e3	0.223	1.000	4.02	3.85	12.5	55.9685	100.0
21	57 13C8-PFOA	421.3 > 376	6.43e3	6.43e3	0.223	1.000	4.38	4.22	12.5	55.9685	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.18e3	6.18e3	0.223	1.000	4.81	4.66	12.5	55.9685	100.0
23	59 13C4-PFOS	503 > 79.9	1.67e3	1.67e3	0.223	1.000	4.89	4.74	12.5	55.9685	100.0
24	60 13C6-PFDA	519.1 > 473.7	4.21e3	4.21e3	0.223	1.000	5.18	5.04	12.5	55.9685	100.0
25	61 13C7-PFUDa	570.1 > 524.8	6.45e3	6.45e3	0.223	1.000	5.49	5.36	12.5	55.9685	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	5.35e2	0.223		3.80		0.000		
27	63 Total PFOA	413 > 368.7	4.01e2	5.84e3	0.223		4.51		0.858	2.3887	
28	64 Total PFOS	499 > 79.9	0.00e0	1.43e3	0.223		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.33e3	0.223		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.02e3	0.223		5.61		0.000		
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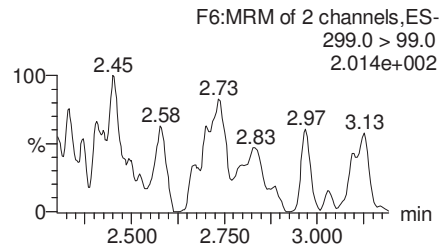
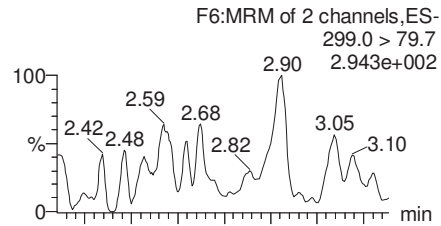
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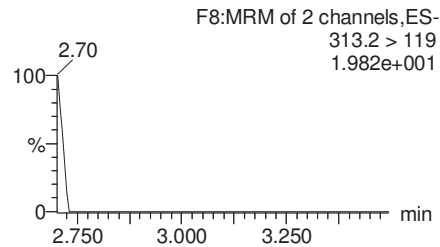
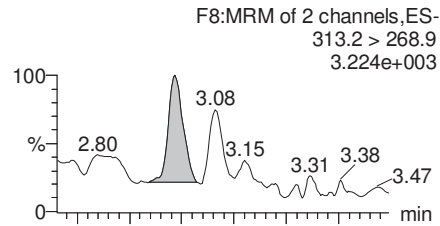
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Name: 180111M2_9, Date: 12-Jan-2018, Time: 05:08:18, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

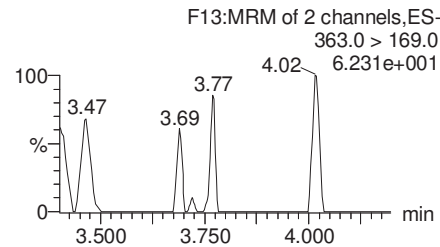
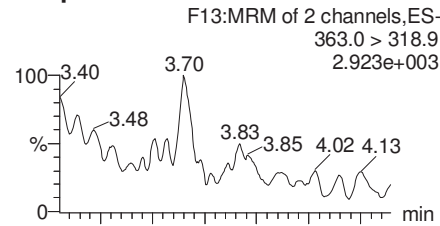
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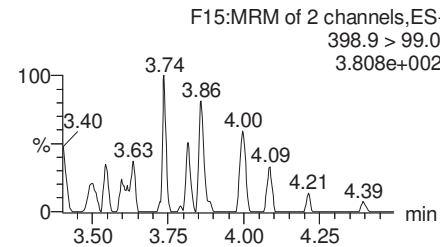
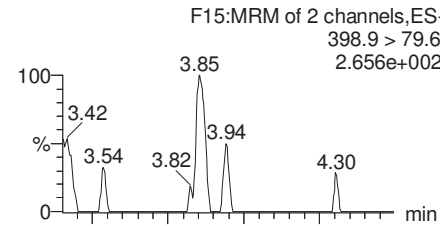
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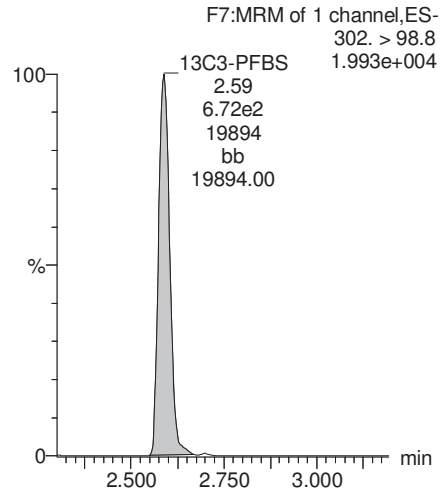
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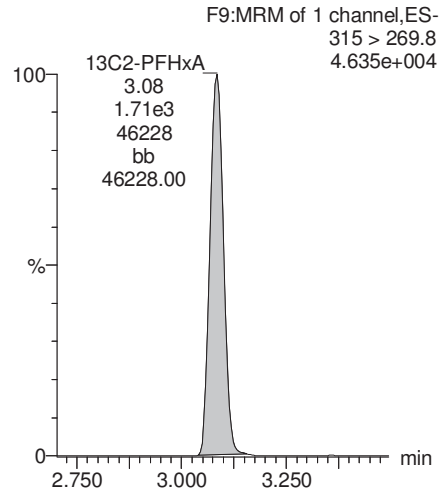
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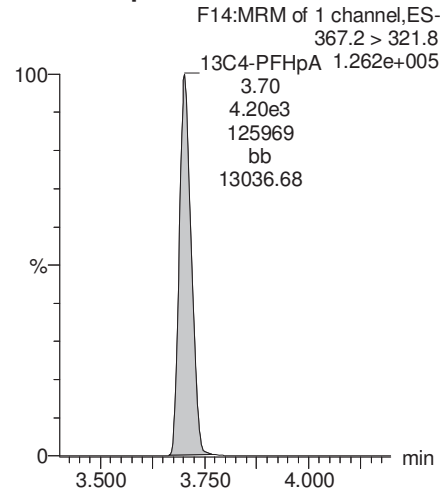
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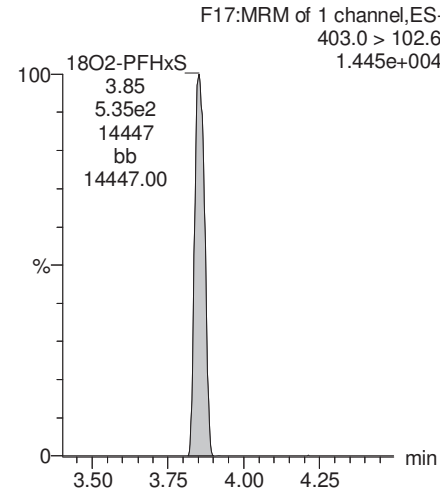
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



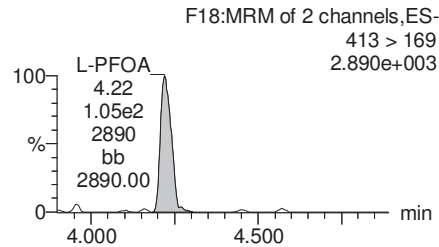
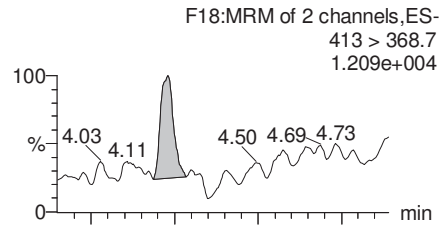
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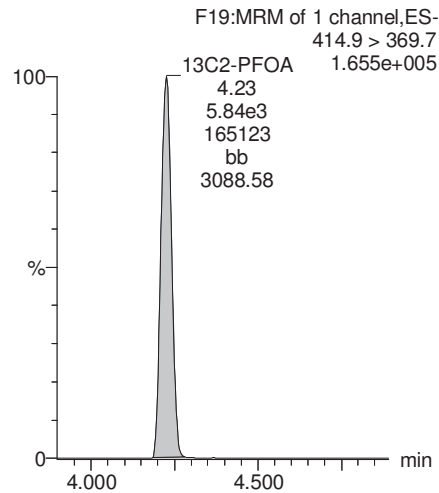
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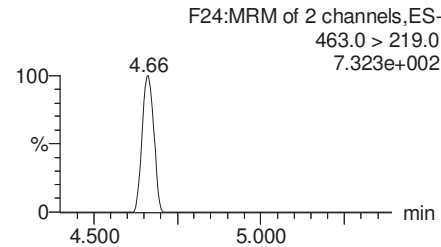
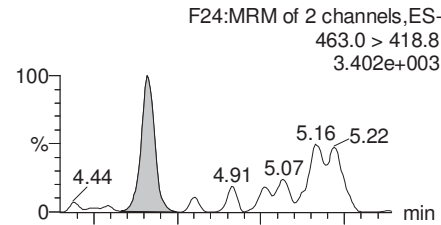
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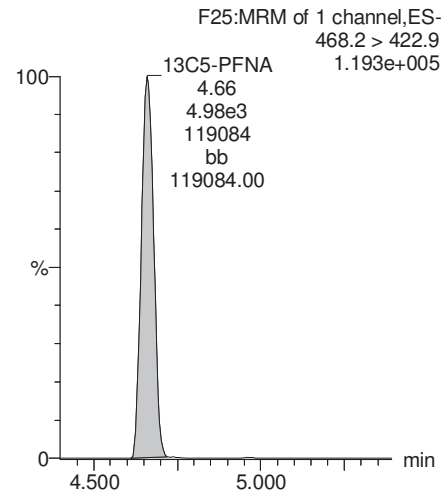
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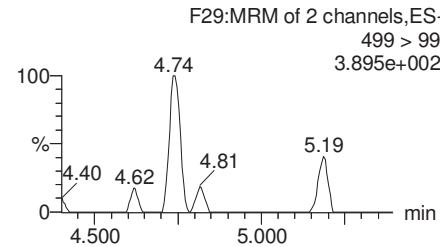
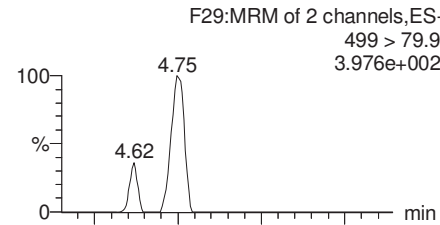
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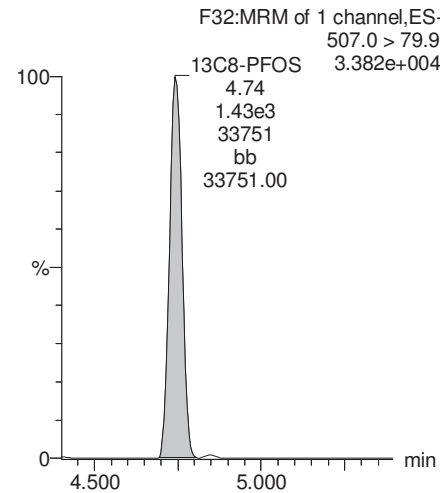
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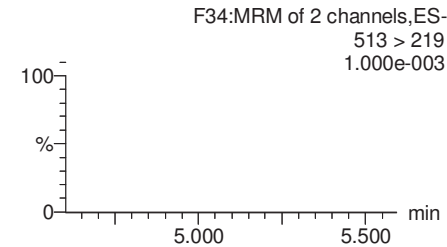
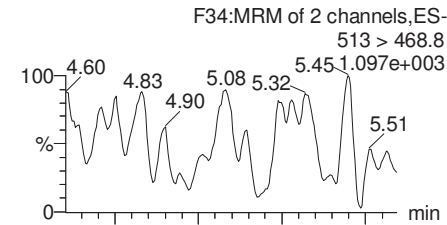
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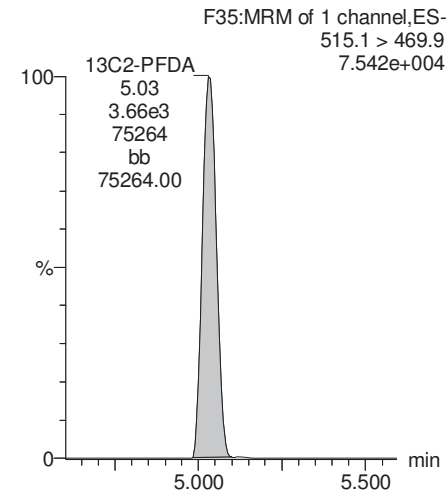
13C8-PFOS



PFDA



13C2-PFDA



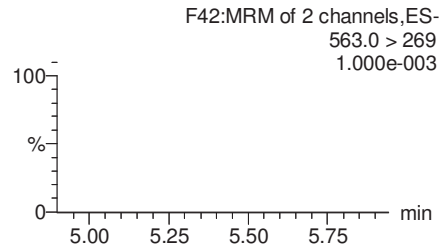
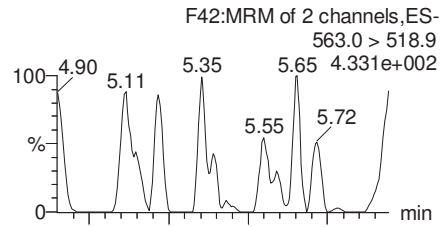
Vista Analytical Laboratory

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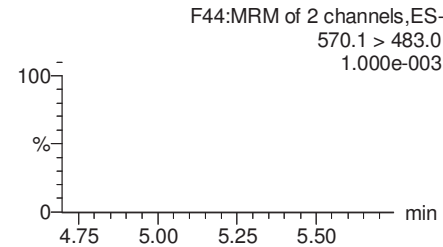
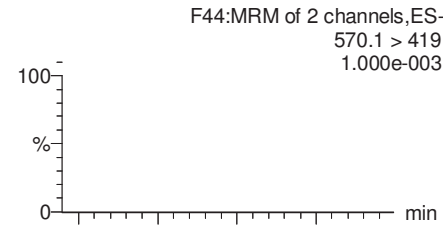
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Printed: Tuesday, January 16, 2018 11:13:38 Pacific Standard Time

Name: 180111M2_9, Date: 12-Jan-2018, Time: 05:08:18, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

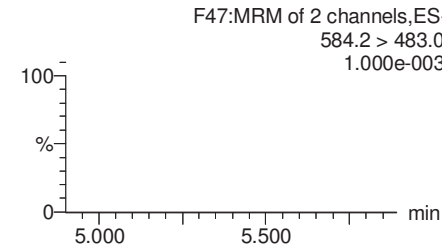
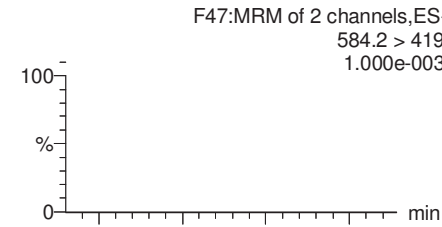
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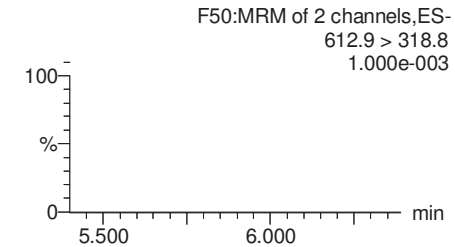
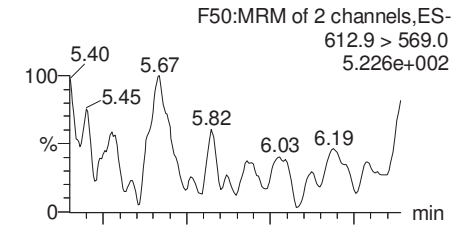
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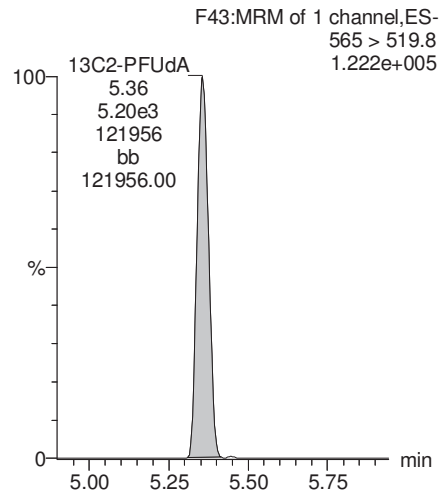
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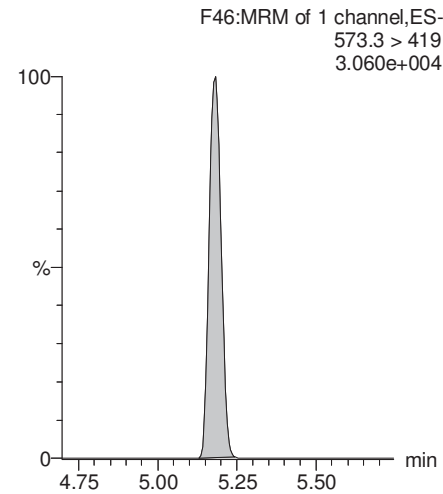
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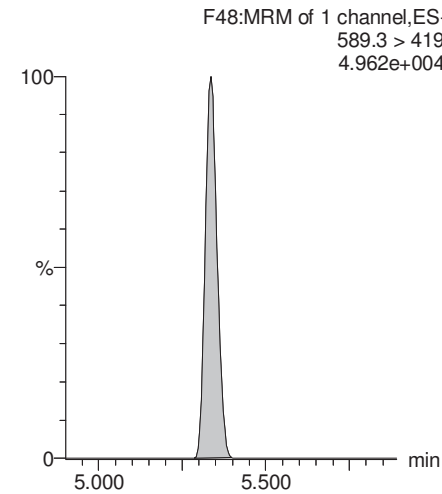
13C2-PFUdA



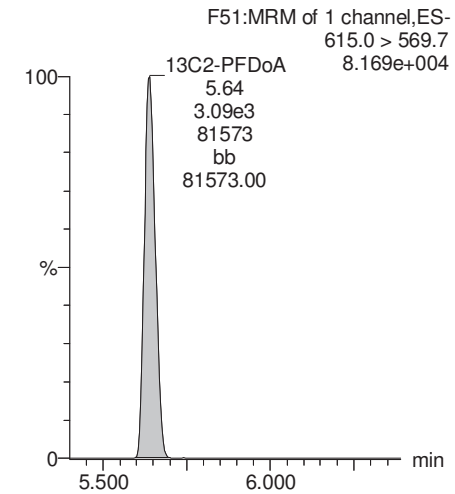
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDaA



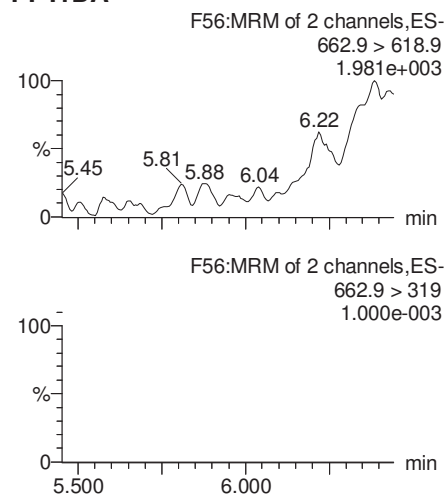
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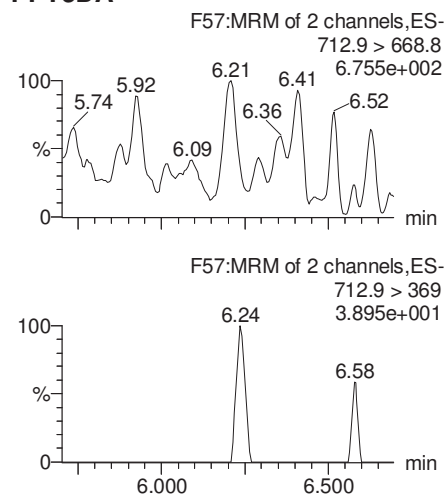
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Name: 180111M2_9, Date: 12-Jan-2018, Time: 05:08:18, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

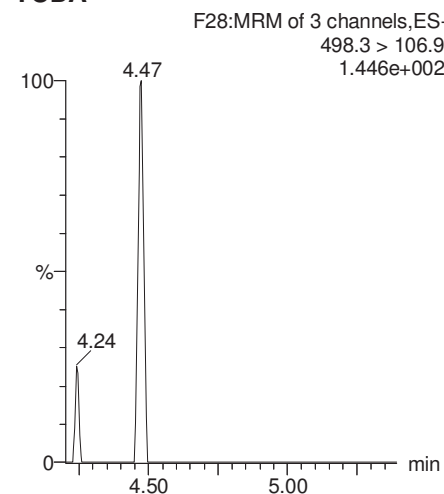
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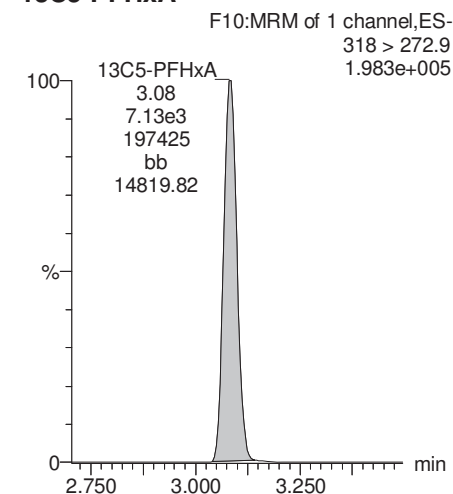
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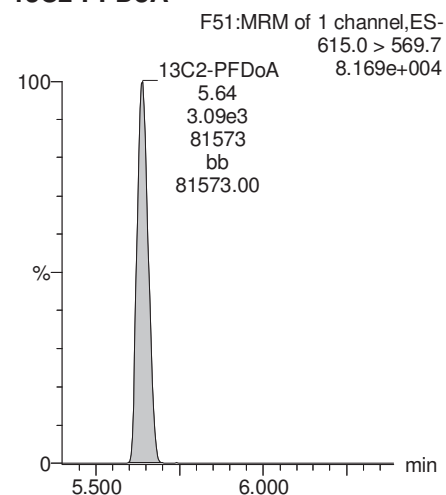
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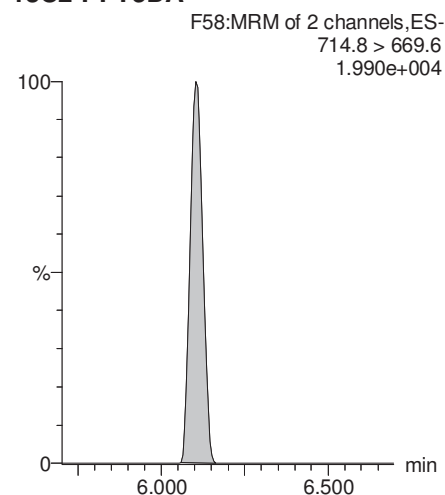
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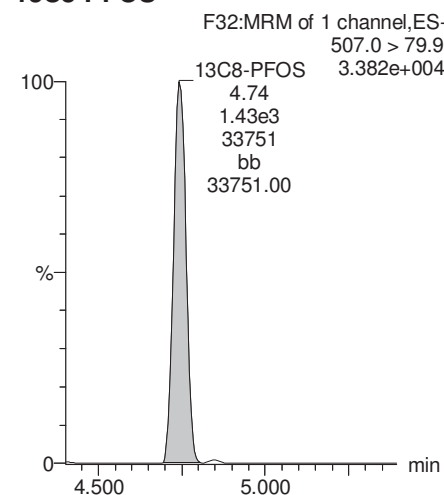
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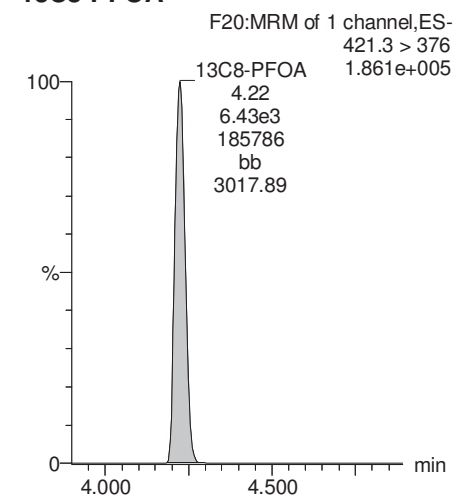
13C2-PFTeDA



13C8-PFOS



13C8-PFOA



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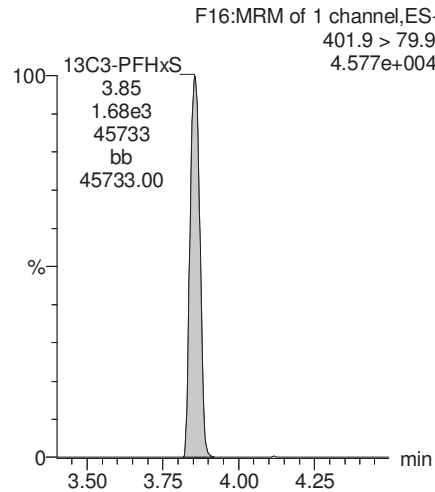
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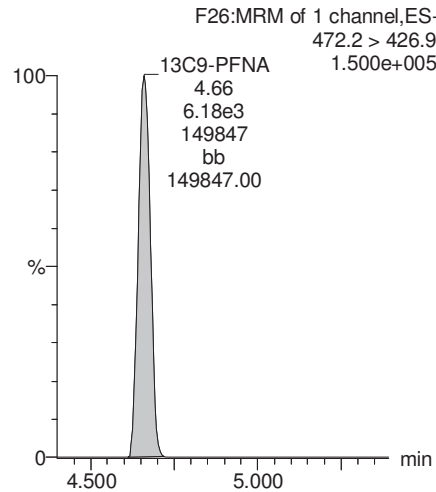
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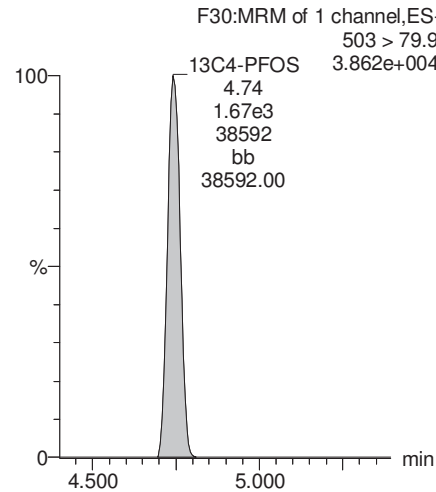
13C3-PFHxS



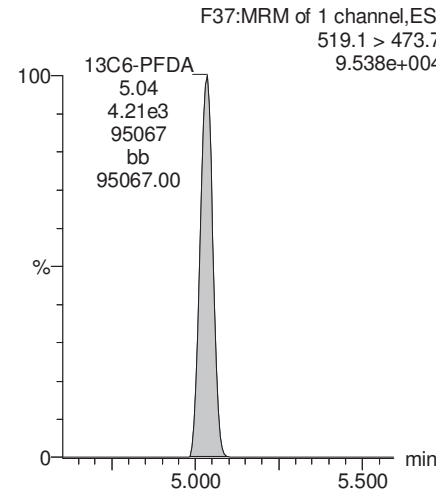
13C9-PFNA



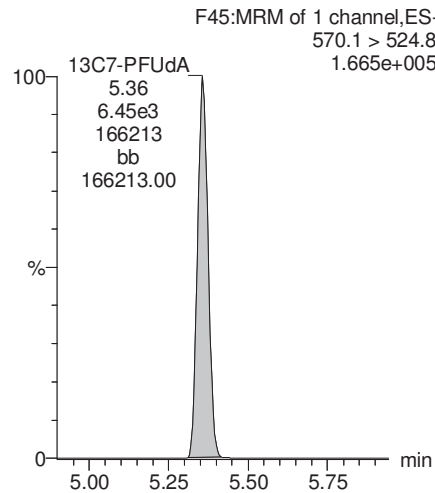
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-11.qld

Last Altered: Tuesday, January 16, 2018 11:04:37 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:07:13 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_11, Date: 12-Jan-2018, Time: 05:30:39, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		7.84e2	0.264		2.66				
2	4 PFHxA	313.2 > 268.9		1.71e3	0.264		3.15				
3	5 PFHpA	363.0 > 318.9		4.37e3	0.264		3.78				
4	6 L-PFHxS	398.9 > 79.6		6.76e2	0.264		3.94				
5	9 L-PFOA	413 > 368.7	1.22e2	5.58e3	0.264		4.31	4.24	0.274	0.2644	
6	12 PFNA	463.0 > 418.8		5.02e3	0.264		4.81				
7	13 PFOSA	498.1 > 77.8		8.68e2	0.264		4.87				
8	16 PFDA	513 > 468.8		4.79e3	0.264		5.18				
9	18 N-MeFOSAA	570.1 > 419		1.52e3	0.264		5.32				
10	19 N-EtFOSAA	584.2 > 419		1.86e3	0.264		5.48				
11	20 PFUdA	563.0 > 518.9		5.13e3	0.264		5.50				
12	22 PFDoA	612.9 > 569.0		2.62e3	0.264		5.77				

Dataset: U:\Q4.PRO\results\180111M2\180111M2-11.qld

Last Altered: Tuesday, January 16, 2018 11:04:37 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:10:33 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_11, Date: 12-Jan-2018, Time: 05:30:39, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.62e3	0.264		6.00				
2	25 PFTeDA	712.9 > 668.8		1.02e3	0.264		6.22				
3	33 13C3-PFBS	302. > 98.8	7.84e2	6.09e3	0.264	0.095	2.77	2.59	1.61	63.9899	135.0
4	34 13C2-PFHxA	315 > 269.8	1.71e3	6.09e3	0.264	0.597	3.15	3.08	3.51	22.2772	117.5
5	35 13C4-PFHpA	367.2 > 321.8	4.37e3	6.09e3	0.264	0.604	3.78	3.70	8.97	56.2697	118.8
6	36 18O2-PFHxS	403.0 > 102.6	6.76e2	1.80e3	0.264	0.293	3.94	3.85	4.69	60.6886	128.1
7	37 13C2-6:2 FTS	429.1 > 408.9	1.13e3	5.55e3	0.264	0.215	4.25	4.16	2.54	44.8098	94.6
8	38 13C2-PFOA	414.9 > 369.7	5.58e3	5.55e3	0.264	0.916	4.31	4.22	12.6	52.0214	109.8
9	39 13C5-PFNA	468.2 > 422.9	5.02e3	6.61e3	0.264	0.817	4.81	4.66	9.49	44.0001	92.9
10	40 13C8-PFOSA	506.1 > 77.7	8.68e2	7.24e3	0.264	0.223	4.87	4.71	1.50	25.4901	53.8
11	41 13C8-PFOS	507.0 > 79.9	1.33e3	1.70e3	0.264	0.875	4.89	4.75	9.79	42.4228	89.5
12	42 13C2-PFDA	515.1 > 469.9	4.79e3	4.95e3	0.264	1.105	5.18	5.04	12.1	41.5514	87.7
13	43 13C2-8:2 FTS	529.1 > 508.7	6.41e2	6.09e3	0.264	0.101	5.15	5.00	1.32	49.4276	104.3
14	44 d3-N-MeFOSAA	573.3 > 419	1.52e3	7.24e3	0.264	0.345	5.32	5.18	2.63	28.8564	60.9
15	45 d5-N-EtFOSAA	589.3 > 419	1.86e3	7.24e3	0.264	0.390	5.47	5.34	3.20	31.1047	65.6
16	46 13C2-PFUDa	565 > 519.8	5.13e3	7.24e3	0.264	0.958	5.49	5.36	8.86	35.0563	74.0
17	47 13C2-PFDoA	615.0 > 569.7	2.62e3	7.24e3	0.264	0.599	5.77	5.64	4.52	28.5765	60.3
18	49 13C2-PFTeDA	714.8 > 669.6	1.02e3	7.24e3	0.264	0.282	6.22	6.11	1.76	23.6839	50.0
19	55 13C5-PFHxA	318 > 272.9	6.09e3	6.09e3	0.264	1.000	3.15	3.08	12.5	47.3844	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.80e3	1.80e3	0.264	1.000	4.02	3.86	12.5	47.3844	100.0
21	57 13C8-PFOA	421.3 > 376	5.55e3	5.55e3	0.264	1.000	4.38	4.22	12.5	47.3844	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.61e3	6.61e3	0.264	1.000	4.81	4.66	12.5	47.3844	100.0
23	59 13C4-PFOS	503 > 79.9	1.70e3	1.70e3	0.264	1.000	4.89	4.74	12.5	47.3844	100.0
24	60 13C6-PFDA	519.1 > 473.7	4.95e3	4.95e3	0.264	1.000	5.18	5.04	12.5	47.3844	100.0
25	61 13C7-PFUDa	570.1 > 524.8	7.24e3	7.24e3	0.264	1.000	5.49	5.36	12.5	47.3844	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	6.76e2	0.264		3.80		0.000		
27	63 Total PFOA	413 > 368.7	2.18e2	5.58e3	0.264		4.51		0.489	0.3530	
28	64 Total PFOS	499 > 79.9	0.00e0	1.33e3	0.264		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.52e3	0.264		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	1.86e3	0.264		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	2.18e2		0.264		0.00		0.489	0.3530	

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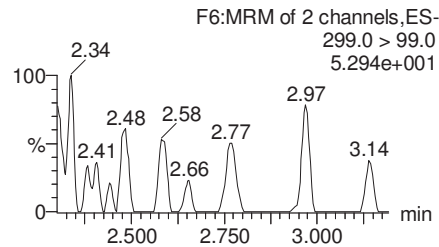
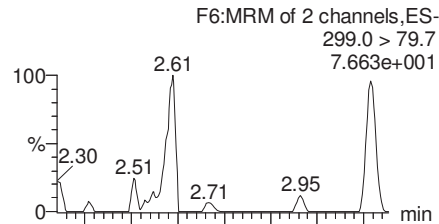
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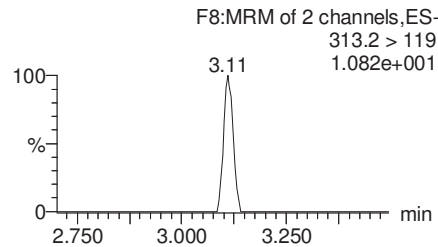
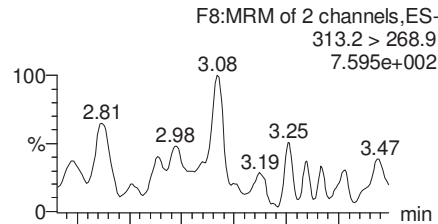
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Name: 180111M2_11, Date: 12-Jan-2018, Time: 05:30:39, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

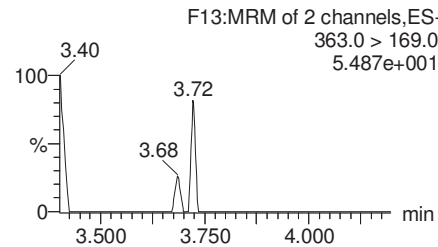
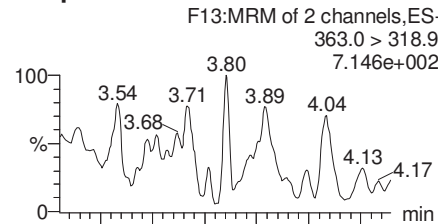
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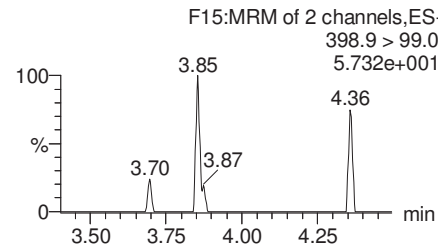
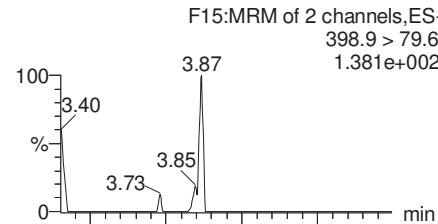
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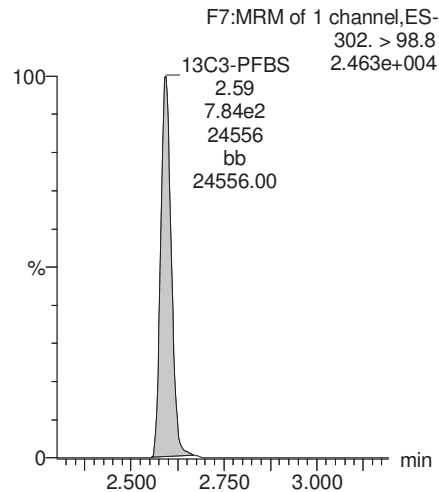
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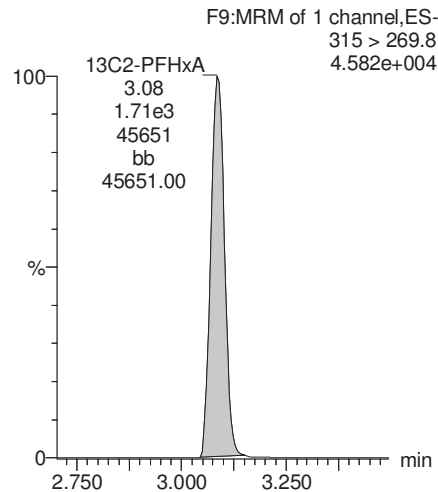
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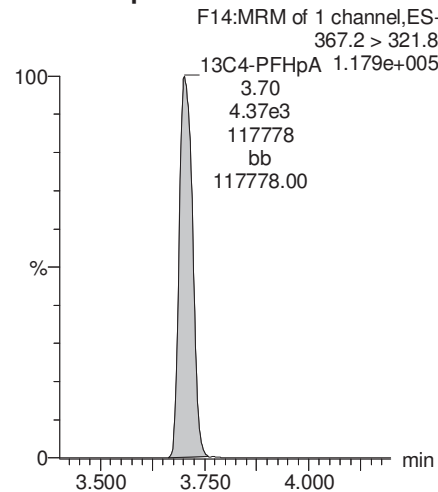
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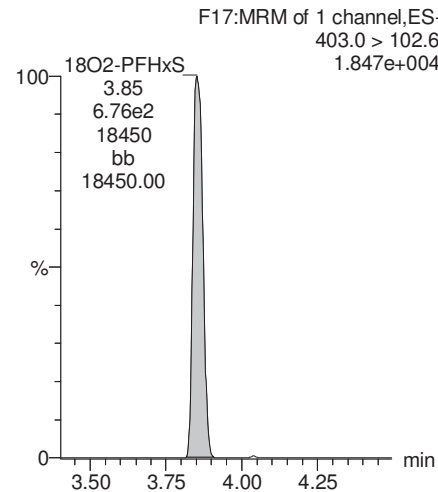
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13C4-PFHpA



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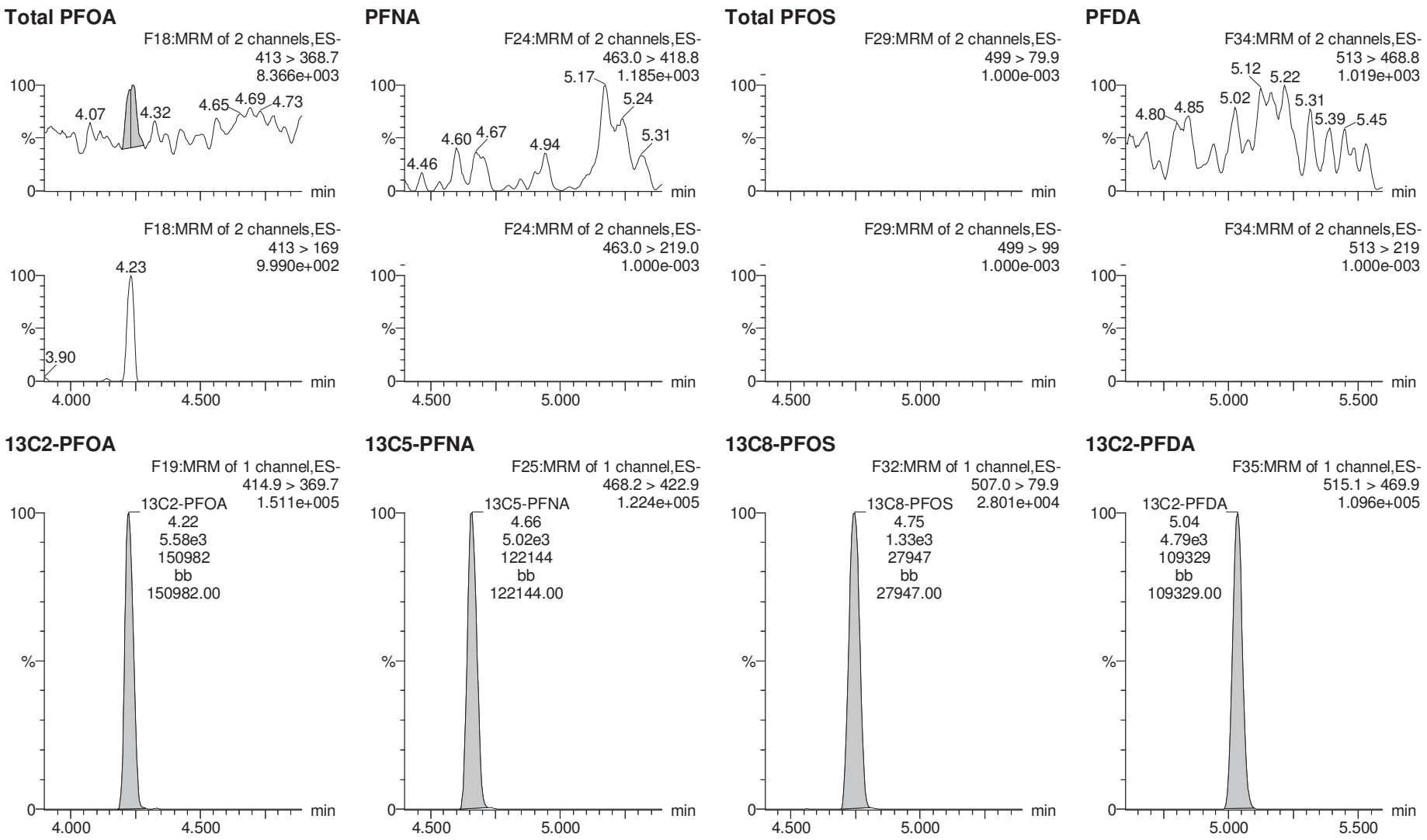


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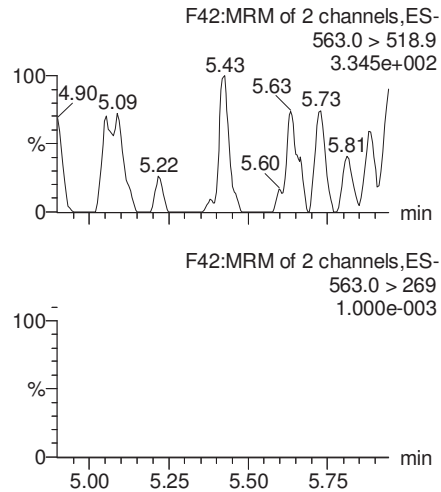
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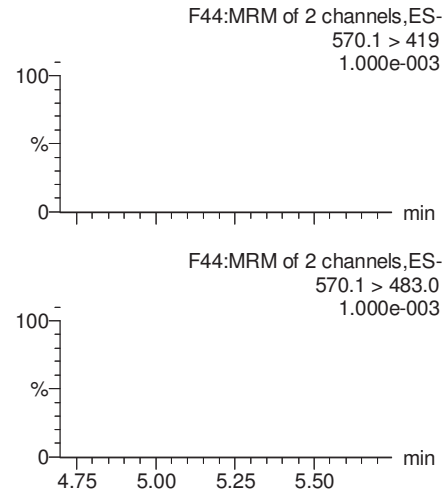
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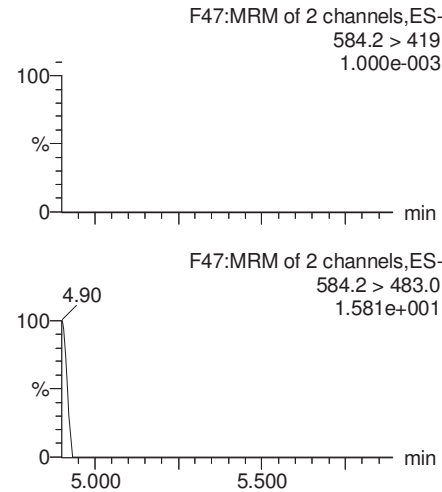
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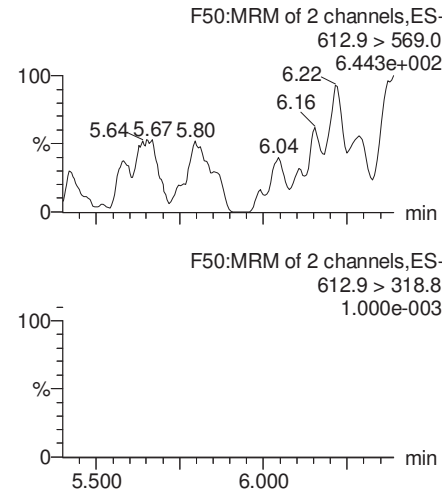
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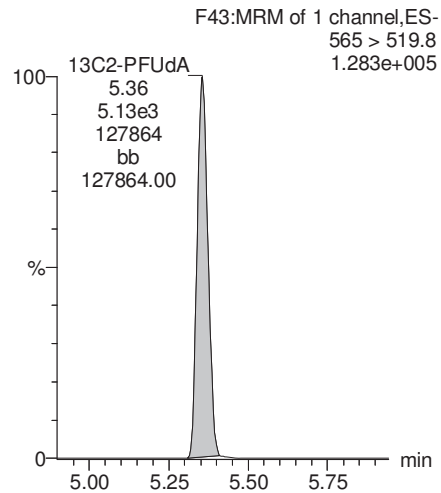
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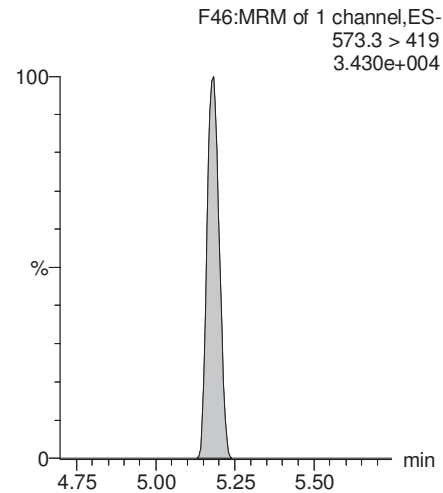
PFDaA



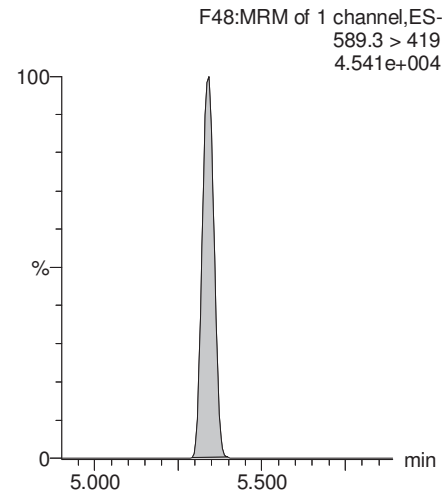
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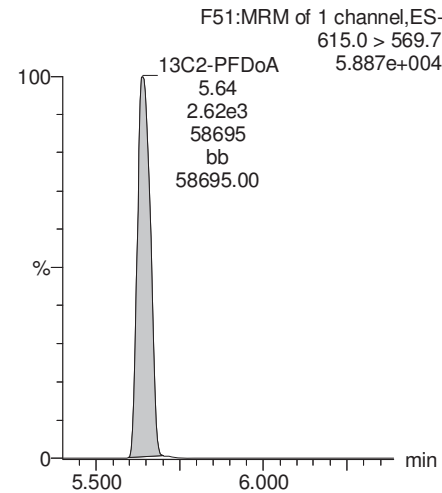
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDaA

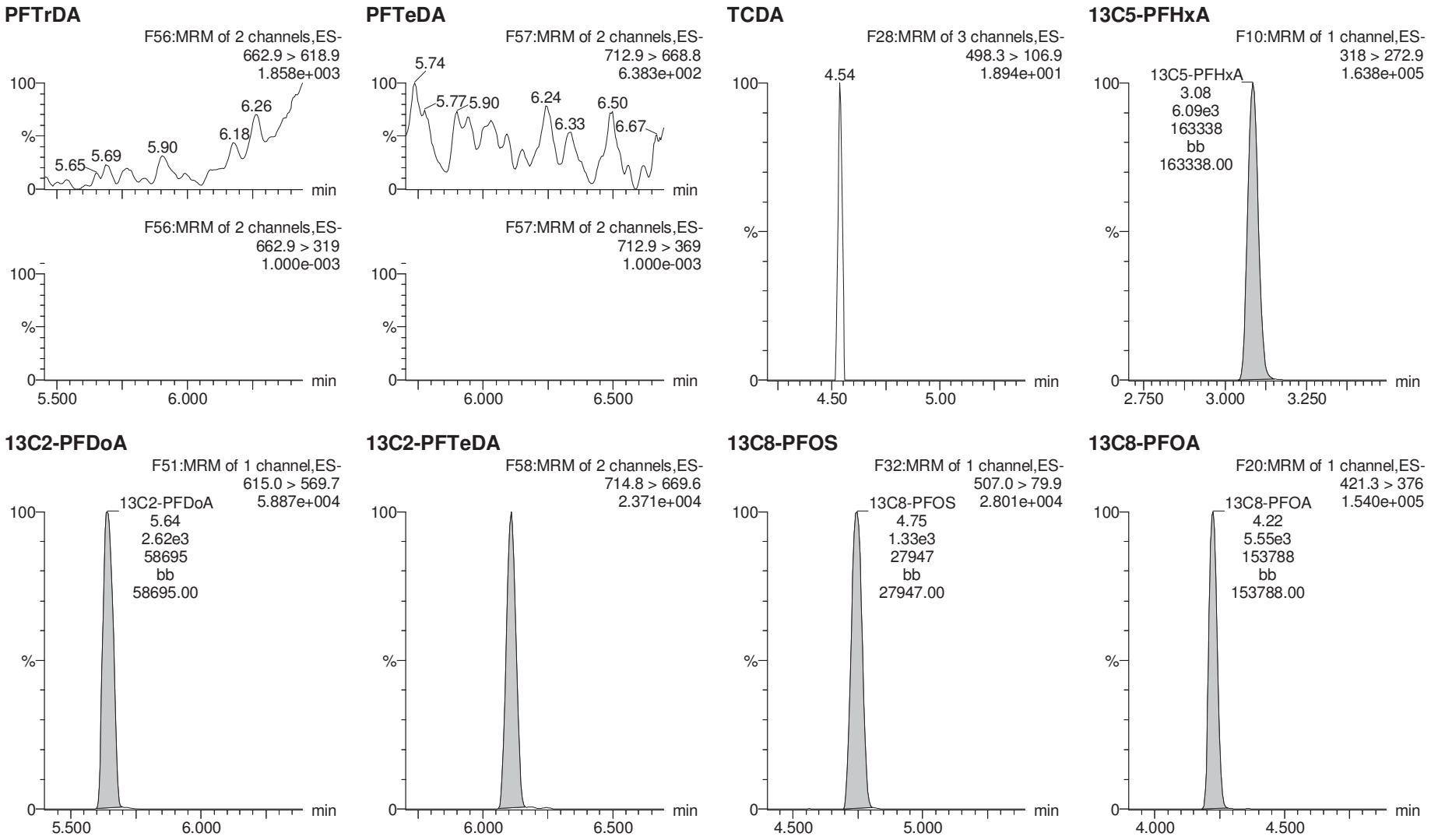


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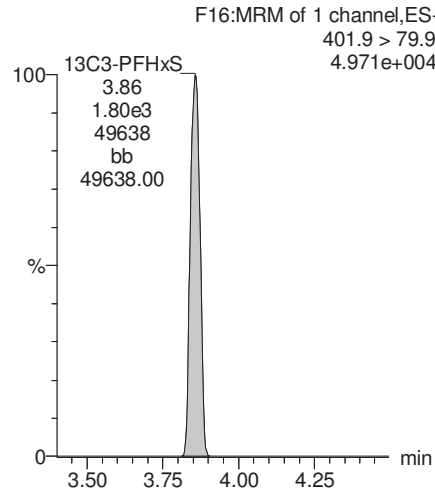
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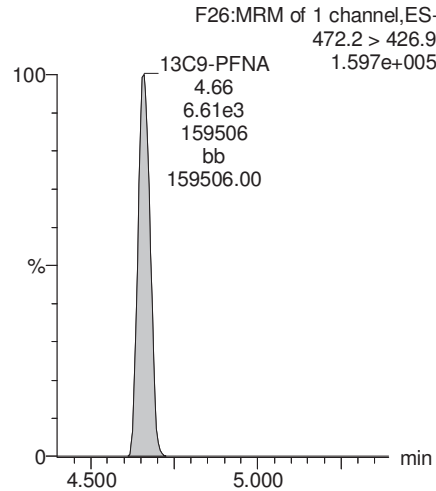
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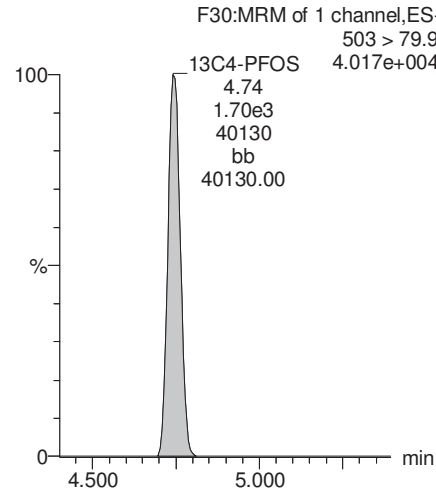
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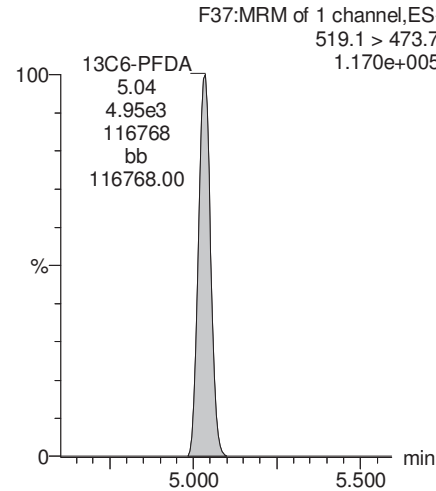
13C9-PFNA



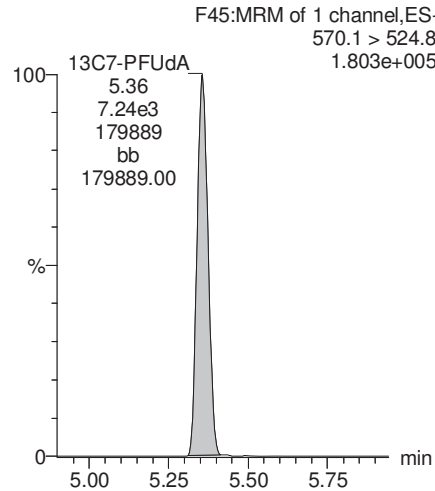
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180114M1\180114M1-31.qld

Last Altered: Wednesday, January 17, 2018 15:57:26 Pacific Standard Time

Printed: Wednesday, January 17, 2018 15:59:19 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_31, Date: 14-Jan-2018, Time: 19:22:20, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		9.75e2	0.264		2.60				
2	4	PFHxA	313.2 > 268.9		2.31e3	0.264		3.00				
3	5	PFHpA	363.0 > 318.9		4.31e3	0.264		3.54				
4	6	L-PFHxS	398.9 > 79.6		7.82e2	0.264		3.68				
5	9	L-PFOA	413 > 368.7	1.52e2	7.50e3	0.264		4.07	3.93	0.253		
6	12	PFNA	463.0 > 418.8	6.50e1	7.07e3	0.264		4.54	4.88	0.115	0.3660	
7	14	L-PFOS	499 > 79.9		1.95e3	0.264		4.63				
8	16	PFDA	513 > 468.8		7.08e3	0.264		4.94				
9	18	N-MeFOSAA	570.1 > 419		2.19e3	0.264		5.10				
10	19	N-EtFOSAA	584.2 > 419		2.05e3	0.264		5.27				
11	20	PFUdA	563.0 > 518.9		7.38e3	0.264		5.30				
12	22	PFDoA	612.9 > 569.0		5.09e3	0.264		5.60				

Dataset: U:\Q4.PRO\results\180114M1\180114M1-31.qld

Last Altered: Wednesday, January 17, 2018 15:57:26 Pacific Standard Time

Printed: Wednesday, January 17, 2018 15:59:28 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_31, Date: 14-Jan-2018, Time: 19:22:20, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		1.79e3	0.264		5.85				
2	25 PFTeDA	712.9 > 668.8		1.79e3	0.264		6.10				
3	33 13C3-PFBS	302. > 98.8	9.75e2	7.35e3	0.264	0.097	2.60	2.47	1.66	65.1740	137.5
4	34 13C2-PFHxA	315 > 269.8	2.31e3	7.35e3	0.264	0.633	3.00	2.91	3.92	23.4817	123.9
5	35 13C4-PFHpA	367.2 > 321.8	4.31e3	7.35e3	0.264	0.651	3.56	3.42	7.33	42.7360	90.2
6	36 18O2-PFHxS	403.0 > 102.6	7.82e2	1.98e3	0.264	0.326	3.68	3.57	4.93	57.3593	121.1
7	37 13C2-6:2 FTS	429.1 > 408.9	1.45e3	8.49e3	0.264	0.171	4.00	3.85	2.13	47.2759	99.8
8	38 13C2-PFOA	414.9 > 369.7	7.50e3	8.49e3	0.264	0.903	4.07	3.93	11.0	46.2962	97.7
9	39 13C5-PFNA	468.2 > 422.9	7.07e3	9.54e3	0.264	0.844	4.54	4.41	9.26	41.5996	87.8
10	40 13C8-PFOSA	506.1 > 77.7	9.31e2	9.72e3	0.264	0.165	4.61	4.48	1.20	27.4461	57.9
11	41 13C8-PFOS	507.0 > 79.9	1.95e3	2.12e3	0.264	0.920	4.62	4.49	11.5	47.2010	99.6
12	42 13C2-PFDA	515.1 > 469.9	7.08e3	6.16e3	0.264	1.044	4.82	4.81	14.4	52.1198	110.0
13	43 13C2-8:2 FTS	529.1 > 508.7	7.62e2	7.35e3	0.264	0.087	4.89	4.76	1.30	56.7883	119.8
14	44 d3-N-MeFOSAA	573.3 > 419	2.19e3	9.72e3	0.264	0.227	5.08	4.96	2.81	46.9071	99.0
15	45 d5-N-EtFOSAA	589.3 > 419	2.05e3	9.72e3	0.264	0.313	5.27	5.15	2.63	31.8270	67.2
16	46 13C2-PFUDa	565 > 519.8	7.38e3	9.72e3	0.264	0.899	5.28	5.16	9.49	40.0089	84.4
17	47 13C2-PFDOa	615.0 > 569.7	5.09e3	9.72e3	0.264	0.645	5.60	5.47	6.56	38.5211	81.3
18	49 13C2-PFTeDA	714.8 > 669.6	1.79e3	9.72e3	0.264	0.290	6.10	5.98	2.30	30.1165	63.6
19	55 13C5-PFHxA	318 > 272.9	7.35e3	7.35e3	0.264	1.000	3.00	2.91	12.5	47.3844	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.98e3	1.98e3	0.264	1.000	3.68	3.57	12.5	47.3844	100.0
21	57 13C8-PFOA	421.3 > 376	8.49e3	8.49e3	0.264	1.000	4.07	3.93	12.5	47.3844	100.0
22	58 13C9-PFNA	472.2 > 426.9	9.54e3	9.54e3	0.264	1.000	4.54	4.41	12.5	47.3844	100.0
23	59 13C4-PFOS	503 > 79.9	2.12e3	2.12e3	0.264	1.000	4.63	4.50	12.5	47.3844	100.0
24	60 13C6-PFDA	519.1 > 473.7	6.16e3	6.16e3	0.264	1.000	4.94	4.81	12.5	47.3844	100.0
25	61 13C7-PFUDa	570.1 > 524.8	9.72e3	9.72e3	0.264	1.000	5.28	5.16	12.5	47.3844	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	7.82e2	0.264		3.50		0.000		
27	63 Total PFOA	413 > 368.7	1.52e2	7.50e3	0.264		3.90		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	1.95e3	0.264		4.50		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.19e3	0.264		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.05e3	0.264		5.20		0.000		

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Dataset: U:\Q4.PRO\results\180114M1\180114M1-31.qld

Last Altered: Wednesday, January 17, 2018 15:57:26 Pacific Standard Time

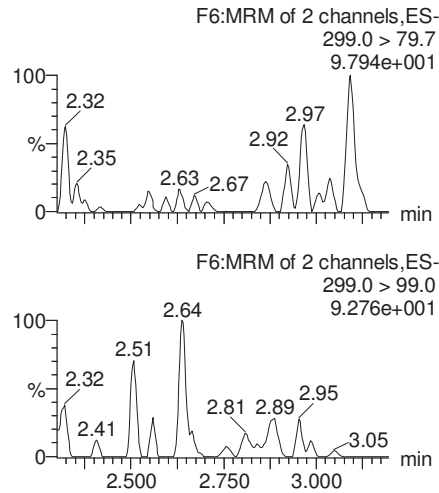
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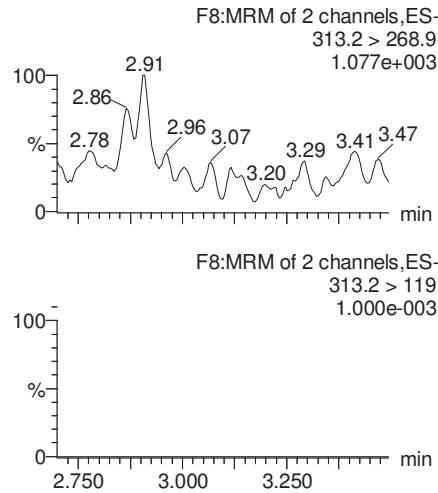
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Name: 180114M1_31, Date: 14-Jan-2018, Time: 19:22:20, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

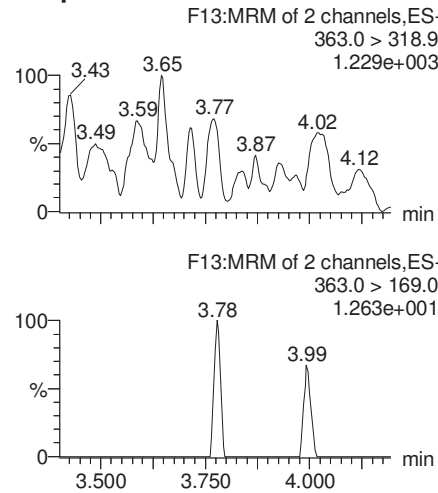
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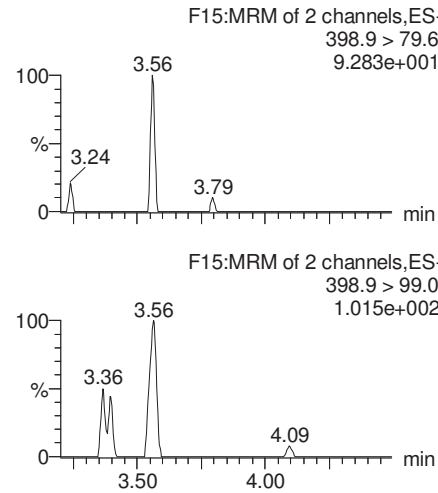
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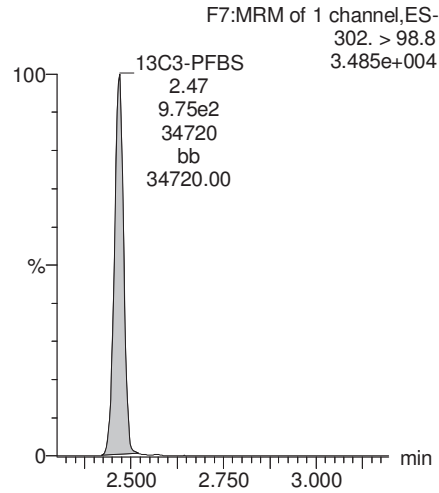
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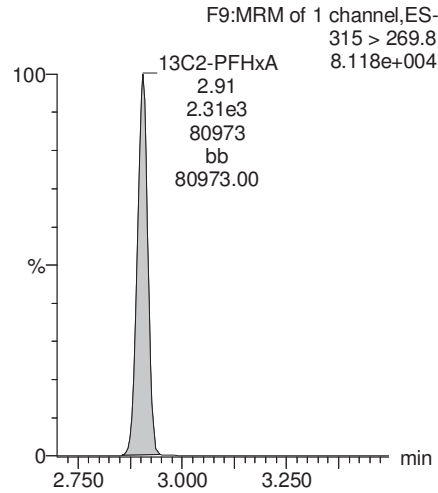
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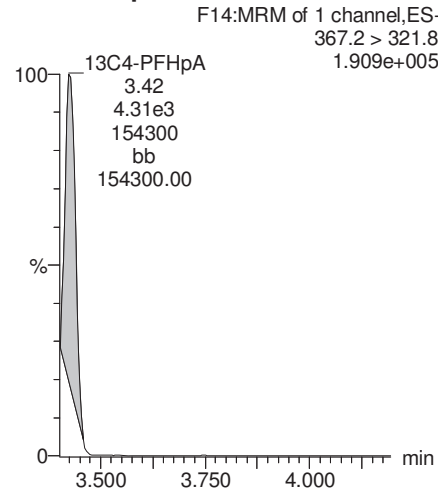
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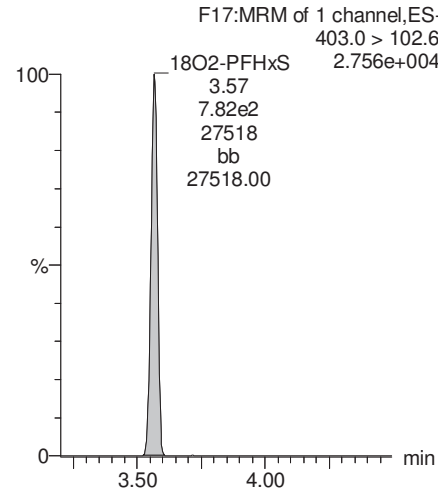
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13C4-PFHpA



18O2-PFHxS



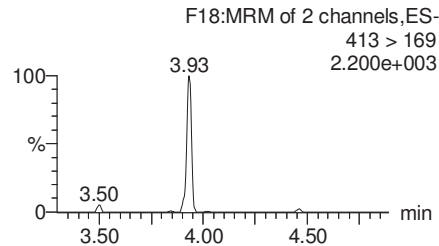
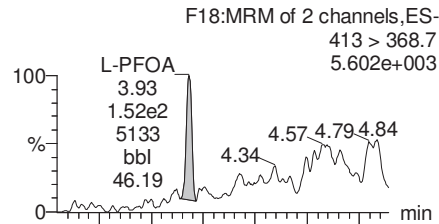
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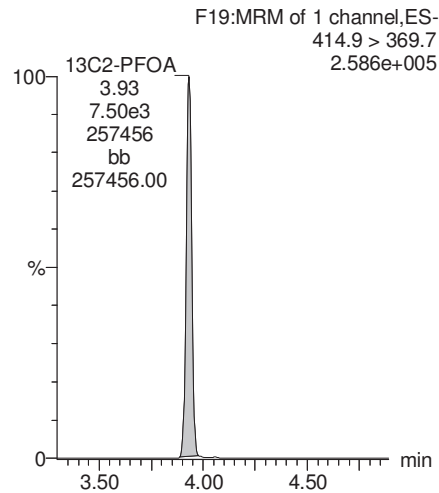
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Name: 180114M1_31, Date: 14-Jan-2018, Time: 19:22:20, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

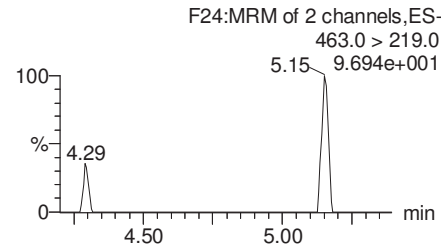
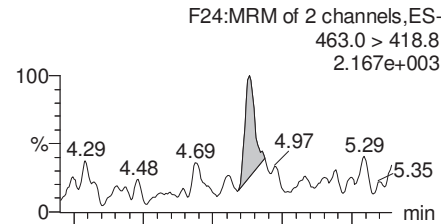
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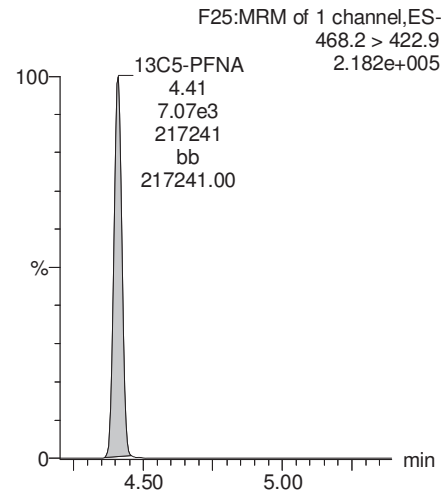
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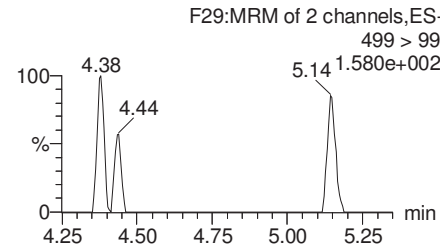
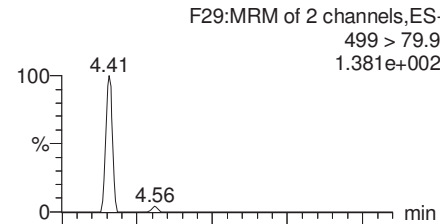
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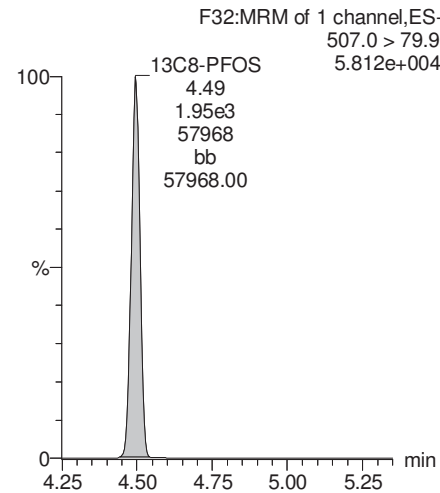
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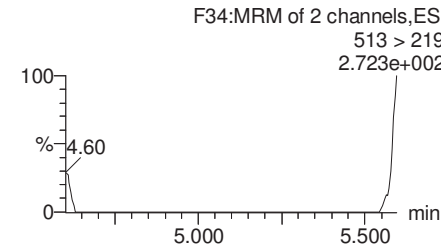
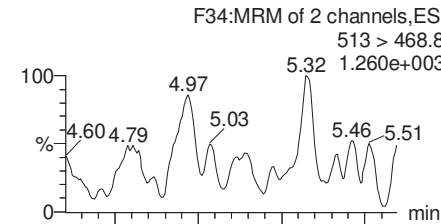
Total PFOS



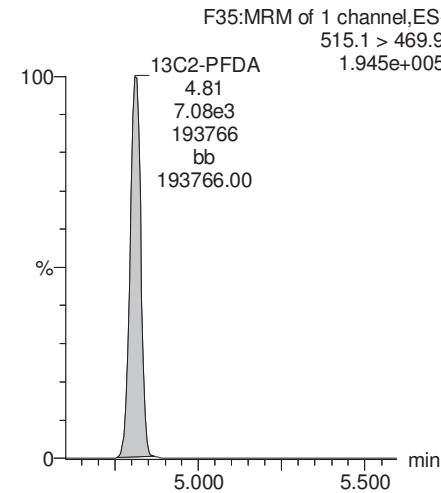
13C8-PFOS



PFDA



13C2-PFDA



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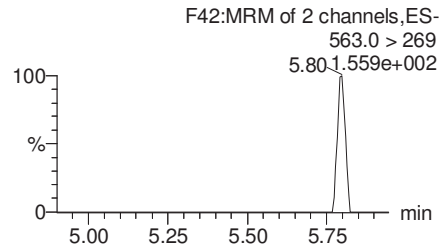
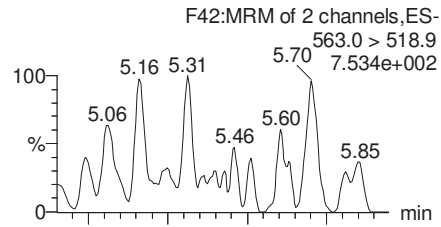
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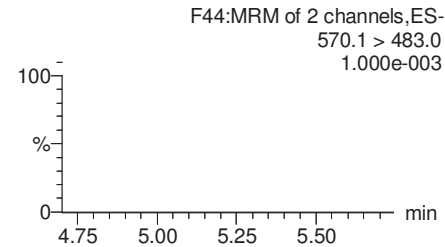
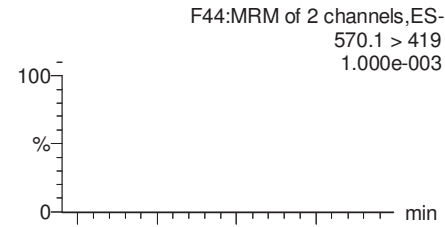
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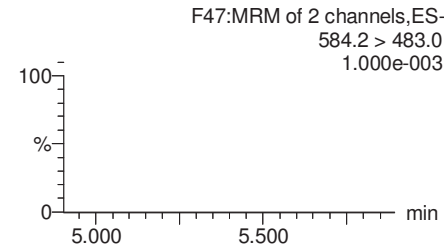
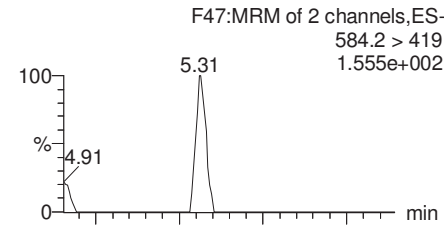
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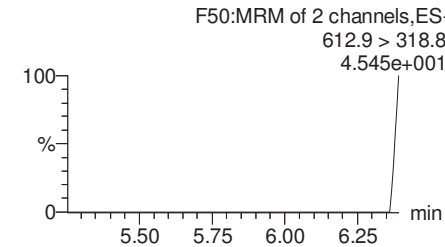
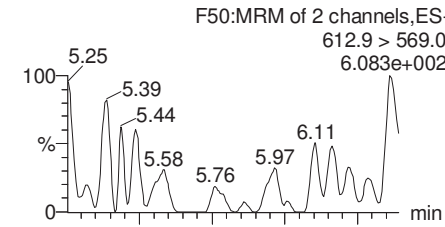
N-MeFOSAA



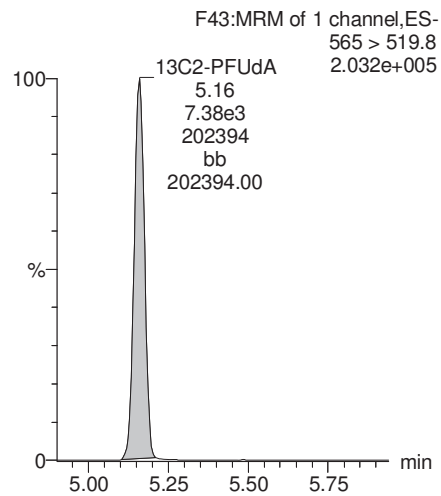
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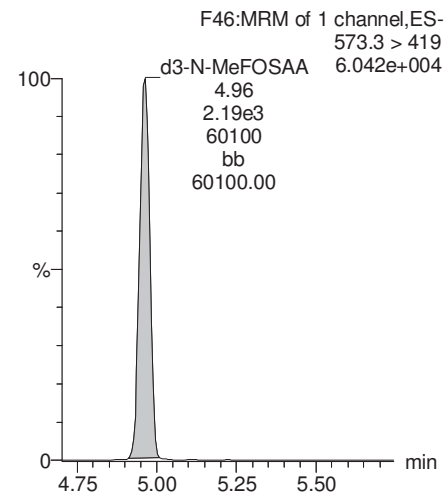
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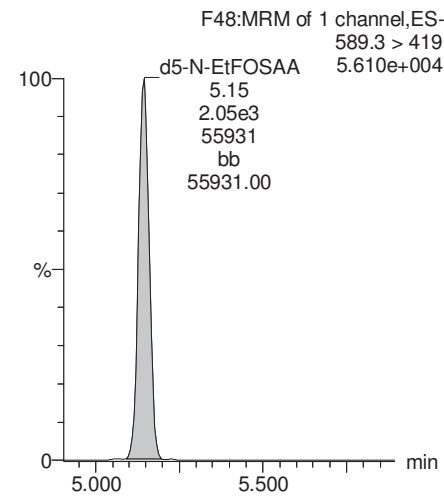
13C2-PFUdA



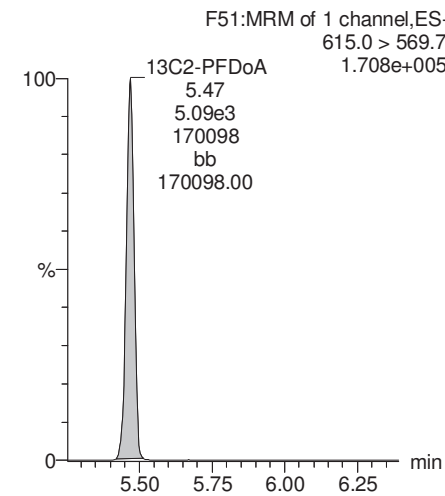
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDaA



Vista Analytical Laboratory

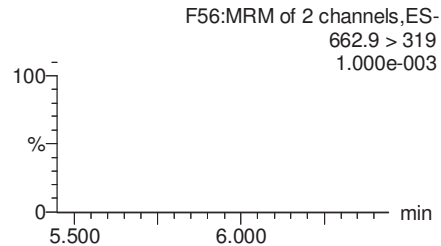
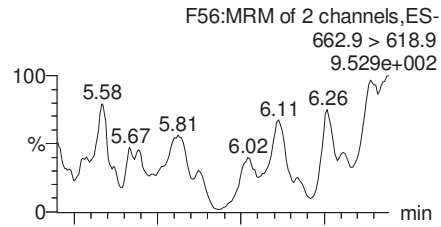
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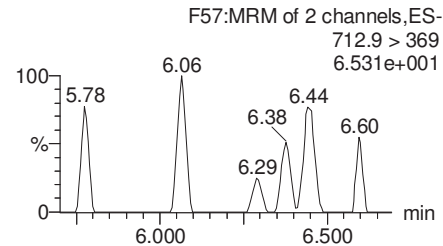
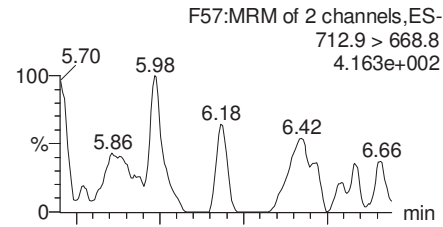
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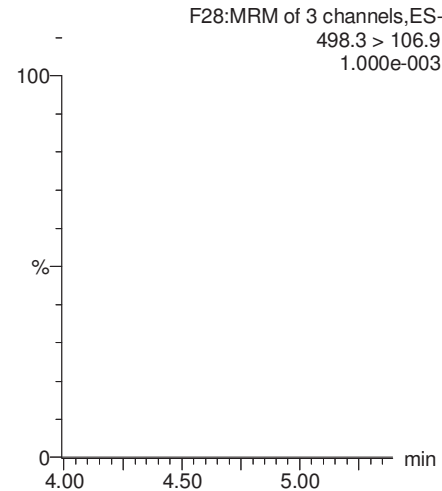
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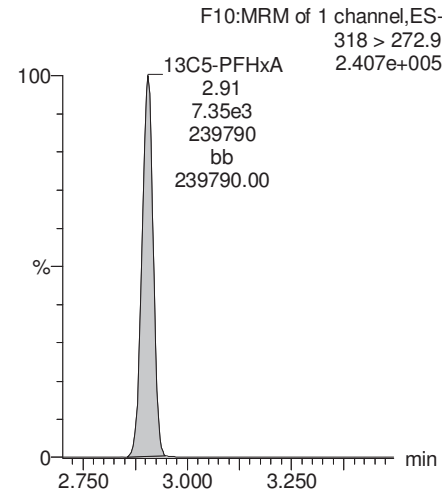
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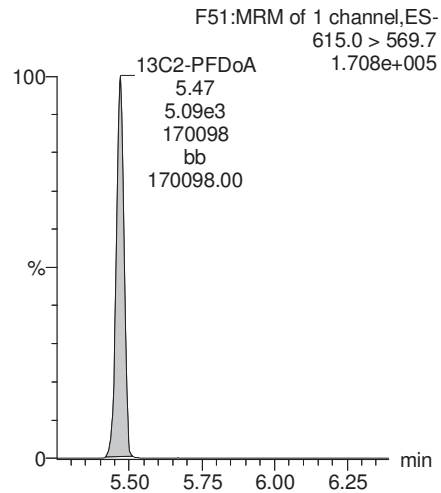
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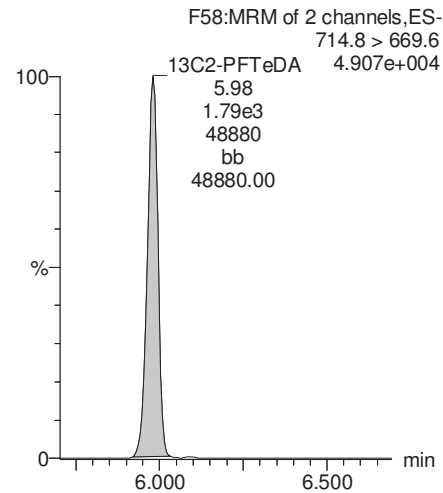
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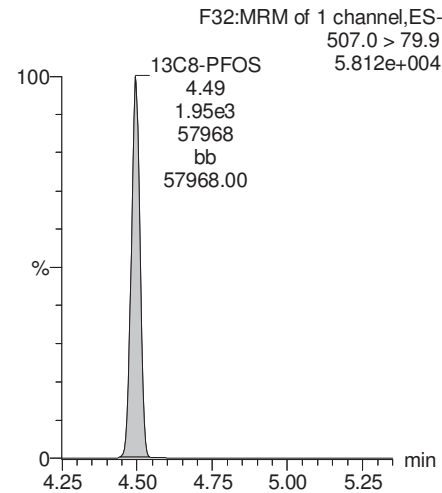
13C2-PFDoA



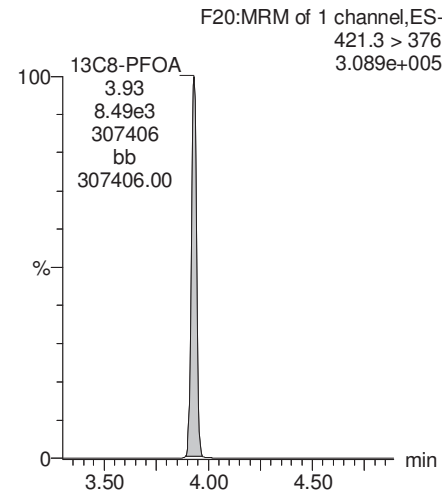
13C2-PFTeDA



13C8-PFOS



13C8-PFOA

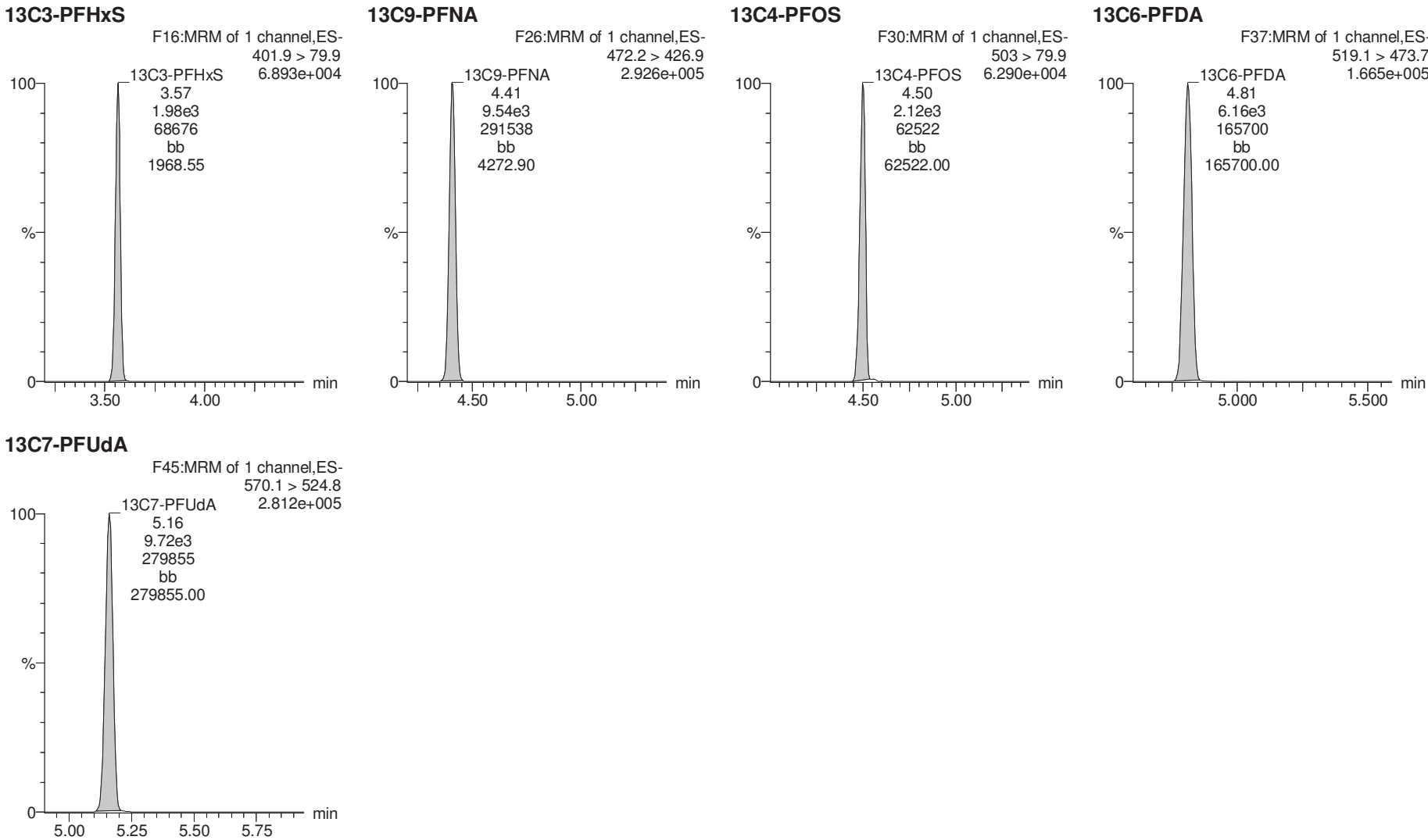


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Last Altered: Wednesday, January 17, 2018 15:57:26 Pacific Standard Time

Printed: Wednesday, January 17, 2018 15:59:28 Pacific Standard Time

Name: 180114M1_31, Date: 14-Jan-2018, Time: 19:22:20, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-12.qld

Last Altered: Tuesday, January 16, 2018 11:15:20 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:15:38 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_12, Date: 12-Jan-2018, Time: 05:41:50, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

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1	3 PFBS	299.0 > 79.7		8.94e2	0.256		2.66				
2	4 PFHxA	313.2 > 268.9		1.71e3	0.256		3.15				
3	5 PFHpA	363.0 > 318.9		4.33e3	0.256		3.78				
4	6 L-PFHxS	398.9 > 79.6		6.89e2	0.256		3.94				
5	9 L-PFOA	413 > 368.7	1.10e2	6.04e3	0.256		4.31	4.22	0.228	0.1324	
6	12 PFNA	463.0 > 418.8		6.32e3	0.256		4.81				
7	13 PFOSA	498.1 > 77.8		6.99e2	0.256		4.87				
8	16 PFDA	513 > 468.8		4.43e3	0.256		5.18				
9	18 N-MeFOSAA	570.1 > 419		1.80e3	0.256		5.32				
10	19 N-EtFOSAA	584.2 > 419		2.05e3	0.256		5.48				
11	20 PFUdA	563.0 > 518.9		4.54e3	0.256		5.50				
12	22 PFDoA	612.9 > 569.0		3.14e3	0.256		5.77				

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Printed: Tuesday, January 16, 2018 11:15:48 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_12, Date: 12-Jan-2018, Time: 05:41:50, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		3.14e3	0.256		6.00				
2	25 PFTeDA	712.9 > 668.8		1.37e3	0.256		6.22				
3	33 13C3-PFBS	302. > 98.8	8.94e2	6.59e3	0.256	0.095	2.77	2.59	1.70	69.3714	142.3
4	34 13C2-PFHxA	315 > 269.8	1.71e3	6.59e3	0.256	0.597	3.15	3.08	3.25	21.2687	109.1
5	35 13C4-PFHpA	367.2 > 321.8	4.33e3	6.59e3	0.256	0.604	3.78	3.70	8.23	53.0929	108.9
6	36 18O2-PFHxS	403.0 > 102.6	6.89e2	1.78e3	0.256	0.293	3.94	3.85	4.83	64.3338	131.9
7	37 13C2-6:2 FTS	429.1 > 408.9	1.47e3	6.17e3	0.256	0.215	4.25	4.17	2.98	54.0426	110.8
8	38 13C2-PFOA	414.9 > 369.7	6.04e3	6.17e3	0.256	0.916	4.31	4.22	12.2	52.1644	107.0
9	39 13C5-PFNA	468.2 > 422.9	6.32e3	6.89e3	0.256	0.817	4.81	4.66	11.5	54.7442	112.3
10	40 13C8-PFOSA	506.1 > 77.7	6.99e2	6.17e3	0.256	0.223	4.87	4.72	1.42	24.7733	50.8
11	41 13C8-PFOS	507.0 > 79.9	1.74e3	1.64e3	0.256	0.875	4.89	4.74	13.3	59.2960	121.6
12	42 13C2-PFDA	515.1 > 469.9	4.43e3	4.76e3	0.256	1.105	5.18	5.03	11.6	41.0324	84.2
13	43 13C2-8:2 FTS	529.1 > 508.7	6.13e2	6.59e3	0.256	0.101	5.15	5.00	1.16	45.0045	92.3
14	44 d3-N-MeFOSAA	573.3 > 419	1.80e3	6.17e3	0.256	0.345	5.32	5.18	3.65	41.2323	84.6
15	45 d5-N-EtFOSAA	589.3 > 419	2.05e3	6.17e3	0.256	0.390	5.47	5.34	4.15	41.4965	85.1
16	46 13C2-PFUDa	565 > 519.8	4.54e3	6.17e3	0.256	0.958	5.49	5.36	9.20	37.4479	76.8
17	47 13C2-PFDOa	615.0 > 569.7	3.14e3	6.17e3	0.256	0.599	5.77	5.64	6.35	41.3698	84.8
18	49 13C2-PFTeDA	714.8 > 669.6	1.37e3	6.17e3	0.256	0.282	6.22	6.11	2.77	38.3483	78.7
19	55 13C5-PFHxA	318 > 272.9	6.59e3	6.59e3	0.256	1.000	3.15	3.08	12.5	48.7577	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.78e3	1.78e3	0.256	1.000	4.02	3.85	12.5	48.7577	100.0
21	57 13C8-PFOA	421.3 > 376	6.17e3	6.17e3	0.256	1.000	4.38	4.22	12.5	48.7577	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.89e3	6.89e3	0.256	1.000	4.81	4.66	12.5	48.7577	100.0
23	59 13C4-PFOS	503 > 79.9	1.64e3	1.64e3	0.256	1.000	4.89	4.75	12.5	48.7577	100.0
24	60 13C6-PFDA	519.1 > 473.7	4.76e3	4.76e3	0.256	1.000	5.18	5.03	12.5	48.7577	100.0
25	61 13C7-PFUDa	570.1 > 524.8	6.17e3	6.17e3	0.256	1.000	5.49	5.36	12.5	48.7577	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	6.89e2	0.256		3.80		0.000		
27	63 Total PFOA	413 > 368.7	1.10e2	6.04e3	0.256		4.51		0.228	0.1324	
28	64 Total PFOS	499 > 79.9	0.00e0	1.74e3	0.256		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.80e3	0.256		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.05e3	0.256		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	1.10e2		0.256		0.00		0.228	0.1324	

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Last Altered: Tuesday, January 16, 2018 11:15:20 Pacific Standard Time

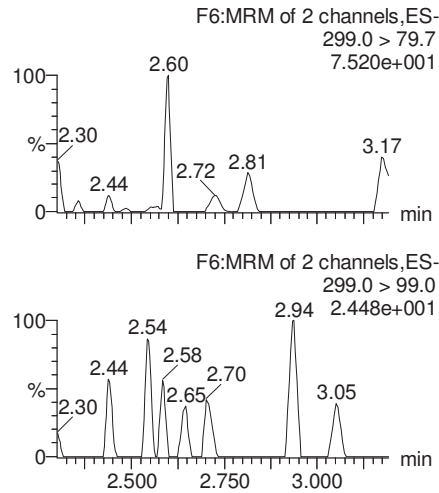
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Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

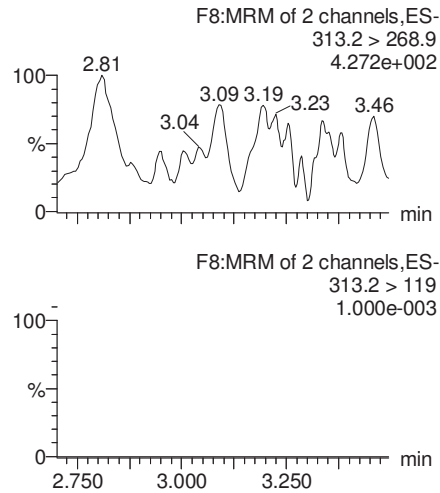
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Name: 180111M2_12, Date: 12-Jan-2018, Time: 05:41:50, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

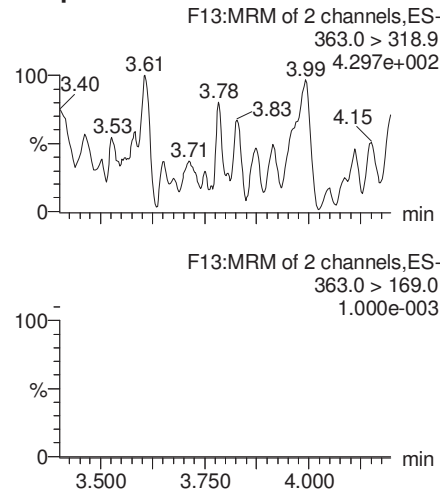
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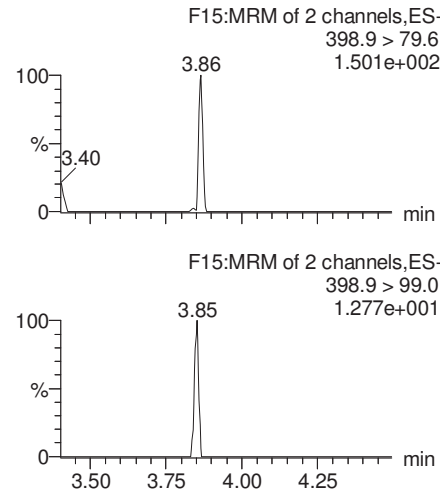
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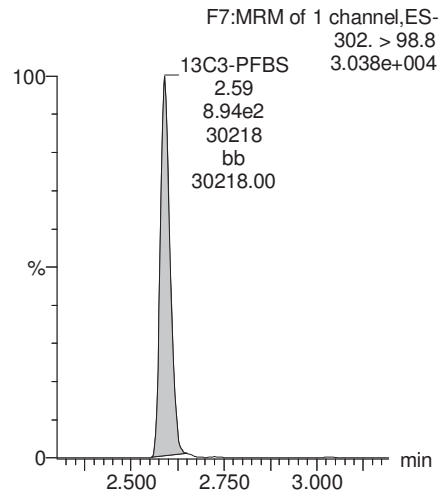
PFHpA



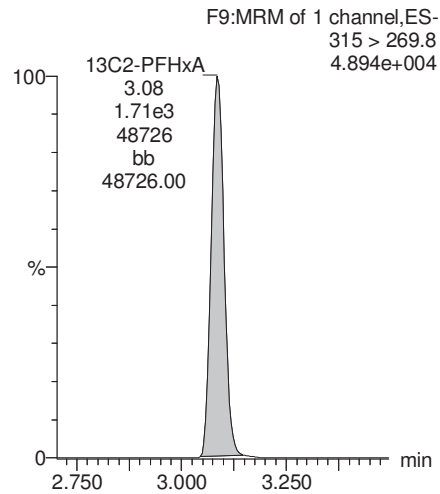
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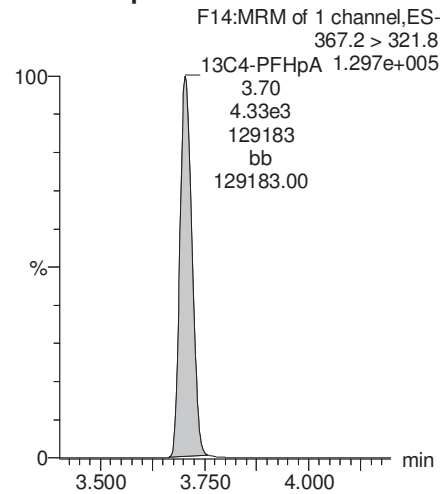
13C3-PFBS



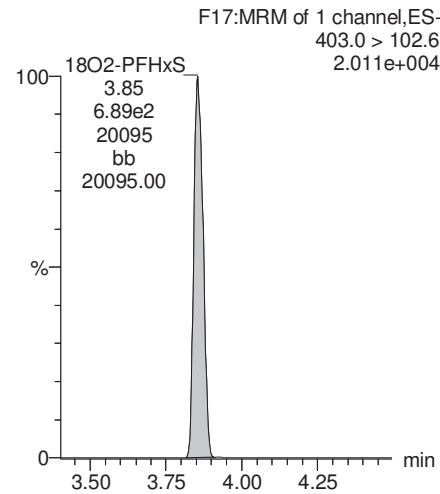
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13C4-PFHpA



18O2-PFHxS

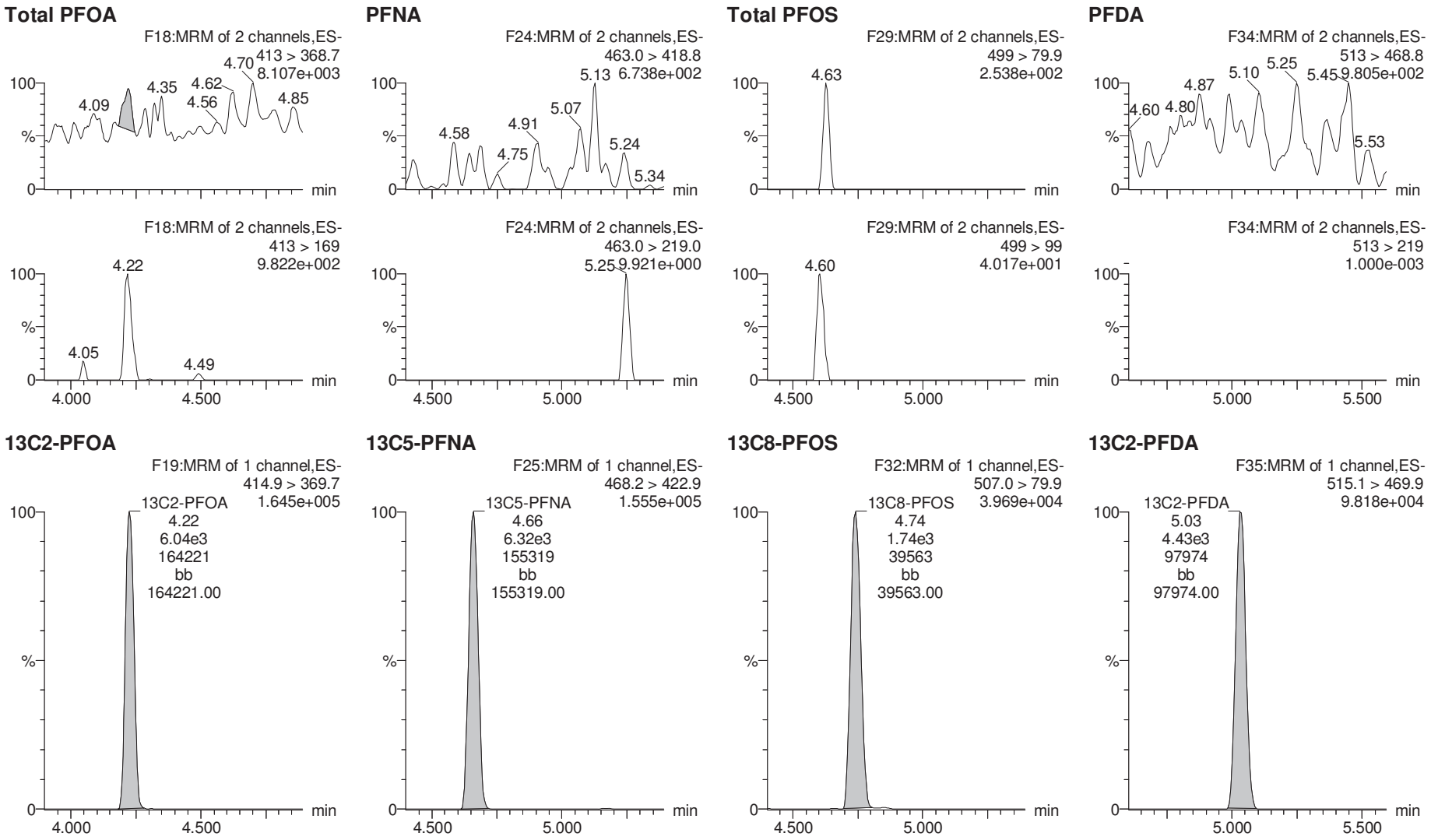


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Last Altered: Tuesday, January 16, 2018 11:15:20 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:15:48 Pacific Standard Time

Name: 180111M2_12, Date: 12-Jan-2018, Time: 05:41:50, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

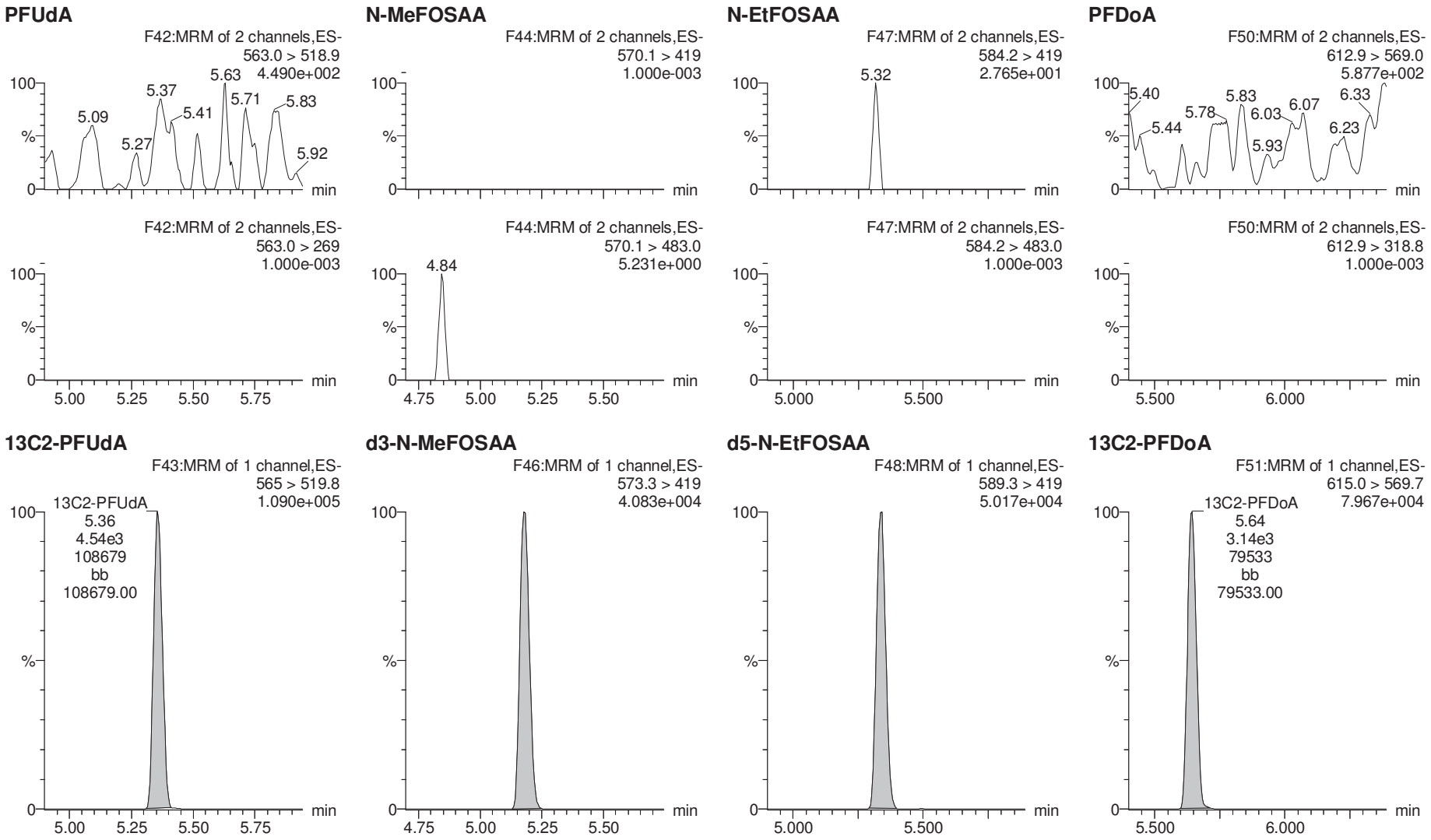


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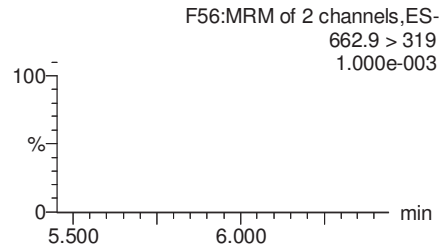
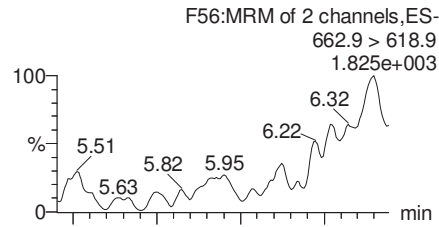
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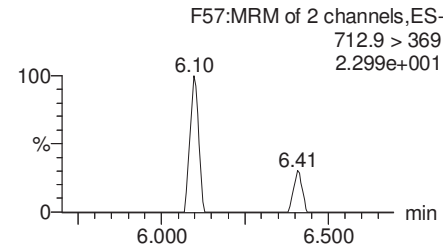
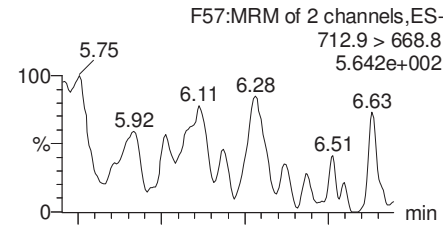
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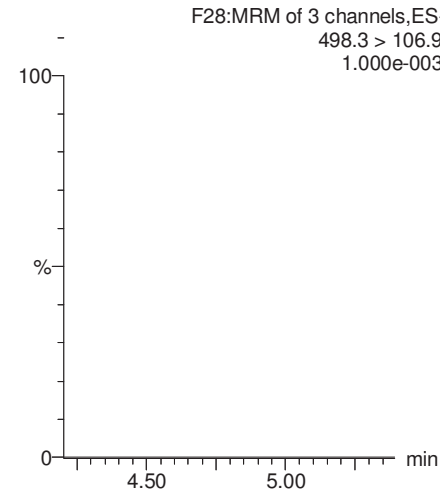
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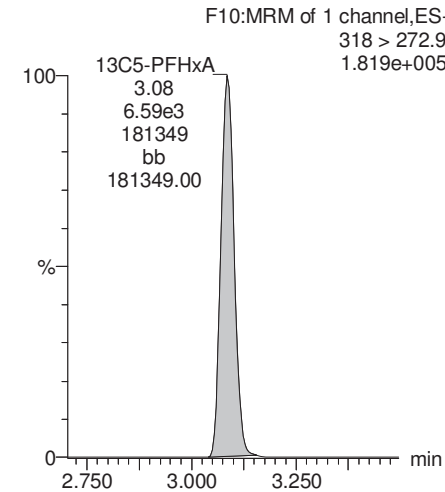
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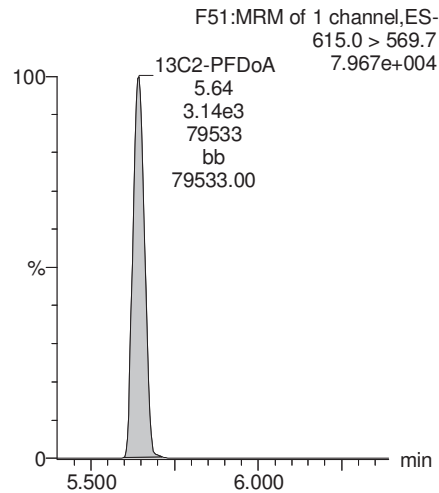
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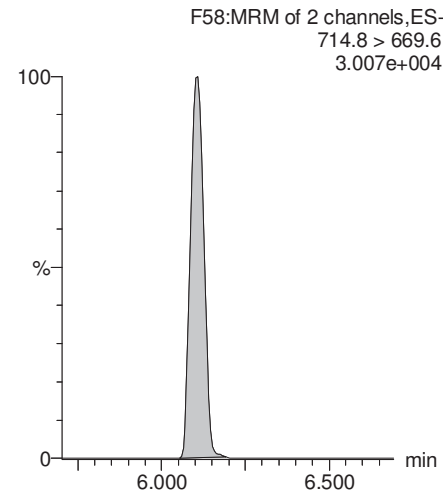
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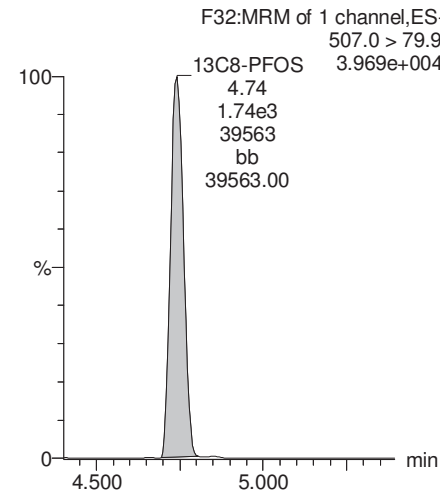
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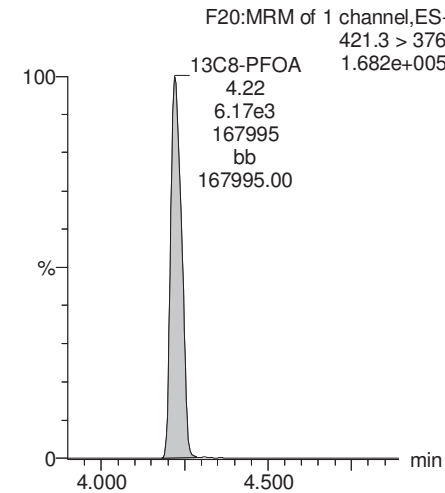
13C2-PFTeDA



13C8-PFOS



13C8-PFOA



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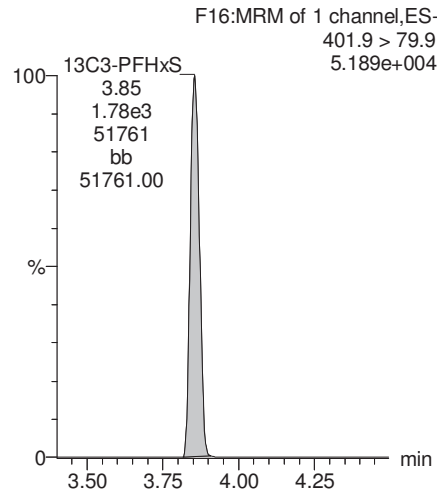
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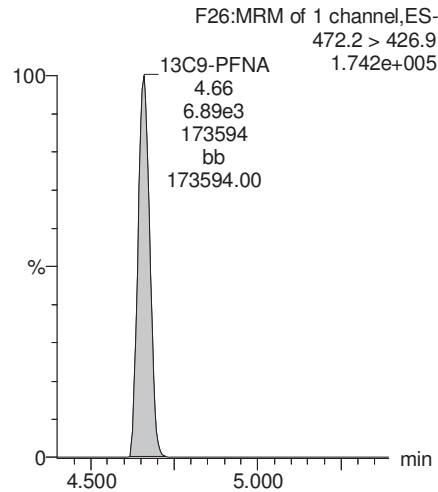
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Name: 180111M2_12, Date: 12-Jan-2018, Time: 05:41:50, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

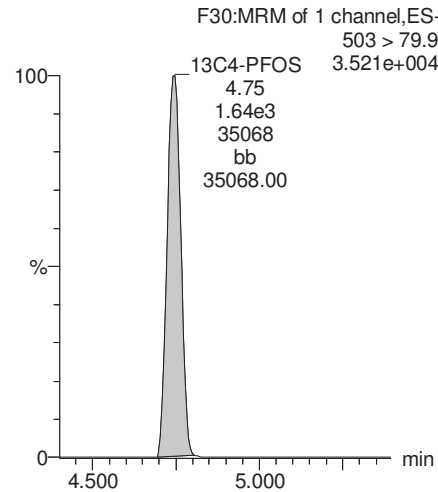
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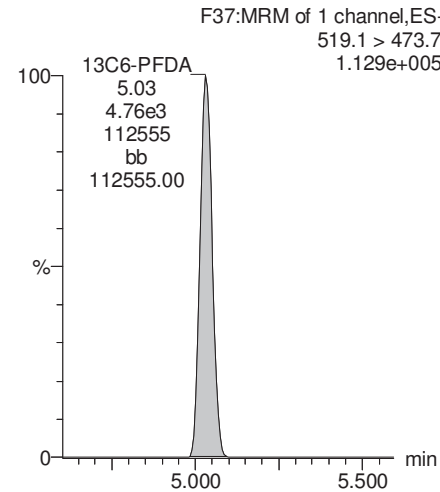
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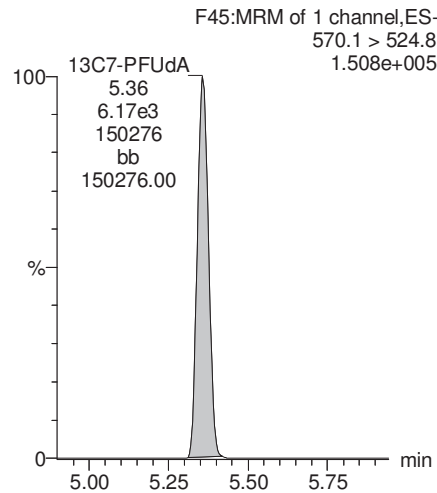
13C4-PFOS



13C6-PFDA



13C7-PFUDa



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Last Altered: Wednesday, January 17, 2018 16:01:28 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:01:42 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_32, Date: 14-Jan-2018, Time: 19:33:48, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		9.83e2	0.256		2.60				
2	4	PFHxA	313.2 > 268.9		2.46e3	0.256		3.00				
3	5	PFHpA	363.0 > 318.9		3.09e3	0.256		3.54				
4	6	L-PFHxS	398.9 > 79.6		8.21e2	0.256		3.68				
5	9	L-PFOA	413 > 368.7	2.38e2	8.26e3	0.256		4.07	3.93	0.361	0.3513	
6	12	PFNA	463.0 > 418.8		7.50e3	0.256		4.54				
7	14	L-PFOS	499 > 79.9		2.10e3	0.256		4.63				
8	16	PFDA	513 > 468.8		5.35e3	0.256		4.94				
9	18	N-MeFOSAA	570.1 > 419		2.01e3	0.256		5.10				
10	19	N-EtFOSAA	584.2 > 419		1.75e3	0.256		5.27				
11	20	PFUdA	563.0 > 518.9		8.04e3	0.256		5.30				
12	22	PFDoA	612.9 > 569.0		4.87e3	0.256		5.60				

Dataset: Untitled

Last Altered: Wednesday, January 17, 2018 16:01:28 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:01:53 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_32, Date: 14-Jan-2018, Time: 19:33:48, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.70e3	0.256		5.85				
2	25 PFTeDA	712.9 > 668.8		2.70e3	0.256		6.10				
3	33 13C3-PFBS	302. > 98.8	9.83e2	8.74e3	0.256	0.097	2.60	2.47	1.41	56.7997	116.5
4	34 13C2-PFHxA	315 > 269.8	2.46e3	8.74e3	0.256	0.633	3.00	2.90	3.52	21.6656	111.1
5	35 13C4-PFHpA	367.2 > 321.8	3.09e3	8.74e3	0.256	0.651	3.56	3.43	4.42	26.4811	54.3
6	36 18O2-PFHxS	403.0 > 102.6	8.21e2	2.43e3	0.256	0.326	3.68	3.56	4.22	50.5655	103.7
7	37 13C2-6:2 FTS	429.1 > 408.9	1.69e3	8.15e3	0.256	0.171	4.00	3.84	2.59	59.3507	121.7
8	38 13C2-PFOA	414.9 > 369.7	8.26e3	8.15e3	0.256	0.903	4.07	3.93	12.7	54.6772	112.1
9	39 13C5-PFNA	468.2 > 422.9	7.50e3	9.49e3	0.256	0.844	4.54	4.41	9.88	45.6485	93.6
10	40 13C8-PFOSA	506.1 > 77.7	7.29e2	8.57e3	0.256	0.165	4.61	4.48	1.06	25.0648	51.4
11	41 13C8-PFOS	507.0 > 79.9	2.10e3	2.32e3	0.256	0.920	4.62	4.49	11.3	48.0319	98.5
12	42 13C2-PFDA	515.1 > 469.9	5.35e3	6.24e3	0.256	1.044	4.82	4.81	10.7	40.0130	82.1
13	43 13C2-8:2 FTS	529.1 > 508.7	8.20e2	8.74e3	0.256	0.087	4.89	4.75	1.17	52.8522	108.4
14	44 d3-N-MeFOSAA	573.3 > 419	2.01e3	8.57e3	0.256	0.227	5.08	4.96	2.93	50.2942	103.2
15	45 d5-N-EtFOSAA	589.3 > 419	1.75e3	8.57e3	0.256	0.313	5.27	5.14	2.55	31.7241	65.1
16	46 13C2-PFUDa	565 > 519.8	8.04e3	8.57e3	0.256	0.899	5.28	5.16	11.7	50.8836	104.4
17	47 13C2-PFDoA	615.0 > 569.7	4.87e3	8.57e3	0.256	0.645	5.60	5.47	7.10	42.9546	88.1
18	49 13C2-PFTeDA	714.8 > 669.6	2.70e3	8.57e3	0.256	0.290	6.10	5.98	3.94	52.9641	108.6
19	55 13C5-PFHxA	318 > 272.9	8.74e3	8.74e3	0.256	1.000	3.00	2.91	12.5	48.7577	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.43e3	2.43e3	0.256	1.000	3.68	3.56	12.5	48.7577	100.0
21	57 13C8-PFOA	421.3 > 376	8.15e3	8.15e3	0.256	1.000	4.07	3.93	12.5	48.7577	100.0
22	58 13C9-PFNA	472.2 > 426.9	9.49e3	9.49e3	0.256	1.000	4.54	4.41	12.5	48.7577	100.0
23	59 13C4-PFOS	503 > 79.9	2.32e3	2.32e3	0.256	1.000	4.63	4.49	12.5	48.7577	100.0
24	60 13C6-PFDA	519.1 > 473.7	6.24e3	6.24e3	0.256	1.000	4.94	4.81	12.5	48.7577	100.0
25	61 13C7-PFUDa	570.1 > 524.8	8.57e3	8.57e3	0.256	1.000	5.28	5.16	12.5	48.7577	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	8.21e2	0.256		3.50		0.000		
27	63 Total PFOA	413 > 368.7	2.38e2	8.26e3	0.256		3.90		0.361	0.3513	
28	64 Total PFOS	499 > 79.9	0.00e0	2.10e3	0.256		4.50		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.01e3	0.256		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	1.75e3	0.256		5.20		0.000		

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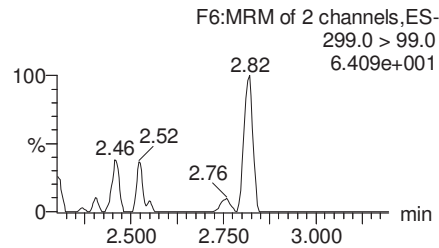
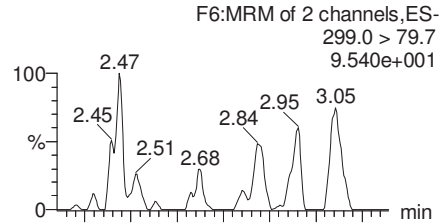
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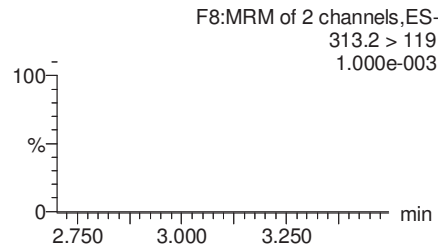
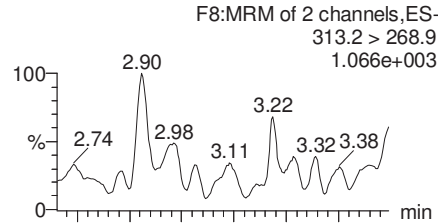
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Name: 180114M1_32, Date: 14-Jan-2018, Time: 19:33:48, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

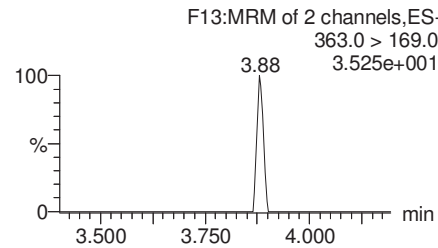
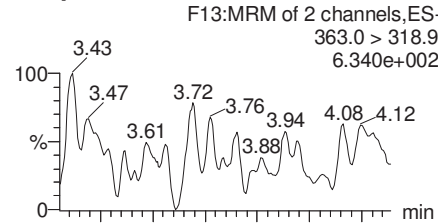
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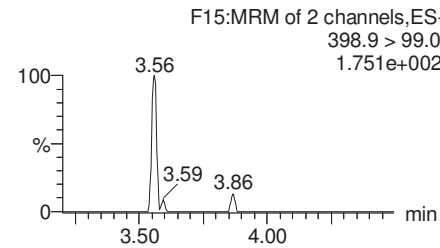
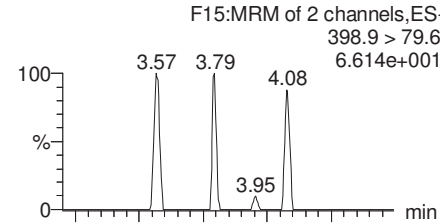
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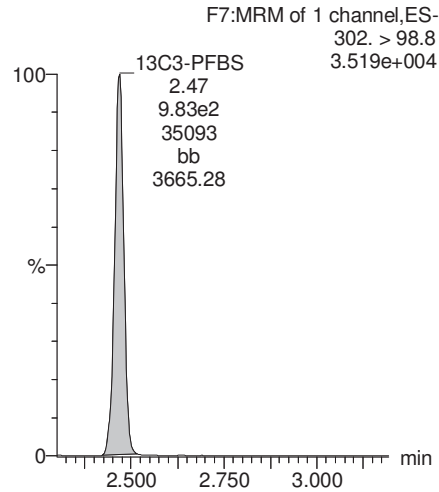
PFHpA



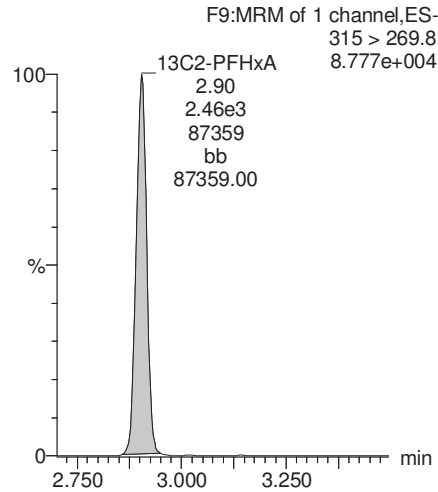
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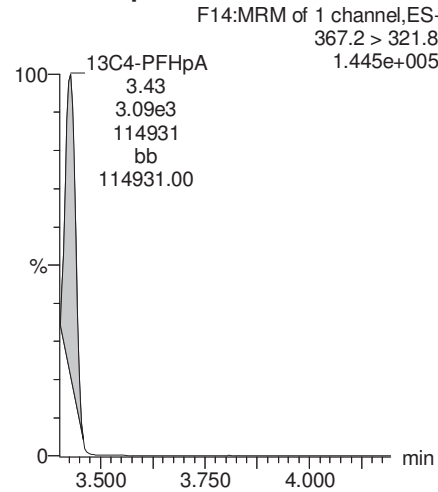
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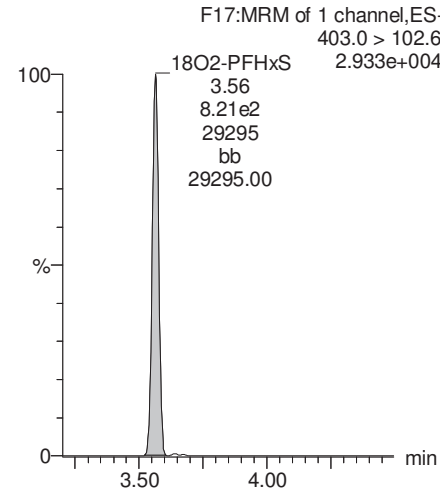
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13C4-PFHpA



18O2-PFHxS



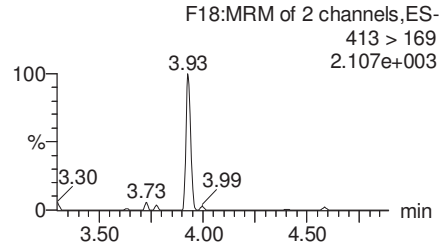
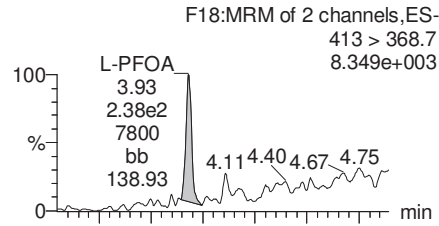
Vista Analytical Laboratory

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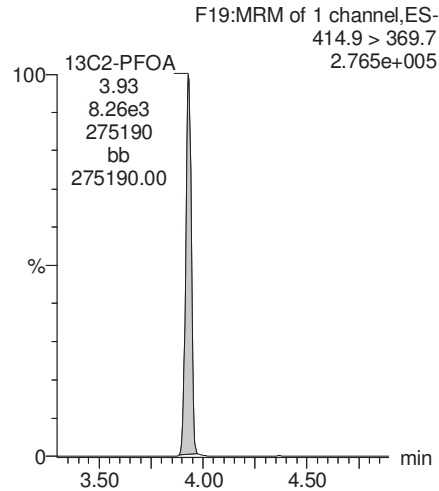
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Name: 180114M1_32, Date: 14-Jan-2018, Time: 19:33:48, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

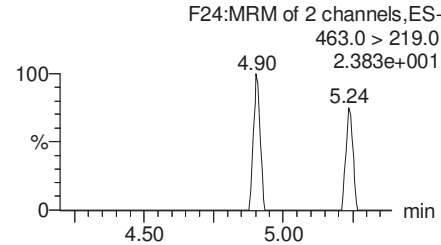
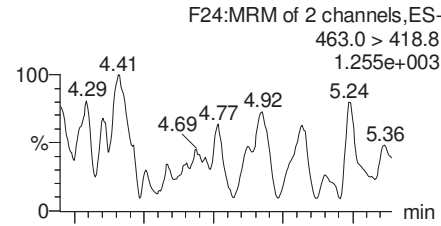
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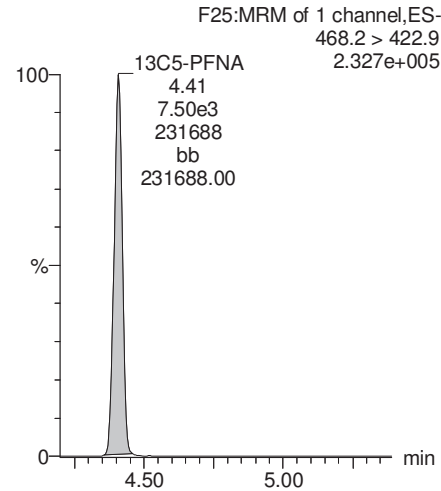
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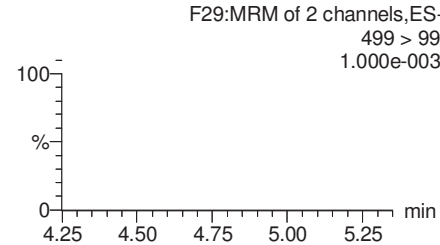
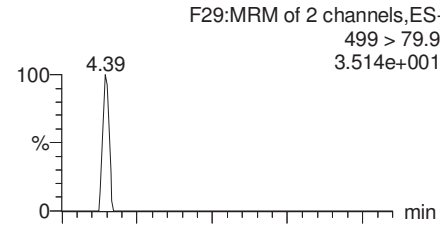
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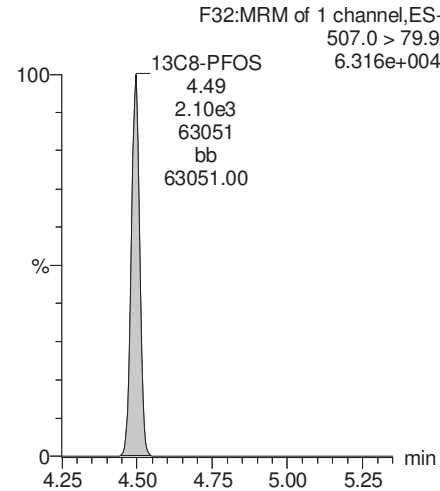
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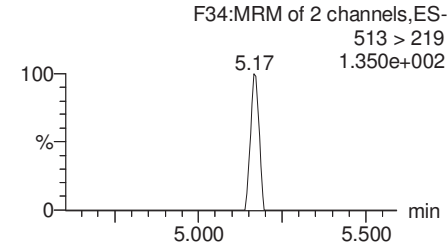
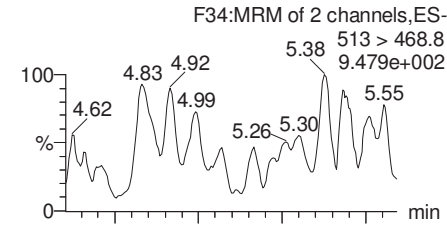
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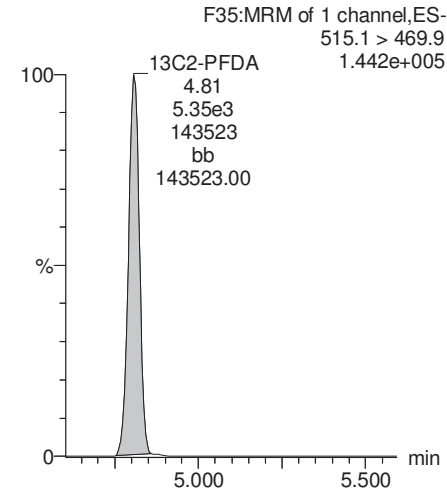
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PFDA



13C2-PFDA



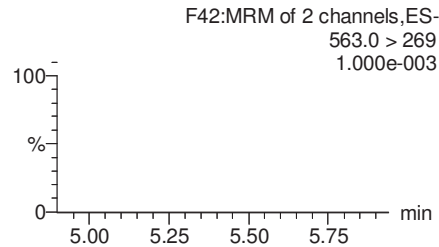
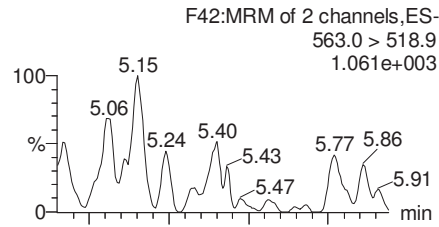
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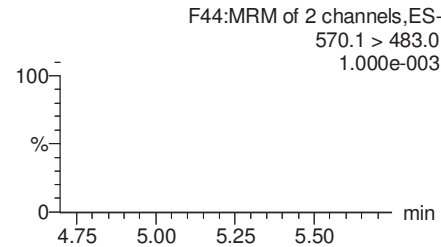
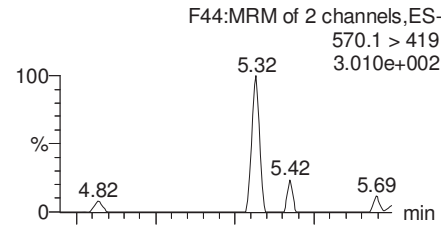
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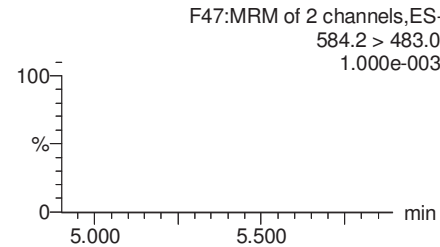
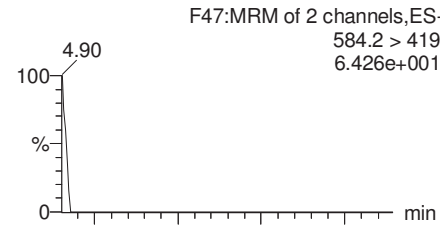
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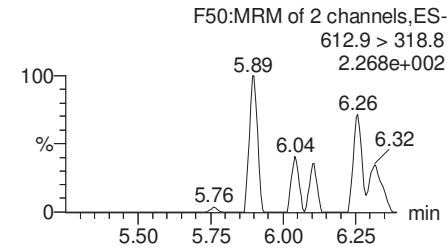
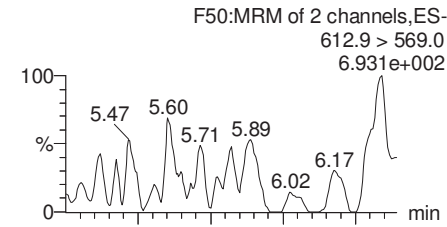
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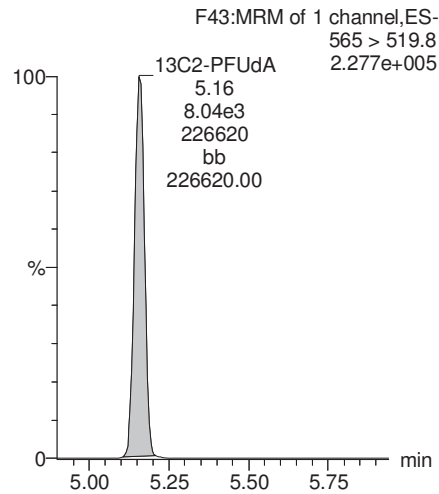
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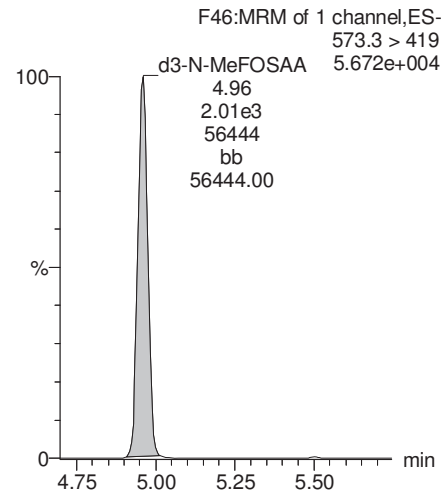
PFDaA



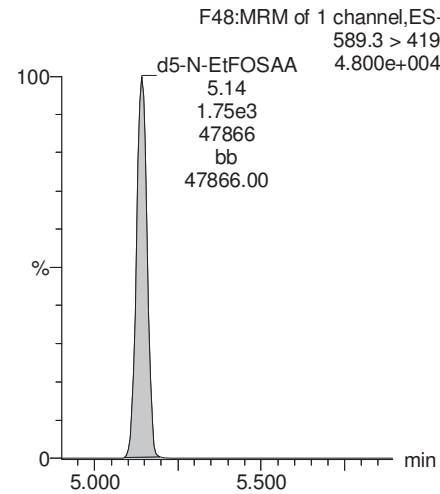
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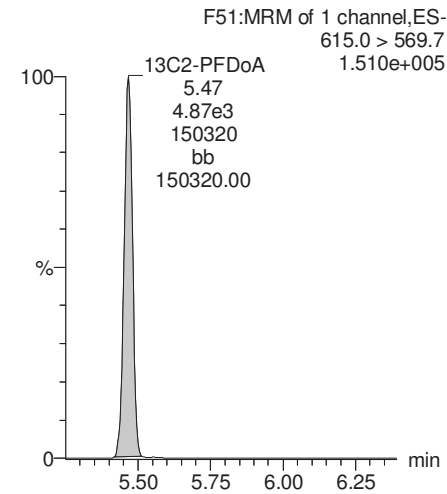
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d5-N-EtFOSAA



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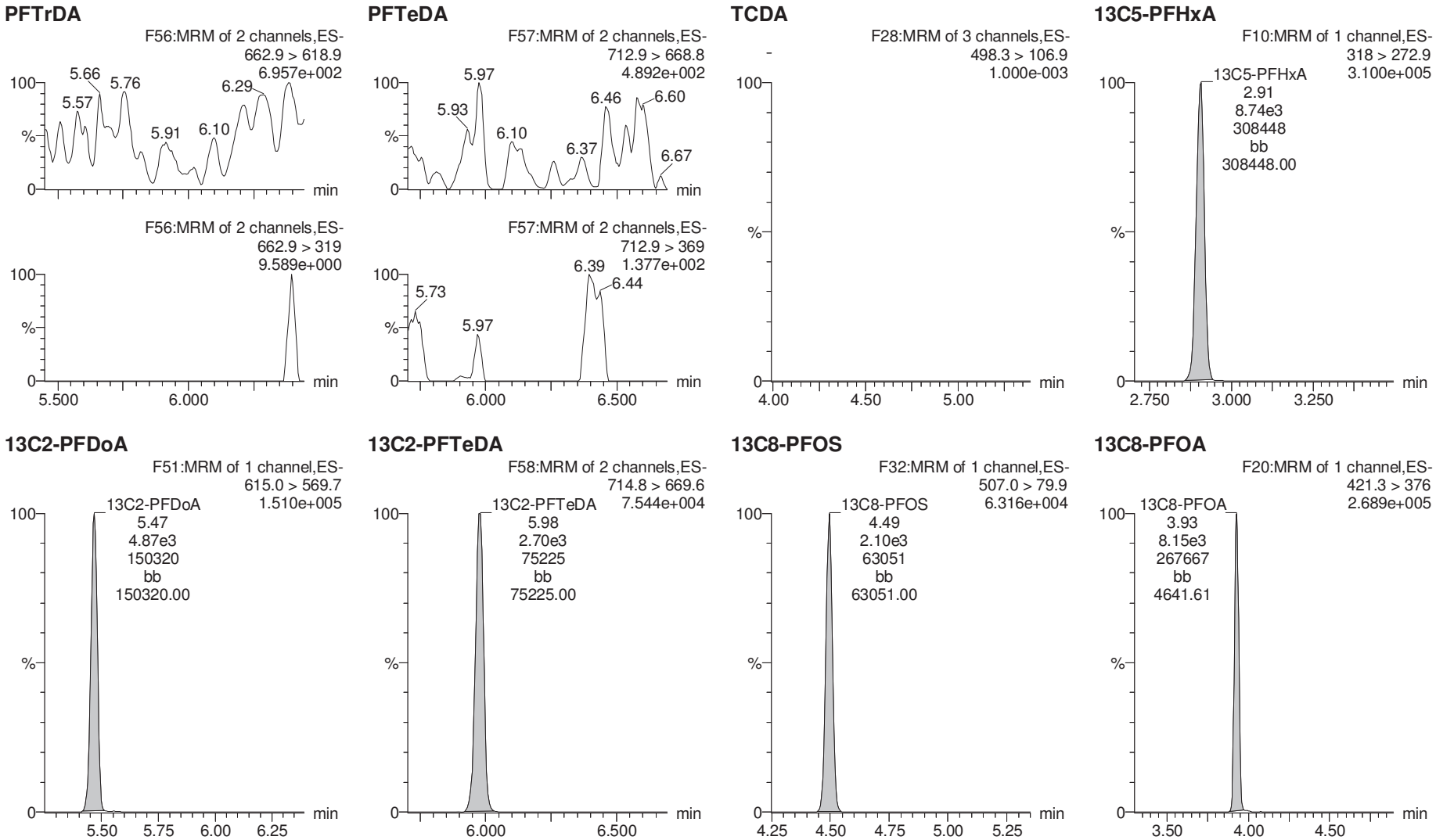


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Vista Analytical Laboratory

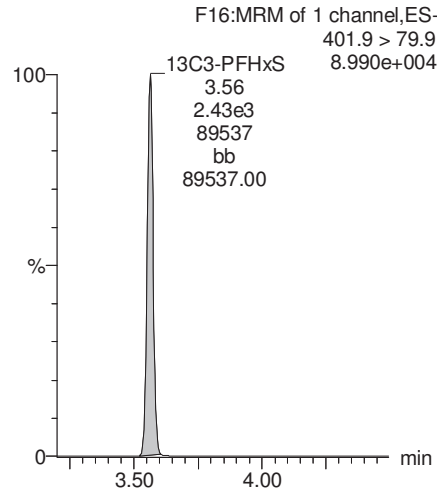
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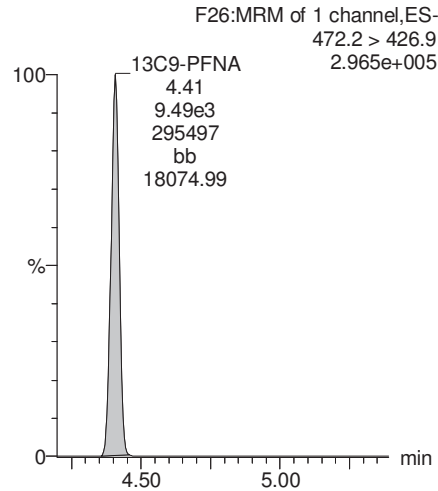
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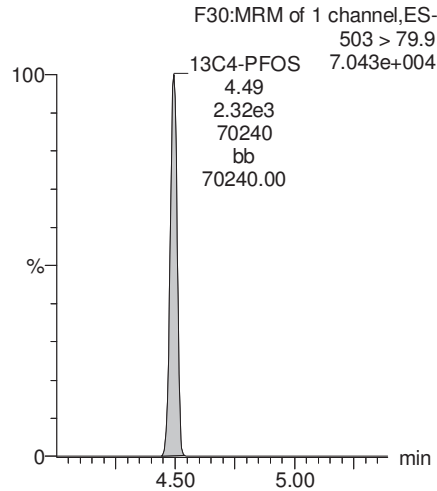
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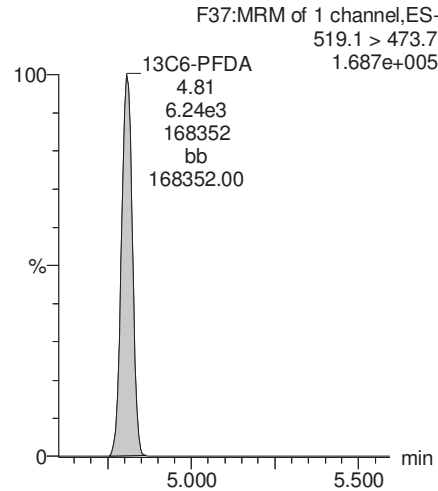
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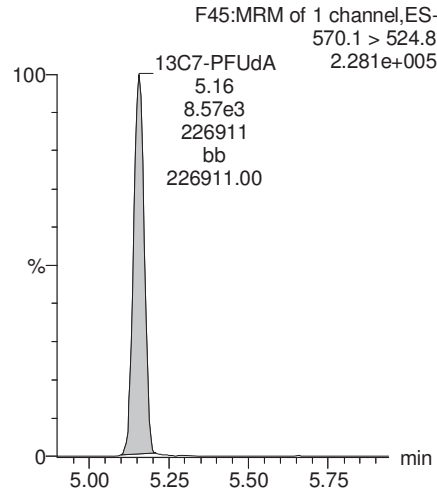
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-13.qld

Last Altered: Tuesday, January 16, 2018 11:16:31 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:16:49 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_13, Date: 12-Jan-2018, Time: 05:53:01, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		7.15e2	0.233		2.66				
2	4 PFHxA	313.2 > 268.9		1.75e3	0.233		3.15				
3	5 PFHpA	363.0 > 318.9		4.38e3	0.233		3.78				
4	6 L-PFHxS	398.9 > 79.6		5.61e2	0.233		3.94				
5	9 L-PFOA	413 > 368.7	2.10e2	5.67e3	0.233		4.31	4.22	0.462	0.9424	
6	12 PFNA	463.0 > 418.8		5.94e3	0.233		4.81				
7	13 PFOSA	498.1 > 77.8		7.56e2	0.233		4.87				
8	16 PFDA	513 > 468.8		4.00e3	0.233		5.18				
9	18 N-MeFOSAA	570.1 > 419		1.74e3	0.233		5.32				
10	19 N-EtFOSAA	584.2 > 419		2.19e3	0.233		5.48				
11	20 PFUdA	563.0 > 518.9		5.04e3	0.233		5.50				
12	22 PFDoA	612.9 > 569.0		2.81e3	0.233		5.77				

Dataset: U:\Q4.PRO\results\180111M2\180111M2-13.qld

Last Altered: Tuesday, January 16, 2018 11:16:31 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:16:57 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_13, Date: 12-Jan-2018, Time: 05:53:01, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.81e3	0.233		6.00				
2	25 PFTeDA	712.9 > 668.8		1.43e3	0.233		6.22				
3	33 13C3-PFBS	302. > 98.8	7.15e2	6.01e3	0.233	0.095	2.77	2.59	1.49	67.0053	124.8
4	34 13C2-PFHxA	315 > 269.8	1.75e3	6.01e3	0.233	0.597	3.15	3.08	3.65	26.2351	122.2
5	35 13C4-PFHpA	367.2 > 321.8	4.38e3	6.01e3	0.233	0.604	3.78	3.70	9.10	64.6917	120.5
6	36 18O2-PFHxS	403.0 > 102.6	5.61e2	1.83e3	0.233	0.293	3.94	3.85	3.84	56.1989	104.7
7	37 13C2-6:2 FTS	429.1 > 408.9	1.12e3	5.62e3	0.233	0.215	4.25	4.17	2.48	49.5635	92.3
8	38 13C2-PFOA	414.9 > 369.7	5.67e3	5.62e3	0.233	0.916	4.31	4.22	12.6	59.0728	110.0
9	39 13C5-PFNA	468.2 > 422.9	5.94e3	6.24e3	0.233	0.817	4.81	4.66	11.9	62.5418	116.5
10	40 13C8-PFOSA	506.1 > 77.7	7.56e2	4.58e3	0.233	0.223	4.87	4.72	2.06	39.7326	74.0
11	41 13C8-PFOS	507.0 > 79.9	1.38e3	1.61e3	0.233	0.875	4.89	4.74	10.7	52.6875	98.1
12	42 13C2-PFDA	515.1 > 469.9	4.00e3	4.03e3	0.233	1.105	5.18	5.04	12.4	48.1793	89.7
13	43 13C2-8:2 FTS	529.1 > 508.7	4.45e2	6.01e3	0.233	0.101	5.15	5.01	0.925	39.3964	73.4
14	44 d3-N-MeFOSAA	573.3 > 419	1.74e3	4.58e3	0.233	0.345	5.32	5.18	4.75	59.0815	110.1
15	45 d5-N-EtFOSAA	589.3 > 419	2.19e3	4.58e3	0.233	0.390	5.47	5.34	5.97	65.6216	122.2
16	46 13C2-PFUDa	565 > 519.8	5.04e3	4.58e3	0.233	0.958	5.49	5.36	13.7	61.6386	114.8
17	47 13C2-PFDOa	615.0 > 569.7	2.81e3	4.58e3	0.233	0.599	5.77	5.64	7.66	54.8907	102.3
18	49 13C2-PFTeDA	714.8 > 669.6	1.43e3	4.58e3	0.233	0.282	6.22	6.11	3.92	59.6940	111.2
19	55 13C5-PFHxA	318 > 272.9	6.01e3	6.01e3	0.233	1.000	3.15	3.08	12.5	53.6826	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.83e3	1.83e3	0.233	1.000	4.02	3.85	12.5	53.6826	100.0
21	57 13C8-PFOA	421.3 > 376	5.62e3	5.62e3	0.233	1.000	4.38	4.22	12.5	53.6826	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.24e3	6.24e3	0.233	1.000	4.81	4.66	12.5	53.6826	100.0
23	59 13C4-PFOS	503 > 79.9	1.61e3	1.61e3	0.233	1.000	4.89	4.74	12.5	53.6826	100.0
24	60 13C6-PFDA	519.1 > 473.7	4.03e3	4.03e3	0.233	1.000	5.18	5.03	12.5	53.6826	100.0
25	61 13C7-PFUDa	570.1 > 524.8	4.58e3	4.58e3	0.233	1.000	5.49	5.36	12.5	53.6826	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	5.61e2	0.233		3.80		0.000		
27	63 Total PFOA	413 > 368.7	2.10e2	5.67e3	0.233		4.51		0.462	0.9424	
28	64 Total PFOS	499 > 79.9	0.00e0	1.38e3	0.233		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.74e3	0.233		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.19e3	0.233		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	2.10e2		0.233		0.00		0.462	0.9424	

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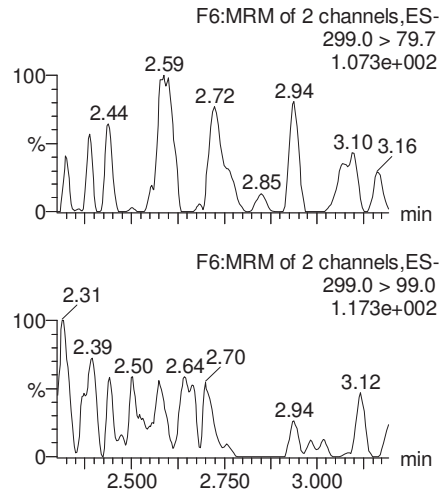
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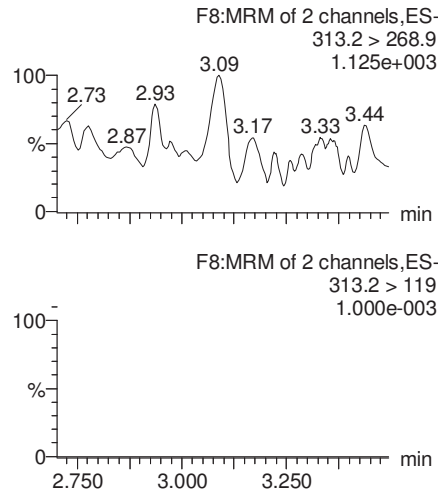
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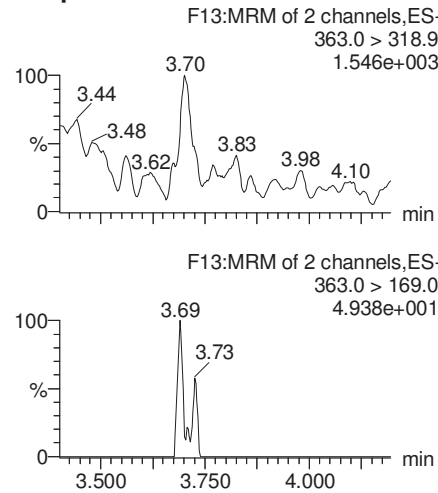
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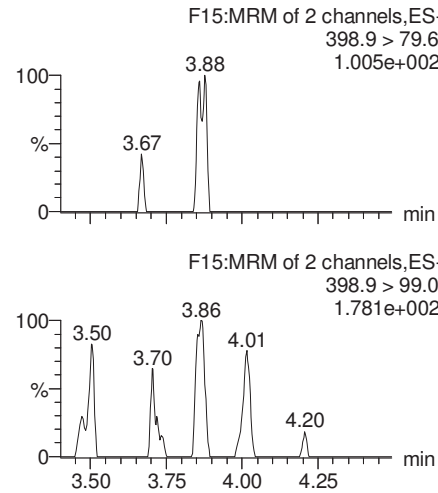
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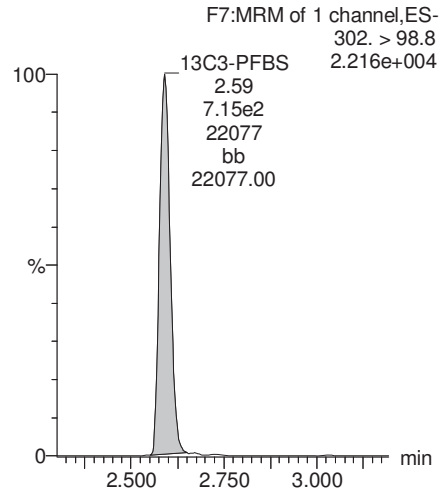
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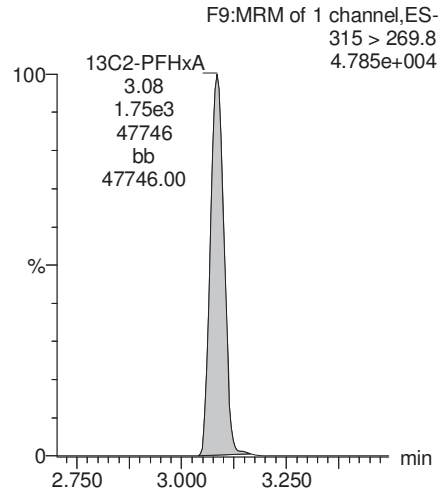
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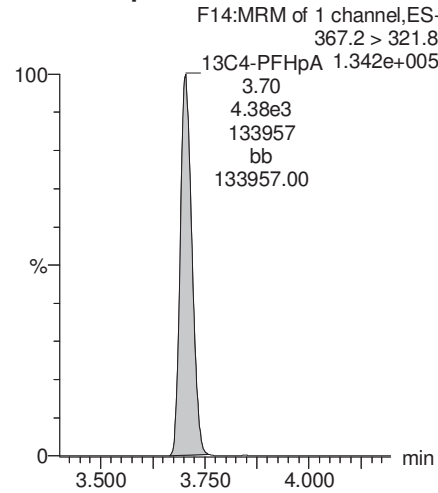
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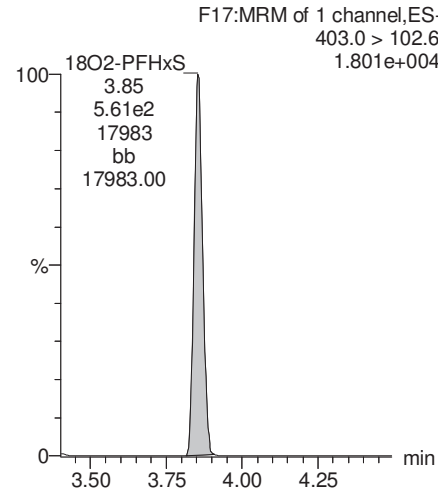
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



Vista Analytical Laboratory

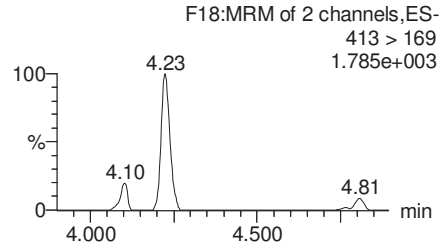
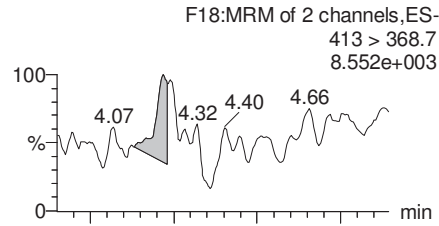
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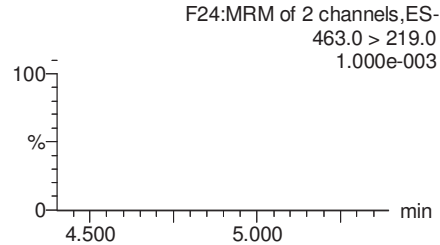
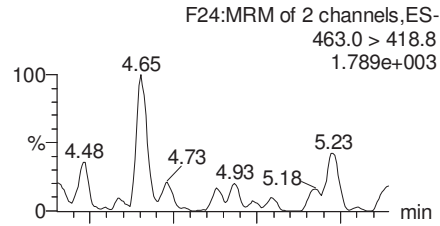
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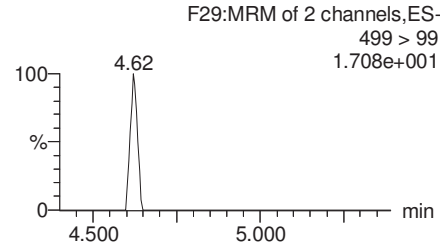
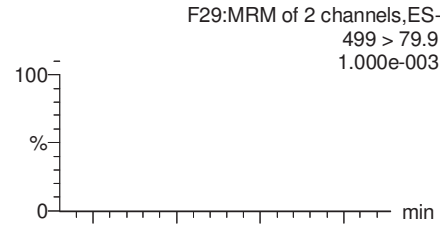
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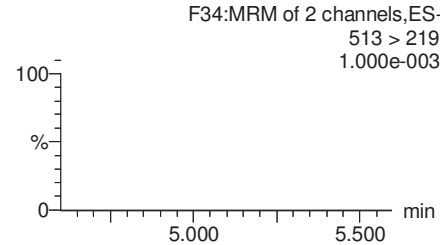
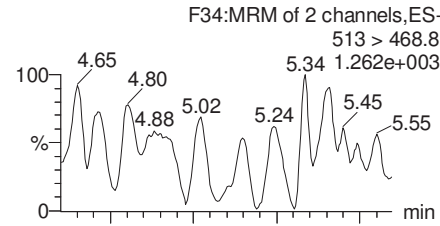
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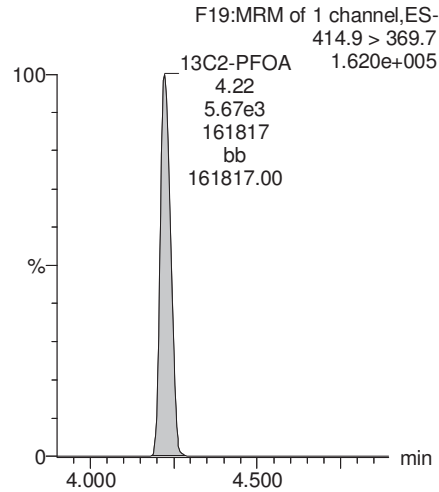
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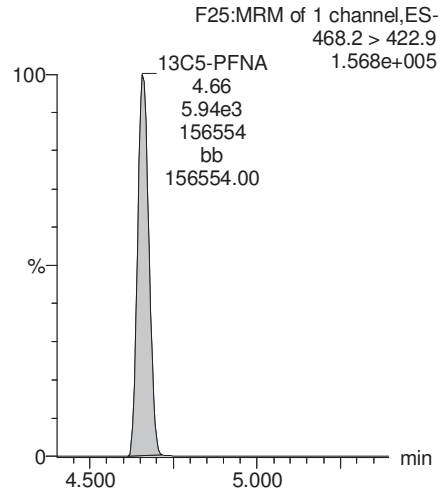
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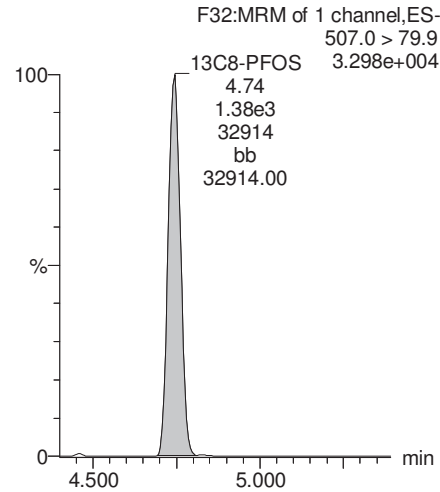
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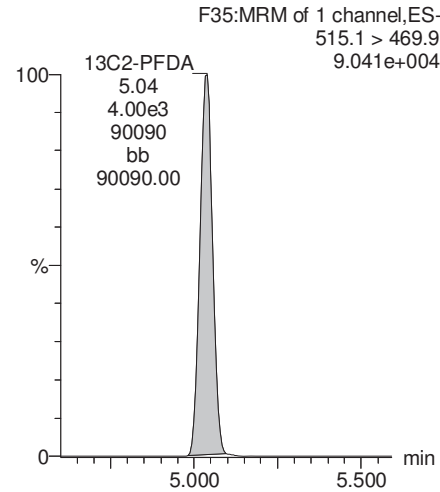
13C5-PFNA



13C8-PFOS



13C2-PFDA



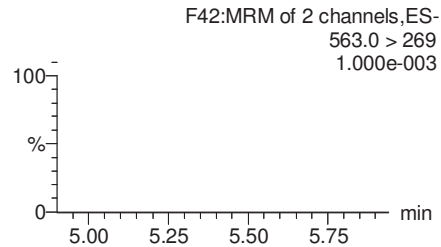
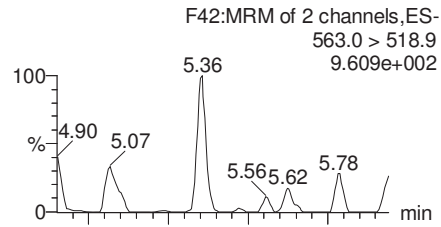
Vista Analytical Laboratory

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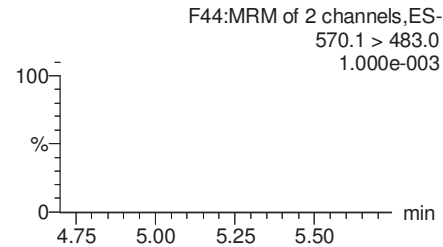
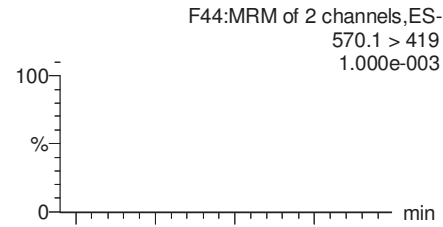
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Name: 180111M2_13, Date: 12-Jan-2018, Time: 05:53:01, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

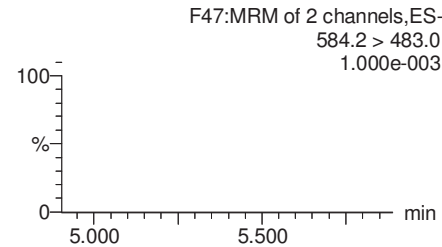
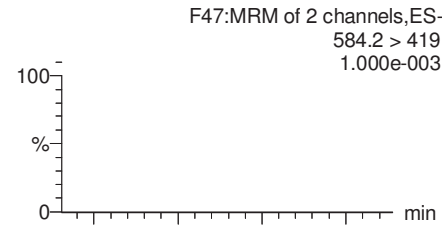
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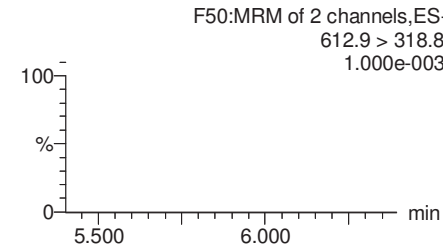
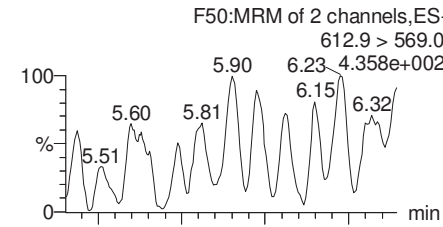
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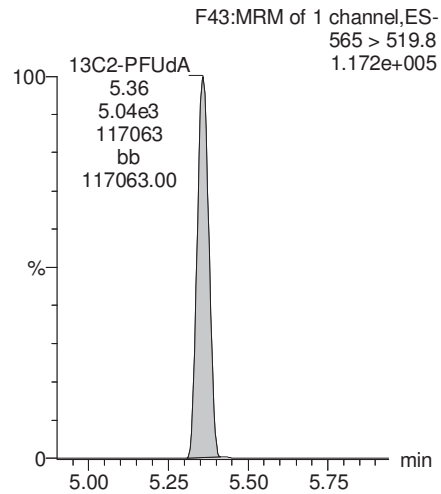
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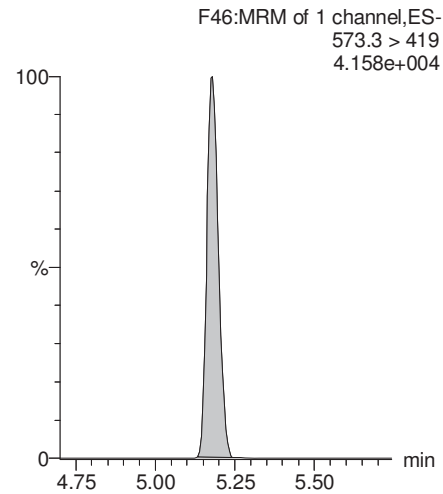
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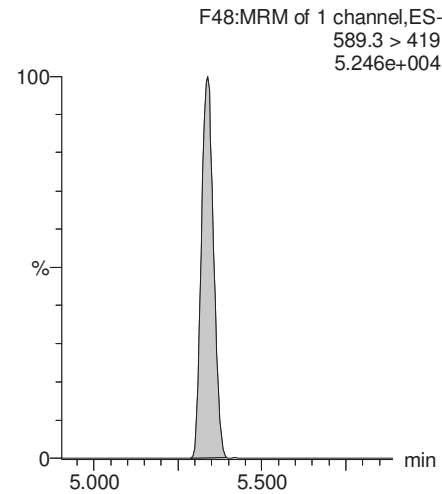
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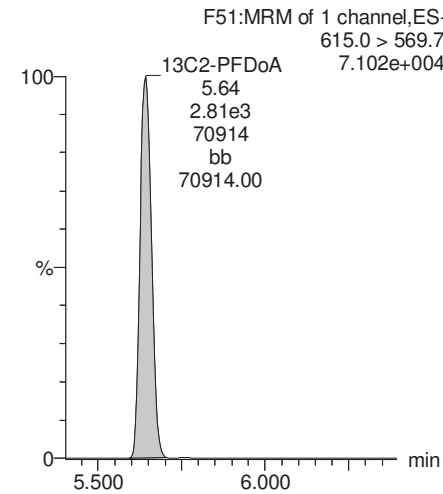
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d5-N-EtFOSAA



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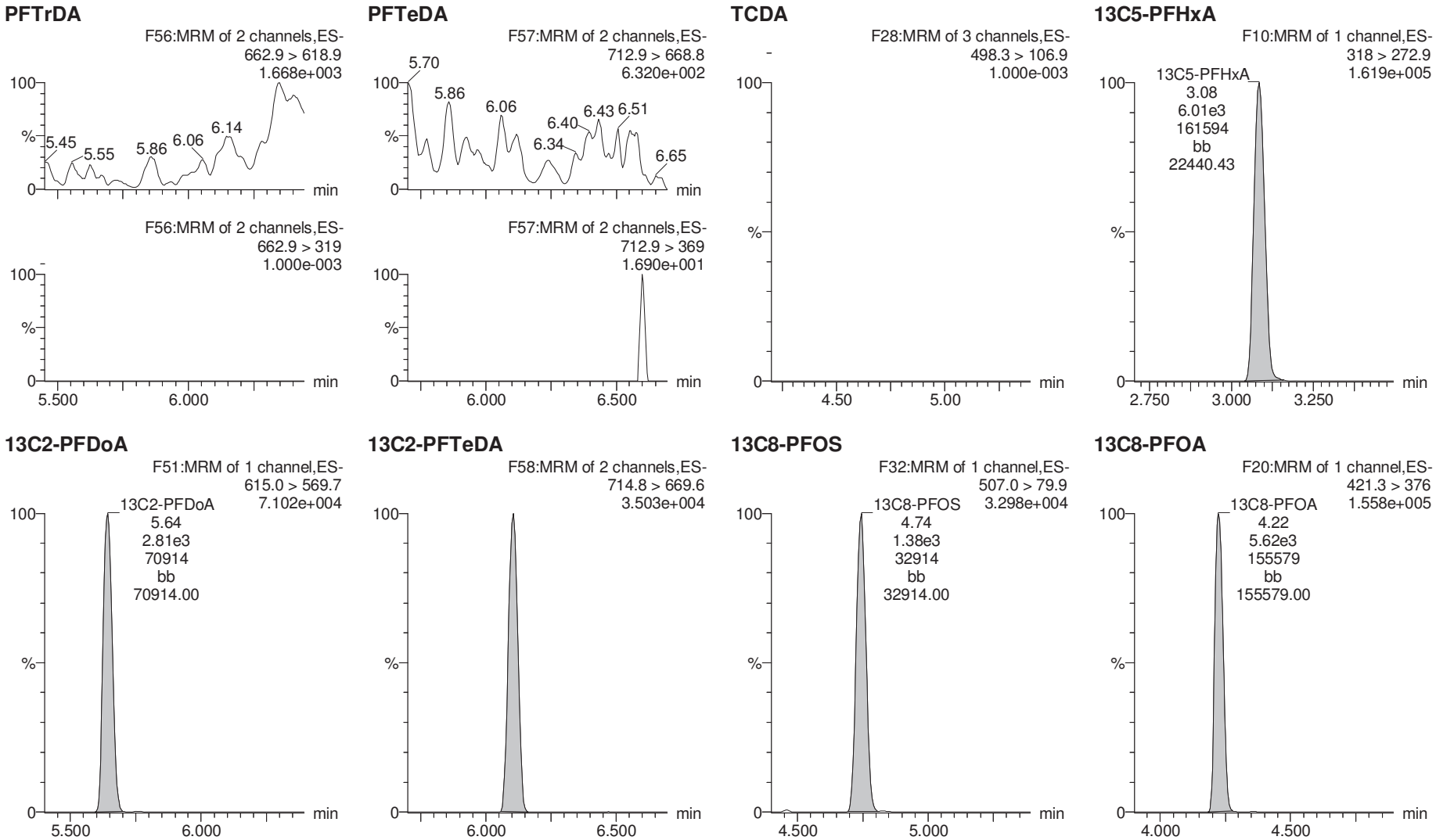


Vista Analytical Laboratory

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Vista Analytical Laboratory

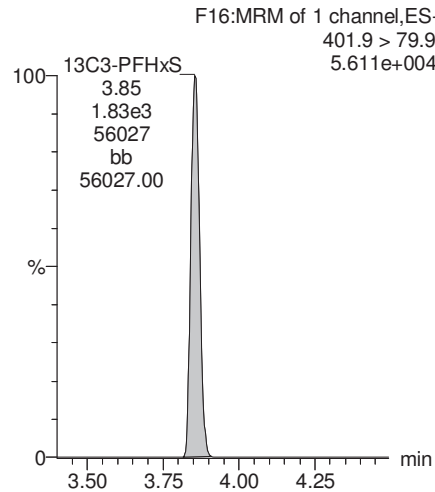
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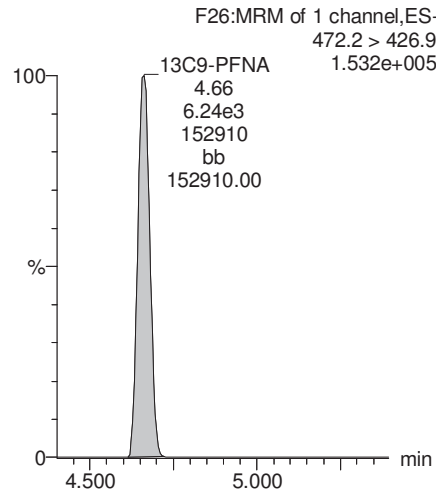
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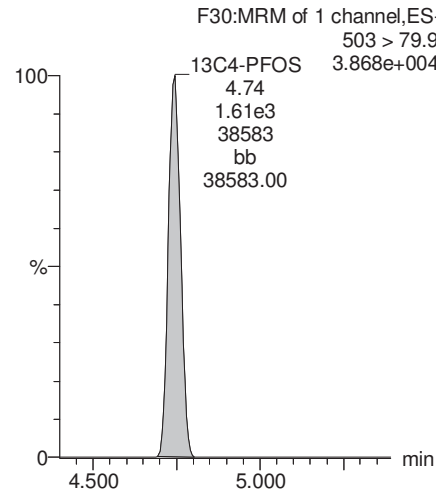
13C3-PFHxS



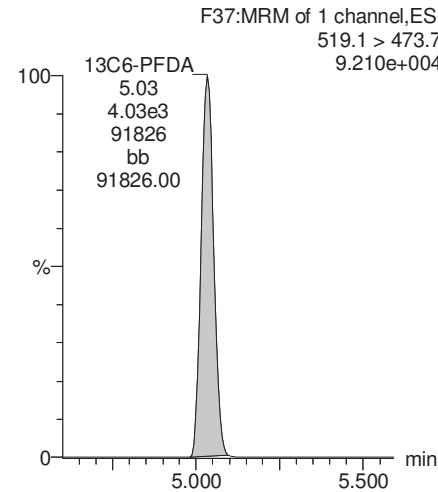
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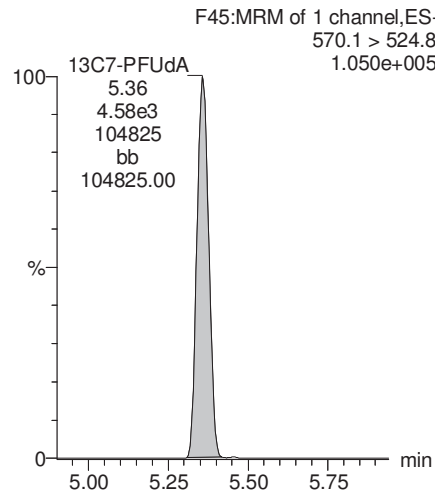
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: Untitled

Last Altered: Wednesday, January 17, 2018 16:15:12 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:15:23 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_33, Date: 14-Jan-2018, Time: 19:45:15, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		8.28e2	0.233		2.60				
2	4	PFHxA	313.2 > 268.9		2.11e3	0.233		3.00				
3	5	PFHpA	363.0 > 318.9		1.77e3	0.233		3.54				
4	6	L-PFHxS	398.9 > 79.6		7.52e2	0.233		3.68				
5	9	L-PFOA	413 > 368.7		8.30e3	0.233		4.07				
6	12	PFNA	463.0 > 418.8		6.41e3	0.233		4.54				
7	14	L-PFOS	499 > 79.9		1.86e3	0.233		4.63				
8	16	PFDA	513 > 468.8		6.22e3	0.233		4.94				
9	18	N-MeFOSAA	570.1 > 419		1.55e3	0.233		5.10				
10	19	N-EtFOSAA	584.2 > 419		2.48e3	0.233		5.27				
11	20	PFUdA	563.0 > 518.9		7.34e3	0.233		5.30				
12	22	PFDoA	612.9 > 569.0		4.86e3	0.233		5.60				

Dataset: Untitled

Last Altered: Wednesday, January 17, 2018 16:15:12 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:15:32 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_33, Date: 14-Jan-2018, Time: 19:45:15, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTeDA	662.9 > 618.9		2.70e3	0.233		5.85				
2	25 PFTeDA	712.9 > 668.8		2.70e3	0.233		6.10				
3	33 13C3-PFBS	302. > 98.8	8.28e2	6.98e3	0.233	0.097	2.60	2.46	1.48	66.0005	122.9
4	34 13C2-PFHxA	315 > 269.8	2.11e3	6.98e3	0.233	0.633	3.00	2.90	3.79	25.6893	119.6
5	35 13C4-PFHpA	367.2 > 321.8	1.77e3	6.98e3	0.233	0.651	3.56	3.42	3.16	20.8914	38.9
6	36 18O2-PFHxS	403.0 > 102.6	7.52e2	1.63e3	0.233	0.326	3.68	3.56	5.78	76.2854	142.1
7	37 13C2-6:2 FTS	429.1 > 408.9	1.31e3	7.65e3	0.233	0.171	4.00	3.84	2.15	54.0268	100.6
8	38 13C2-PFOA	414.9 > 369.7	8.30e3	7.65e3	0.233	0.903	4.07	3.92	13.6	64.4623	120.1
9	39 13C5-PFNA	468.2 > 422.9	6.41e3	7.31e3	0.233	0.844	4.54	4.40	11.0	55.8003	103.9
10	40 13C8-PFOSA	506.1 > 77.7	6.92e2	7.57e3	0.233	0.165	4.61	4.47	1.14	29.6567	55.2
11	41 13C8-PFOS	507.0 > 79.9	1.86e3	1.89e3	0.233	0.920	4.62	4.49	12.3	57.5442	107.2
12	42 13C2-PFDA	515.1 > 469.9	6.22e3	6.96e3	0.233	1.044	4.82	4.80	11.2	45.8913	85.5
13	43 13C2-8:2 FTS	529.1 > 508.7	7.99e2	6.98e3	0.233	0.087	4.89	4.75	1.43	71.0894	132.4
14	44 d3-N-MeFOSAA	573.3 > 419	1.55e3	7.57e3	0.233	0.227	5.08	4.95	2.56	48.2825	89.9
15	45 d5-N-EtFOSAA	589.3 > 419	2.48e3	7.57e3	0.233	0.313	5.27	5.14	4.09	56.0422	104.4
16	46 13C2-PFUDa	565 > 519.8	7.34e3	7.57e3	0.233	0.899	5.28	5.15	12.1	57.9184	107.9
17	47 13C2-PFDOa	615.0 > 569.7	4.86e3	7.57e3	0.233	0.645	5.60	5.46	8.03	53.4419	99.6
18	49 13C2-PFTeDA	714.8 > 669.6	2.70e3	7.57e3	0.233	0.290	6.10	5.97	4.45	65.9377	122.8
19	55 13C5-PFHxA	318 > 272.9	6.98e3	6.98e3	0.233	1.000	3.00	2.90	12.5	53.6826	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.63e3	1.63e3	0.233	1.000	3.68	3.56	12.5	53.6826	100.0
21	57 13C8-PFOA	421.3 > 376	7.65e3	7.65e3	0.233	1.000	4.07	3.92	12.5	53.6826	100.0
22	58 13C9-PFNA	472.2 > 426.9	7.31e3	7.31e3	0.233	1.000	4.54	4.40	12.5	53.6826	100.0
23	59 13C4-PFOS	503 > 79.9	1.89e3	1.89e3	0.233	1.000	4.63	4.49	12.5	53.6826	100.0
24	60 13C6-PFDA	519.1 > 473.7	6.96e3	6.96e3	0.233	1.000	4.94	4.80	12.5	53.6826	100.0
25	61 13C7-PFUDa	570.1 > 524.8	7.57e3	7.57e3	0.233	1.000	5.28	5.15	12.5	53.6826	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	7.52e2	0.233		3.50		0.000		
27	63 Total PFOA	413 > 368.7	3.22e2	8.30e3	0.233		3.90		0.484	0.8347	
28	64 Total PFOS	499 > 79.9	0.00e0	1.86e3	0.233		4.50		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.55e3	0.233		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.48e3	0.233		5.20		0.000		

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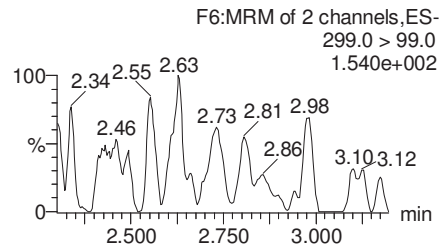
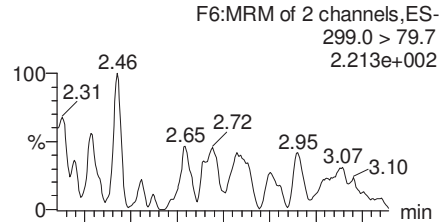
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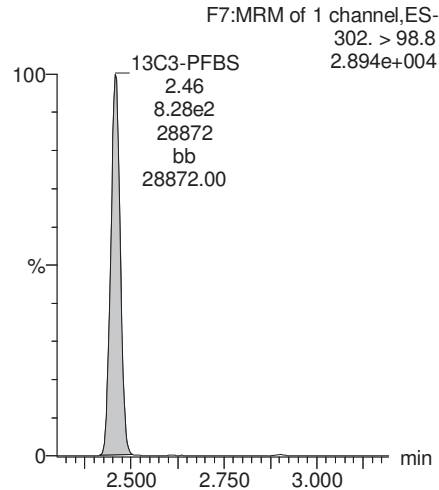
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Name: 180114M1_33, Date: 14-Jan-2018, Time: 19:45:15, ID: 1701851-05 FT-PZ-453S-20171202 0.23285, Description: FT-PZ-453S-20171202

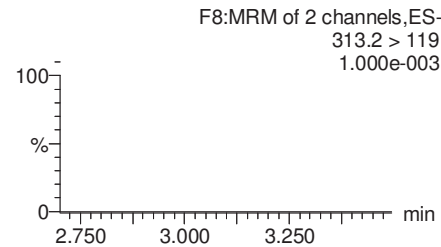
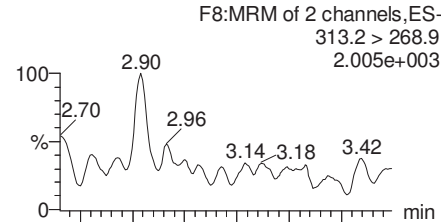
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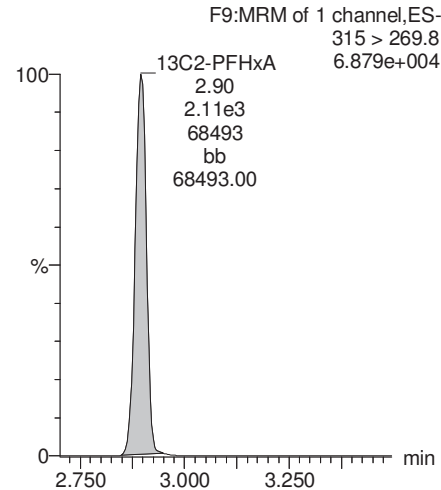
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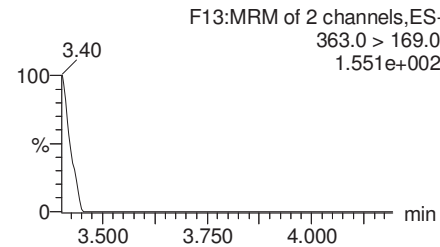
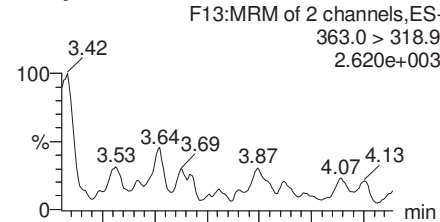
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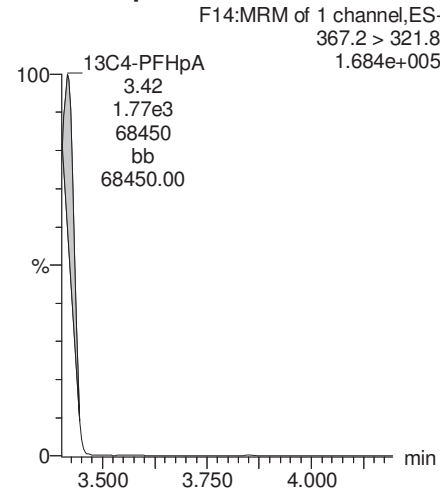
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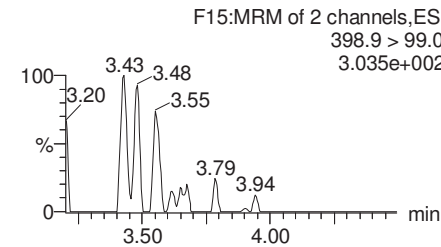
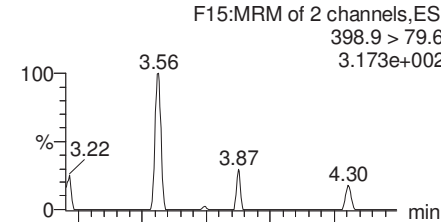
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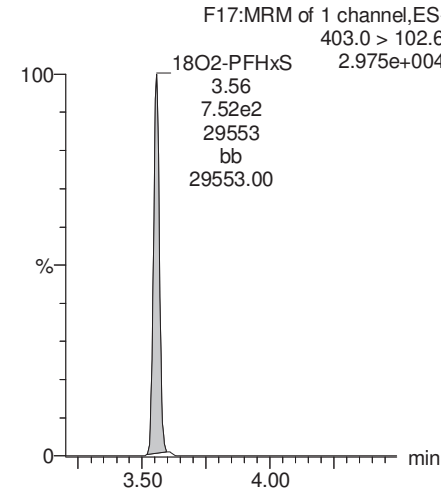
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Total PFHxS



18O2-PFHxS

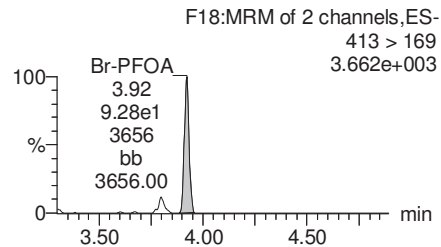
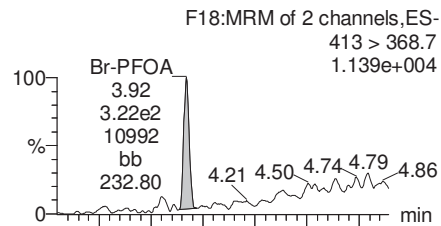


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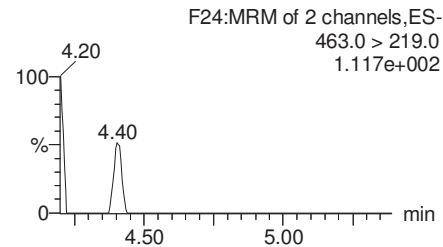
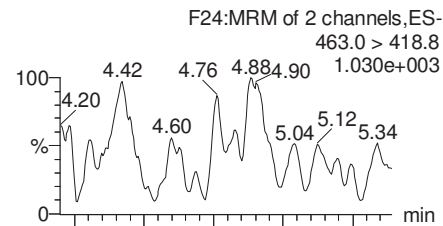
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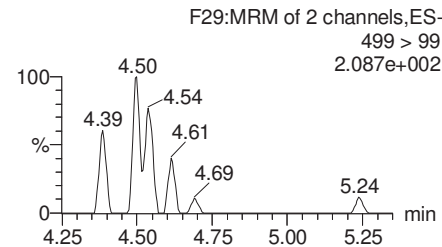
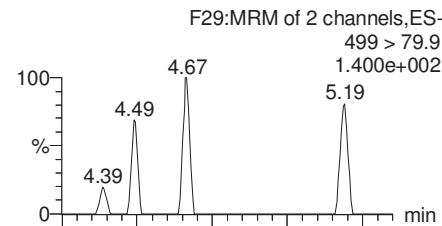
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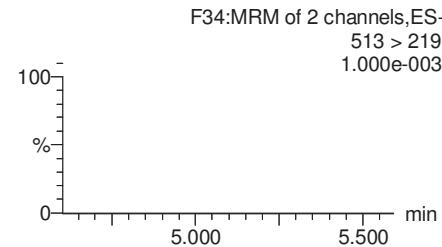
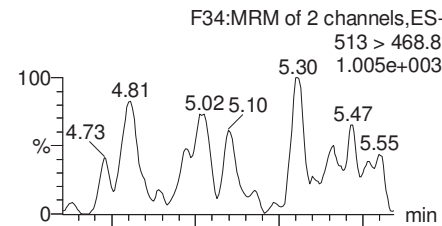
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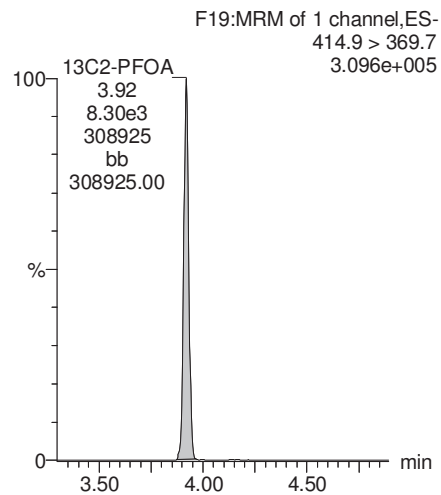
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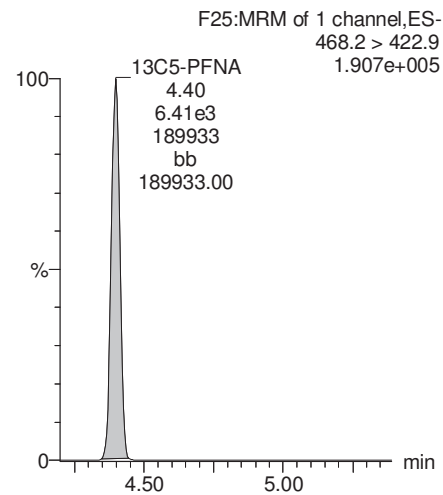
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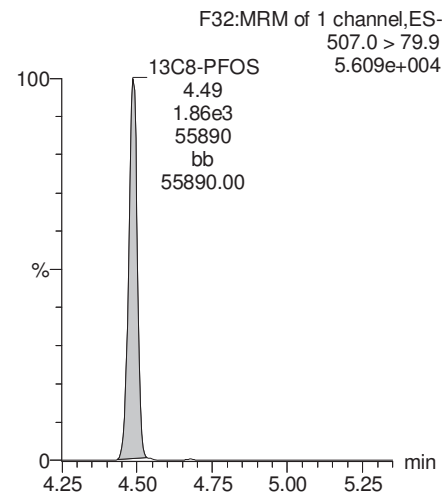
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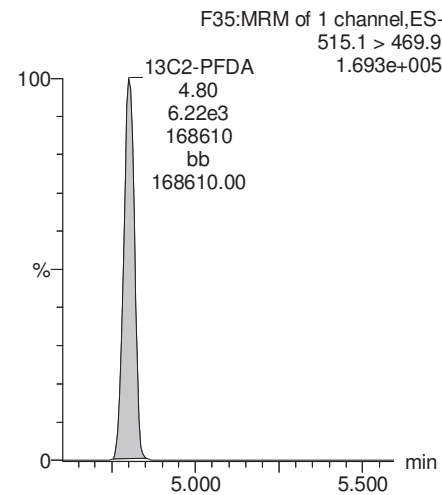
13C5-PFNA



13C8-PFOS



13C2-PFDA



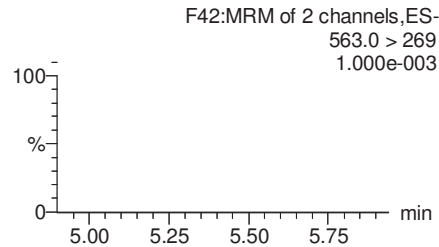
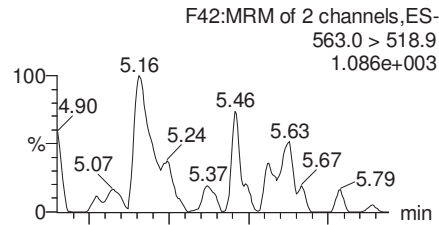
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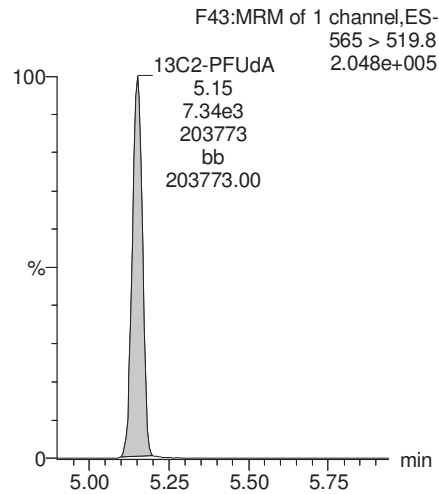
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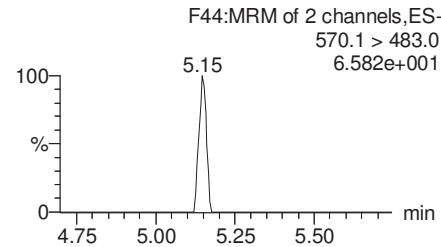
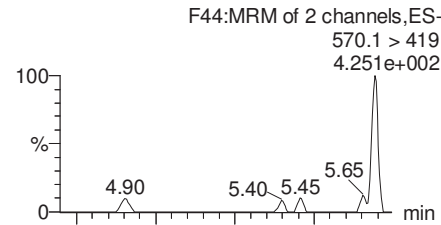
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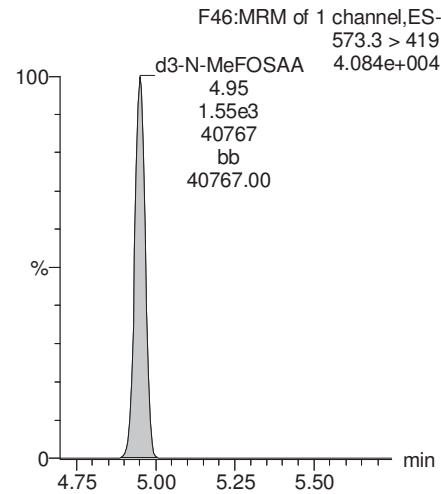
13C2-PFUdA



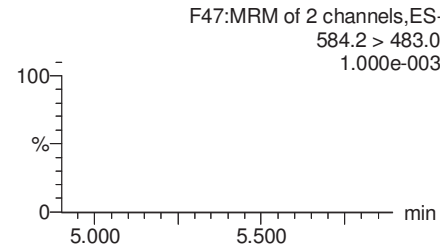
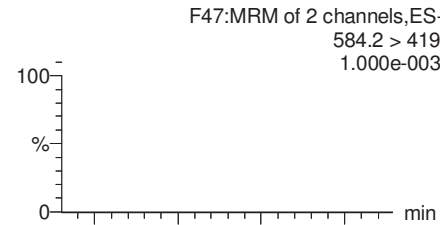
N-MeFOSAA



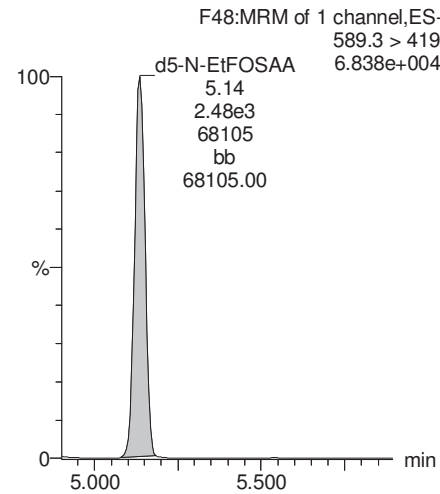
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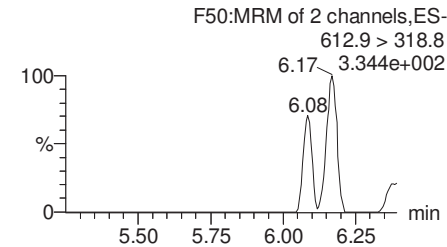
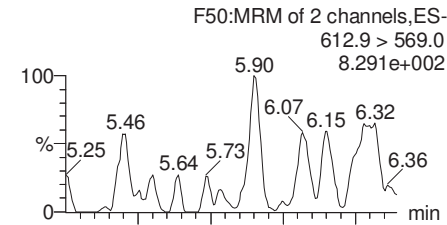
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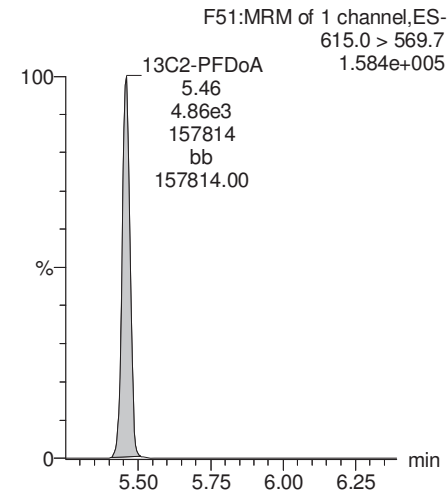
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PFDaA



13C2-PFDaA

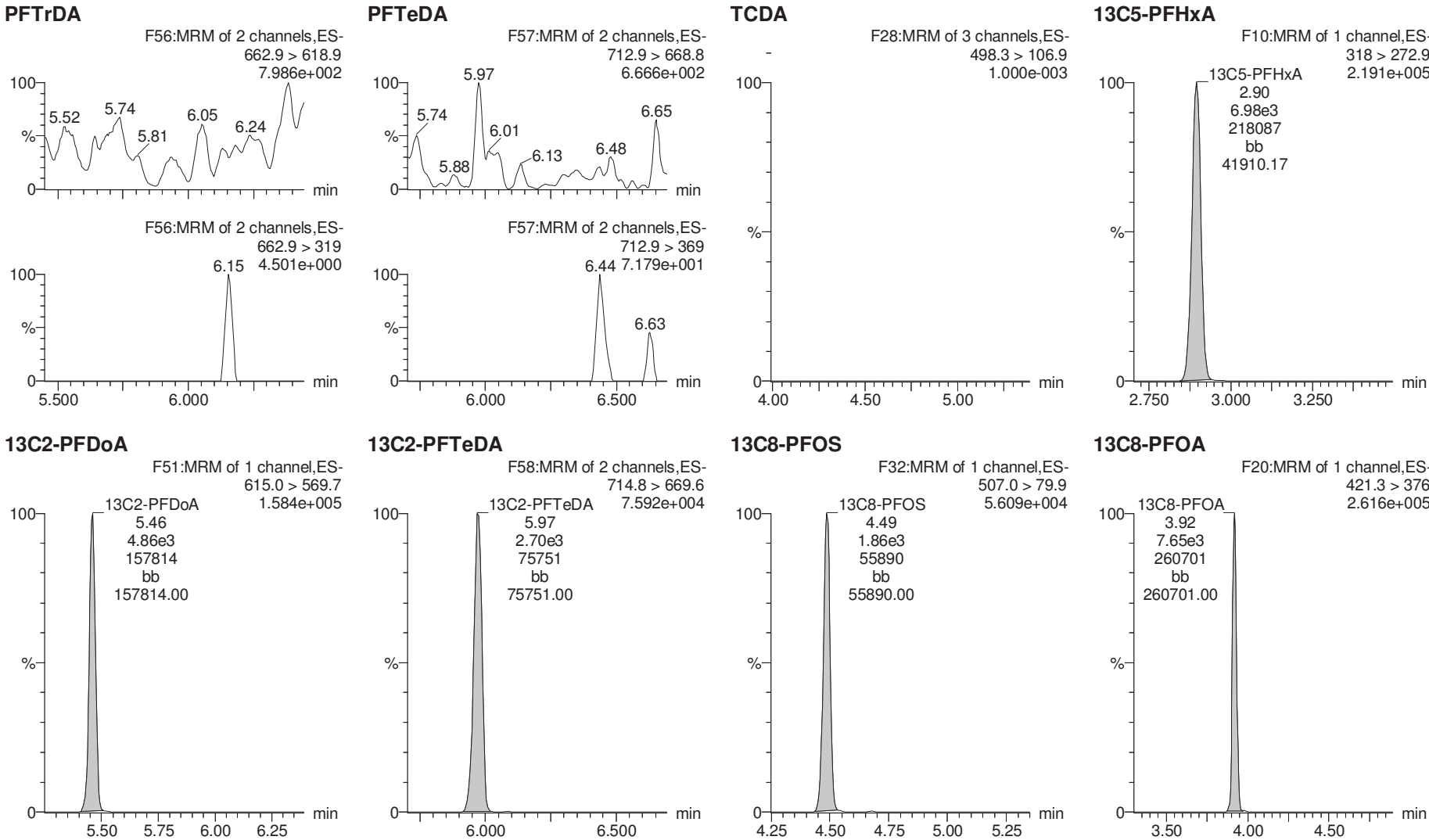


Vista Analytical Laboratory

Dataset: Untitled

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Printed: Wednesday, January 17, 2018 16:15:32 Pacific Standard Time

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Vista Analytical Laboratory

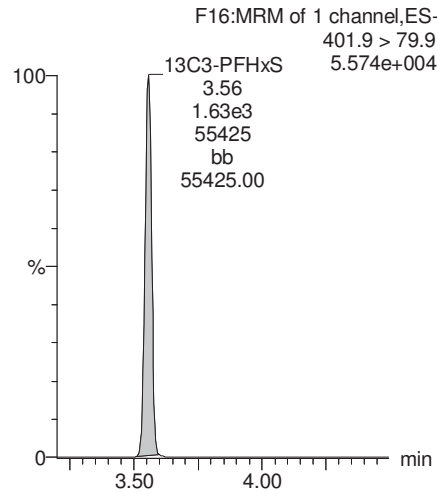
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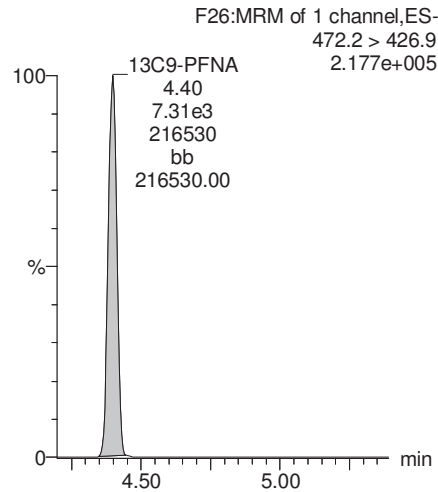
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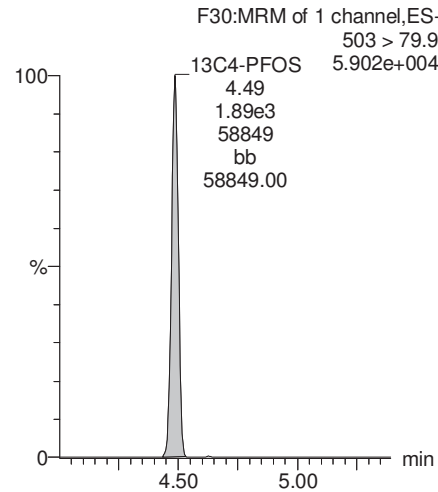
13C3-PFHxS



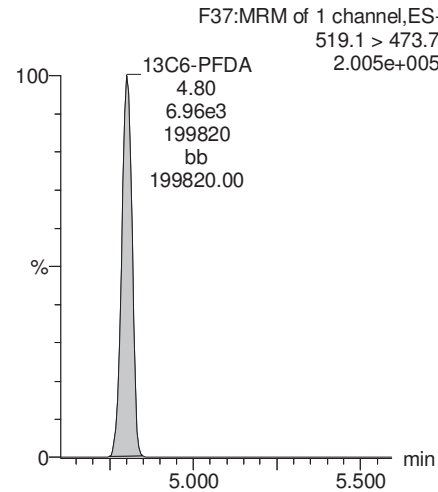
13C9-PFNA



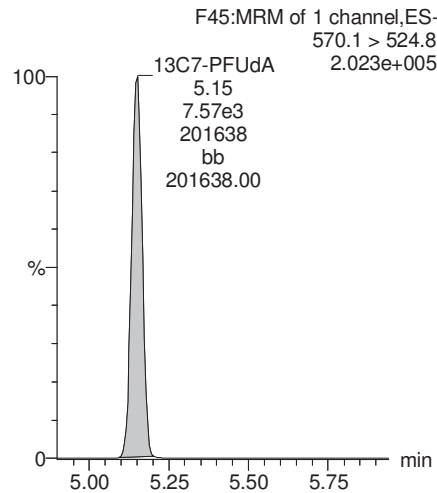
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-14.qld

Last Altered: Tuesday, January 16, 2018 11:17:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:18:15 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_14, Date: 12-Jan-2018, Time: 06:04:12, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		8.56e2	0.262		2.66				
2	4 PFHxA	313.2 > 268.9		1.93e3	0.262		3.15				
3	5 PFHpA	363.0 > 318.9		5.13e3	0.262		3.78				
4	6 L-PFHxS	398.9 > 79.6		6.81e2	0.262		3.94				
5	9 L-PFOA	413 > 368.7	1.43e2	7.19e3	0.262		4.31	4.22	0.248	0.1887	
6	12 PFNA	463.0 > 418.8		6.07e3	0.262		4.81				
7	13 PFOSA	498.1 > 77.8		8.43e2	0.262		4.87				
8	16 PFDA	513 > 468.8		3.85e3	0.262		5.18				
9	18 N-MeFOSAA	570.1 > 419		1.86e3	0.262		5.32				
10	19 N-EtFOSAA	584.2 > 419		2.28e3	0.262		5.48				
11	20 PFUdA	563.0 > 518.9		5.98e3	0.262		5.50				
12	22 PFDoA	612.9 > 569.0		3.63e3	0.262		5.77				

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-14.qld

Last Altered: Tuesday, January 16, 2018 11:17:43 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:18:49 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_14, Date: 12-Jan-2018, Time: 06:04:12, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		3.63e3	0.262		6.00				
2	25 PFTeDA	712.9 > 668.8		1.23e3	0.262		6.22				
3	33 13C3-PFBS	302. > 98.8	8.56e2	6.18e3	0.262	0.095	2.77	2.59	1.73	69.4626	145.4
4	34 13C2-PFHxA	315 > 269.8	1.93e3	6.18e3	0.262	0.597	3.15	3.08	3.91	25.0612	131.1
5	35 13C4-PFHpA	367.2 > 321.8	5.13e3	6.18e3	0.262	0.604	3.78	3.70	10.4	65.6868	137.5
6	36 18O2-PFHxS	403.0 > 102.6	6.81e2	2.01e3	0.262	0.293	3.94	3.86	4.23	55.2055	115.5
7	37 13C2-6:2 FTS	429.1 > 408.9	1.43e3	6.66e3	0.262	0.215	4.25	4.17	2.69	47.7608	99.9
8	38 13C2-PFOA	414.9 > 369.7	7.19e3	6.66e3	0.262	0.916	4.31	4.22	13.5	56.3127	117.8
9	39 13C5-PFNA	468.2 > 422.9	6.07e3	6.07e3	0.262	0.817	4.81	4.66	12.5	58.4535	122.3
10	40 13C8-PFOSA	506.1 > 77.7	8.43e2	6.34e3	0.262	0.223	4.87	4.72	1.66	28.4971	59.6
11	41 13C8-PFOS	507.0 > 79.9	1.86e3	1.62e3	0.262	0.875	4.89	4.75	14.4	62.8903	131.6
12	42 13C2-PFDA	515.1 > 469.9	3.85e3	4.40e3	0.262	1.105	5.18	5.04	10.9	37.7772	79.1
13	43 13C2-8:2 FTS	529.1 > 508.7	9.47e2	6.18e3	0.262	0.101	5.15	5.01	1.92	72.6492	152.0
14	44 d3-N-MeFOSAA	573.3 > 419	1.86e3	6.34e3	0.262	0.345	5.32	5.18	3.66	40.5868	84.9
15	45 d5-N-EtFOSAA	589.3 > 419	2.28e3	6.34e3	0.262	0.390	5.47	5.34	4.50	44.0915	92.3
16	46 13C2-PFUDa	565 > 519.8	5.98e3	6.34e3	0.262	0.958	5.49	5.36	11.8	47.0408	98.4
17	47 13C2-PFDOa	615.0 > 569.7	3.63e3	6.34e3	0.262	0.599	5.77	5.64	7.17	45.7287	95.7
18	49 13C2-PFTeDA	714.8 > 669.6	1.23e3	6.34e3	0.262	0.282	6.22	6.11	2.42	32.8473	68.7
19	55 13C5-PFHxA	318 > 272.9	6.18e3	6.18e3	0.262	1.000	3.15	3.08	12.5	47.7847	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.01e3	2.01e3	0.262	1.000	4.02	3.86	12.5	47.7847	100.0
21	57 13C8-PFOA	421.3 > 376	6.66e3	6.66e3	0.262	1.000	4.38	4.23	12.5	47.7847	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.07e3	6.07e3	0.262	1.000	4.81	4.66	12.5	47.7847	100.0
23	59 13C4-PFOS	503 > 79.9	1.62e3	1.62e3	0.262	1.000	4.89	4.75	12.5	47.7847	100.0
24	60 13C6-PFDA	519.1 > 473.7	4.40e3	4.40e3	0.262	1.000	5.18	5.04	12.5	47.7847	100.0
25	61 13C7-PFUDa	570.1 > 524.8	6.34e3	6.34e3	0.262	1.000	5.49	5.36	12.5	47.7847	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	6.81e2	0.262		3.80		0.000		
27	63 Total PFOA	413 > 368.7	2.08e2	7.19e3	0.262		4.51		0.248	0.1887	
28	64 Total PFOS	499 > 79.9	0.00e0	1.86e3	0.262		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.86e3	0.262		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.28e3	0.262		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	2.08e2		0.262		0.00		0.248	0.1887	

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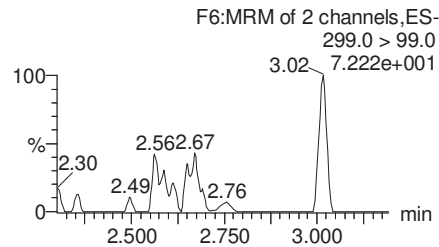
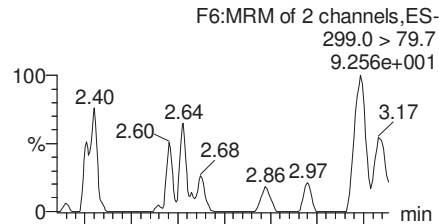
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Printed: Tuesday, January 16, 2018 11:18:49 Pacific Standard Time

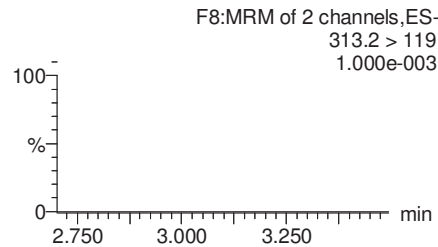
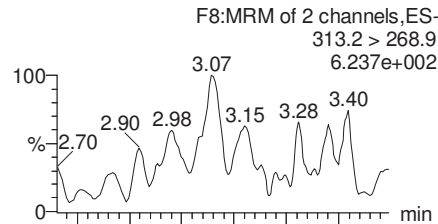
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Name: 180111M2_14, Date: 12-Jan-2018, Time: 06:04:12, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

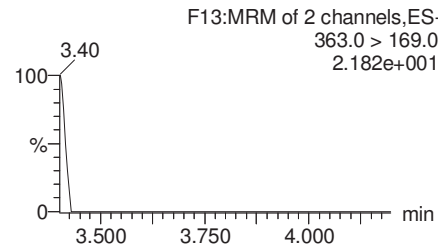
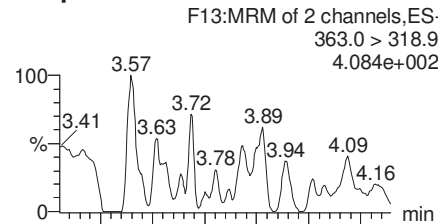
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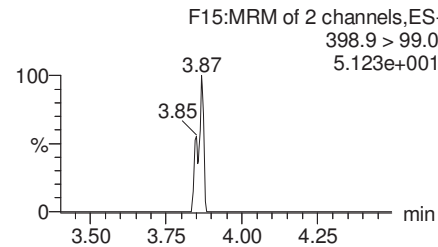
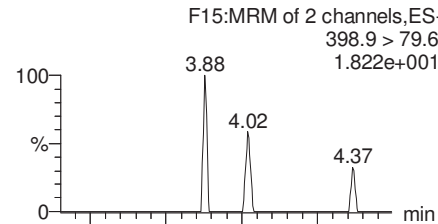
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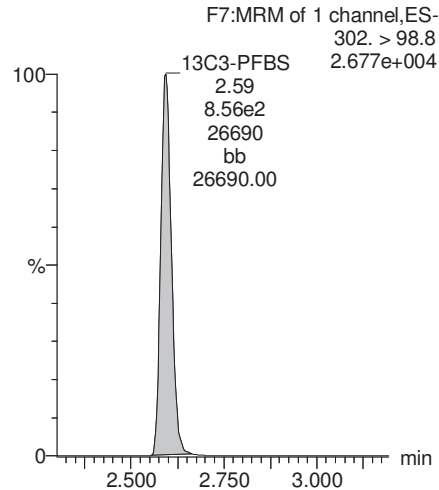
PFHpA



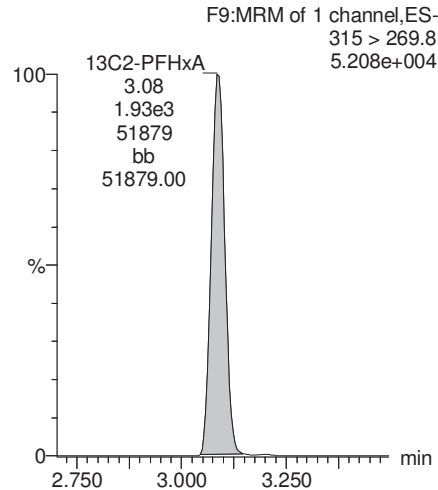
Total PFHxS



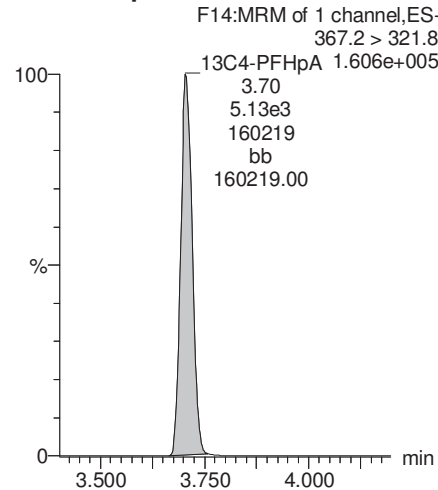
13C3-PFBS



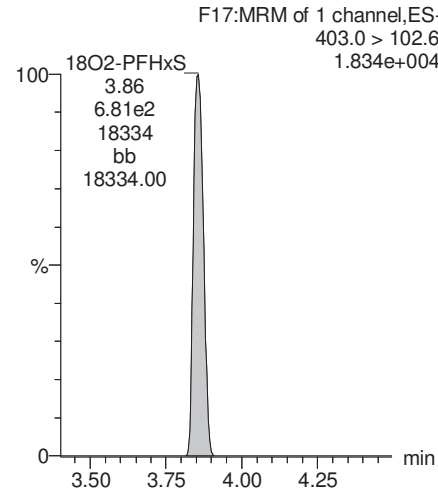
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13C4-PFHpA



18O2-PFHxS

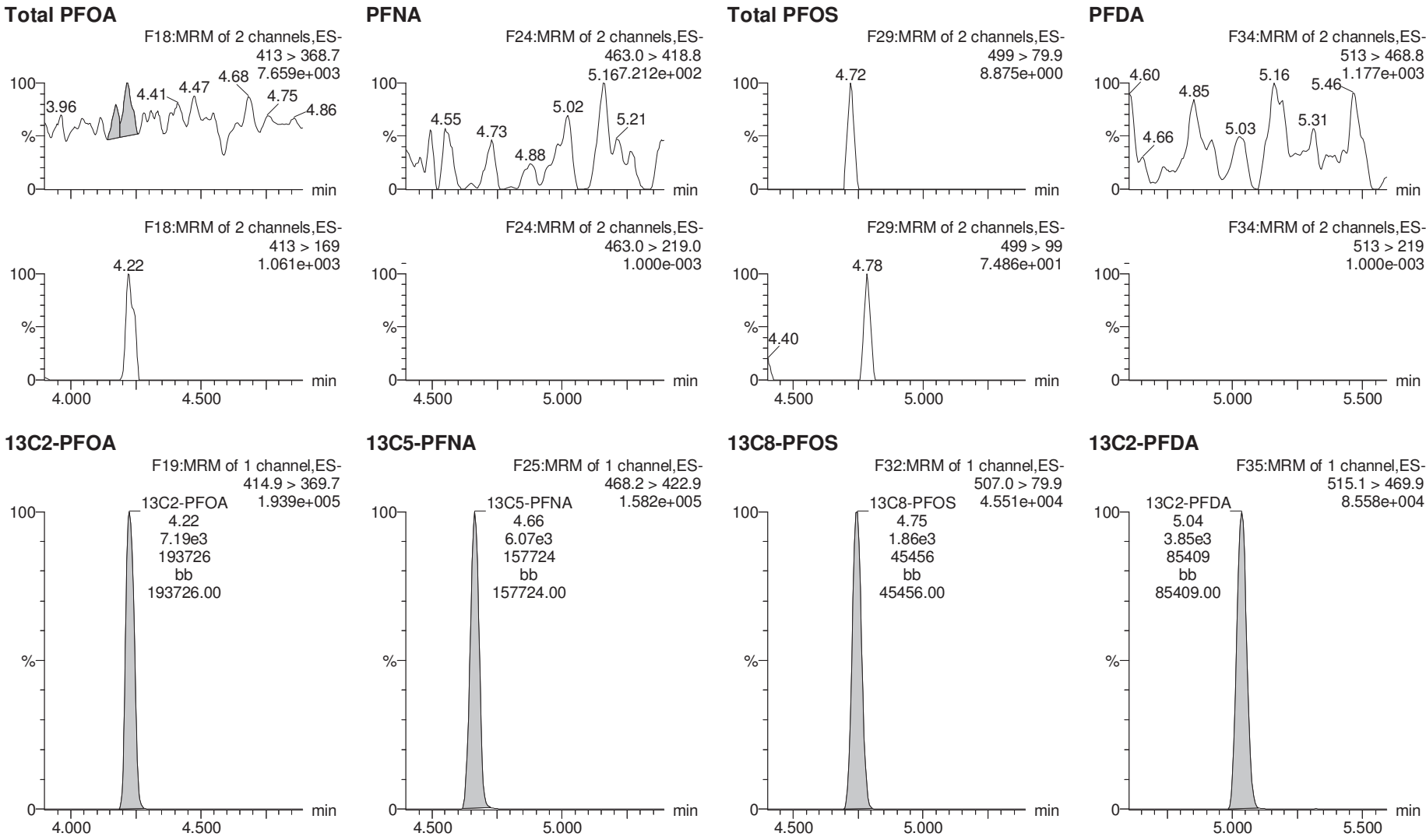


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Printed: Tuesday, January 16, 2018 11:18:49 Pacific Standard Time

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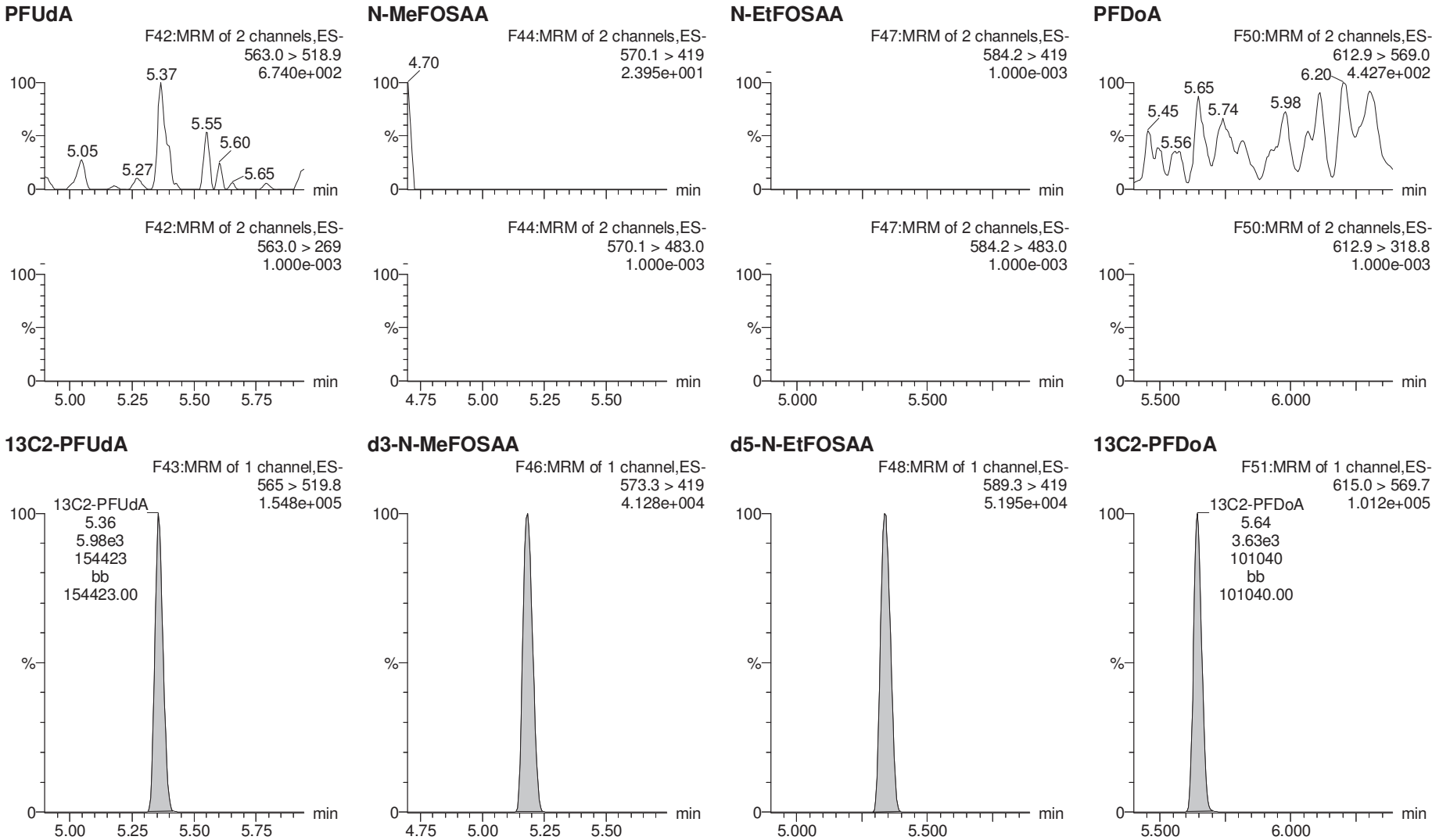
Vista Analytical Laboratory

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Printed: Tuesday, January 16, 2018 11:18:49 Pacific Standard Time

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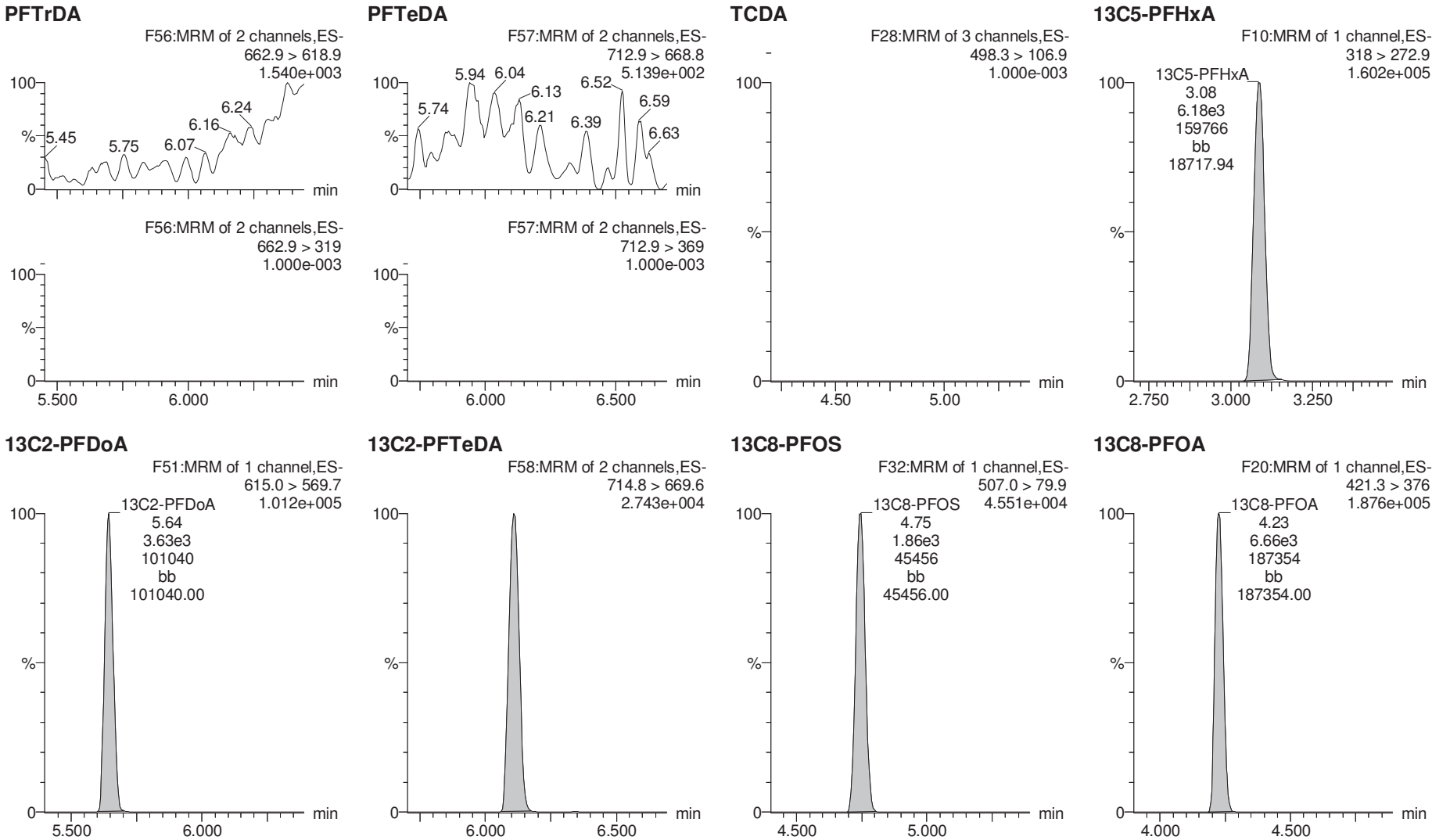
Vista Analytical Laboratory

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Printed: Tuesday, January 16, 2018 11:18:49 Pacific Standard Time

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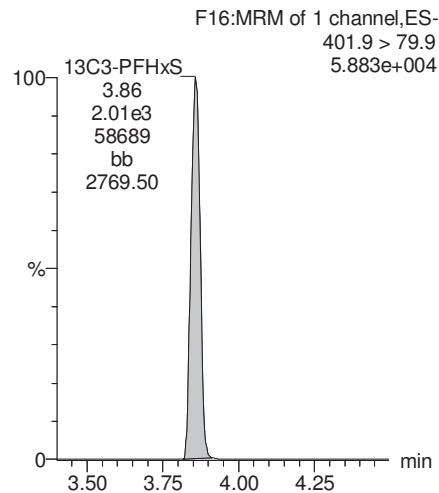
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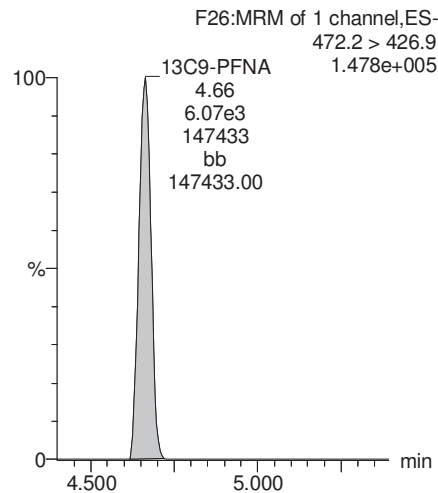
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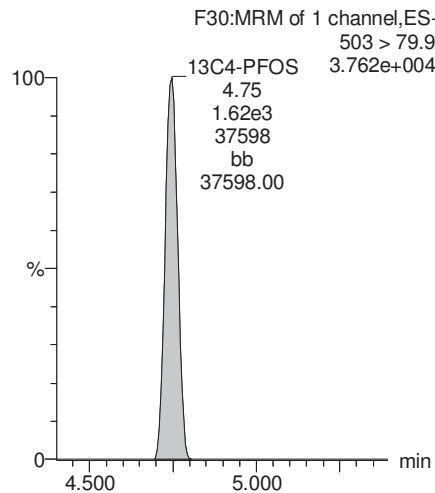
13C3-PFHxS



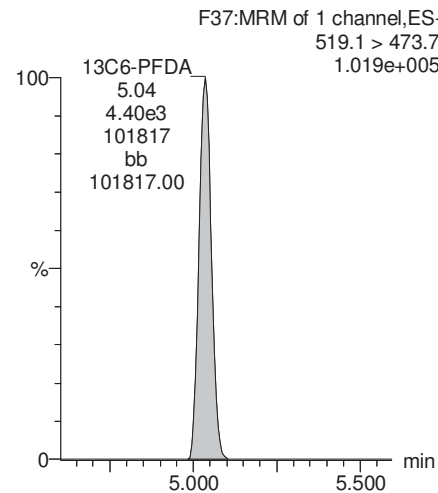
13C9-PFNA



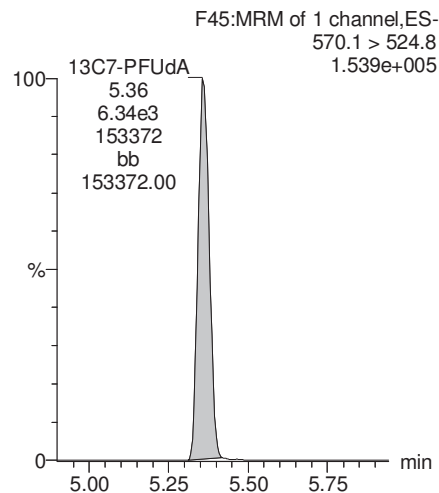
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180114M1\180114M1-34.qld

Last Altered: Wednesday, January 17, 2018 16:16:10 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:16:36 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_34, Date: 14-Jan-2018, Time: 19:56:41, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		1.09e3	0.262		2.60				
2	4	PFHxA	313.2 > 268.9		2.80e3	0.262		3.00				
3	5	PFHpA	363.0 > 318.9		2.30e3	0.262		3.54				
4	6	L-PFHxS	398.9 > 79.6		7.83e2	0.262		3.68				
5	9	L-PFOA	413 > 368.7	1.93e2	9.72e3	0.262		4.07	3.92	0.248		
6	12	PFNA	463.0 > 418.8		1.05e4	0.262		4.54				
7	14	L-PFOS	499 > 79.9		2.94e3	0.262		4.63				
8	16	PFDA	513 > 468.8		7.76e3	0.262		4.94				
9	18	N-MeFOSAA	570.1 > 419		2.33e3	0.262		5.10				
10	19	N-EtFOSAA	584.2 > 419		2.84e3	0.262		5.27				
11	20	PFUdA	563.0 > 518.9		7.83e3	0.262		5.30				
12	22	PFDoA	612.9 > 569.0		6.00e3	0.262		5.60				

Dataset: U:\Q4.PRO\results\180114M1\180114M1-34.qld

Last Altered: Wednesday, January 17, 2018 16:16:10 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:16:45 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_34, Date: 14-Jan-2018, Time: 19:56:41, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.87e3	0.262		5.85				
2	25 PFTeDA	712.9 > 668.8		2.87e3	0.262		6.10				
3	33 13C3-PFBS	302. > 98.8	1.09e3	7.99e3	0.262	0.097	2.60	2.46	1.70	67.4247	141.1
4	34 13C2-PFHxA	315 > 269.8	2.80e3	7.99e3	0.262	0.633	3.00	2.90	4.38	26.4111	138.2
5	35 13C4-PFHpA	367.2 > 321.8	2.30e3	7.99e3	0.262	0.651	3.56	3.42	3.60	21.1490	44.3
6	36 18O2-PFHxS	403.0 > 102.6	7.83e2	2.16e3	0.262	0.326	3.68	3.56	4.53	53.2385	111.4
7	37 13C2-6:2 FTS	429.1 > 408.9	1.45e3	8.31e3	0.262	0.171	4.00	3.83	2.19	48.9889	102.5
8	38 13C2-PFOA	414.9 > 369.7	9.72e3	8.31e3	0.262	0.903	4.07	3.92	14.6	61.8849	129.5
9	39 13C5-PFNA	468.2 > 422.9	1.05e4	9.60e3	0.262	0.844	4.54	4.40	13.7	62.0237	129.8
10	40 13C8-PFOSA	506.1 > 77.7	9.18e2	9.38e3	0.262	0.165	4.61	4.47	1.22	28.2678	59.2
11	41 13C8-PFOS	507.0 > 79.9	2.94e3	2.57e3	0.262	0.920	4.62	4.49	14.3	59.5680	124.7
12	42 13C2-PFDA	515.1 > 469.9	7.76e3	8.86e3	0.262	1.044	4.82	4.81	11.0	40.0853	83.9
13	43 13C2-8:2 FTS	529.1 > 508.7	8.62e2	7.99e3	0.262	0.087	4.89	4.75	1.35	59.6029	124.7
14	44 d3-N-MeFOSAA	573.3 > 419	2.33e3	9.38e3	0.262	0.227	5.08	4.96	3.11	52.3334	109.5
15	45 d5-N-EtFOSAA	589.3 > 419	2.84e3	9.38e3	0.262	0.313	5.27	5.14	3.78	46.1594	96.6
16	46 13C2-PFUDa	565 > 519.8	7.83e3	9.38e3	0.262	0.899	5.28	5.15	10.4	44.3628	92.8
17	47 13C2-PFDoA	615.0 > 569.7	6.00e3	9.38e3	0.262	0.645	5.60	5.46	8.00	47.3845	99.2
18	49 13C2-PFTeDA	714.8 > 669.6	2.87e3	9.38e3	0.262	0.290	6.10	5.97	3.83	50.4602	105.6
19	55 13C5-PFHxA	318 > 272.9	7.99e3	7.99e3	0.262	1.000	3.00	2.90	12.5	47.7847	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.16e3	2.16e3	0.262	1.000	3.68	3.56	12.5	47.7847	100.0
21	57 13C8-PFOA	421.3 > 376	8.31e3	8.31e3	0.262	1.000	4.07	3.92	12.5	47.7847	100.0
22	58 13C9-PFNA	472.2 > 426.9	9.60e3	9.60e3	0.262	1.000	4.54	4.40	12.5	47.7847	100.0
23	59 13C4-PFOS	503 > 79.9	2.57e3	2.57e3	0.262	1.000	4.63	4.49	12.5	47.7847	100.0
24	60 13C6-PFDA	519.1 > 473.7	8.86e3	8.86e3	0.262	1.000	4.94	4.80	12.5	47.7847	100.0
25	61 13C7-PFUDa	570.1 > 524.8	9.38e3	9.38e3	0.262	1.000	5.28	5.15	12.5	47.7847	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	7.83e2	0.262		3.50		0.000		
27	63 Total PFOA	413 > 368.7	1.93e2	9.72e3	0.262		3.90		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	2.94e3	0.262		4.50		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.33e3	0.262		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.84e3	0.262		5.20		0.000		

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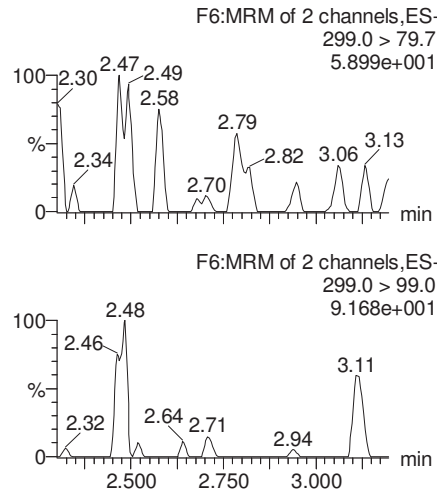
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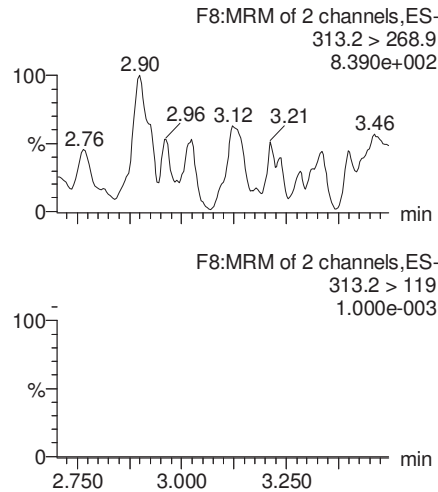
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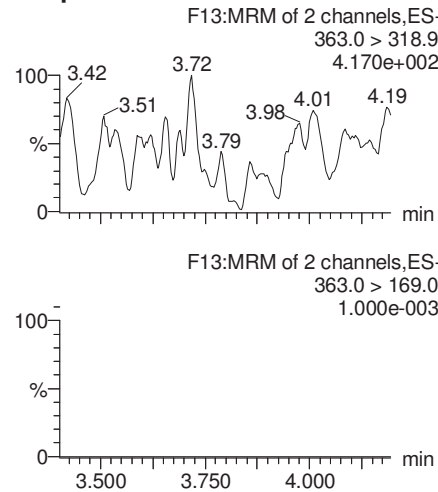
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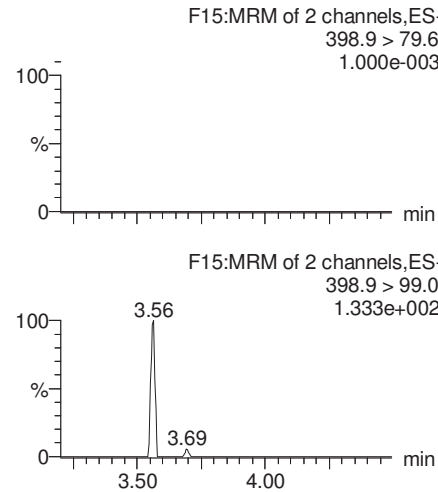
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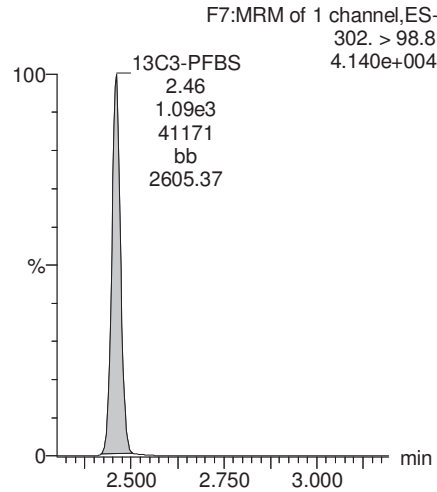
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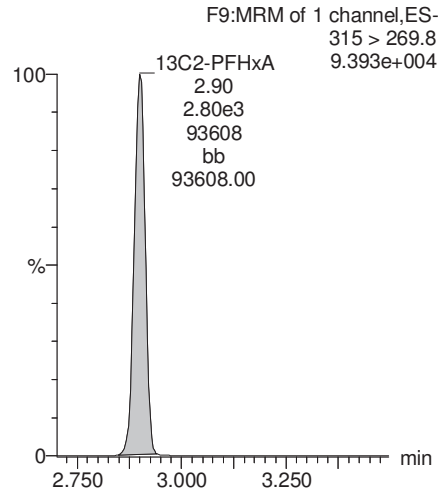
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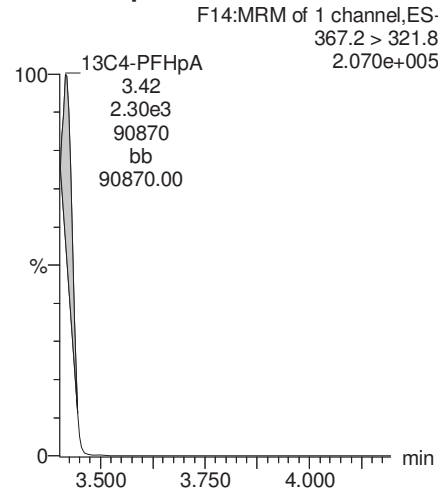
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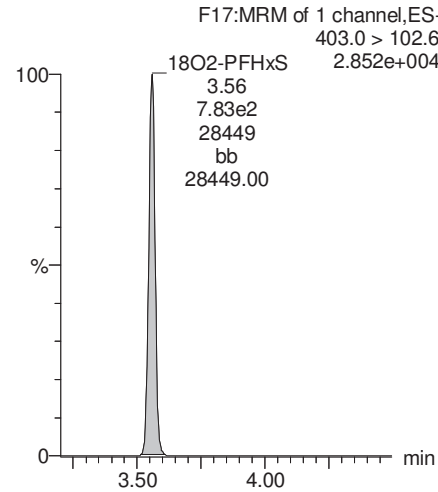
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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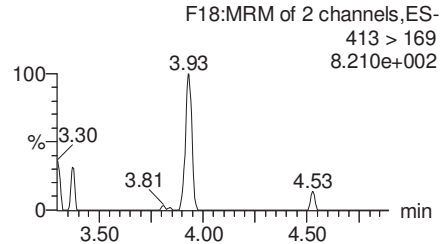
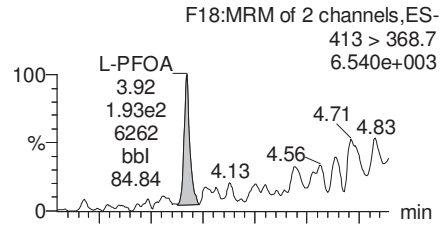
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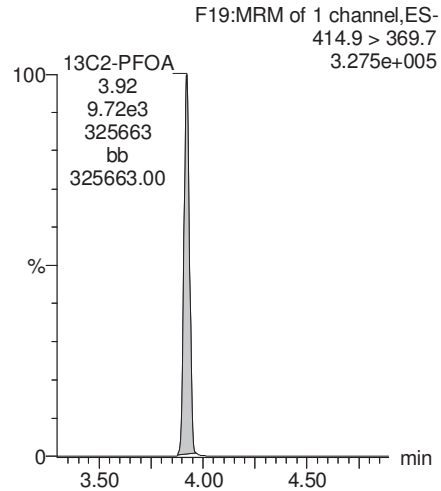
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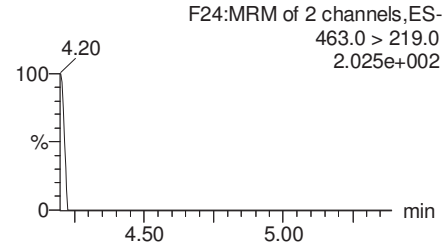
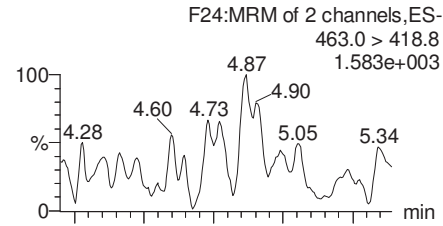
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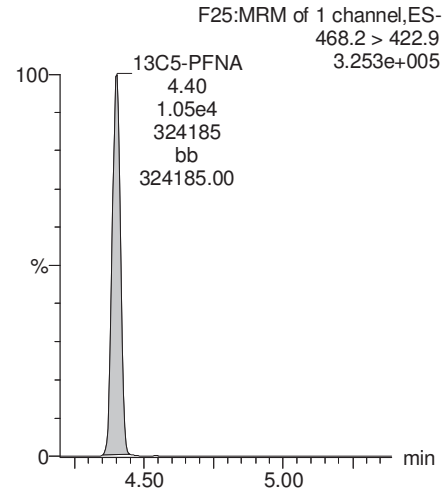
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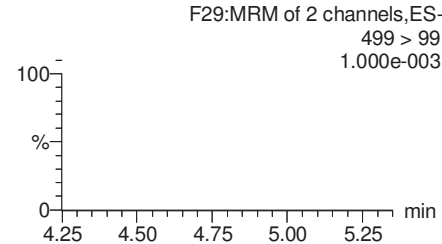
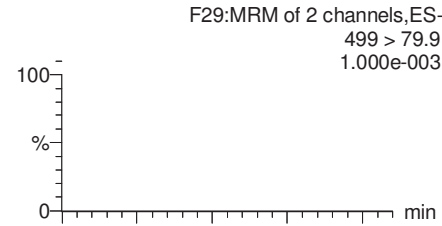
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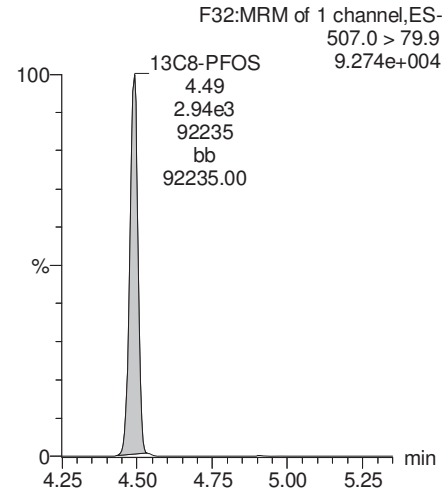
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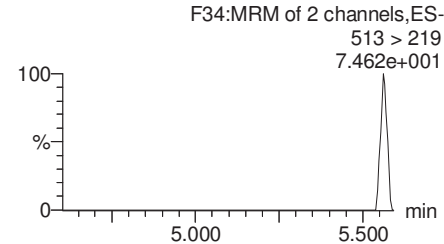
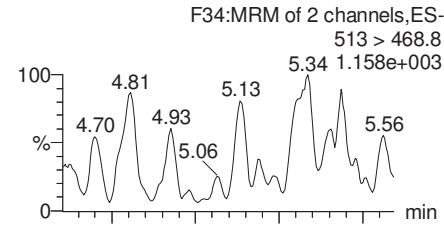
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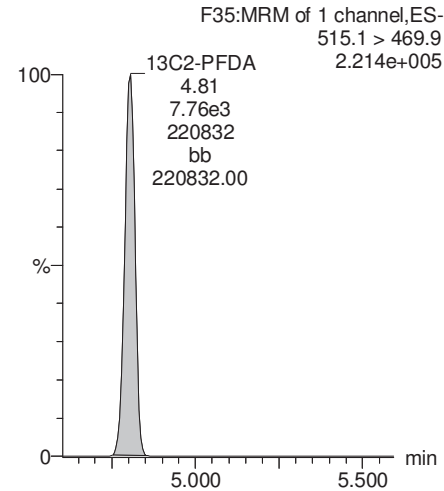
13C8-PFOS



PFDA



13C2-PFDA

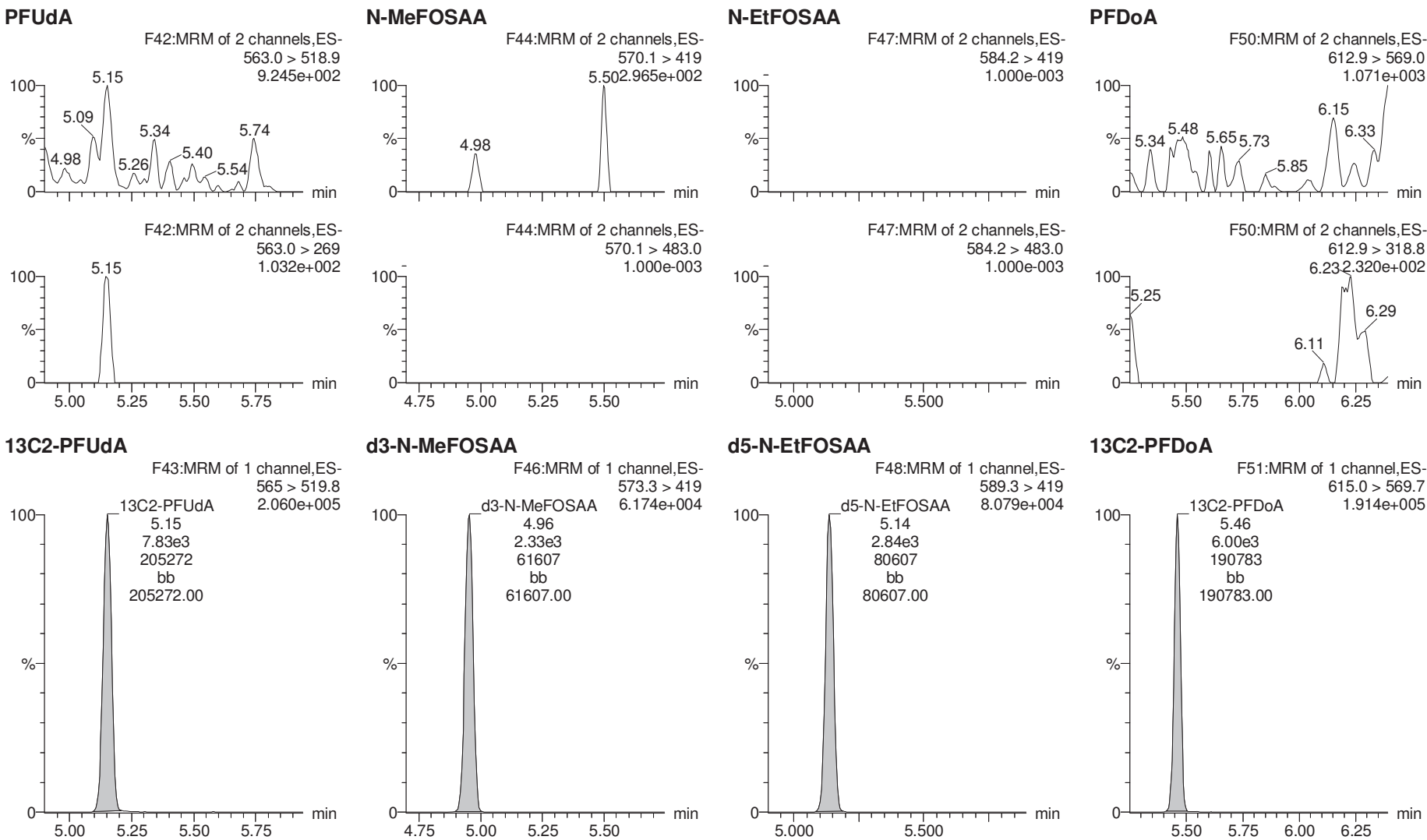


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Name: 180114M1_34, Date: 14-Jan-2018, Time: 19:56:41, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159, Description: FT-PZ-453S-FRB-20171202



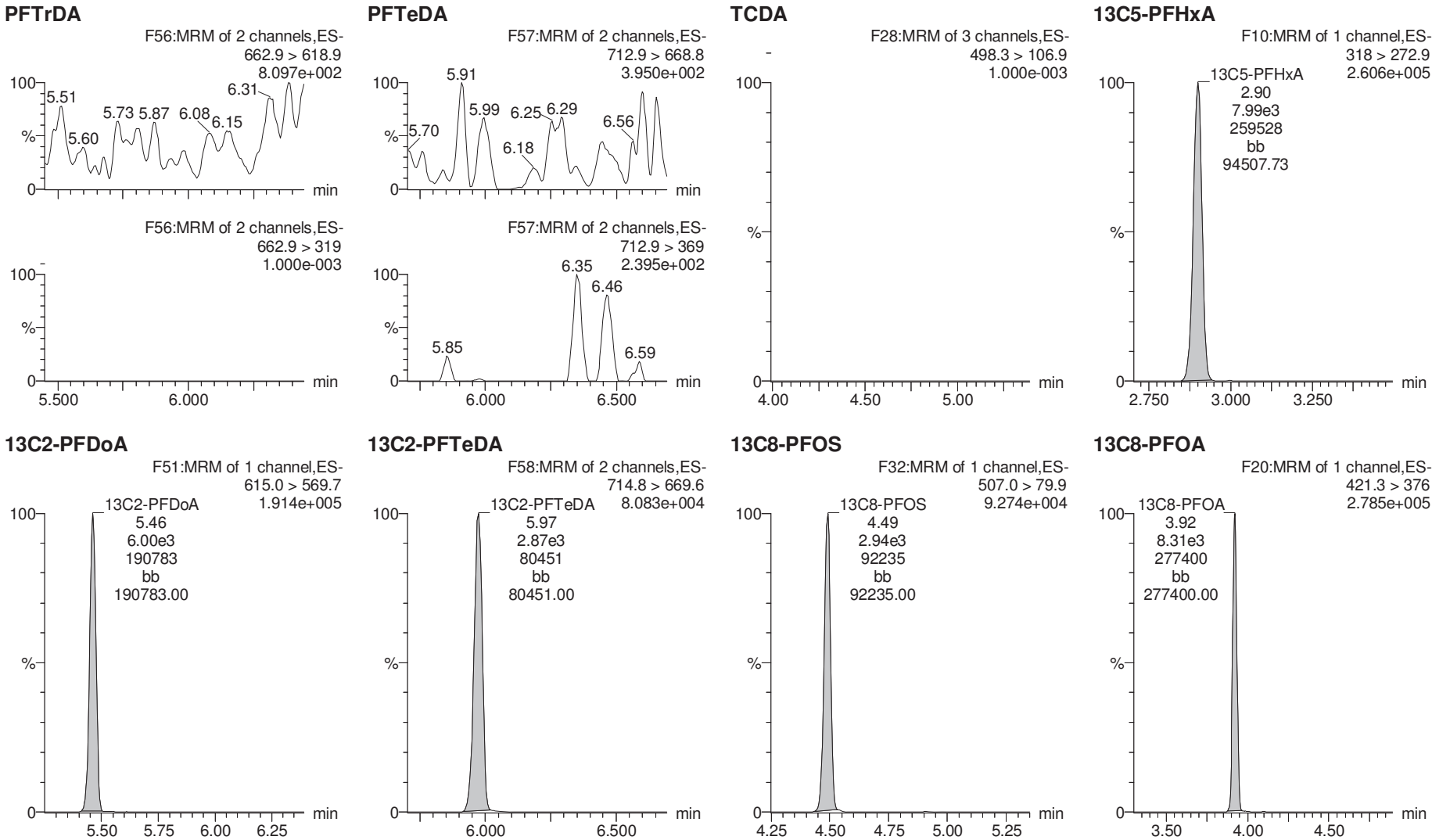
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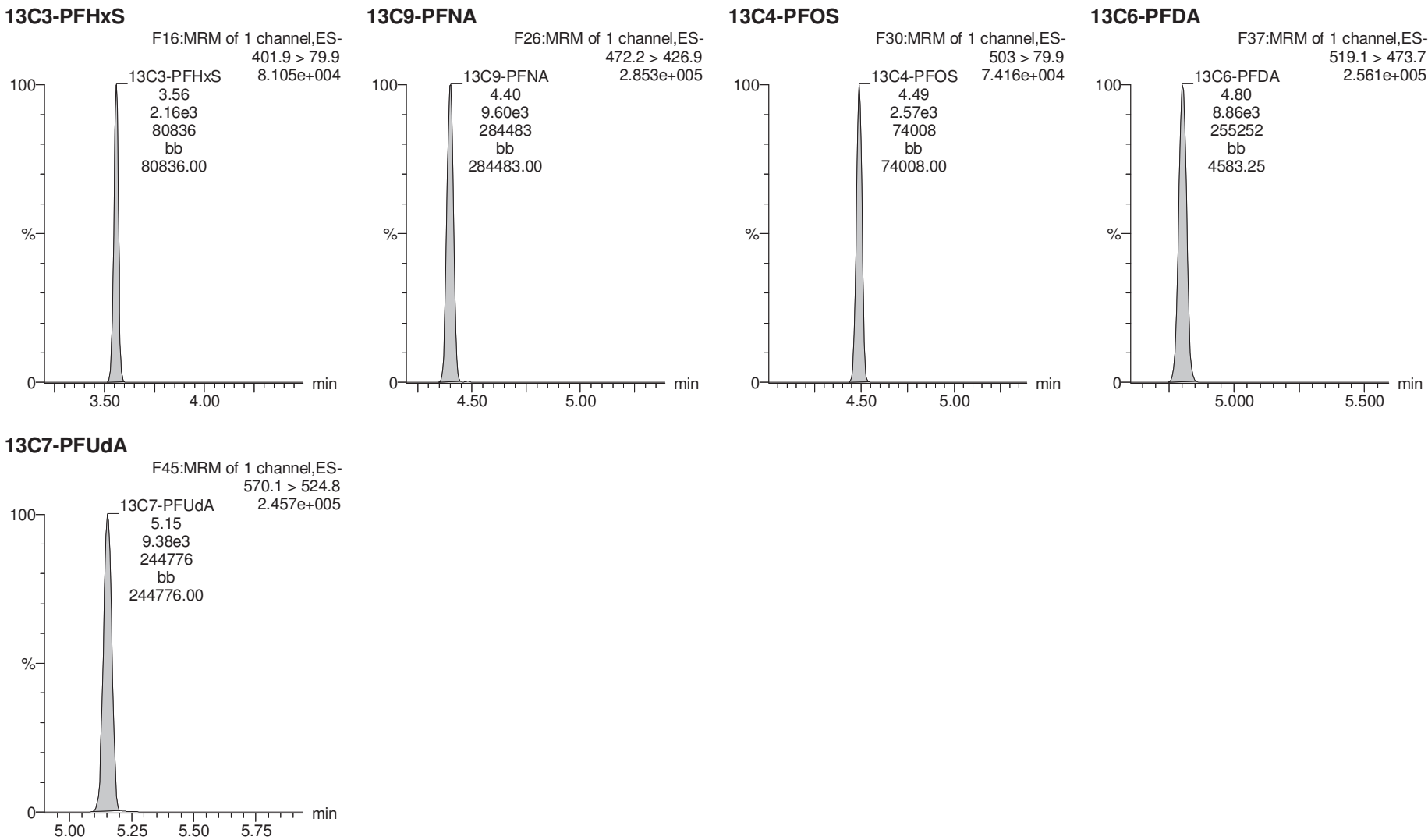


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Dataset: U:\Q4.PRO\results\180111M2\1801111M2-15.qld

Last Altered: Tuesday, January 16, 2018 11:20:45 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:21:06 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_15, Date: 12-Jan-2018, Time: 06:15:23, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		6.54e2	0.254		2.66				
2	4	PFHxA	313.2 > 268.9		1.55e3	0.254		3.15				
3	5	PFHpA	363.0 > 318.9		3.65e3	0.254		3.78				
4	6	L-PFHxS	398.9 > 79.6		4.52e2	0.254		3.94				
5	9	L-PFOA	413 > 368.7		5.22e3	0.254		4.31				
6	12	PFNA	463.0 > 418.8		4.56e3	0.254		4.81				
7	13	PFOSA	498.1 > 77.8		7.04e2	0.254		4.87				
8	16	PFDA	513 > 468.8		3.43e3	0.254		5.18				
9	18	N-MeFOSAA	570.1 > 419		1.45e3	0.254		5.32				
10	19	N-EtFOSAA	584.2 > 419		1.63e3	0.254		5.48				
11	20	PFUdA	563.0 > 518.9		4.01e3	0.254		5.50				
12	22	PFDoA	612.9 > 569.0		2.24e3	0.254		5.77				

Dataset: U:\Q4.PRO\results\180111M2\180111M2-15.qld

Last Altered: Tuesday, January 16, 2018 11:20:45 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_15, Date: 12-Jan-2018, Time: 06:15:23, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		2.24e3	0.254		6.00				
2	25 PFTeDA	712.9 > 668.8		1.25e3	0.254		6.22				
3	33 13C3-PFBS	302. > 98.8	6.54e2	5.30e3	0.254	0.095	2.77	2.59	1.54	63.8017	129.4
4	34 13C2-PFHxA	315 > 269.8	1.55e3	5.30e3	0.254	0.597	3.15	3.08	3.65	24.1143	122.3
5	35 13C4-PFHpA	367.2 > 321.8	3.65e3	5.30e3	0.254	0.604	3.78	3.71	8.60	56.1473	113.9
6	36 18O2-PFHxS	403.0 > 102.6	4.52e2	1.34e3	0.254	0.293	3.94	3.85	4.21	56.6283	114.9
7	37 13C2-6:2 FTS	429.1 > 408.9	1.15e3	5.40e3	0.254	0.215	4.25	4.17	2.65	48.5806	98.6
8	38 13C2-PFOA	414.9 > 369.7	5.22e3	5.40e3	0.254	0.916	4.31	4.22	12.1	51.9937	105.5
9	39 13C5-PFNA	468.2 > 422.9	4.56e3	6.05e3	0.254	0.817	4.81	4.66	9.41	45.3702	92.0
10	40 13C8-PFOSA	506.1 > 77.7	7.04e2	6.06e3	0.254	0.223	4.87	4.72	1.45	25.6760	52.1
11	41 13C8-PFOS	507.0 > 79.9	1.35e3	1.36e3	0.254	0.875	4.89	4.74	12.4	55.8223	113.3
12	42 13C2-PFDA	515.1 > 469.9	3.43e3	3.61e3	0.254	1.105	5.18	5.04	11.9	42.3298	85.9
13	43 13C2-8:2 FTS	529.1 > 508.7	4.63e2	5.30e3	0.254	0.101	5.15	5.01	1.09	42.7318	86.7
14	44 d3-N-MeFOSAA	573.3 > 419	1.45e3	6.06e3	0.254	0.345	5.32	5.18	2.99	34.1267	69.2
15	45 d5-N-EtFOSAA	589.3 > 419	1.63e3	6.06e3	0.254	0.390	5.47	5.34	3.37	34.0308	69.0
16	46 13C2-PFUDa	565 > 519.8	4.01e3	6.06e3	0.254	0.958	5.49	5.36	8.28	34.0677	69.1
17	47 13C2-PFDOa	615.0 > 569.7	2.24e3	6.06e3	0.254	0.599	5.77	5.64	4.62	30.3955	61.7
18	49 13C2-PFTeDA	714.8 > 669.6	1.25e3	6.06e3	0.254	0.282	6.22	6.11	2.58	36.0969	73.2
19	55 13C5-PFHxA	318 > 272.9	5.30e3	5.30e3	0.254	1.000	3.15	3.08	12.5	49.2902	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.34e3	1.34e3	0.254	1.000	4.02	3.86	12.5	49.2902	100.0
21	57 13C8-PFOA	421.3 > 376	5.40e3	5.40e3	0.254	1.000	4.38	4.23	12.5	49.2902	100.0
22	58 13C9-PFNA	472.2 > 426.9	6.05e3	6.05e3	0.254	1.000	4.81	4.66	12.5	49.2902	100.0
23	59 13C4-PFOS	503 > 79.9	1.36e3	1.36e3	0.254	1.000	4.89	4.74	12.5	49.2902	100.0
24	60 13C6-PFDA	519.1 > 473.7	3.61e3	3.61e3	0.254	1.000	5.18	5.04	12.5	49.2902	100.0
25	61 13C7-PFUDa	570.1 > 524.8	6.06e3	6.06e3	0.254	1.000	5.49	5.36	12.5	49.2902	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	4.52e2	0.254		3.80		0.000		
27	63 Total PFOA	413 > 368.7	0.00e0	5.22e3	0.254		4.51		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	1.35e3	0.254		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.45e3	0.254		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	1.63e3	0.254		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	0.00e0		0.254		0.00		0.000		

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Dataset: U:\Q4.PRO\results\180111M2\1801111M2-15.qld

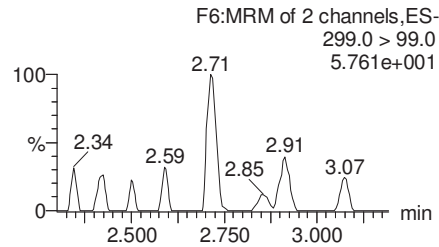
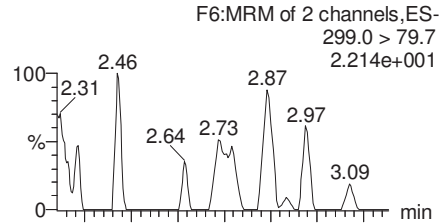
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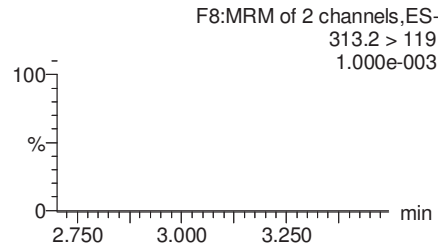
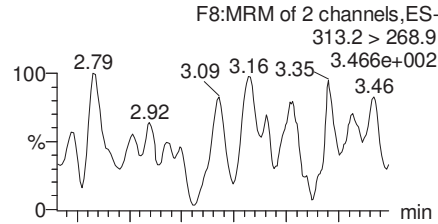
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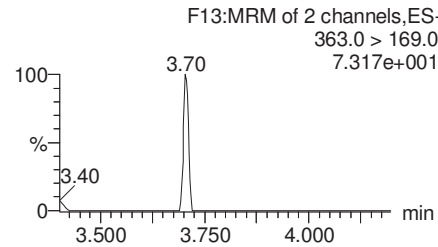
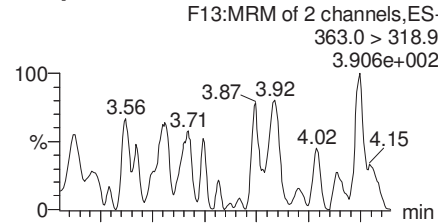
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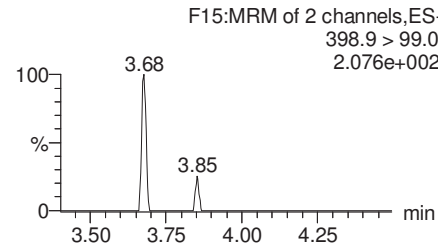
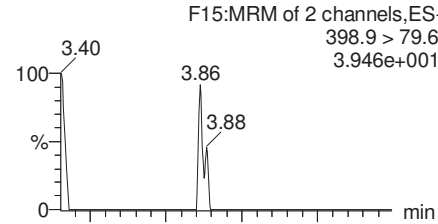
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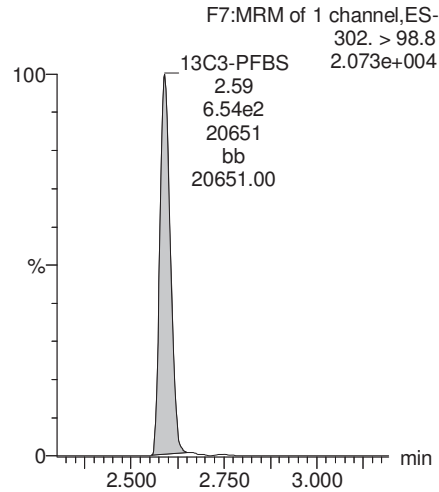
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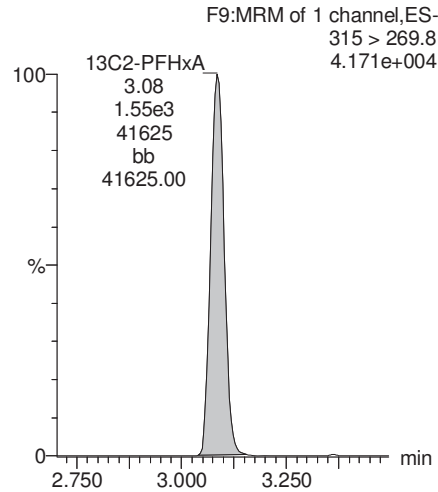
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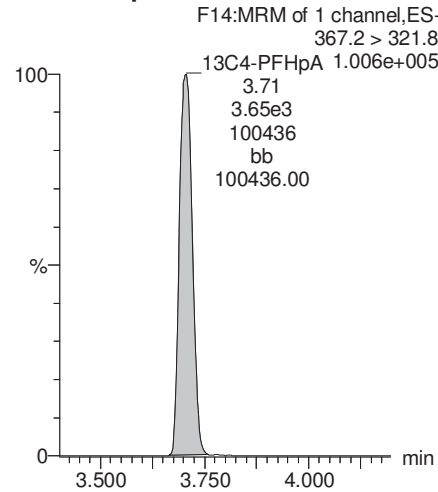
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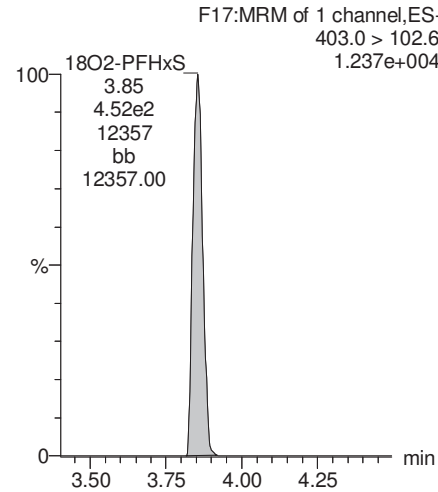
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



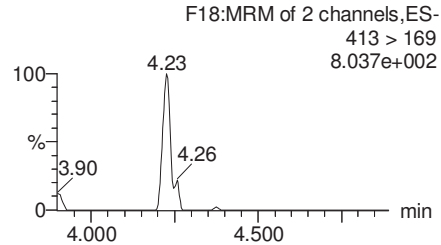
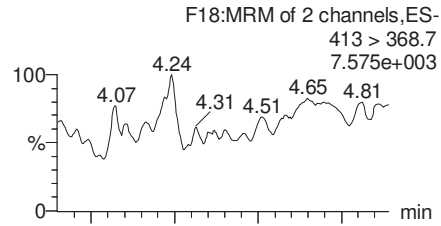
Vista Analytical Laboratory

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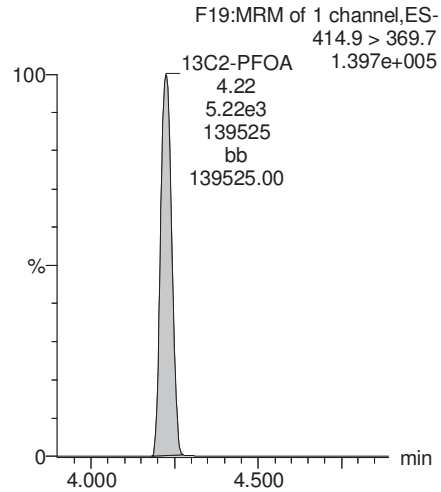
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Printed: Tuesday, January 16, 2018 11:21:16 Pacific Standard Time

Name: 180111M2_15, Date: 12-Jan-2018, Time: 06:15:23, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

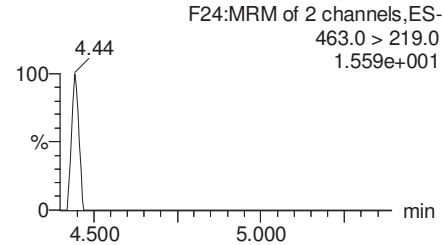
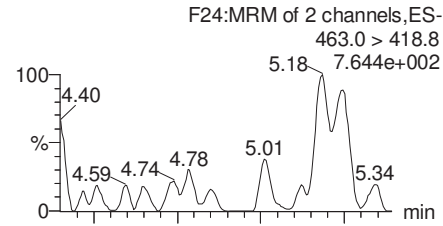
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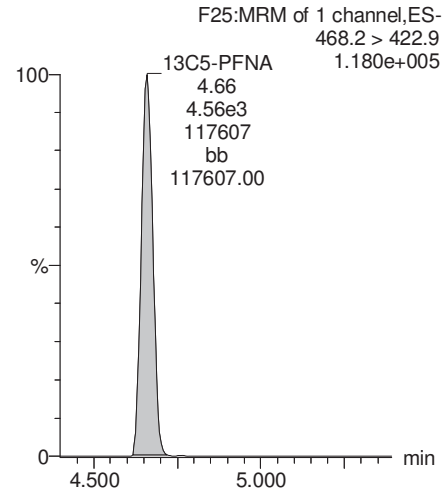
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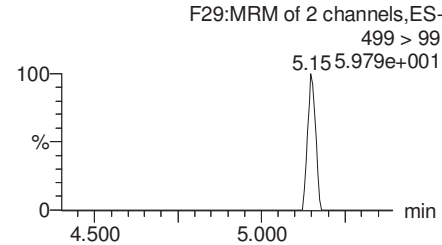
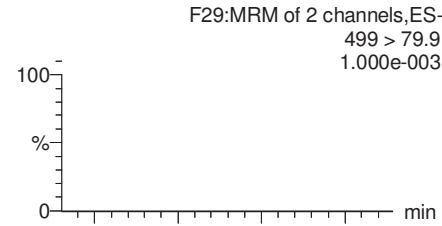
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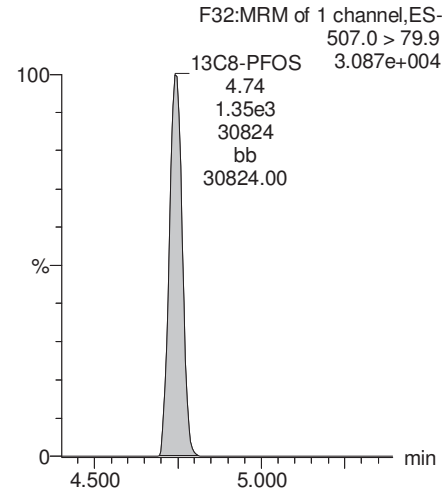
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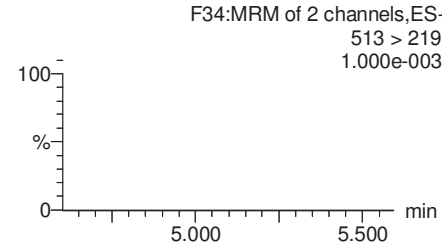
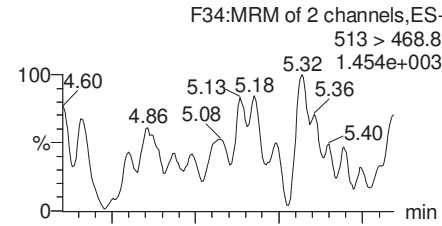
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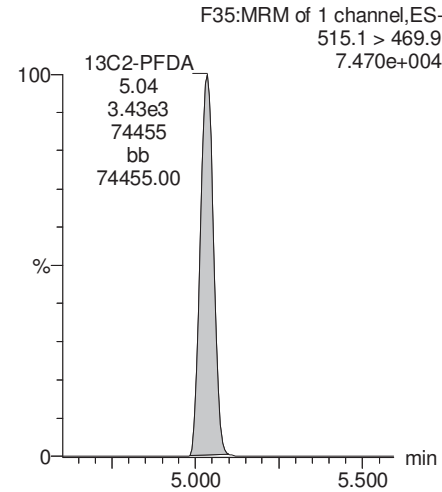
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PFDA



13C2-PFDA



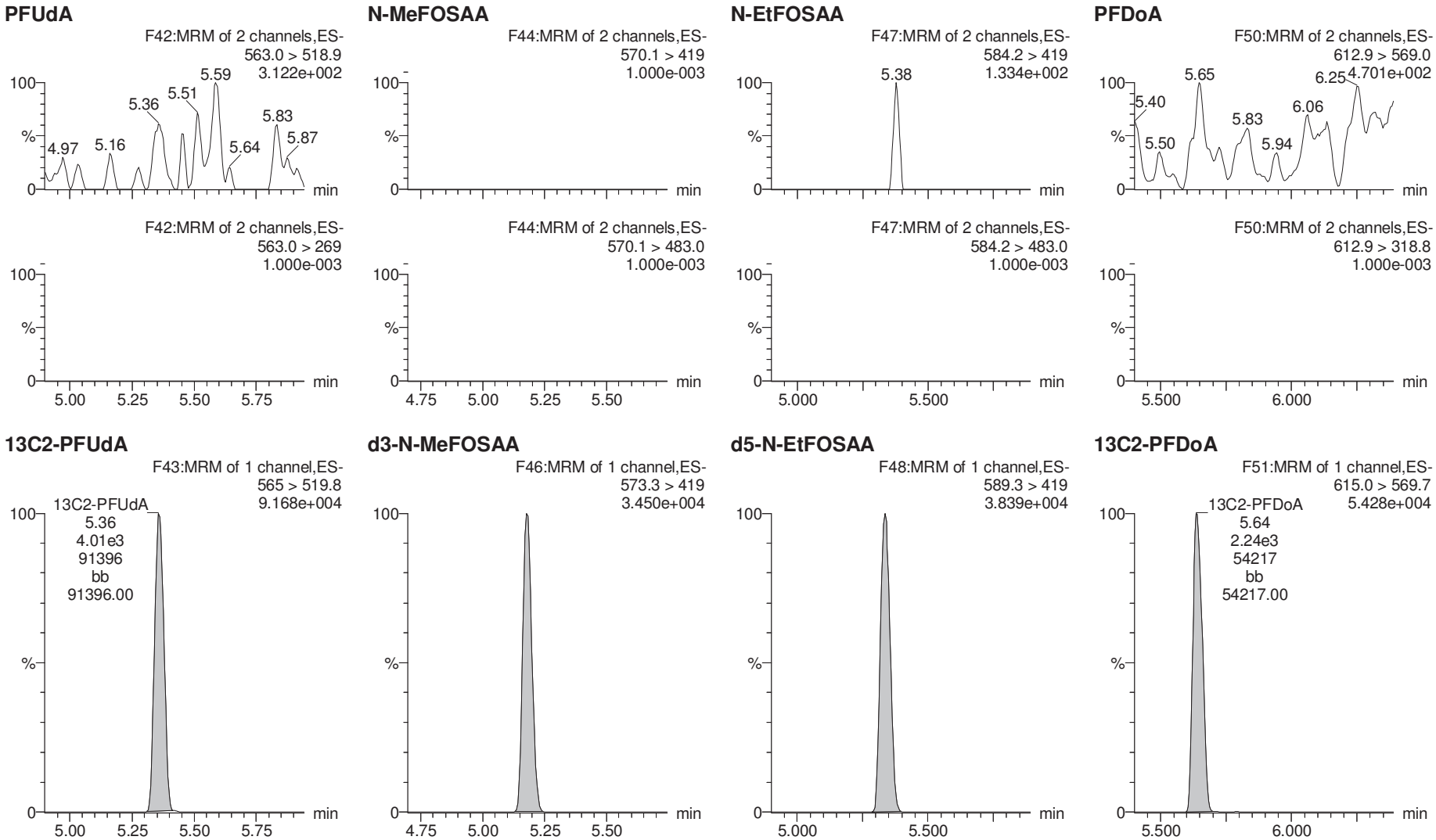
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-15.qld

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Printed: Tuesday, January 16, 2018 11:21:16 Pacific Standard Time

Name: 180111M2_15, Date: 12-Jan-2018, Time: 06:15:23, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204



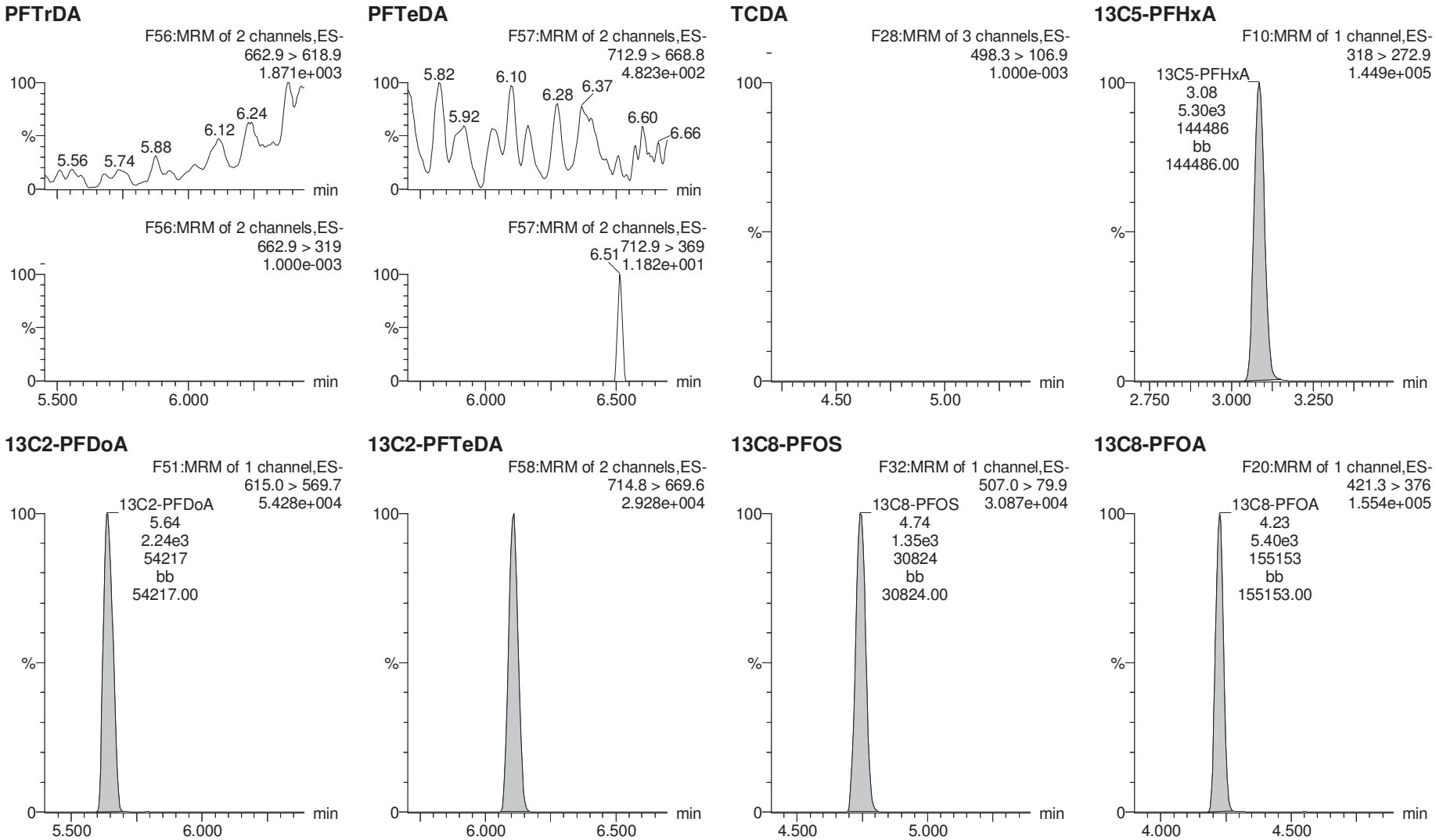
Vista Analytical Laboratory

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Vista Analytical Laboratory

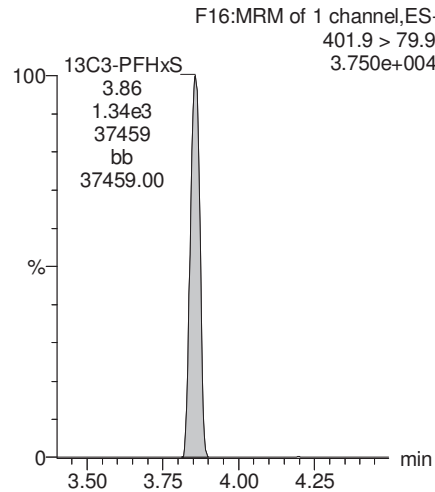
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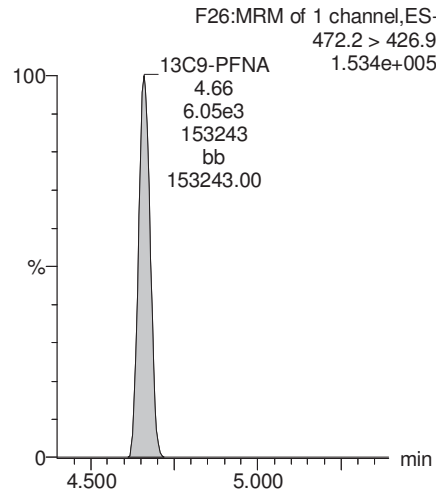
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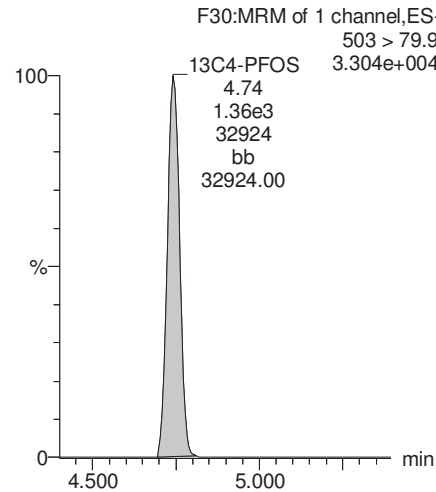
13C3-PFHxS



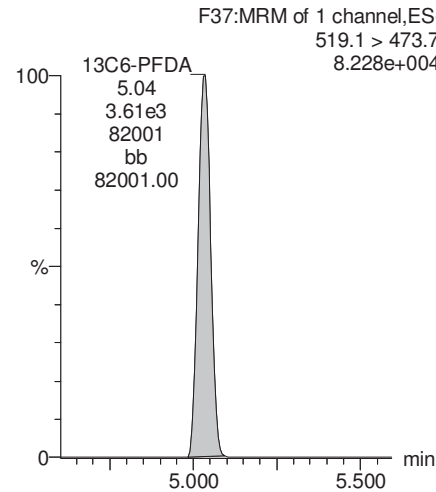
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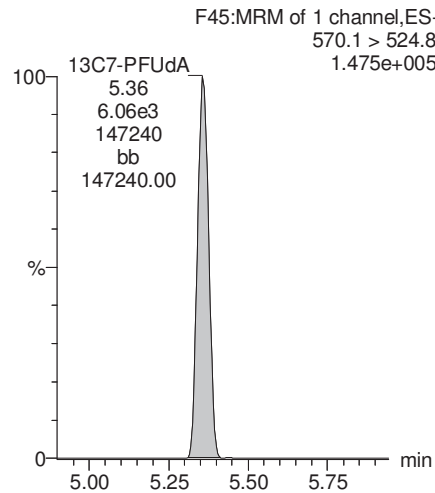
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180114M1\180114M1-35.qld

Last Altered: Wednesday, January 17, 2018 16:17:45 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:18:02 Pacific Standard Time

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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_35, Date: 14-Jan-2018, Time: 20:08:08, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		7.39e2	0.254		2.60				
2	4	PFHxA	313.2 > 268.9		2.00e3	0.254		3.00				
3	5	PFHpA	363.0 > 318.9		9.68e2	0.254		3.54				
4	6	L-PFHxS	398.9 > 79.6		7.21e2	0.254		3.68				
5	9	L-PFOA	413 > 368.7		6.92e3	0.254		4.07				
6	12	PFNA	463.0 > 418.8		5.87e3	0.254		4.54				
7	14	L-PFOS	499 > 79.9		1.72e3	0.254		4.63				
8	16	PFDA	513 > 468.8		6.81e3	0.254		4.94				
9	18	N-MeFOSAA	570.1 > 419		1.69e3	0.254		5.10				
10	19	N-EtFOSAA	584.2 > 419		2.01e3	0.254		5.27				
11	20	PFUdA	563.0 > 518.9		6.11e3	0.254		5.30				
12	22	PFDoA	612.9 > 569.0		4.38e3	0.254		5.60				

Dataset: U:\Q4.PRO\results\180114M1\180114M1-35.qld

Last Altered: Wednesday, January 17, 2018 16:17:45 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:18:11 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_35, Date: 14-Jan-2018, Time: 20:08:08, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.26e3	0.254		5.85				
2	25 PFTeDA	712.9 > 668.8		2.26e3	0.254		6.10				
3	33 13C3-PFBS	302. > 98.8	7.39e2	6.32e3	0.254	0.097	2.60	2.45	1.46	59.6875	121.1
4	34 13C2-PFHxA	315 > 269.8	2.00e3	6.32e3	0.254	0.633	3.00	2.90	3.95	24.6025	124.8
5	35 13C4-PFHpA	367.2 > 321.8	9.68e2	6.32e3	0.254	0.651	3.56	3.41	1.91	11.5960	23.5
6	36 18O2-PFHxS	403.0 > 102.6	7.21e2	1.89e3	0.254	0.326	3.68	3.55	4.78	57.8551	117.4
7	37 13C2-6:2 FTS	429.1 > 408.9	1.73e3	6.59e3	0.254	0.171	4.00	3.83	3.28	75.8271	153.8
8	38 13C2-PFOA	414.9 > 369.7	6.92e3	6.59e3	0.254	0.903	4.07	3.92	13.1	57.3312	116.3
9	39 13C5-PFNA	468.2 > 422.9	5.87e3	7.67e3	0.254	0.844	4.54	4.39	9.56	44.6824	90.7
10	40 13C8-PFOSA	506.1 > 77.7	7.32e2	9.66e3	0.254	0.165	4.61	4.46	0.948	22.5936	45.8
11	41 13C8-PFOS	507.0 > 79.9	1.72e3	1.96e3	0.254	0.920	4.62	4.49	11.0	47.0670	95.5
12	42 13C2-PFDA	515.1 > 469.9	6.81e3	6.50e3	0.254	1.044	4.82	4.80	13.1	49.4330	100.3
13	43 13C2-8:2 FTS	529.1 > 508.7	9.76e2	6.32e3	0.254	0.087	4.89	4.74	1.93	87.9444	178.4
14	44 d3-N-MeFOSAA	573.3 > 419	1.69e3	9.66e3	0.254	0.227	5.08	4.95	2.19	38.0042	77.1
15	45 d5-N-EtFOSAA	589.3 > 419	2.01e3	9.66e3	0.254	0.313	5.27	5.13	2.60	32.7315	66.4
16	46 13C2-PFUDa	565 > 519.8	6.11e3	9.66e3	0.254	0.899	5.28	5.15	7.90	34.6583	70.3
17	47 13C2-PFDOa	615.0 > 569.7	4.38e3	9.66e3	0.254	0.645	5.60	5.46	5.66	34.6166	70.2
18	49 13C2-PFTeDA	714.8 > 669.6	2.26e3	9.66e3	0.254	0.290	6.10	5.97	2.93	39.8203	80.8
19	55 13C5-PFHxA	318 > 272.9	6.32e3	6.32e3	0.254	1.000	3.00	2.90	12.5	49.2902	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.89e3	1.89e3	0.254	1.000	3.68	3.55	12.5	49.2902	100.0
21	57 13C8-PFOA	421.3 > 376	6.59e3	6.59e3	0.254	1.000	4.07	3.92	12.5	49.2902	100.0
22	58 13C9-PFNA	472.2 > 426.9	7.67e3	7.67e3	0.254	1.000	4.54	4.39	12.5	49.2902	100.0
23	59 13C4-PFOS	503 > 79.9	1.96e3	1.96e3	0.254	1.000	4.63	4.49	12.5	49.2902	100.0
24	60 13C6-PFDA	519.1 > 473.7	6.50e3	6.50e3	0.254	1.000	4.94	4.80	12.5	49.2902	100.0
25	61 13C7-PFUDa	570.1 > 524.8	9.66e3	9.66e3	0.254	1.000	5.28	5.15	12.5	49.2902	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	7.21e2	0.254		3.50		0.000		
27	63 Total PFOA	413 > 368.7	9.62e1	6.92e3	0.254		3.90		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	1.72e3	0.254		4.50		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.69e3	0.254		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.01e3	0.254		5.20		0.000		

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180114M1\180114M1-35.qld

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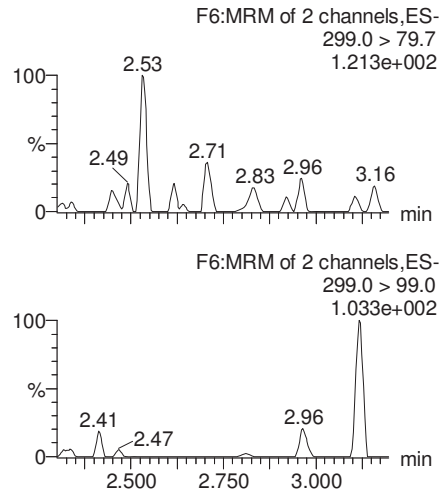
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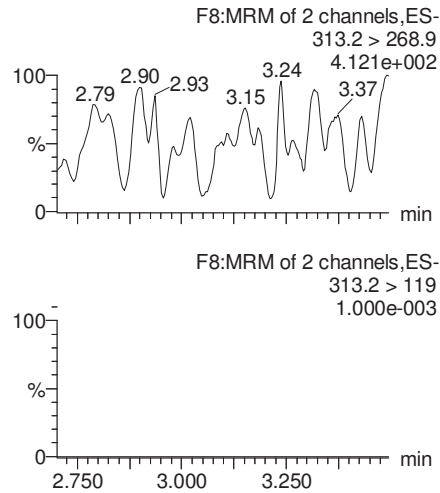
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Name: 180114M1_35, Date: 14-Jan-2018, Time: 20:08:08, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204

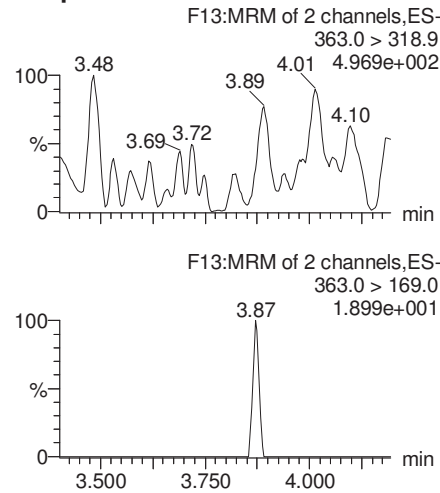
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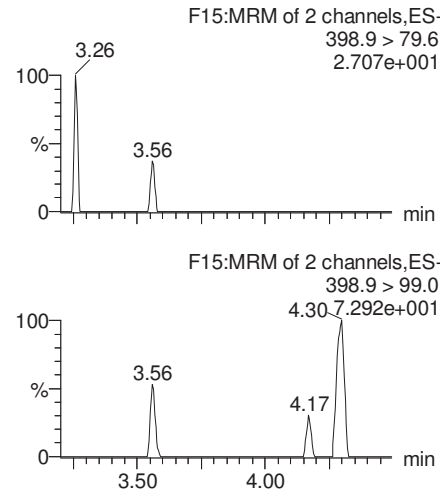
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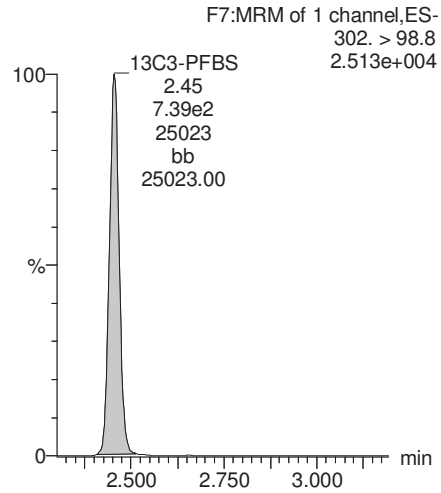
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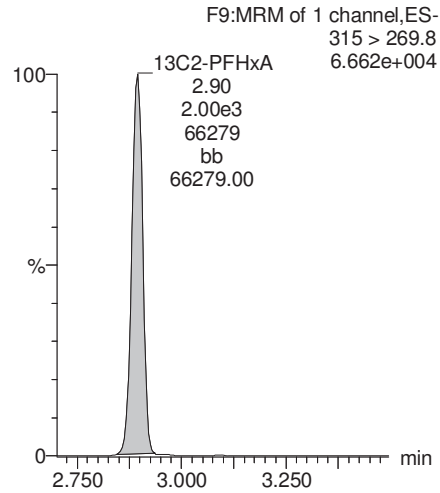
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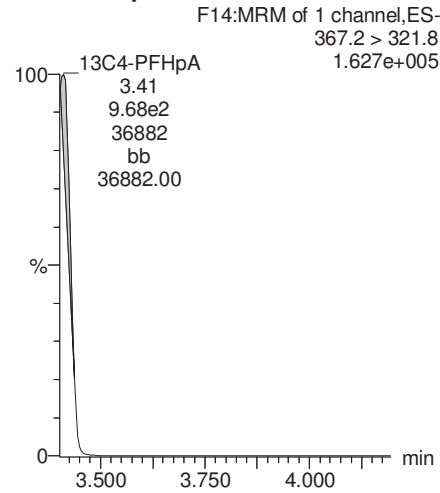
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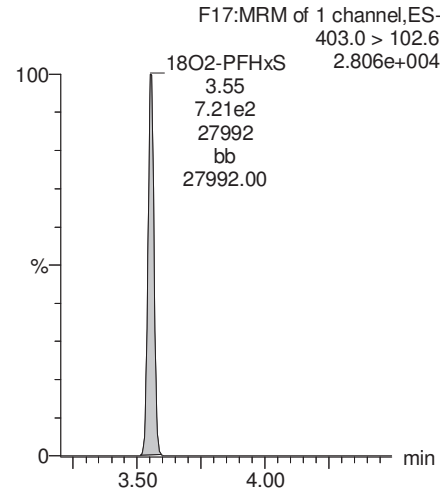
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13C4-PFHpA



18O2-PFHxS



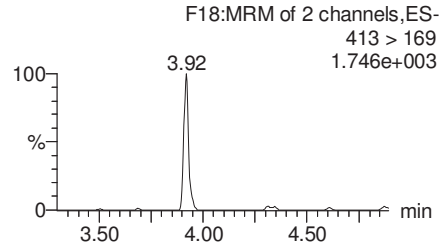
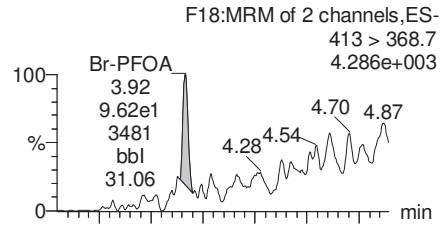
Vista Analytical Laboratory

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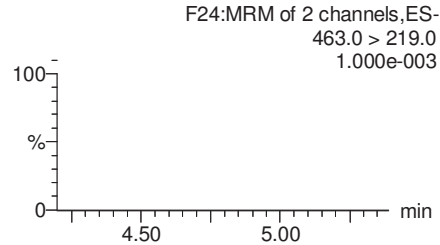
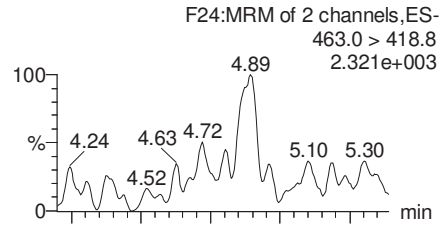
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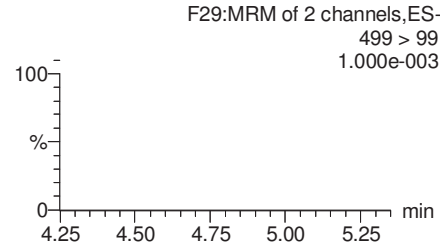
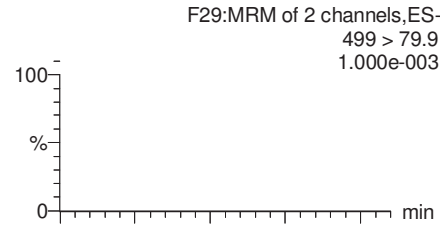
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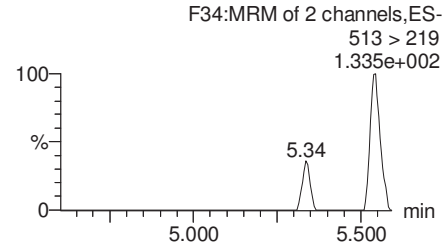
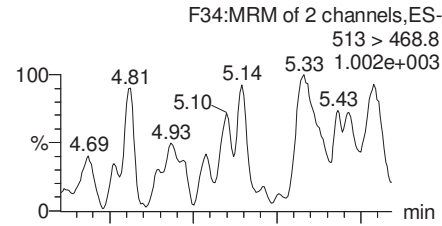
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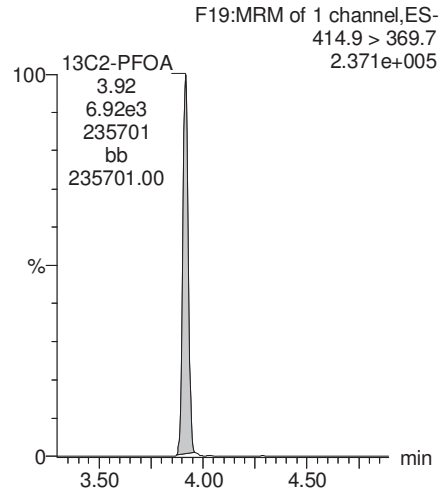
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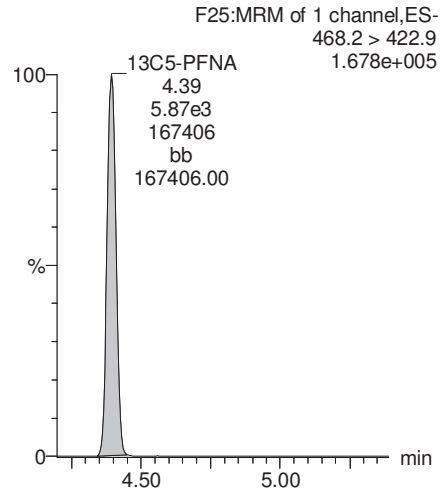
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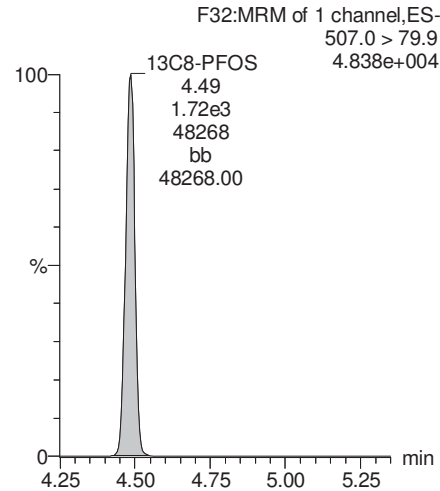
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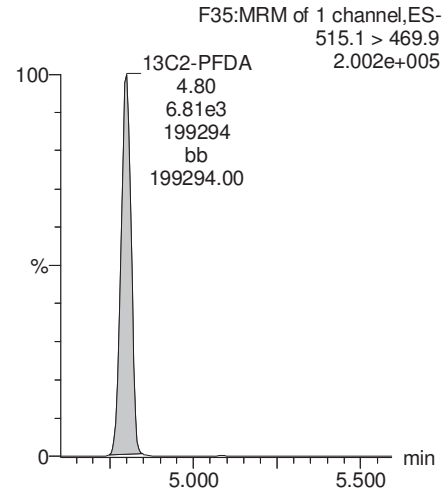
13C5-PFNA



13C8-PFOS



13C2-PFDA



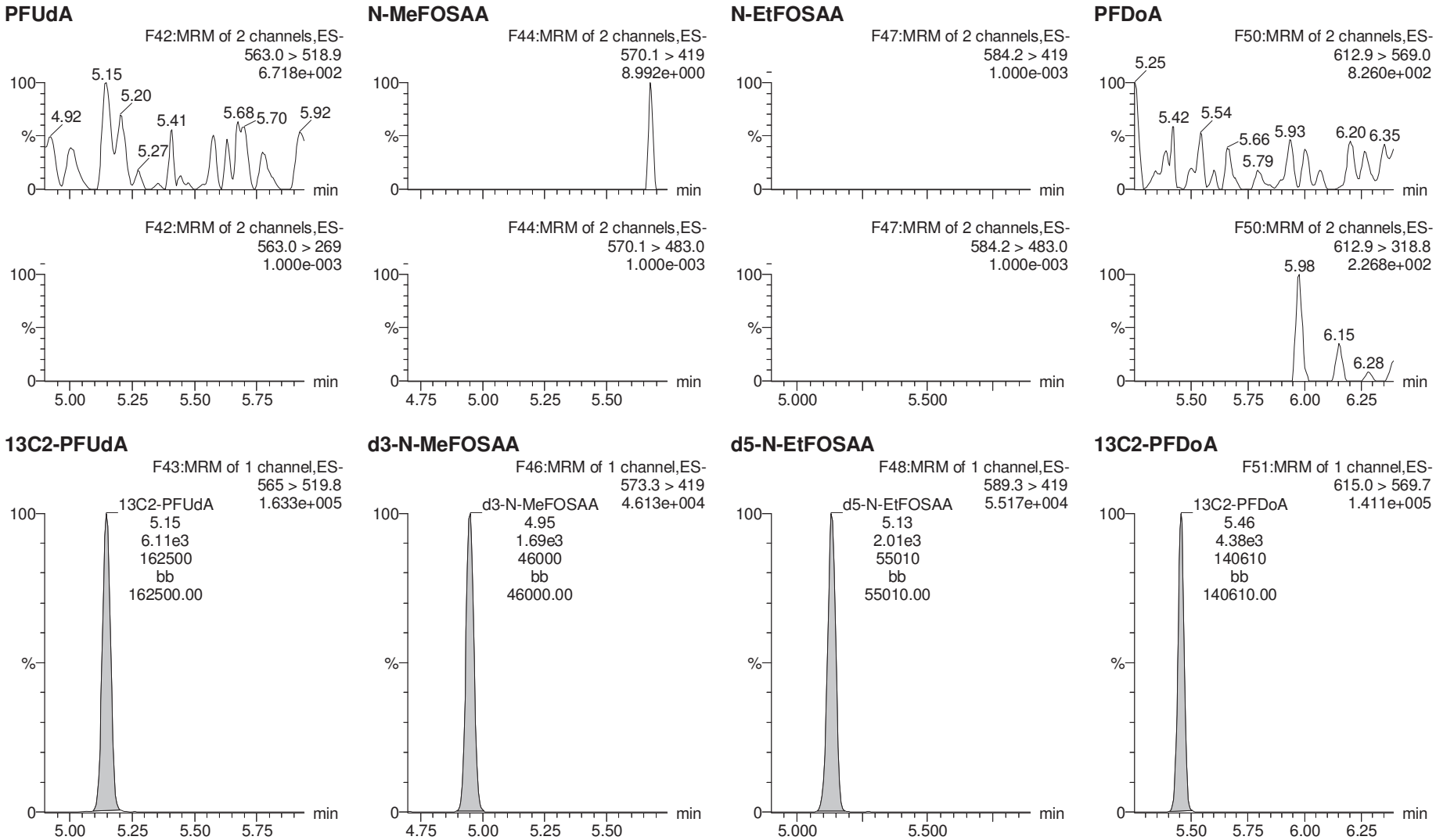
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180114M1\180114M1-35.qld

Last Altered: Wednesday, January 17, 2018 16:17:45 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:18:11 Pacific Standard Time

Name: 180114M1_35, Date: 14-Jan-2018, Time: 20:08:08, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204



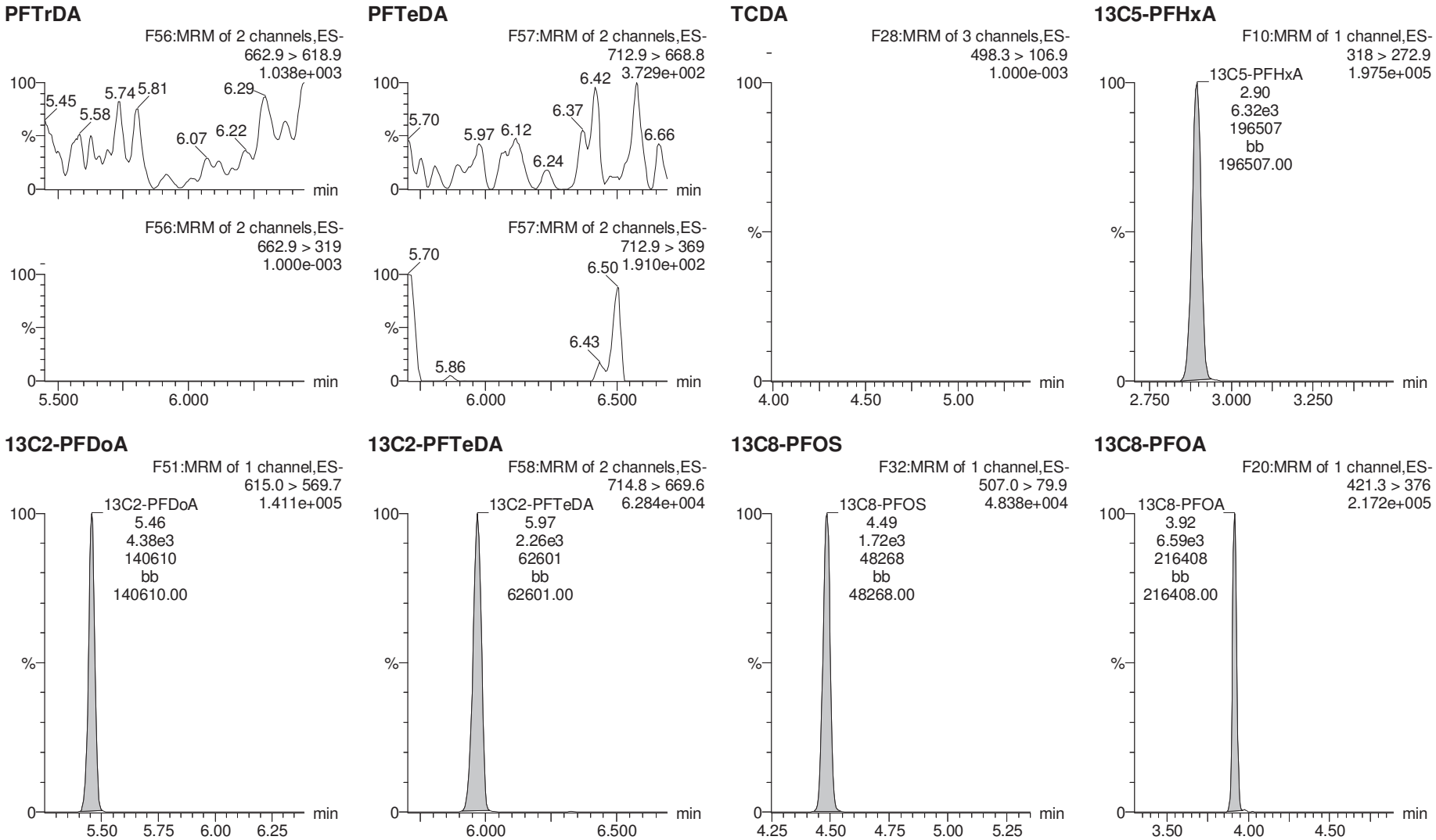
Vista Analytical Laboratory

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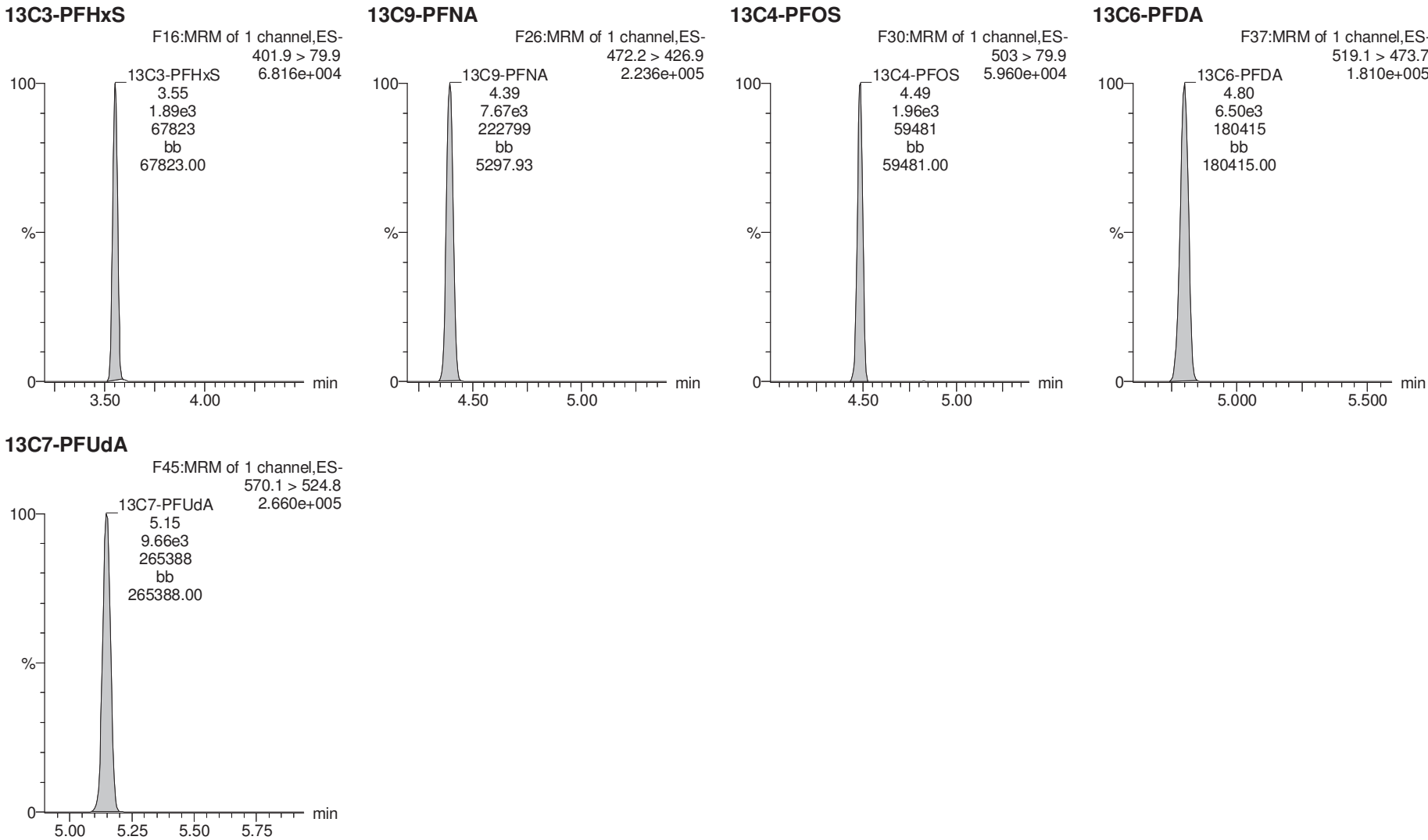


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Name: 180114M1_35, Date: 14-Jan-2018, Time: 20:08:08, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536, Description: FT-PZ-456I-FRB-20171204



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-16.qld

Last Altered: Tuesday, January 16, 2018 11:21:52 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:22:15 Pacific Standard Time

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1	3	PFBS	299.0 > 79.7		7.84e2	0.260		2.66				
2	4	PFHxA	313.2 > 268.9	1.19e3	1.86e3	0.260		3.15	3.08	3.22	6.4240	
3	5	PFHpA	363.0 > 318.9	5.86e2	4.87e3	0.260		3.78	3.71	1.50	3.7700	
4	6	L-PFHxS	398.9 > 79.6		6.17e2	0.260		3.94				
5	9	L-PFOA	413 > 368.7	1.84e3	6.18e3	0.260		4.31	4.22	3.73	10.8000	
6	12	PFNA	463.0 > 418.8	1.05e3	5.74e3	0.260		4.81	4.66	2.28	6.1978	
7	13	PFOSA	498.1 > 77.8		1.27e3	0.260		4.87				
8	16	PFDA	513 > 468.8		4.16e3	0.260		5.18				
9	18	N-MeFOSAA	570.1 > 419		2.14e3	0.260		5.32				
10	19	N-EtFOSAA	584.2 > 419		2.44e3	0.260		5.48				
11	20	PFUdA	563.0 > 518.9		5.33e3	0.260		5.50				
12	22	PFDoA	612.9 > 569.0		3.69e3	0.260		5.77				

Dataset: U:\Q4.PRO\results\180111M2\180111M2-16.qld

Last Altered: Tuesday, January 16, 2018 11:21:52 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:22:22 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_16, Date: 12-Jan-2018, Time: 06:26:36, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		3.69e3	0.260		6.00				
2	25 PFTeDA	712.9 > 668.8		1.74e3	0.260		6.22				
3	33 13C3-PFBS	302. > 98.8	7.84e2	7.06e3	0.260	0.095	2.77	2.59	1.39	55.8403	116.3
4	34 13C2-PFHxA	315 > 269.8	1.86e3	7.06e3	0.260	0.597	3.15	3.08	3.28	21.1277	110.0
5	35 13C4-PFHpA	367.2 > 321.8	4.87e3	7.06e3	0.260	0.604	3.78	3.70	8.62	54.7748	114.1
6	36 18O2-PFHxS	403.0 > 102.6	6.17e2	1.77e3	0.260	0.293	3.94	3.85	4.37	57.2008	119.2
7	37 13C2-6:2 FTS	429.1 > 408.9	1.13e3	6.34e3	0.260	0.215	4.25	4.17	2.23	39.7208	82.7
8	38 13C2-PFOA	414.9 > 369.7	6.18e3	6.34e3	0.260	0.916	4.31	4.22	12.2	51.1147	106.5
9	39 13C5-PFNA	468.2 > 422.9	5.74e3	7.21e3	0.260	0.817	4.81	4.65	9.95	46.7196	97.3
10	40 13C8-PFOSA	506.1 > 77.7	1.27e3	6.90e3	0.260	0.223	4.87	4.72	2.30	39.6764	82.7
11	41 13C8-PFOS	507.0 > 79.9	1.59e3	2.12e3	0.260	0.875	4.89	4.74	9.35	41.0642	85.5
12	42 13C2-PFDA	515.1 > 469.9	4.16e3	3.92e3	0.260	1.105	5.18	5.03	13.3	46.0354	95.9
13	43 13C2-8:2 FTS	529.1 > 508.7	6.06e2	7.06e3	0.260	0.101	5.15	5.01	1.07	40.8344	85.1
14	44 d3-N-MeFOSAA	573.3 > 419	2.14e3	6.90e3	0.260	0.345	5.32	5.18	3.87	43.0605	89.7
15	45 d5-N-EtFOSAA	589.3 > 419	2.44e3	6.90e3	0.260	0.390	5.47	5.34	4.43	43.5427	90.7
16	46 13C2-PFUdA	565 > 519.8	5.33e3	6.90e3	0.260	0.958	5.49	5.35	9.65	38.6953	80.6
17	47 13C2-PFDoA	615.0 > 569.7	3.69e3	6.90e3	0.260	0.599	5.77	5.64	6.68	42.7907	89.1
18	49 13C2-PFTeDA	714.8 > 669.6	1.74e3	6.90e3	0.260	0.282	6.22	6.10	3.14	42.8619	89.3
19	55 13C5-PFHxA	318 > 272.9	7.06e3	7.06e3	0.260	1.000	3.15	3.08	12.5	48.0012	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.77e3	1.77e3	0.260	1.000	4.02	3.85	12.5	48.0012	100.0
21	57 13C8-PFOA	421.3 > 376	6.34e3	6.34e3	0.260	1.000	4.38	4.22	12.5	48.0012	100.0
22	58 13C9-PFNA	472.2 > 426.9	7.21e3	7.21e3	0.260	1.000	4.81	4.65	12.5	48.0012	100.0
23	59 13C4-PFOS	503 > 79.9	2.12e3	2.12e3	0.260	1.000	4.89	4.74	12.5	48.0012	100.0
24	60 13C6-PFDA	519.1 > 473.7	3.92e3	3.92e3	0.260	1.000	5.18	5.04	12.5	48.0012	100.0
25	61 13C7-PFUdA	570.1 > 524.8	6.90e3	6.90e3	0.260	1.000	5.49	5.35	12.5	48.0012	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	6.17e2	0.260		3.80		0.000		
27	63 Total PFOA	413 > 368.7	2.17e3	6.18e3	0.260		4.51		4.40	12.2796	
28	64 Total PFOS	499 > 79.9	0.00e0	1.59e3	0.260		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.14e3	0.260		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.44e3	0.260		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	2.17e3		0.260		0.00		4.40	12.2796	

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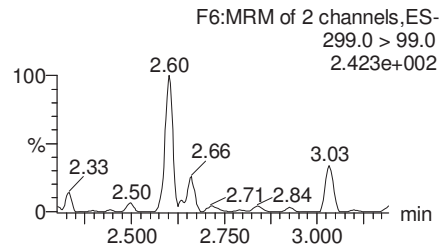
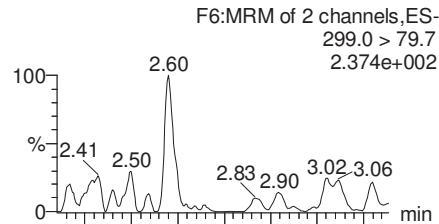
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Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

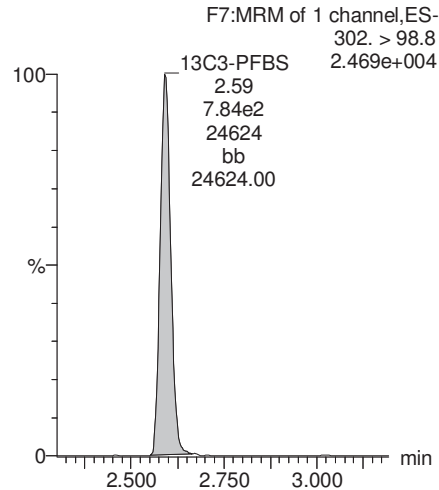
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Name: 180111M2_16, Date: 12-Jan-2018, Time: 06:26:36, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

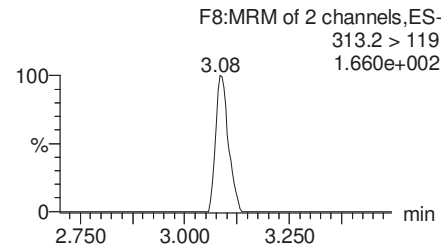
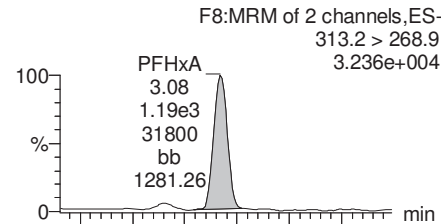
PFBS



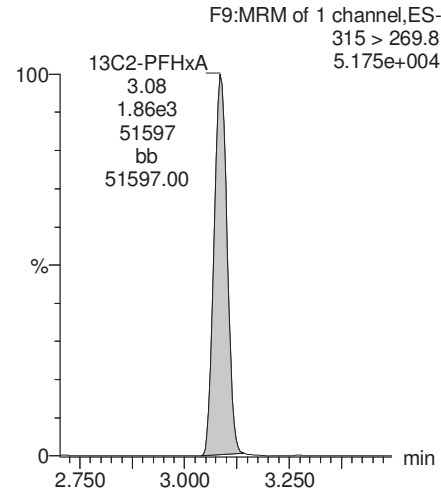
13C3-PFBS



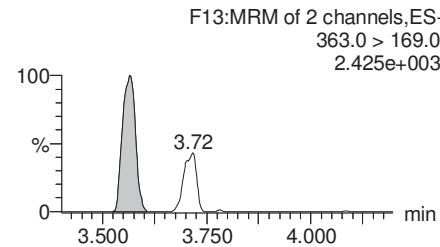
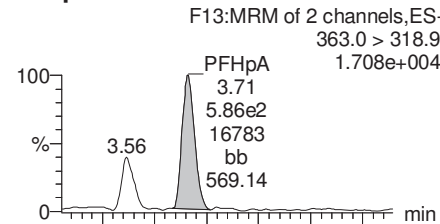
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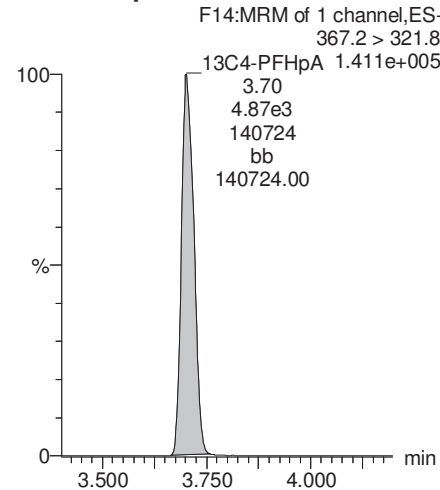
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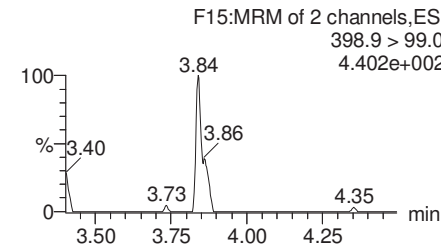
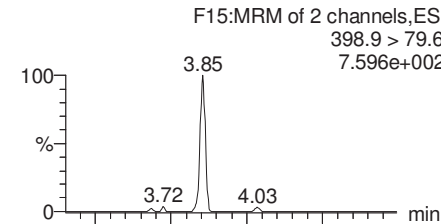
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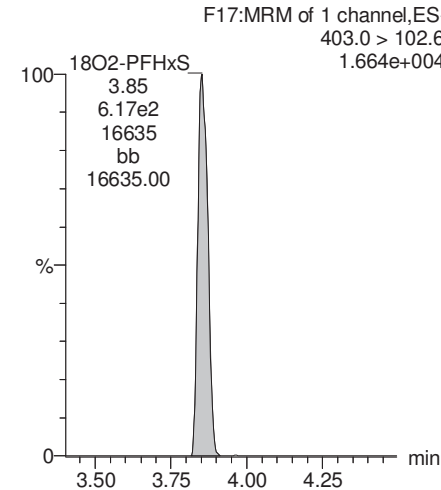
13C4-PFHpA



Total PFHxS



18O2-PFHxS

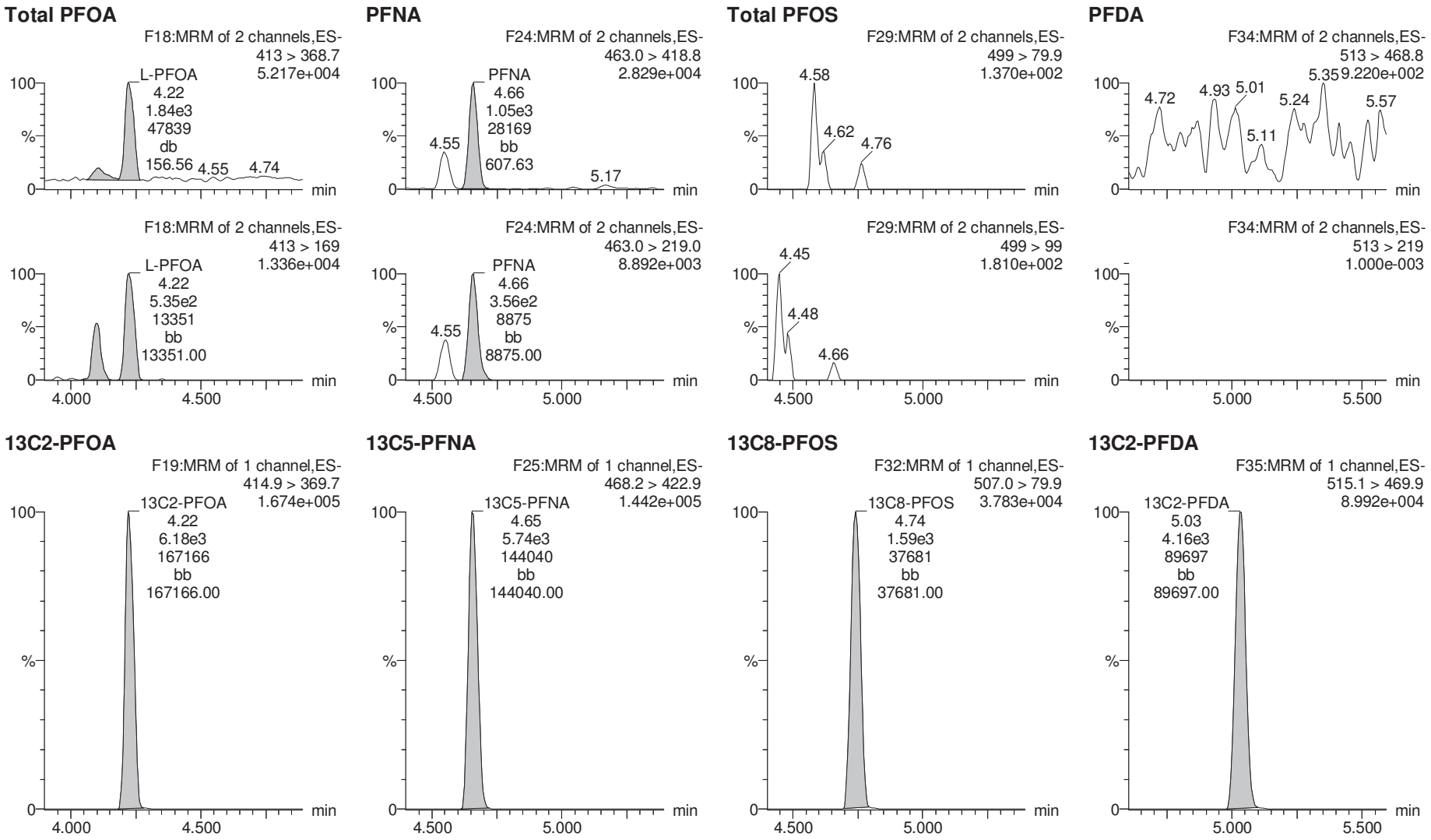


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Printed: Tuesday, January 16, 2018 11:22:22 Pacific Standard Time

Name: 180111M2_16, Date: 12-Jan-2018, Time: 06:26:36, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

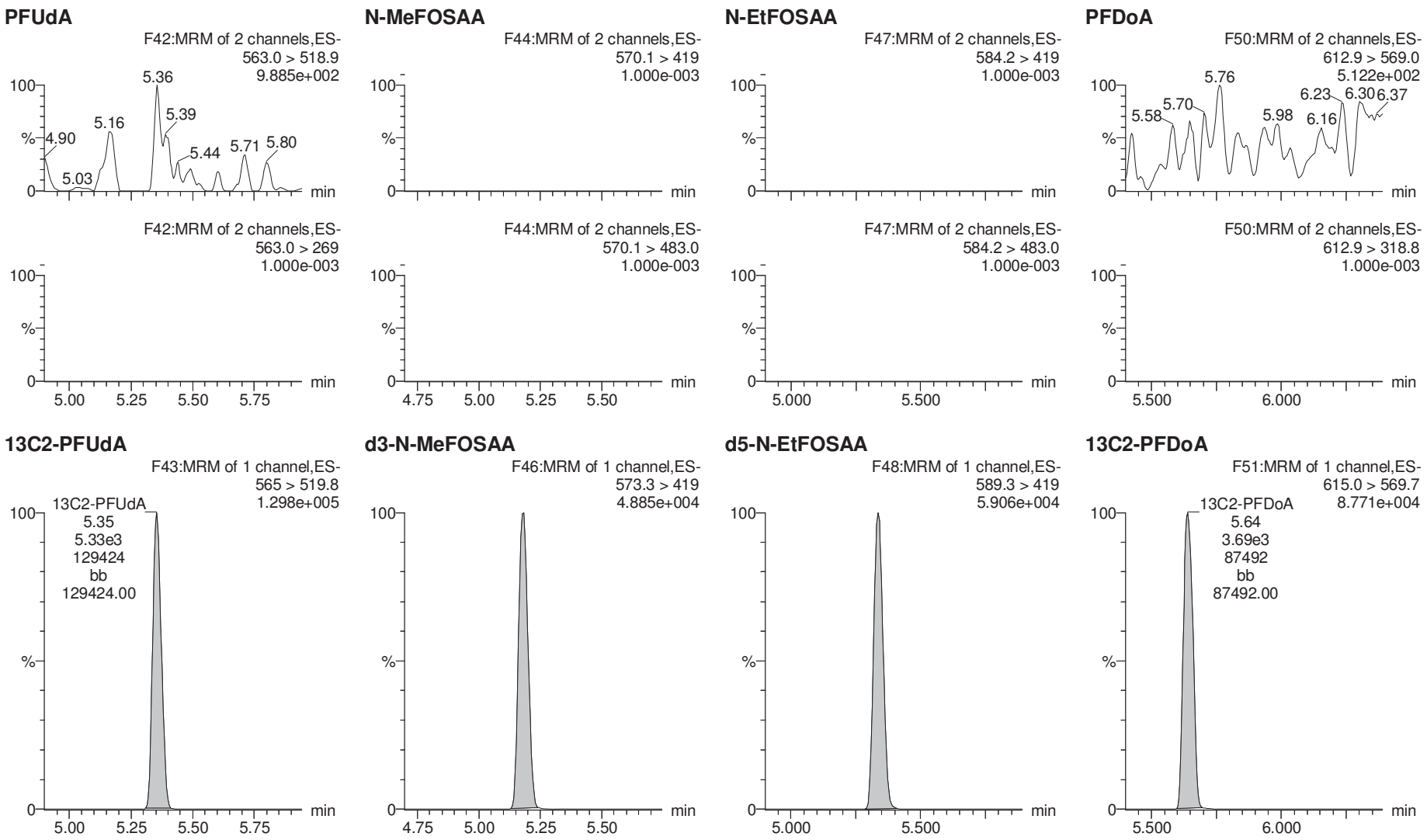


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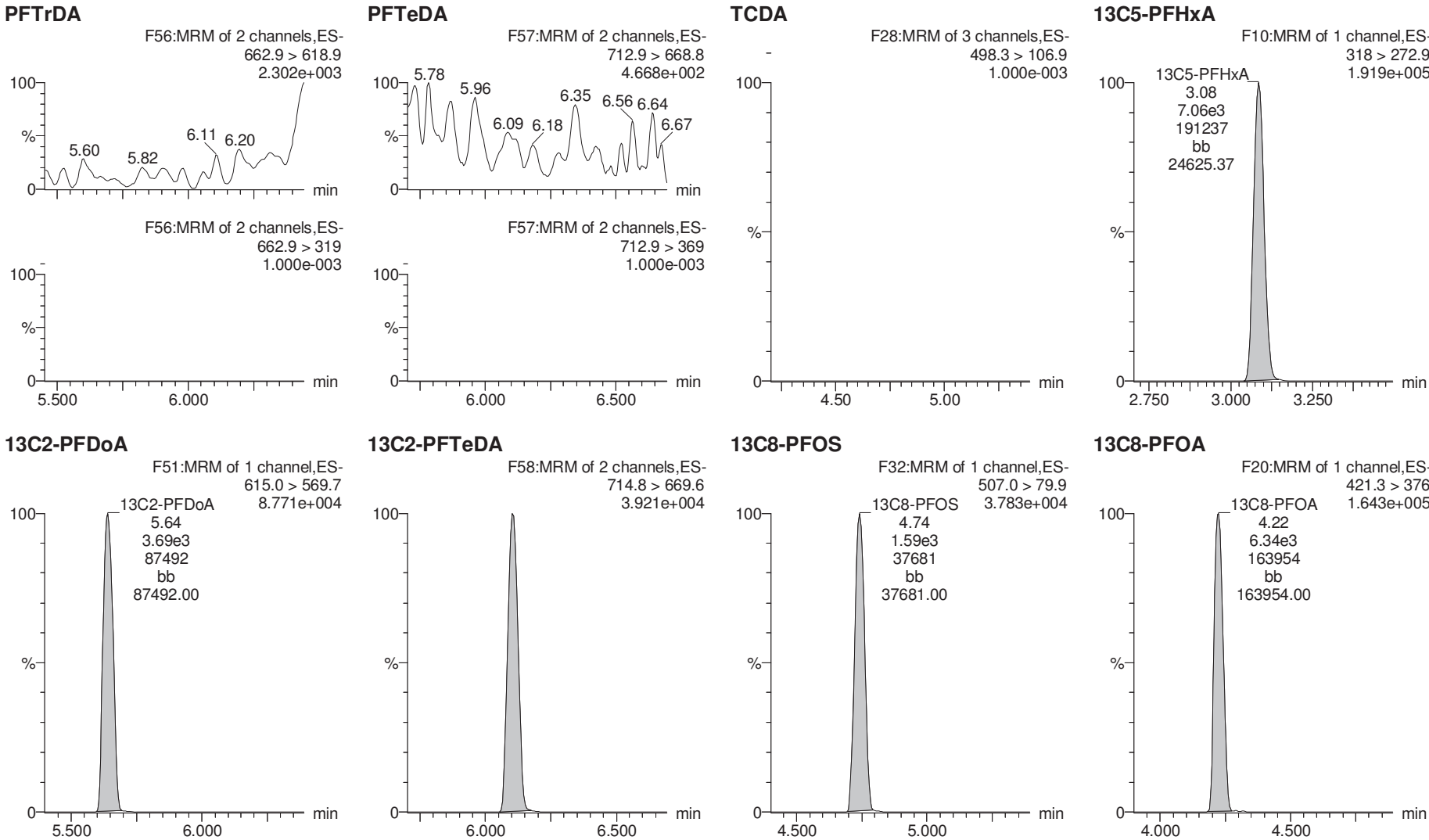
Vista Analytical Laboratory

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Name: 180111M2_16, Date: 12-Jan-2018, Time: 06:26:36, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204



Vista Analytical Laboratory

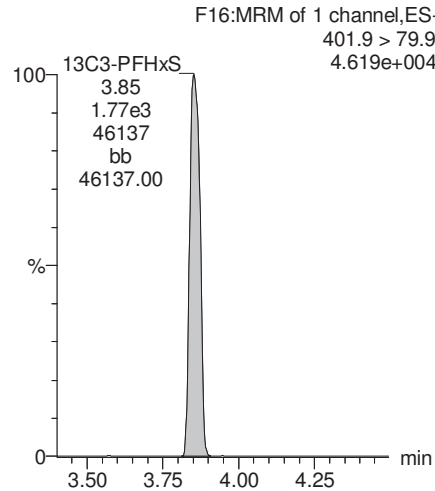
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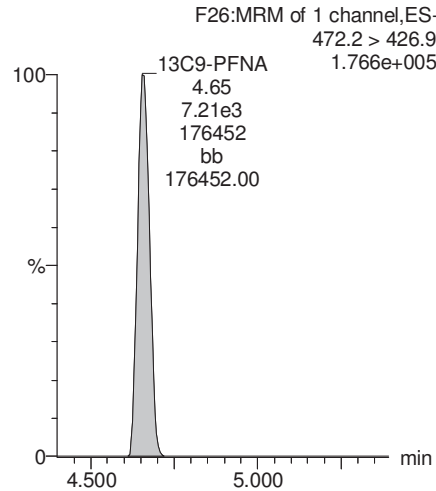
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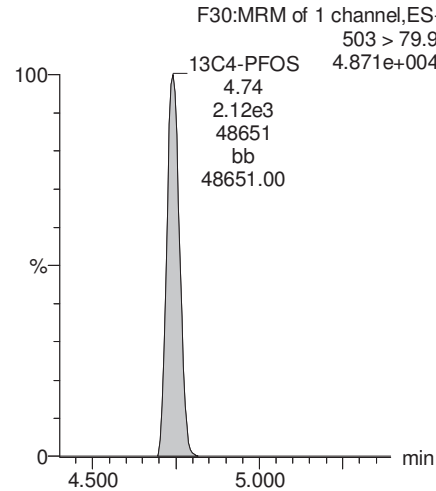
13C3-PFHxS



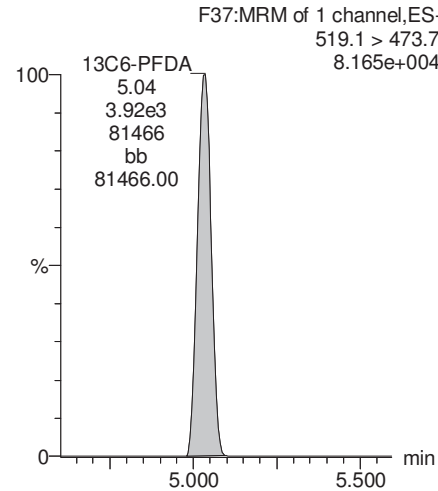
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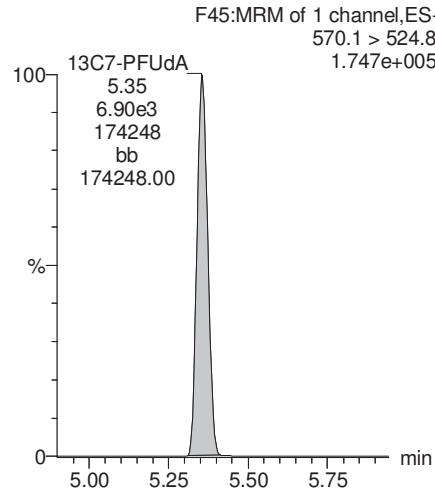
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180114M1\180114M1-36.qld

Last Altered: Wednesday, January 17, 2018 16:19:55 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:20:23 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_36, Date: 14-Jan-2018, Time: 20:19:35, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		9.36e2	0.260		2.60				
2	4 PFHxA	313.2 > 268.9	1.67e3	2.29e3	0.260		3.00	2.90	3.65	7.5344	
3	5 PFHpA	363.0 > 318.9			0.260		3.54				
4	6 L-PFHxS	398.9 > 79.6		9.74e2	0.260		3.68				
5	9 L-PFOA	413 > 368.7		8.09e3	0.260		4.07				
6	12 PFNA	463.0 > 418.8	1.53e3	7.55e3	0.260		4.54	4.39	2.53	6.3295	
7	14 L-PFOS	499 > 79.9		2.07e3	0.260		4.63				
8	16 PFDA	513 > 468.8		6.34e3	0.260		4.94				
9	18 N-MeFOSAA	570.1 > 419		2.21e3	0.260		5.10				
10	19 N-EtFOSAA	584.2 > 419		2.30e3	0.260		5.27				
11	20 PFUdA	563.0 > 518.9	6.68e1	9.20e3	0.260		5.30	5.15	0.0908		
12	22 PFDoA	612.9 > 569.0		5.30e3	0.260		5.60				

Dataset: U:\Q4.PRO\results\180114M1\180114M1-36.qld

Last Altered: Wednesday, January 17, 2018 16:19:55 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:20:38 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_36, Date: 14-Jan-2018, Time: 20:19:35, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.84e3	0.260		5.85				
2	25 PFTTeDA	712.9 > 668.8		2.84e3	0.260		6.10				
3	33 13C3-PFBS	302. > 98.8	9.36e2	7.35e3	0.260	0.097	2.60	2.45	1.59	63.2857	131.8
4	34 13C2-PFHxA	315 > 269.8	2.29e3	7.35e3	0.260	0.633	3.00	2.90	3.89	23.5968	122.9
5	35 13C4-PFHpA	367.2 > 321.8		7.35e3	0.260	0.651	3.56				
6	36 18O2-PFHxS	403.0 > 102.6	9.74e2	2.48e3	0.260	0.326	3.68	3.55	4.91	57.9222	120.7
7	37 13C2-6:2 FTS	429.1 > 408.9	1.87e3	7.78e3	0.260	0.171	4.00	3.83	3.00	67.6069	140.8
8	38 13C2-PFOA	414.9 > 369.7	8.09e3	7.78e3	0.260	0.903	4.07	3.91	13.0	55.2543	115.1
9	39 13C5-PFNA	468.2 > 422.9	7.55e3	9.45e3	0.260	0.844	4.54	4.39	9.99	45.4627	94.7
10	40 13C8-PFOSA	506.1 > 77.7	1.31e3	9.07e3	0.260	0.165	4.61	4.46	1.81	42.0030	87.5
11	41 13C8-PFOS	507.0 > 79.9	2.07e3	2.60e3	0.260	0.920	4.62	4.48	9.96	41.5578	86.6
12	42 13C2-PFDA	515.1 > 469.9	6.34e3	5.59e3	0.260	1.044	4.82	4.80	14.2	52.1562	108.7
13	43 13C2-8:2 FTS	529.1 > 508.7	5.12e2	7.35e3	0.260	0.087	4.89	4.74	0.870	38.6087	80.4
14	44 d3-N-MeFOSAA	573.3 > 419	2.21e3	9.07e3	0.260	0.227	5.08	4.95	3.04	51.4174	107.1
15	45 d5-N-EtFOSAA	589.3 > 419	2.30e3	9.07e3	0.260	0.313	5.27	5.13	3.16	38.7591	80.7
16	46 13C2-PFUdA	565 > 519.8	9.20e3	9.07e3	0.260	0.899	5.28	5.15	12.7	54.1402	112.8
17	47 13C2-PFDoA	615.0 > 569.7	5.30e3	9.07e3	0.260	0.645	5.60	5.46	7.31	43.5045	90.6
18	49 13C2-PFTTeDA	714.8 > 669.6	2.84e3	9.07e3	0.260	0.290	6.10	5.96	3.92	51.8945	108.1
19	55 13C5-PFHxA	318 > 272.9	7.35e3	7.35e3	0.260	1.000	3.00	2.89	12.5	48.0012	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.48e3	2.48e3	0.260	1.000	3.68	3.55	12.5	48.0012	100.0
21	57 13C8-PFOA	421.3 > 376	7.78e3	7.78e3	0.260	1.000	4.07	3.91	12.5	48.0012	100.0
22	58 13C9-PFNA	472.2 > 426.9	9.45e3	9.45e3	0.260	1.000	4.54	4.39	12.5	48.0012	100.0
23	59 13C4-PFOS	503 > 79.9	2.60e3	2.60e3	0.260	1.000	4.63	4.48	12.5	48.0012	100.0
24	60 13C6-PFDA	519.1 > 473.7	5.59e3	5.59e3	0.260	1.000	4.94	4.80	12.5	48.0012	100.0
25	61 13C7-PFUdA	570.1 > 524.8	9.07e3	9.07e3	0.260	1.000	5.28	5.15	12.5	48.0012	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	9.74e2	0.260		3.50		0.000		
27	63 Total PFOA	413 > 368.7	2.74e3	8.09e3	0.260		3.90		4.23	12.9205	
28	64 Total PFOS	499 > 79.9	0.00e0	2.07e3	0.260		4.50		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	2.21e3	0.260		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.30e3	0.260		5.20		0.000		

Vista Analytical Laboratory

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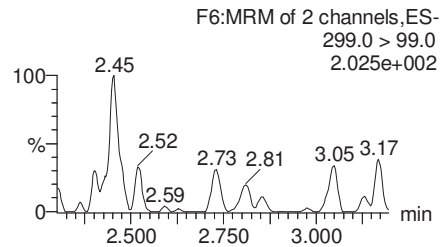
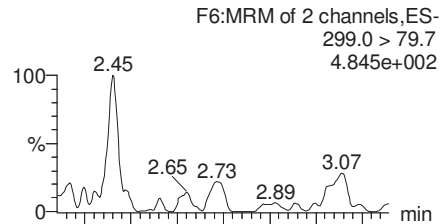
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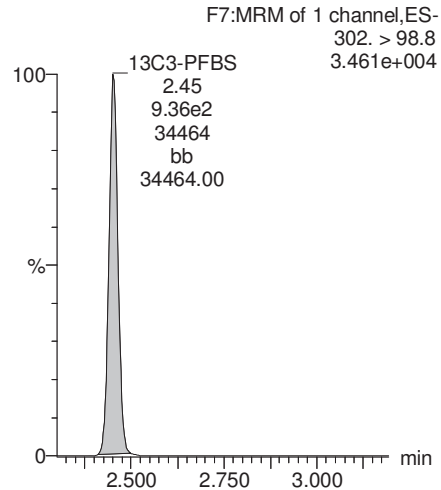
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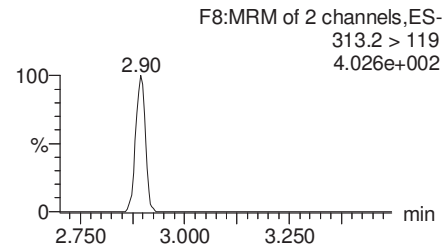
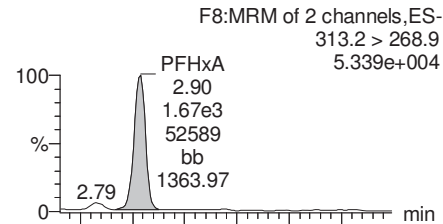
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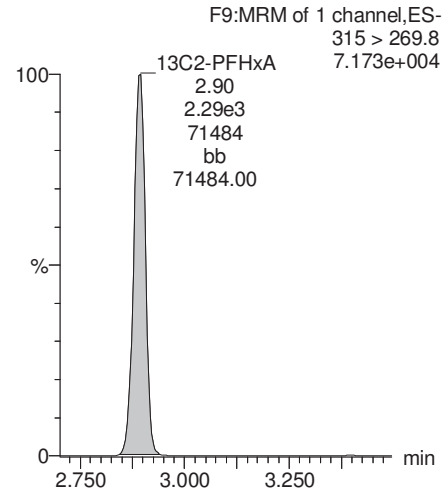
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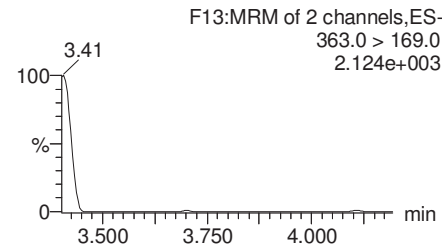
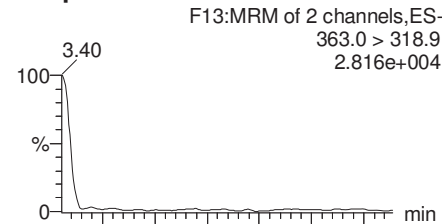
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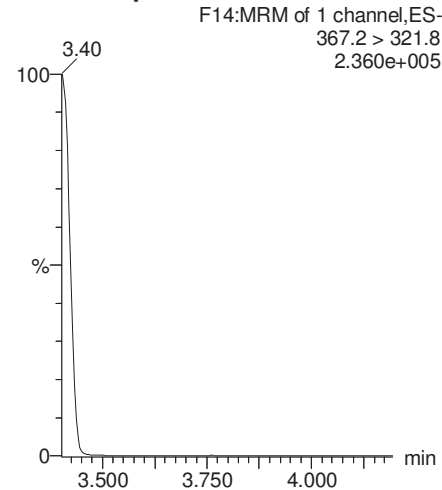
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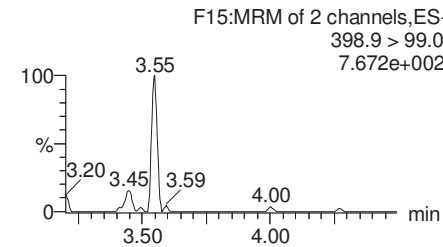
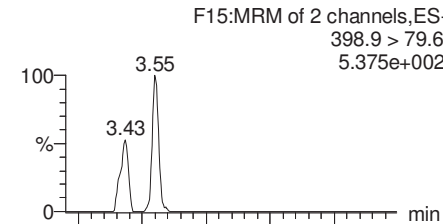
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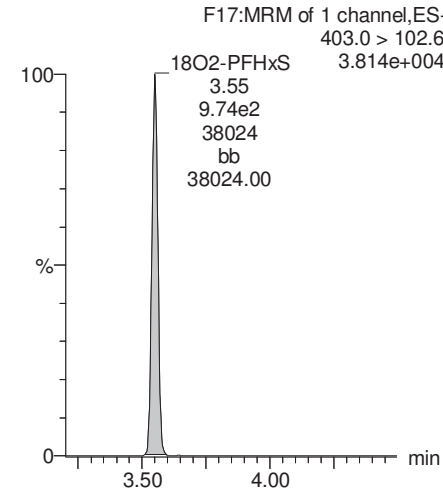
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Total PFHxS



18O2-PFHxS



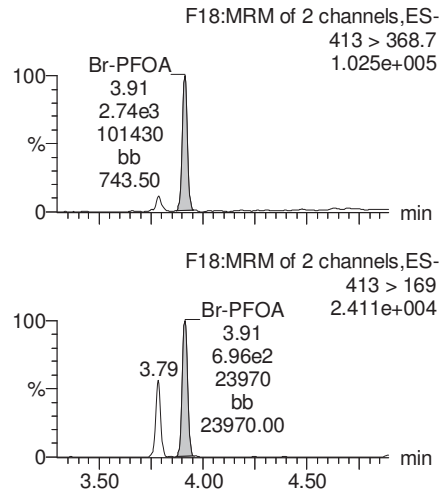
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Last Altered: Wednesday, January 17, 2018 16:19:55 Pacific Standard Time

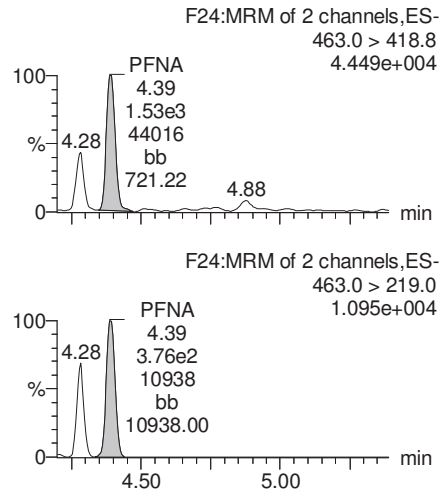
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Name: 180114M1_36, Date: 14-Jan-2018, Time: 20:19:35, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204

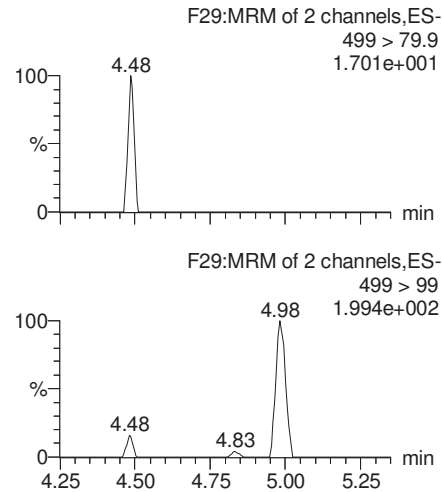
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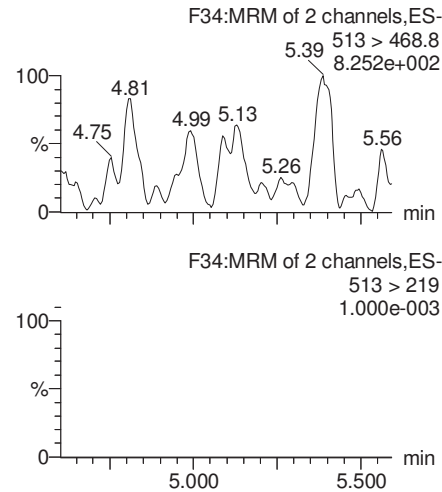
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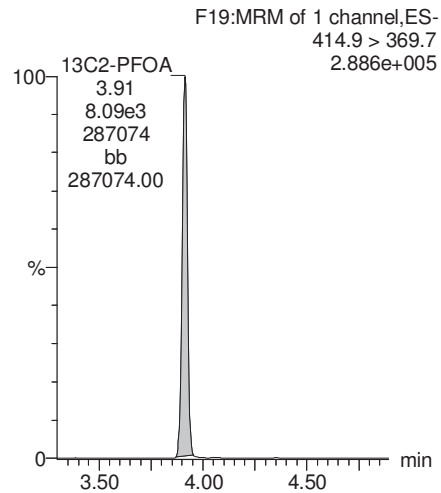
Total PFOS



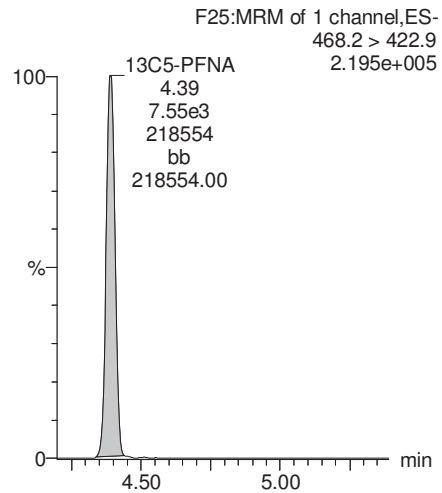
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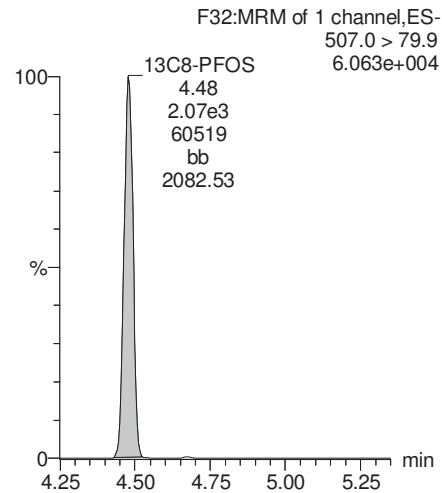
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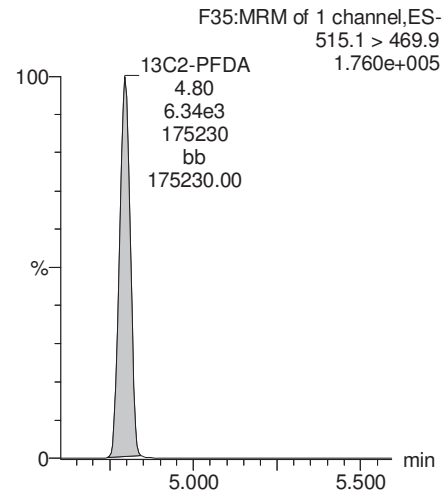
13C5-PFNA



13C8-PFOS



13C2-PFDA



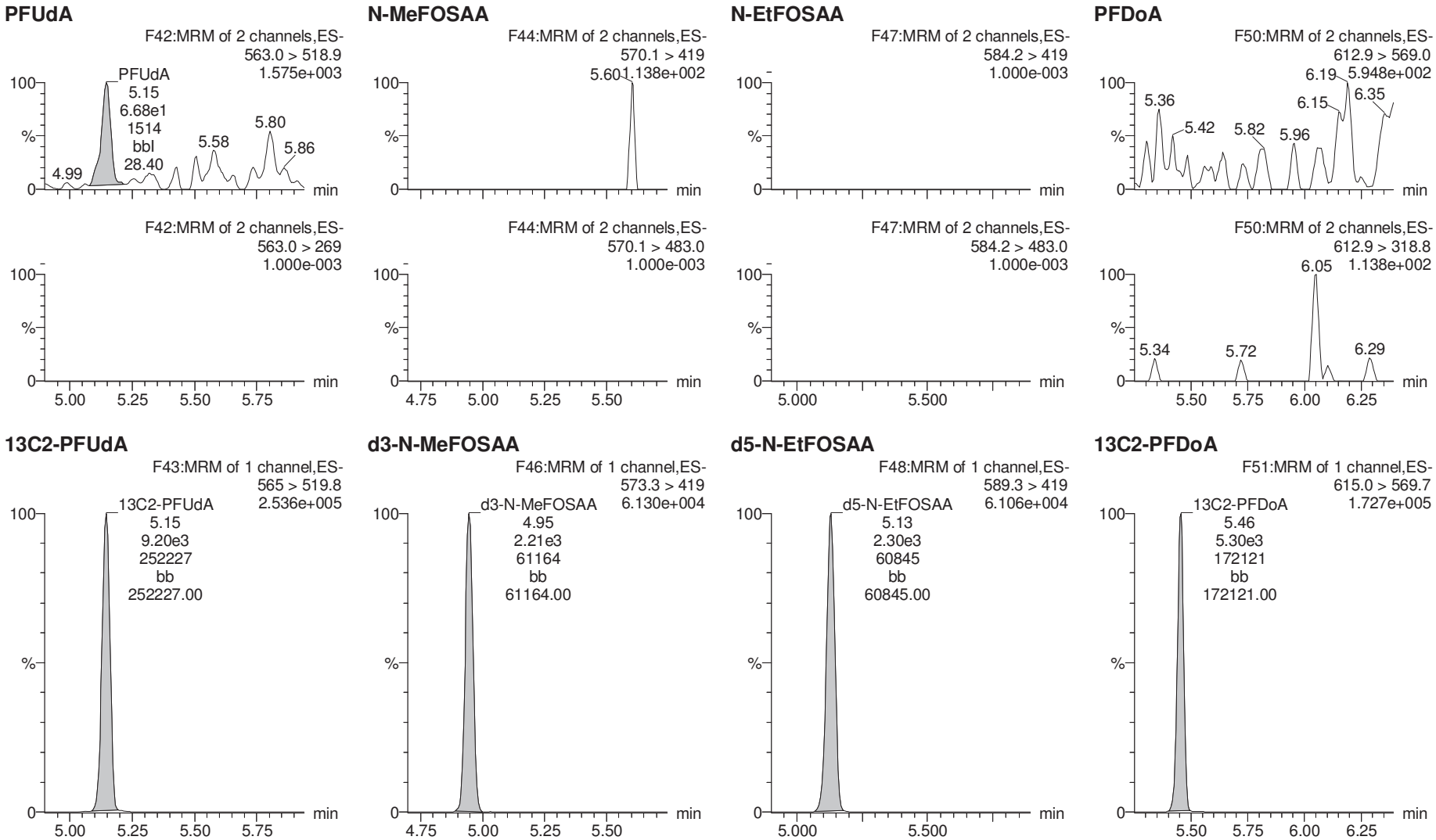
Vista Analytical Laboratory

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Printed: Wednesday, January 17, 2018 16:20:38 Pacific Standard Time

Name: 180114M1_36, Date: 14-Jan-2018, Time: 20:19:35, ID: 1701851-08 FT-PZ-456I-20171204 0.26041, Description: FT-PZ-456I-20171204



Vista Analytical Laboratory

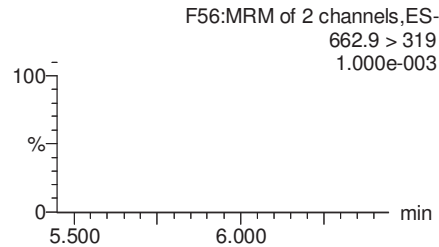
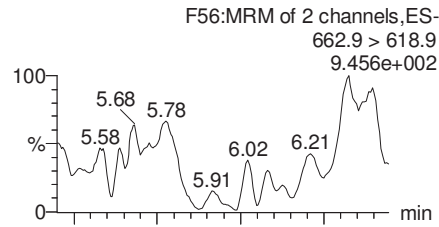
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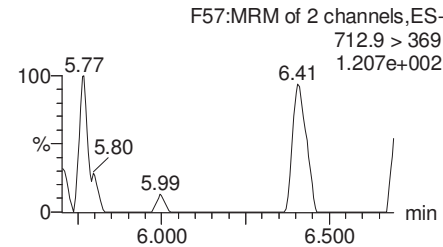
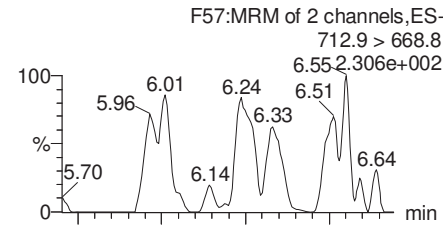
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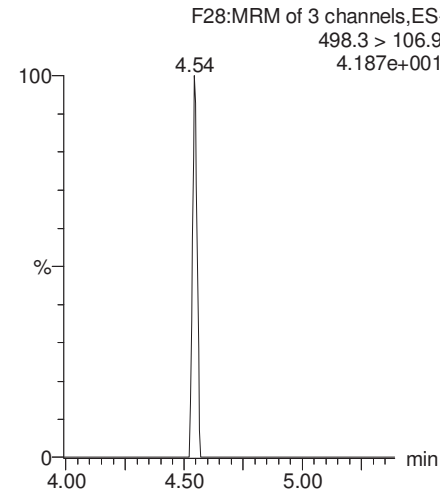
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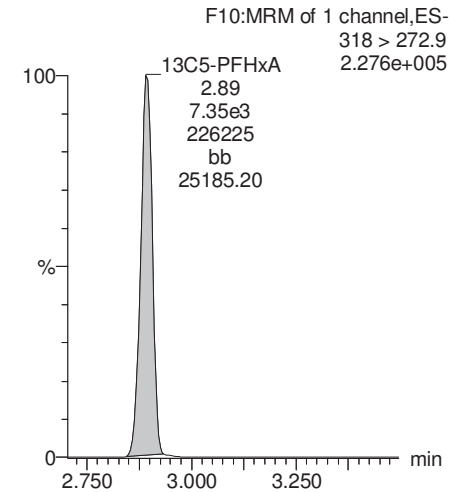
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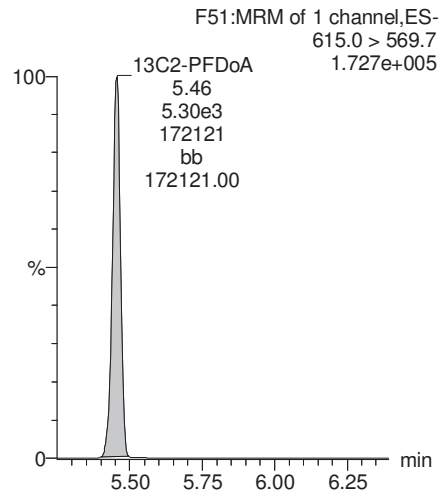
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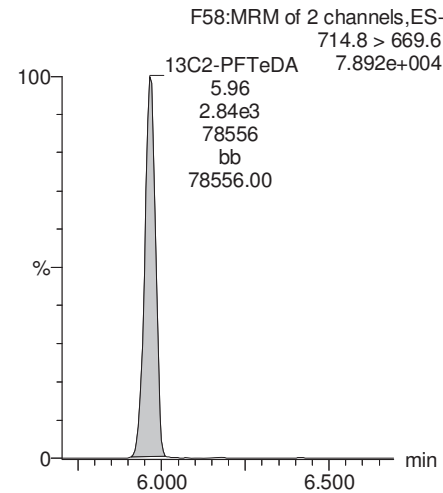
13C5-PFHxA



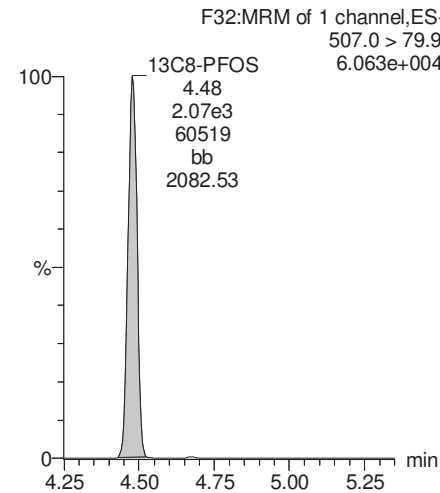
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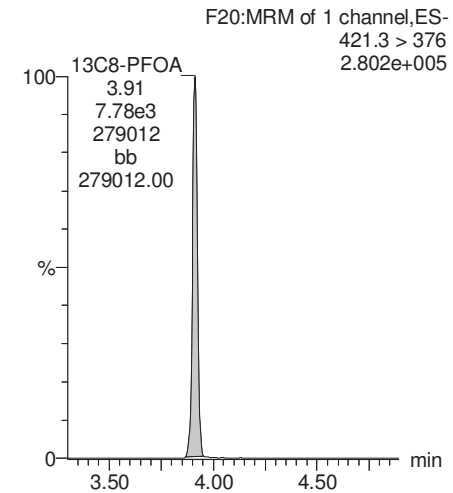
13C2-PFTeDA



13C8-PFOS



13C8-PFOA



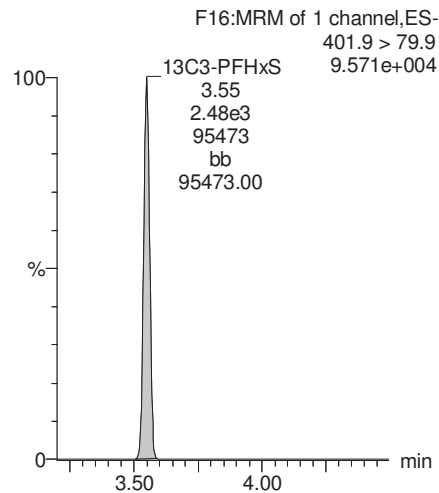
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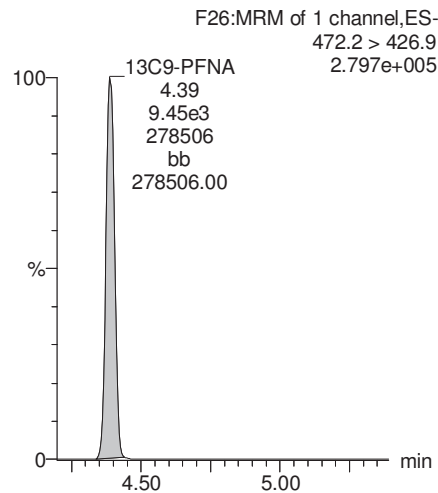
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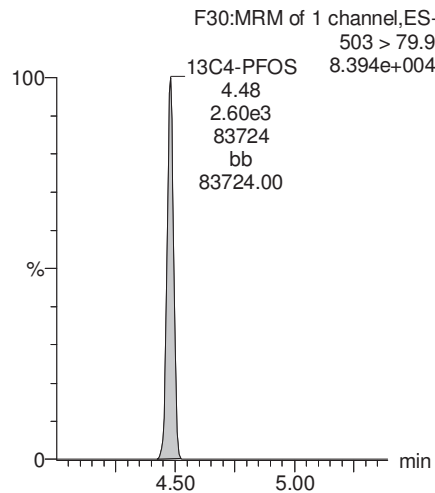
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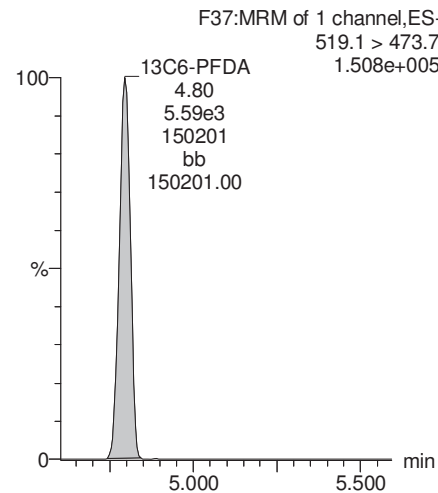
13C9-PFNA



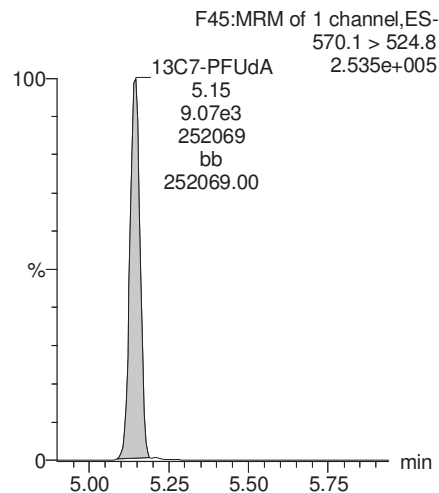
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180111M2\1801111M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:22:55 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:23:56 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_17, Date: 12-Jan-2018, Time: 06:37:48, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3 PFBS	299.0 > 79.7		7.67e2	0.259		2.66				
2	4 PFHxA	313.2 > 268.9		1.82e3	0.259		3.15				
3	5 PFHpA	363.0 > 318.9		4.53e3	0.259		3.78				
4	6 L-PFHxS	398.9 > 79.6		5.11e2	0.259		3.94				
5	9 L-PFOA	413 > 368.7	7.29e1	6.39e3	0.259		4.31	4.33	0.143		
6	12 PFNA	463.0 > 418.8		4.86e3	0.259		4.81				
7	13 PFOSA	498.1 > 77.8		8.80e2	0.259		4.87				
8	16 PFDA	513 > 468.8		3.78e3	0.259		5.18				
9	18 N-MeFOSAA	570.1 > 419		1.74e3	0.259		5.32				
10	19 N-EtFOSAA	584.2 > 419		2.09e3	0.259		5.48				
11	20 PFUdA	563.0 > 518.9		5.21e3	0.259		5.50				
12	22 PFDoA	612.9 > 569.0		3.35e3	0.259		5.77				

Dataset: U:\Q4.PRO\results\180111M2\180111M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:22:55 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:24:05 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 15 Jan 2018 11:34:14

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_17, Date: 12-Jan-2018, Time: 06:37:48, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTrDA	662.9 > 618.9		3.35e3	0.259		6.00				
2	25 PFTeDA	712.9 > 668.8		1.16e3	0.259		6.22				
3	33 13C3-PFBS	302. > 98.8	7.67e2	5.71e3	0.259	0.095	2.77	2.59	1.68	67.9600	140.8
4	34 13C2-PFHxA	315 > 269.8	1.82e3	5.71e3	0.259	0.597	3.15	3.09	3.97	25.7197	133.2
5	35 13C4-PFHpA	367.2 > 321.8	4.53e3	5.71e3	0.259	0.604	3.78	3.71	9.92	63.3945	131.3
6	36 18O2-PFHxS	403.0 > 102.6	5.11e2	1.58e3	0.259	0.293	3.94	3.86	4.04	53.2669	110.4
7	37 13C2-6:2 FTS	429.1 > 408.9	1.04e3	5.63e3	0.259	0.215	4.25	4.17	2.30	41.2562	85.5
8	38 13C2-PFOA	414.9 > 369.7	6.39e3	5.63e3	0.259	0.916	4.31	4.23	14.2	59.7672	123.8
9	39 13C5-PFNA	468.2 > 422.9	4.86e3	5.63e3	0.259	0.817	4.81	4.66	10.8	50.8948	105.4
10	40 13C8-PFOSA	506.1 > 77.7	8.80e2	6.85e3	0.259	0.223	4.87	4.72	1.60	27.7928	57.6
11	41 13C8-PFOS	507.0 > 79.9	1.65e3	1.29e3	0.259	0.875	4.89	4.74	16.0	70.7987	146.7
12	42 13C2-PFDA	515.1 > 469.9	3.78e3	4.23e3	0.259	1.105	5.18	5.04	11.1	38.9416	80.7
13	43 13C2-8:2 FTS	529.1 > 508.7	4.86e2	5.71e3	0.259	0.101	5.15	5.00	1.06	40.7216	84.4
14	44 d3-N-MeFOSAA	573.3 > 419	1.74e3	6.85e3	0.259	0.345	5.32	5.18	3.17	35.4355	73.4
15	45 d5-N-EtFOSAA	589.3 > 419	2.09e3	6.85e3	0.259	0.390	5.47	5.34	3.82	37.7741	78.3
16	46 13C2-PFUDa	565 > 519.8	5.21e3	6.85e3	0.259	0.958	5.49	5.36	9.50	38.2799	79.3
17	47 13C2-PFDOa	615.0 > 569.7	3.35e3	6.85e3	0.259	0.599	5.77	5.64	6.10	39.3158	81.5
18	49 13C2-PFTeDA	714.8 > 669.6	1.16e3	6.85e3	0.259	0.282	6.22	6.11	2.12	29.0070	60.1
19	55 13C5-PFHxA	318 > 272.9	5.71e3	5.71e3	0.259	1.000	3.15	3.09	12.5	48.2663	100.0
20	56 13C3-PFHxS	401.9 > 79.9	1.58e3	1.58e3	0.259	1.000	4.02	3.86	12.5	48.2663	100.0
21	57 13C8-PFOA	421.3 > 376	5.63e3	5.63e3	0.259	1.000	4.38	4.23	12.5	48.2663	100.0
22	58 13C9-PFNA	472.2 > 426.9	5.63e3	5.63e3	0.259	1.000	4.81	4.66	12.5	48.2663	100.0
23	59 13C4-PFOS	503 > 79.9	1.29e3	1.29e3	0.259	1.000	4.89	4.74	12.5	48.2663	100.0
24	60 13C6-PFDA	519.1 > 473.7	4.23e3	4.23e3	0.259	1.000	5.18	5.03	12.5	48.2663	100.0
25	61 13C7-PFUDa	570.1 > 524.8	6.85e3	6.85e3	0.259	1.000	5.49	5.36	12.5	48.2663	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	5.11e2	0.259		3.80		0.000		
27	63 Total PFOA	413 > 368.7	7.29e1	6.39e3	0.259		4.51		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	1.65e3	0.259		4.75		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.74e3	0.259		5.45		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	2.09e3	0.259		5.61		0.000		
31	68 Total PFOA+PFOS	499 > 79.9,41...	7.29e1		0.259		0.00		0.000		

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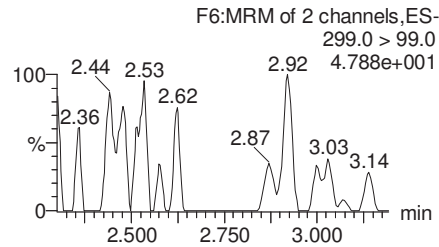
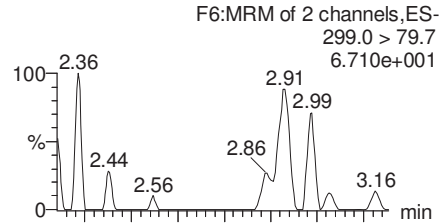
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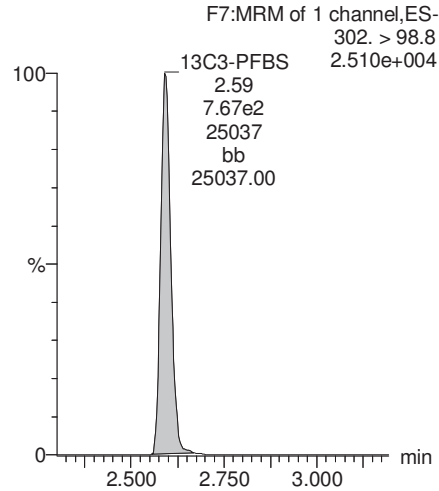
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Name: 180111M2_17, Date: 12-Jan-2018, Time: 06:37:48, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

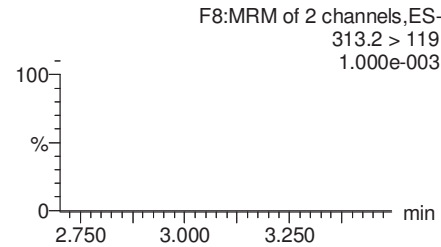
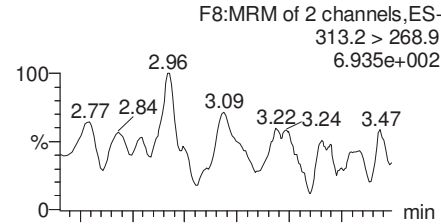
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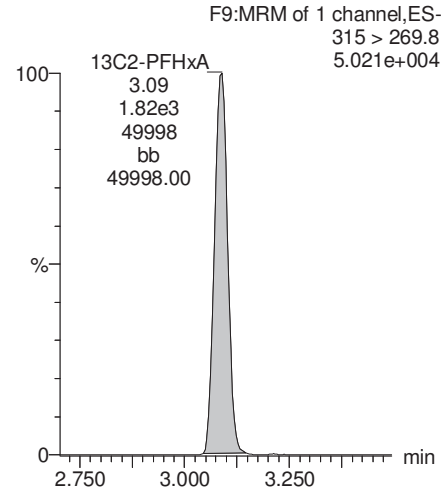
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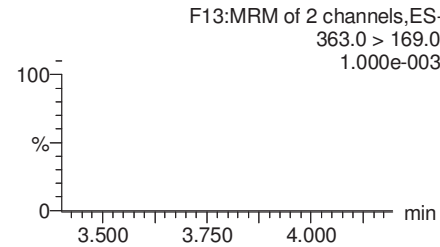
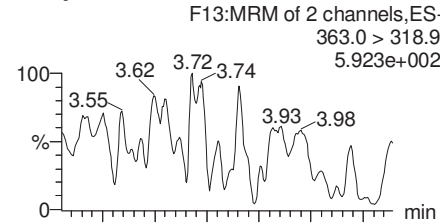
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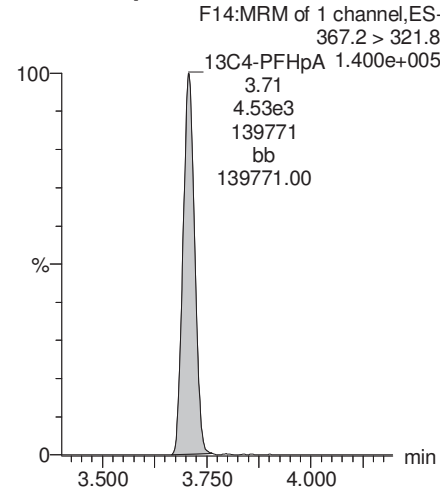
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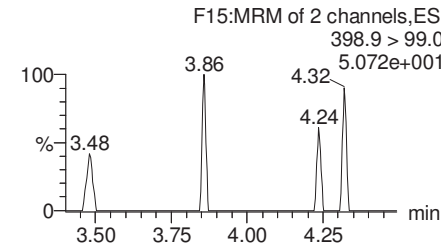
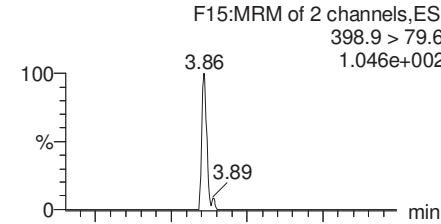
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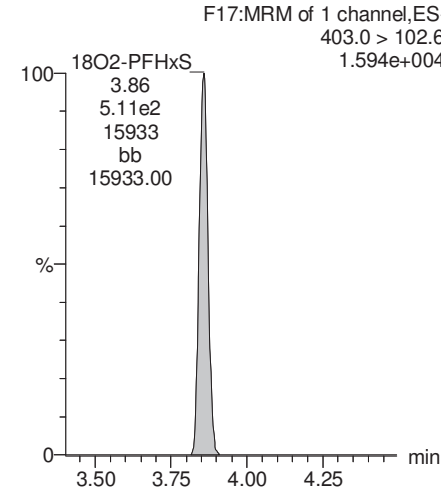
13C4-PFHpA



Total PFHxS



18O2-PFHxS



Vista Analytical Laboratory

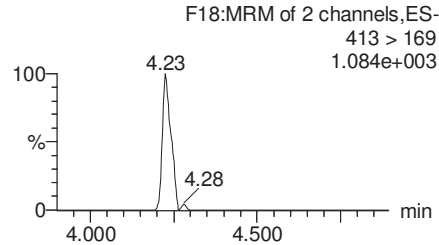
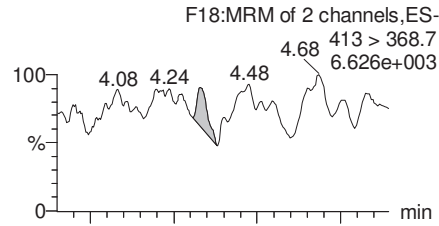
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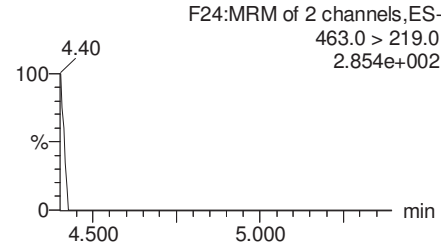
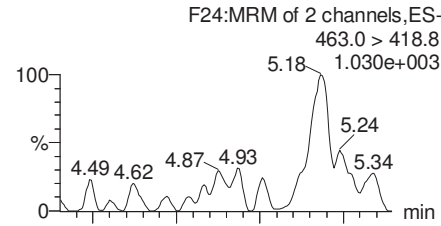
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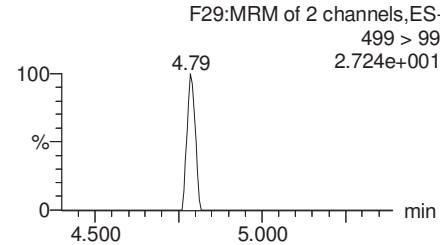
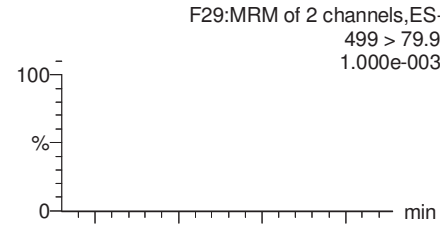
Total PFOA



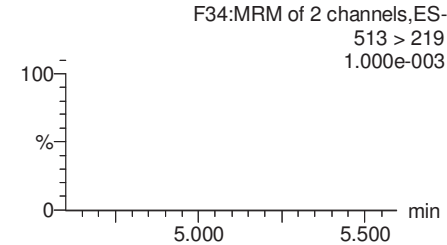
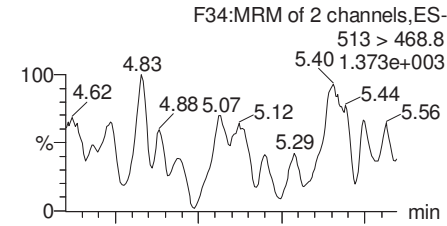
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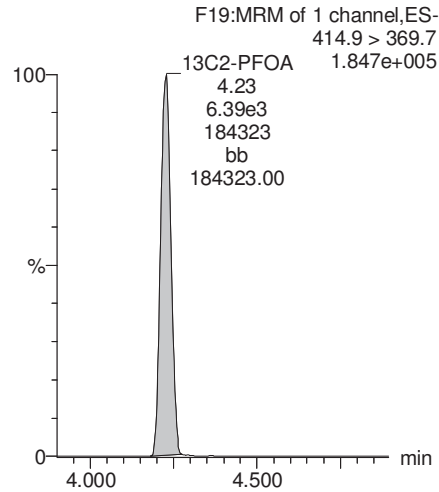
Total PFOS



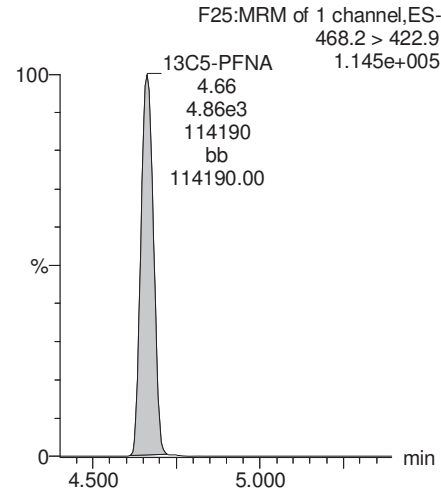
PFDA



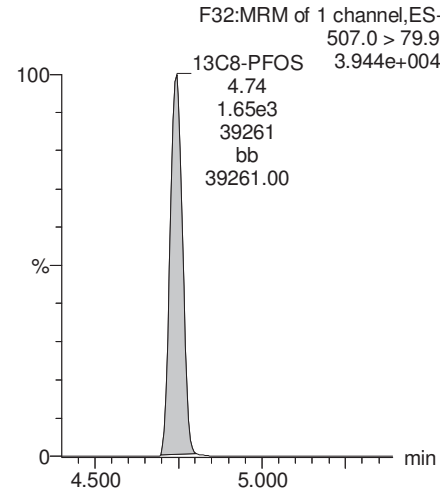
13C2-PFOA



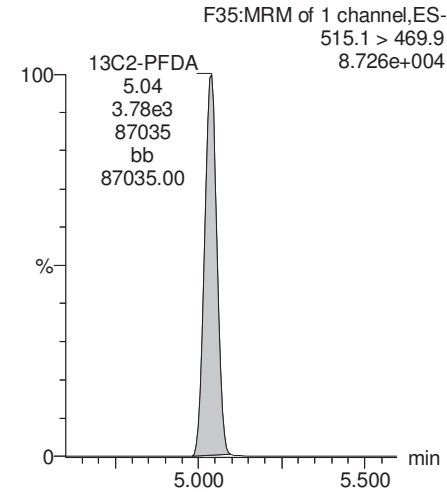
13C5-PFNA



13C8-PFOS



13C2-PFDA



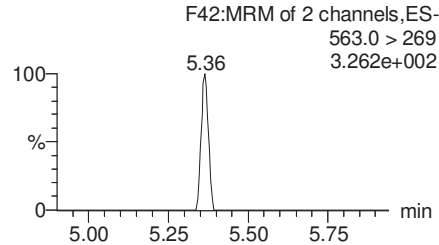
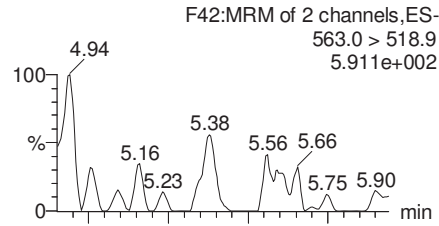
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-17.qld

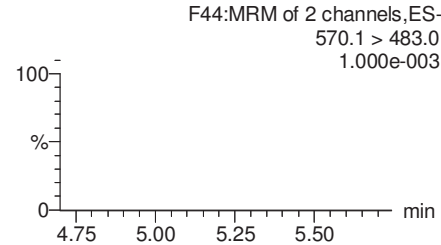
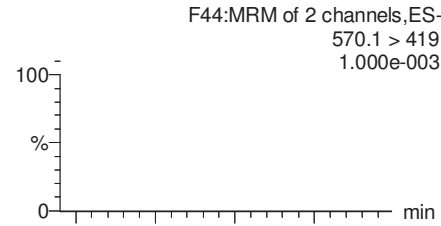
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Printed: Tuesday, January 16, 2018 11:24:05 Pacific Standard Time

Name: 180111M2_17, Date: 12-Jan-2018, Time: 06:37:48, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

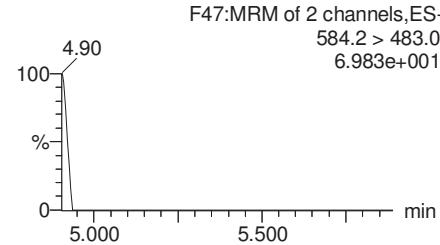
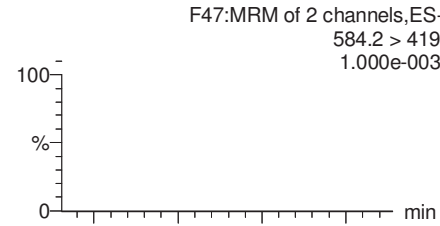
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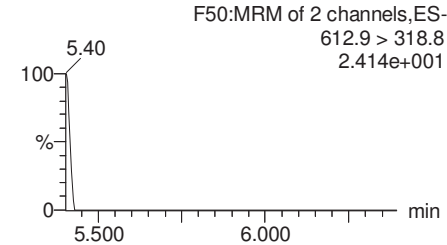
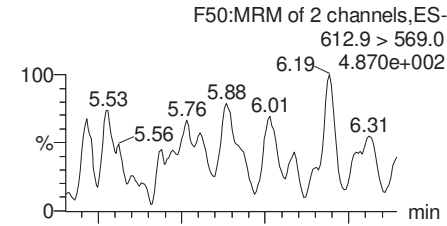
N-MeFOSAA



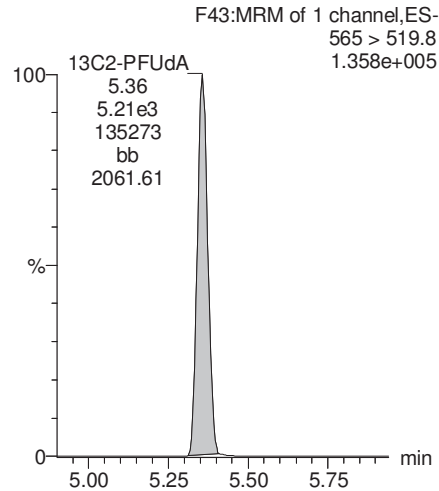
N-EtFOSAA



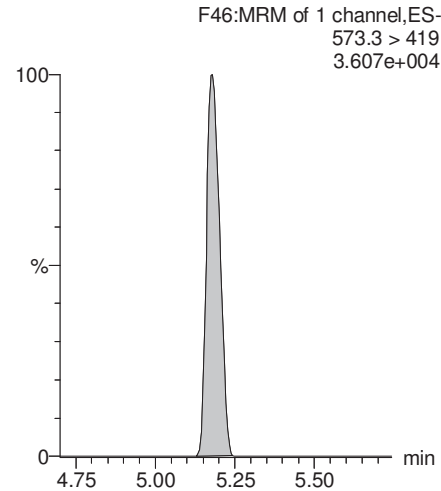
PFDaA



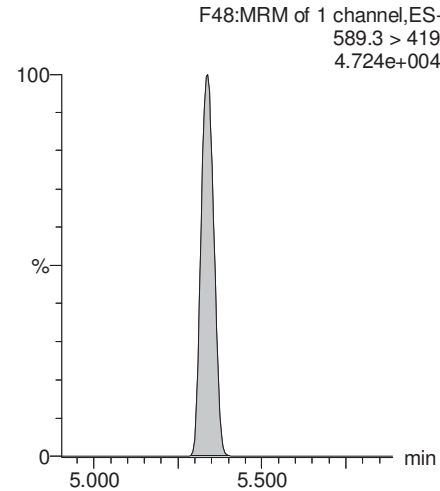
13C2-PFUdA



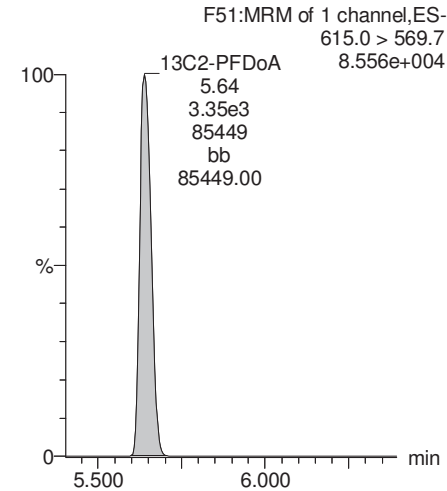
d3-N-MeFOSAA



d5-N-EtFOSAA



13C2-PFDaA



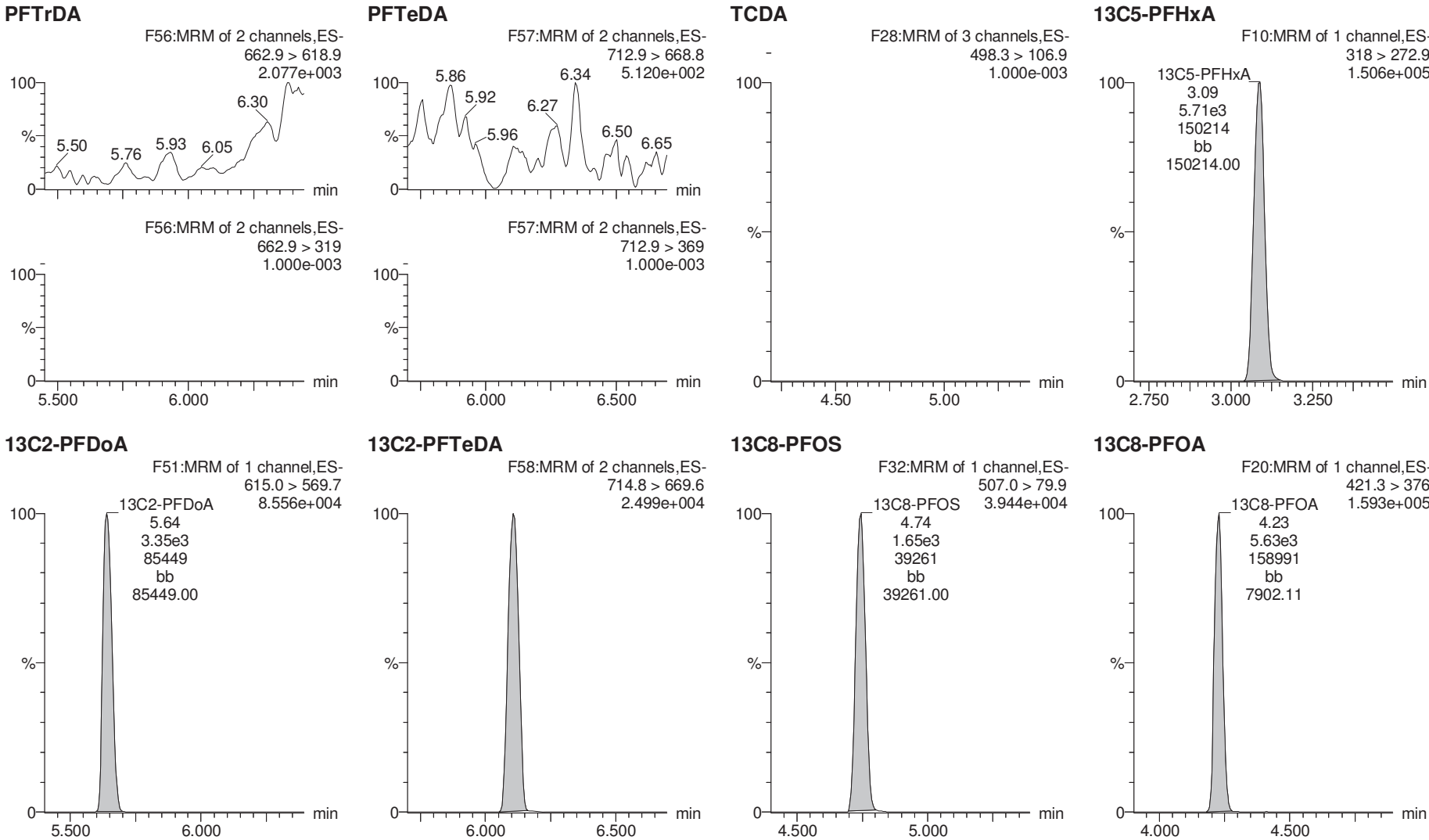
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-17.qld

Last Altered: Tuesday, January 16, 2018 11:22:55 Pacific Standard Time

Printed: Tuesday, January 16, 2018 11:24:05 Pacific Standard Time

Name: 180111M2_17, Date: 12-Jan-2018, Time: 06:37:48, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204



Vista Analytical Laboratory

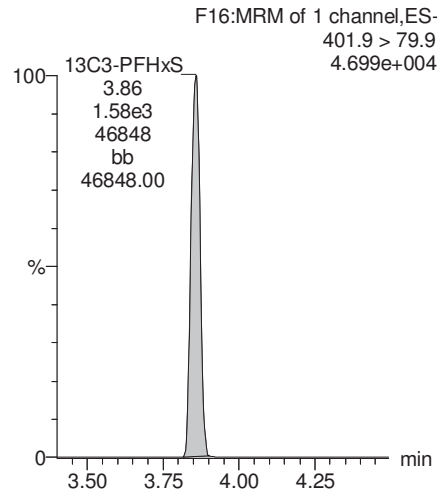
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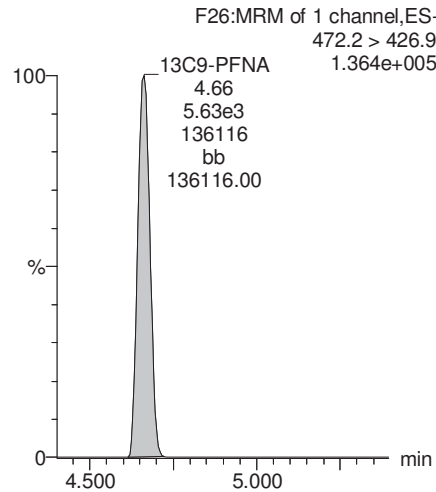
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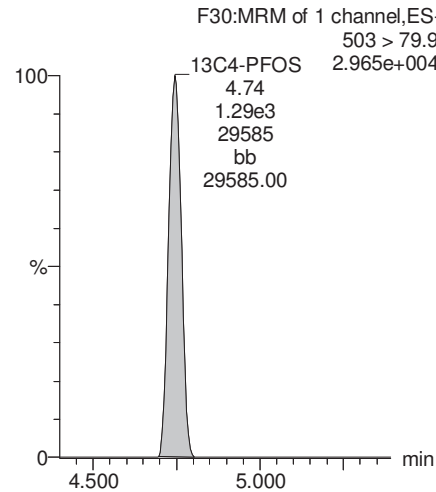
13C3-PFHxS



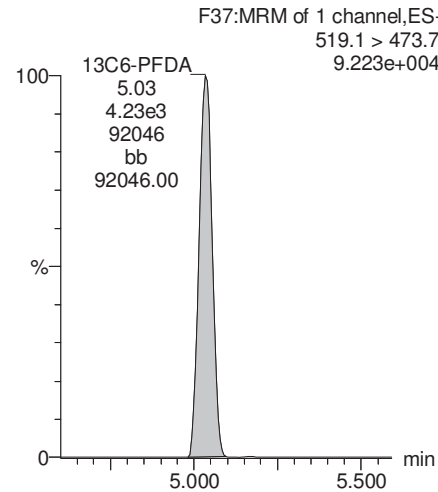
13C9-PFNA



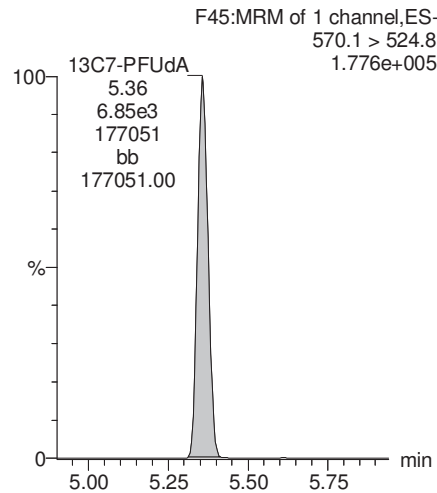
13C4-PFOS



13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180114M1\180114M1-37.qld

Last Altered: Wednesday, January 17, 2018 16:21:16 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:21:34 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_37, Date: 14-Jan-2018, Time: 20:31:02, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

	#	Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	3	PFBS	299.0 > 79.7		8.64e2	0.259		2.60				
2	4	PFHxA	313.2 > 268.9		2.44e3	0.259		3.00				
3	5	PFHpA	363.0 > 318.9			0.259		3.54				
4	6	L-PFHxS	398.9 > 79.6		8.73e2	0.259		3.68				
5	9	L-PFOA	413 > 368.7		7.74e3	0.259		4.07				
6	12	PFNA	463.0 > 418.8		8.14e3	0.259		4.54				
7	14	L-PFOS	499 > 79.9		2.08e3	0.259		4.63				
8	16	PFDA	513 > 468.8		8.24e3	0.259		4.94				
9	18	N-MeFOSAA	570.1 > 419		1.45e3	0.259		5.10				
10	19	N-EtFOSAA	584.2 > 419		1.86e3	0.259		5.27				
11	20	PFUdA	563.0 > 518.9		9.23e3	0.259		5.30				
12	22	PFDoA	612.9 > 569.0		7.28e3	0.259		5.60				

Dataset: U:\Q4.PRO\results\180114M1\180114M1-37.qld

Last Altered: Wednesday, January 17, 2018 16:21:16 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:21:42 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_37, Date: 14-Jan-2018, Time: 20:31:02, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

	# Name	Trace	Area	IS Area	Wt./Vol.	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	24 PFTTrDA	662.9 > 618.9		2.55e3	0.259		5.85				
2	25 PFTeDA	712.9 > 668.8		2.55e3	0.259		6.10				
3	33 13C3-PFBS	302. > 98.8	8.64e2	7.22e3	0.259	0.097	2.60	2.45	1.49	59.8119	123.9
4	34 13C2-PFHxA	315 > 269.8	2.44e3	7.22e3	0.259	0.633	3.00	2.90	4.22	25.6949	133.1
5	35 13C4-PFHpA	367.2 > 321.8		7.22e3	0.259	0.651	3.56				
6	36 18O2-PFHxS	403.0 > 102.6	8.73e2	2.02e3	0.259	0.326	3.68	3.55	5.42	64.2529	133.1
7	37 13C2-6:2 FTS	429.1 > 408.9	1.51e3	6.58e3	0.259	0.171	4.00	3.82	2.87	64.9725	134.6
8	38 13C2-PFOA	414.9 > 369.7	7.74e3	6.58e3	0.259	0.903	4.07	3.91	14.7	62.8571	130.2
9	39 13C5-PFNA	468.2 > 422.9	8.14e3	8.60e3	0.259	0.844	4.54	4.39	11.8	54.1476	112.2
10	40 13C8-PFOSA	506.1 > 77.7	1.01e3	1.07e4	0.259	0.165	4.61	4.46	1.18	27.4953	57.0
11	41 13C8-PFOS	507.0 > 79.9	2.08e3	2.28e3	0.259	0.920	4.62	4.48	11.4	47.7489	98.9
12	42 13C2-PFDA	515.1 > 469.9	8.24e3	8.05e3	0.259	1.044	4.82	4.80	12.8	47.3388	98.1
13	43 13C2-8:2 FTS	529.1 > 508.7	8.73e2	7.22e3	0.259	0.087	4.89	4.74	1.51	67.3877	139.6
14	44 d3-N-MeFOSAA	573.3 > 419	1.45e3	1.07e4	0.259	0.227	5.08	4.94	1.69	28.6859	59.4
15	45 d5-N-EtFOSAA	589.3 > 419	1.86e3	1.07e4	0.259	0.313	5.27	5.13	2.17	26.6903	55.3
16	46 13C2-PFUDa	565 > 519.8	9.23e3	1.07e4	0.259	0.899	5.28	5.14	10.7	46.1023	95.5
17	47 13C2-PFDoA	615.0 > 569.7	7.28e3	1.07e4	0.259	0.645	5.60	5.45	8.47	50.7133	105.1
18	49 13C2-PFTeDA	714.8 > 669.6	2.55e3	1.07e4	0.259	0.290	6.10	5.96	2.97	39.5310	81.9
19	55 13C5-PFHxA	318 > 272.9	7.22e3	7.22e3	0.259	1.000	3.00	2.90	12.5	48.2663	100.0
20	56 13C3-PFHxS	401.9 > 79.9	2.02e3	2.02e3	0.259	1.000	3.68	3.55	12.5	48.2663	100.0
21	57 13C8-PFOA	421.3 > 376	6.58e3	6.58e3	0.259	1.000	4.07	3.91	12.5	48.2663	100.0
22	58 13C9-PFNA	472.2 > 426.9	8.60e3	8.60e3	0.259	1.000	4.54	4.39	12.5	48.2663	100.0
23	59 13C4-PFOS	503 > 79.9	2.28e3	2.28e3	0.259	1.000	4.63	4.48	12.5	48.2663	100.0
24	60 13C6-PFDA	519.1 > 473.7	8.05e3	8.05e3	0.259	1.000	4.94	4.80	12.5	48.2663	100.0
25	61 13C7-PFUDa	570.1 > 524.8	1.07e4	1.07e4	0.259	1.000	5.28	5.14	12.5	48.2663	100.0
26	62 Total PFHxS	398.9 > 79.6	0.00e0	8.73e2	0.259		3.50		0.000		
27	63 Total PFOA	413 > 368.7	1.18e2	7.74e3	0.259		3.90		0.000		
28	64 Total PFOS	499 > 79.9	0.00e0	2.08e3	0.259		4.50		0.000		
29	65 Total N-MeFOSAA	570.1 > 419	0.00e0	1.45e3	0.259		5.00		0.000		
30	66 Total N-EtFOSAA	584.2 > 419	0.00e0	1.86e3	0.259		5.20		0.000		

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180114M1\180114M1-37.qld

Last Altered: Wednesday, January 17, 2018 16:21:16 Pacific Standard Time

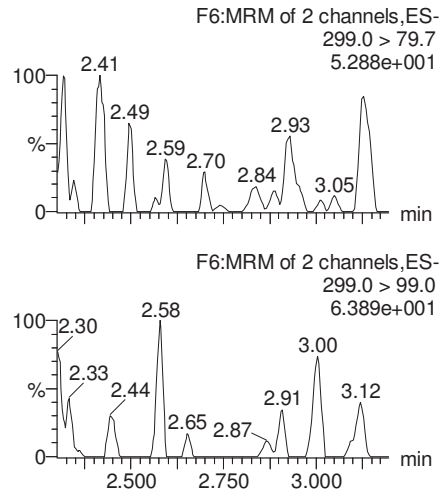
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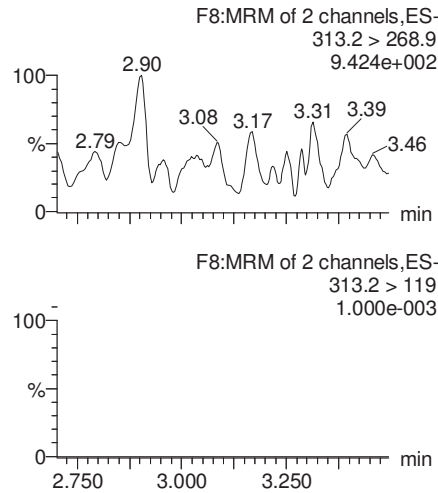
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_37, Date: 14-Jan-2018, Time: 20:31:02, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

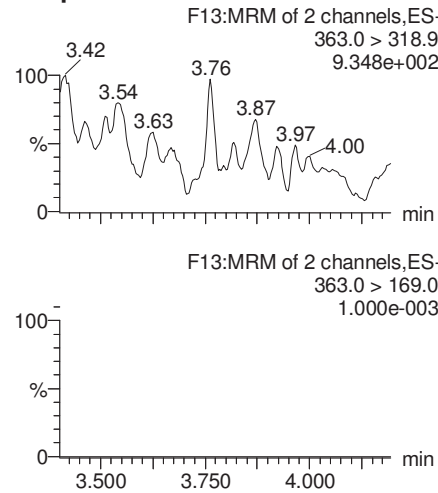
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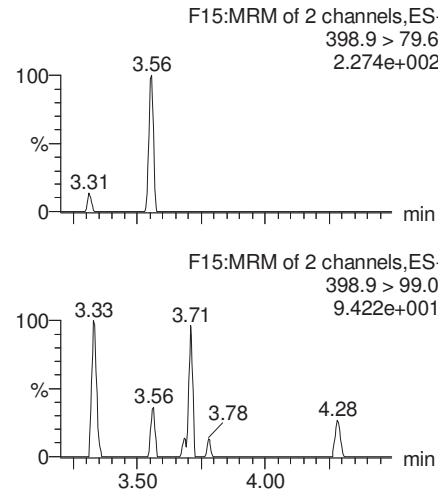
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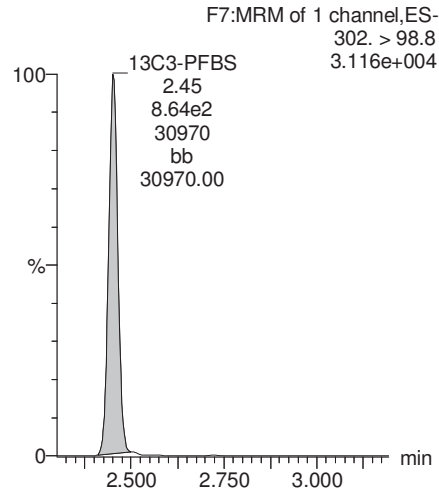
PFHpA



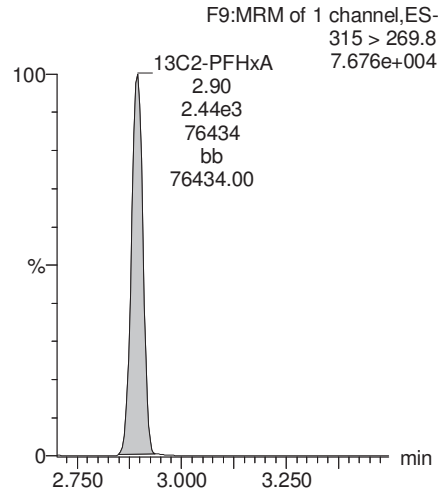
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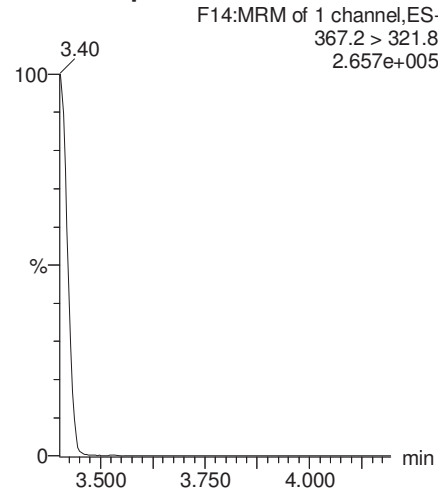
13C3-PFBS



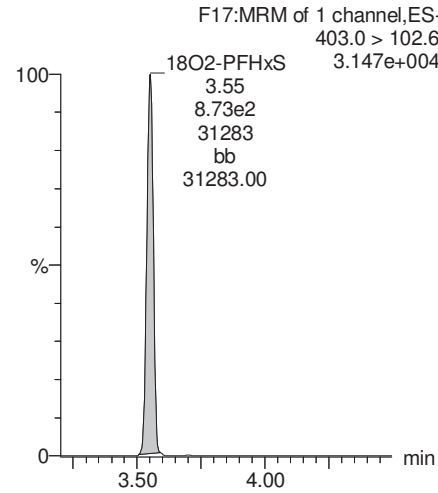
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



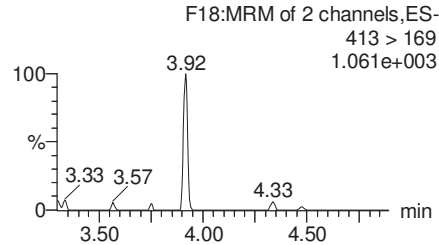
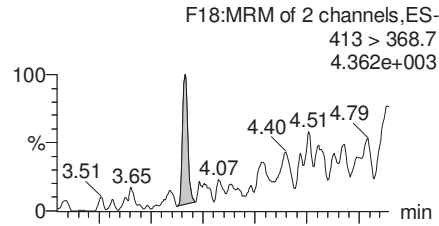
Vista Analytical Laboratory

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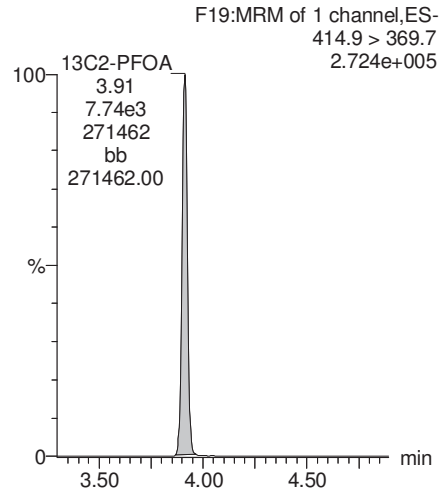
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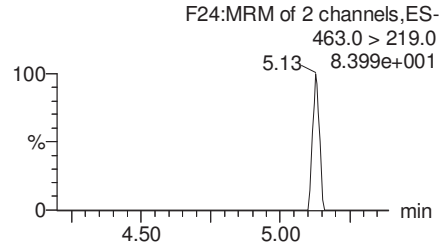
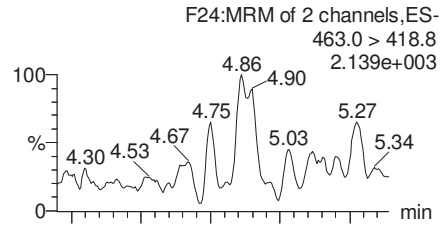
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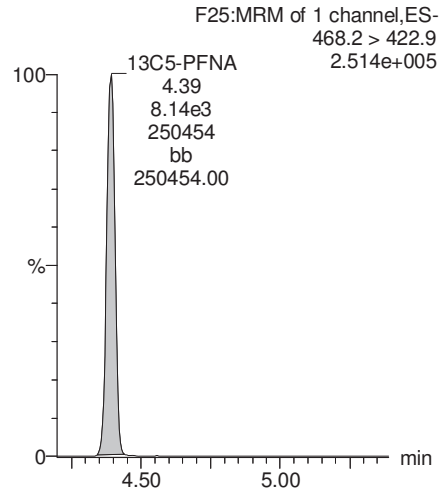
13C2-PFOA



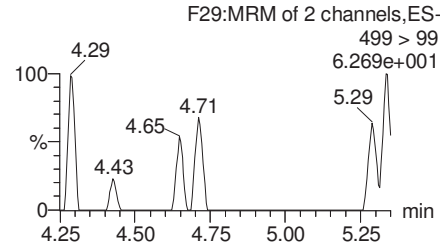
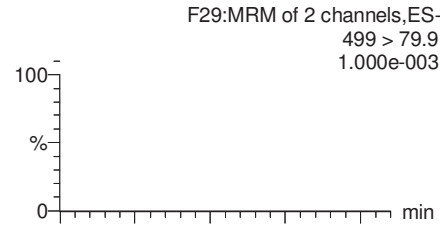
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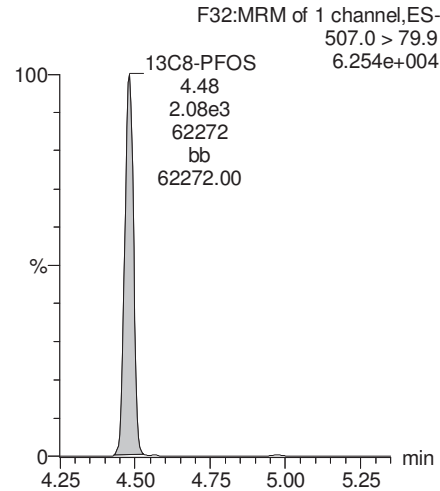
13C5-PFNA



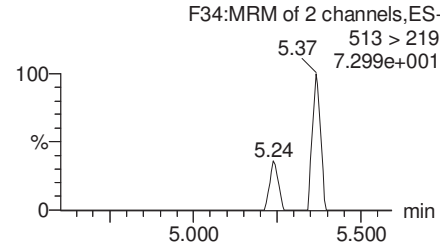
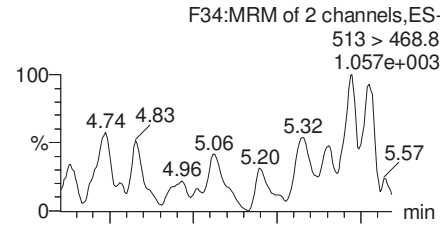
Total PFOS



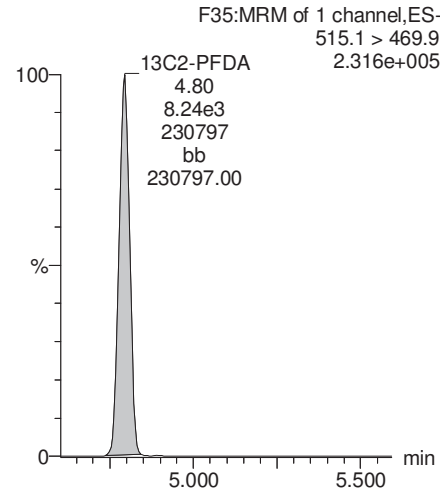
13C8-PFOS



PFDA



13C2-PFDA

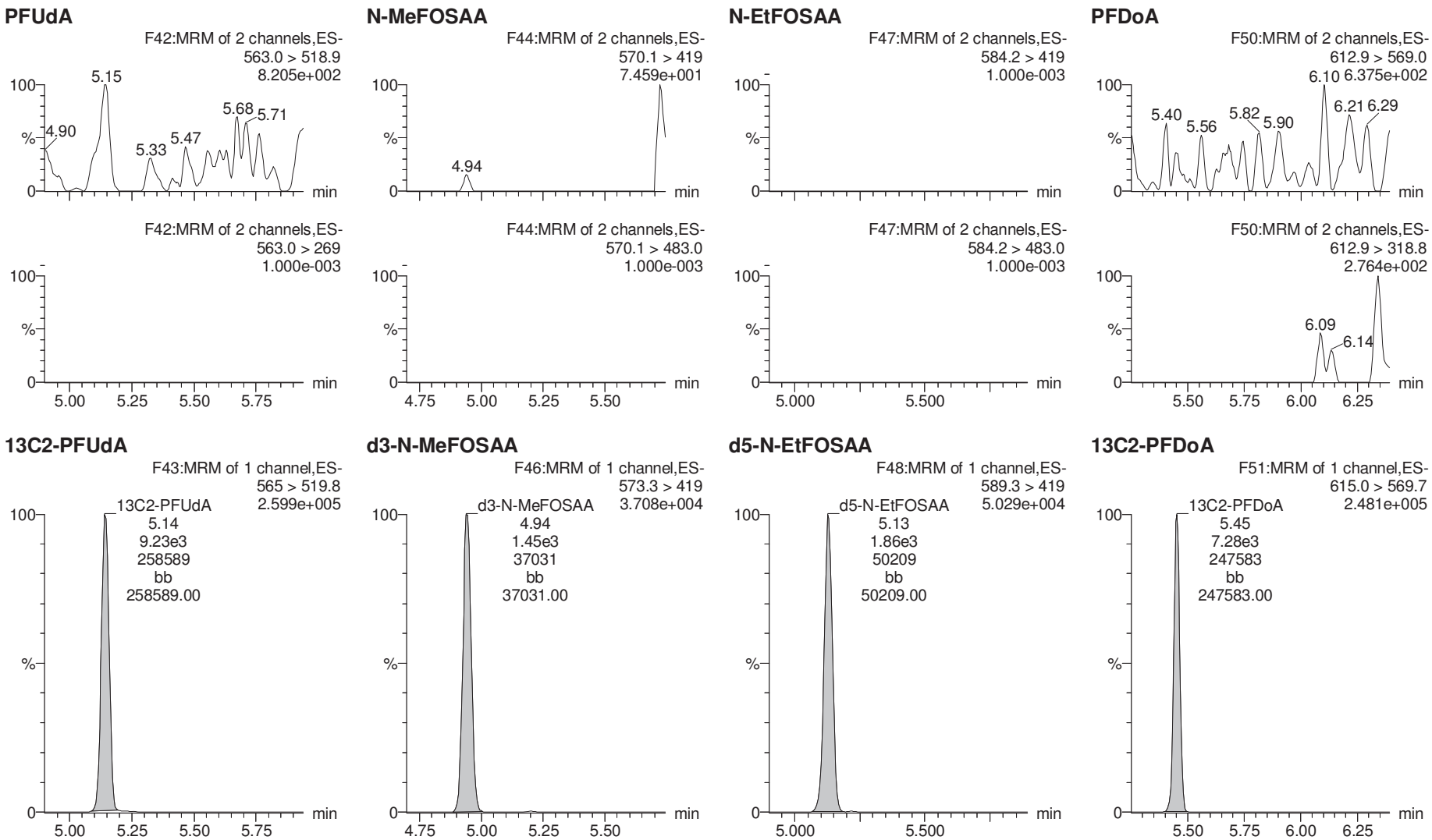


Dataset: U:\Q4.PRO\results\180114M1\180114M1-37.qld

Last Altered: Wednesday, January 17, 2018 16:21:16 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:21:42 Pacific Standard Time

Name: 180114M1_37, Date: 14-Jan-2018, Time: 20:31:02, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

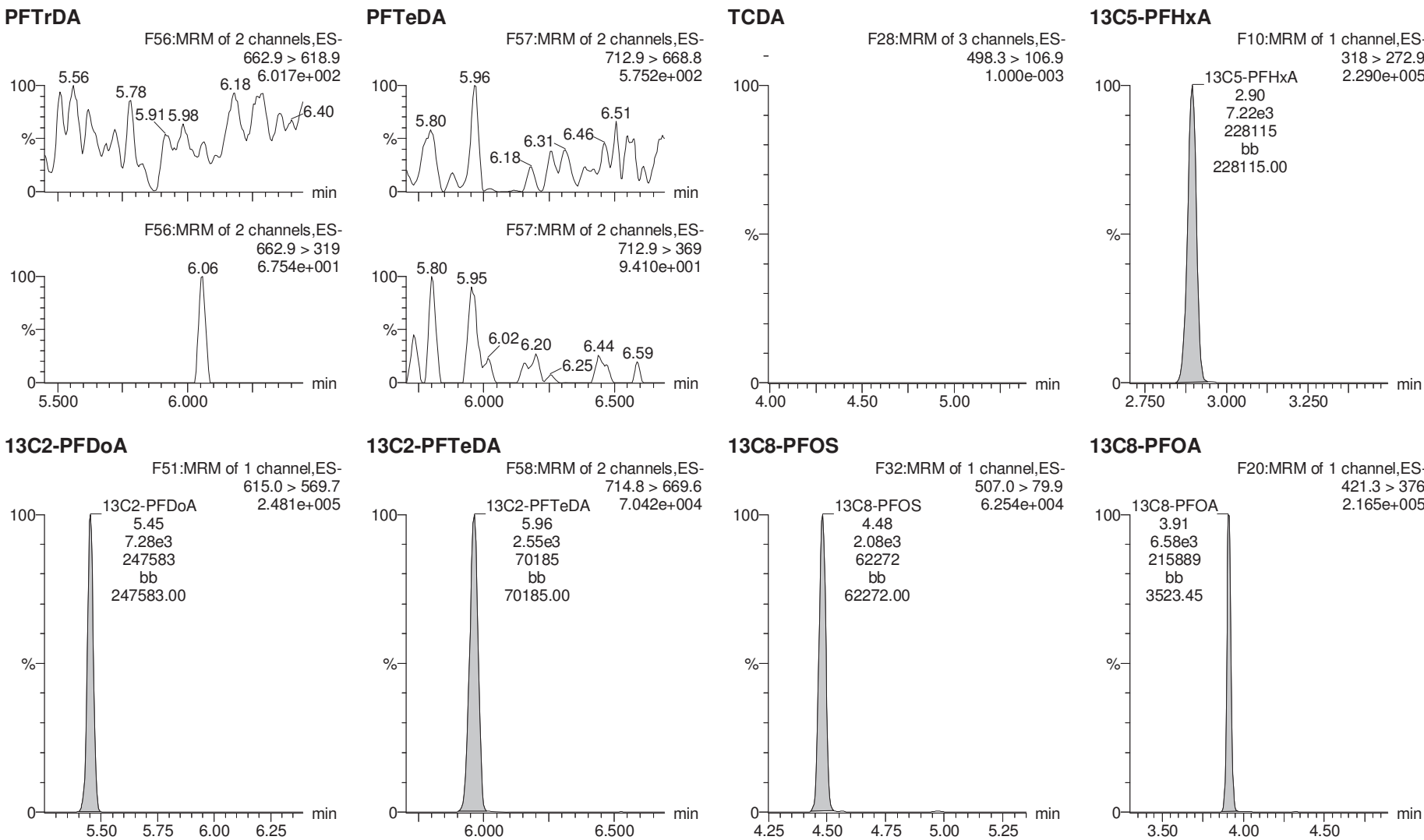


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Last Altered: Wednesday, January 17, 2018 16:21:16 Pacific Standard Time

Printed: Wednesday, January 17, 2018 16:21:42 Pacific Standard Time

Name: 180114M1_37, Date: 14-Jan-2018, Time: 20:31:02, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204

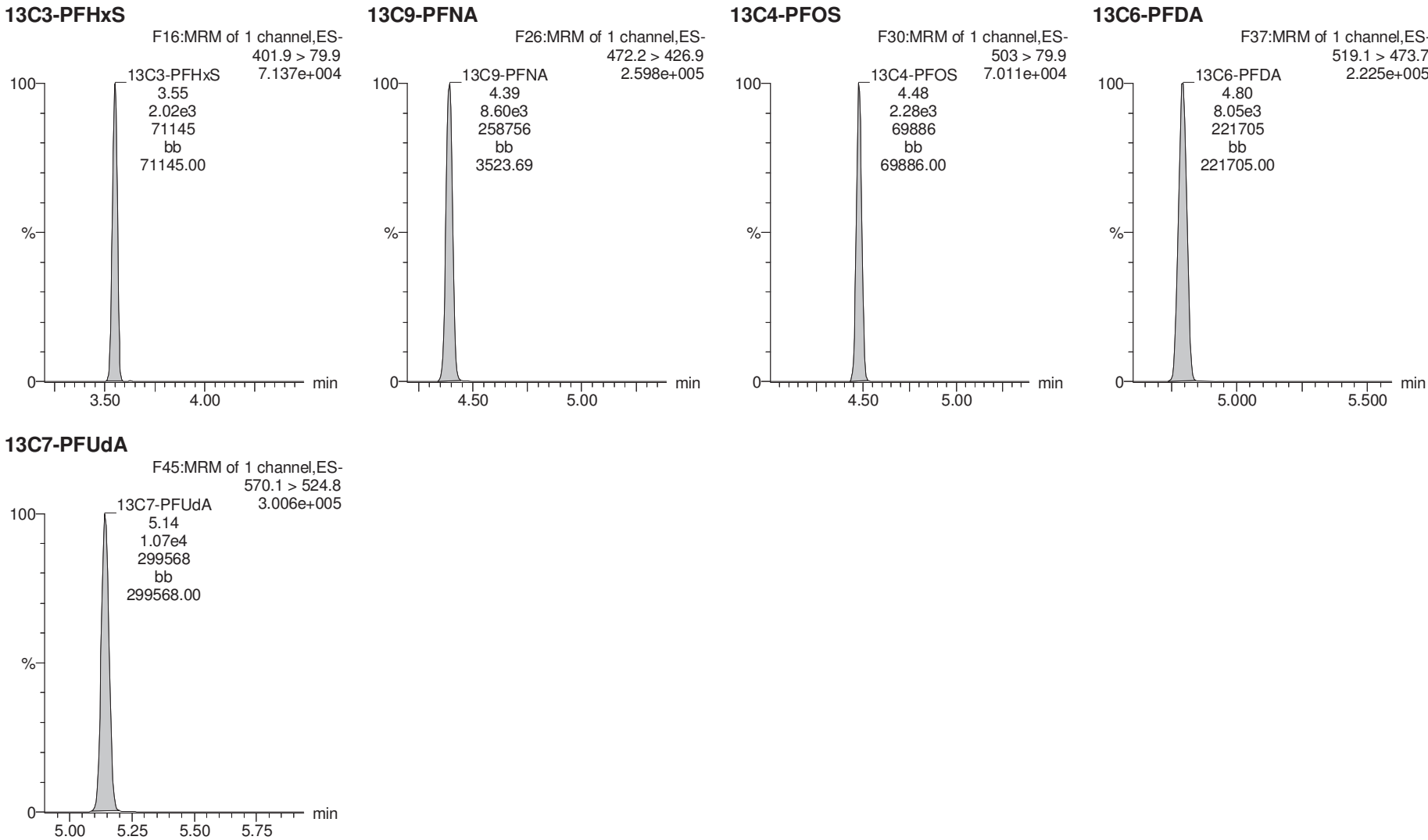


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Printed: Wednesday, January 17, 2018 16:21:42 Pacific Standard Time

Name: 180114M1_37, Date: 14-Jan-2018, Time: 20:31:02, ID: 1701851-09 FT-PZ-456S-20171204 0.25898, Description: FT-PZ-456S-20171204



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

Dataset: U:\Q4.PRO\results\180111M2\180111M2-IIS.qld

Last Altered: Saturday, January 13, 2018 11:01:13 Pacific Standard Time

Printed: Monday, January 15, 2018 16:21:02 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_RS-12-29-17.mdb 30 Dec 2017 10:03:31

Calibration: 13 Jan 2018 11:01:13

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608

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1	1 13C4-PFBA	ST180111M2-1 PFC CS0 17L2608	1.04e4	100.0	NO
2	2 13C5-PFHxA	ST180111M2-1 PFC CS0 17L2608	1.27e4	100.0	NO
3	3 13C3-PFHxS	ST180111M2-1 PFC CS0 17L2608	2.97e3	100.0	NO
4	4 13C8-PFOA	ST180111M2-1 PFC CS0 17L2608	1.13e4	100.0	NO
5	5 13C9-PFNA	ST180111M2-1 PFC CS0 17L2608	1.27e4	100.0	NO
6	6 13C4-PFOS	ST180111M2-1 PFC CS0 17L2608	2.84e3	100.0	NO
7	7 13C6-PFDA	ST180111M2-1 PFC CS0 17L2608	8.17e3	100.0	NO
8	8 13C7-PFUDa	ST180111M2-1 PFC CS0 17L2608	9.56e3	100.0	NO

Name: 180111M2_2, Date: 12-Jan-2018, Time: 03:49:59, ID: IPA, Description: IPA

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

Name: 180111M2_3, Date: 12-Jan-2018, Time: 04:01:09, ID: B7L0101-BS1 OPR 0.25, Description: OPR

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7L0101-BS1 OPR 0.25	5.14e3	49.5	YES
2	2 13C5-PFHxA	B7L0101-BS1 OPR 0.25	6.19e3	48.7	YES
3	3 13C3-PFHxS	B7L0101-BS1 OPR 0.25	1.69e3	56.9	NO
4	4 13C8-PFOA	B7L0101-BS1 OPR 0.25	5.63e3	49.7	YES
5	5 13C9-PFNA	B7L0101-BS1 OPR 0.25	5.94e3	46.9	YES
6	6 13C4-PFOS	B7L0101-BS1 OPR 0.25	1.48e3	52.2	NO
7	7 13C6-PFDA	B7L0101-BS1 OPR 0.25	3.98e3	48.7	YES
8	8 13C7-PFUDa	B7L0101-BS1 OPR 0.25	6.30e3	65.9	NO

Name: 180111M2_4, Date: 12-Jan-2018, Time: 04:12:24, ID: B7L0101-BSD1 LCSD 0.25, Description: LCSD

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	B7L0101-BSD1 LCSD 0.25	6.14e3	59.1	NO
2	2 13C5-PFHxA	B7L0101-BSD1 LCSD 0.25	7.42e3	58.4	NO
3	3 13C3-PFHxS	B7L0101-BSD1 LCSD 0.25	1.87e3	62.8	NO
4	4 13C8-PFOA	B7L0101-BSD1 LCSD 0.25	7.36e3	65.0	NO
5	5 13C9-PFNA	B7L0101-BSD1 LCSD 0.25	6.93e3	54.8	NO
6	6 13C4-PFOS	B7L0101-BSD1 LCSD 0.25	1.67e3	58.8	NO
7	7 13C6-PFDA	B7L0101-BSD1 LCSD 0.25	5.88e3	71.9	NO
8	8 13C7-PFUDa	B7L0101-BSD1 LCSD 0.25	7.08e3	74.0	NO

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Name: 180111M2_5, Date: 12-Jan-2018, Time: 04:23:34, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0101-BLK1 Method Blank 0.25	5.02e3	48.3	YES
2	2	13C5-PFHxA	B7L0101-BLK1 Method Blank 0.25	6.74e3	53.0	NO
3	3	13C3-PFHxS	B7L0101-BLK1 Method Blank 0.25	1.63e3	54.8	NO
4	4	13C8-PFOA	B7L0101-BLK1 Method Blank 0.25	6.15e3	54.3	NO
5	5	13C9-PFNA	B7L0101-BLK1 Method Blank 0.25	6.40e3	50.6	NO
6	6	13C4-PFOS	B7L0101-BLK1 Method Blank 0.25	1.85e3	65.3	NO
7	7	13C6-PFDA	B7L0101-BLK1 Method Blank 0.25	3.56e3	43.6	YES
8	8	13C7-PFUDa	B7L0101-BLK1 Method Blank 0.25	4.86e3	50.9	NO

Name: 180111M2_6, Date: 12-Jan-2018, Time: 04:34:44, ID: 1701840-04 YS22-GW16-1217 0.1211, Description: YS22-GW16-1217

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701840-04 YS22-GW16-1217 0.1211	4.90e3	47.2	YES
2	2	13C5-PFHxA	1701840-04 YS22-GW16-1217 0.1211	5.98e3	47.1	YES
3	3	13C3-PFHxS	1701840-04 YS22-GW16-1217 0.1211	1.63e3	54.7	NO
4	4	13C8-PFOA	1701840-04 YS22-GW16-1217 0.1211	5.52e3	48.8	YES
5	5	13C9-PFNA	1701840-04 YS22-GW16-1217 0.1211	5.68e3	44.8	YES
6	6	13C4-PFOS	1701840-04 YS22-GW16-1217 0.1211	1.69e3	59.7	NO
7	7	13C6-PFDA	1701840-04 YS22-GW16-1217 0.1211	3.89e3	47.6	YES
8	8	13C7-PFUDa	1701840-04 YS22-GW16-1217 0.1211	5.62e3	58.8	NO

Name: 180111M2_7, Date: 12-Jan-2018, Time: 04:45:56, ID: 1701840-05 YS22-GW10-1217 0.11512, Description: YS22-GW10-1217

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701840-05 YS22-GW10-1217 0.11512	6.25e3	60.2	NO
2	2	13C5-PFHxA	1701840-05 YS22-GW10-1217 0.11512	6.21e3	48.8	YES
3	3	13C3-PFHxS	1701840-05 YS22-GW10-1217 0.11512	1.87e3	62.9	NO
4	4	13C8-PFOA	1701840-05 YS22-GW10-1217 0.11512	6.84e3	60.4	NO
5	5	13C9-PFNA	1701840-05 YS22-GW10-1217 0.11512	5.62e3	44.4	YES
6	6	13C4-PFOS	1701840-05 YS22-GW10-1217 0.11512	1.63e3	57.3	NO
7	7	13C6-PFDA	1701840-05 YS22-GW10-1217 0.11512	5.05e3	61.8	NO
8	8	13C7-PFUDa	1701840-05 YS22-GW10-1217 0.11512	5.66e3	59.2	NO

Name: 180111M2_8, Date: 12-Jan-2018, Time: 04:57:07, ID: 1701840-10 YS22-GW18-1117 0.1082, Description: YS22-GW18-1117

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701840-10 YS22-GW18-1117 0.1082	5.50e3	53.0	NO
2	2	13C5-PFHxA	1701840-10 YS22-GW18-1117 0.1082	6.58e3	51.8	NO
3	3	13C3-PFHxS	1701840-10 YS22-GW18-1117 0.1082	1.70e3	57.2	NO
4	4	13C8-PFOA	1701840-10 YS22-GW18-1117 0.1082	6.32e3	55.8	NO
5	5	13C9-PFNA	1701840-10 YS22-GW18-1117 0.1082	6.38e3	50.4	NO
6	6	13C4-PFOS	1701840-10 YS22-GW18-1117 0.1082	1.74e3	61.3	NO
7	7	13C6-PFDA	1701840-10 YS22-GW18-1117 0.1082	4.21e3	51.6	NO
8	8	13C7-PFUDa	1701840-10 YS22-GW18-1117 0.1082	5.68e3	59.4	NO

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Name: 180111M2_9, Date: 12-Jan-2018, Time: 05:08:18, ID: 1701851-01 FT-PZ-462S-20171202 0.22334,
Description: FT-PZ-462S-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-01 FT-PZ-462S-20171202 0.2...	5.41e3	52.1	NO
2	2	13C5-PFHxA	1701851-01 FT-PZ-462S-20171202 0.2...	7.13e3	56.1	NO
3	3	13C3-PFHxS	1701851-01 FT-PZ-462S-20171202 0.2...	1.68e3	56.4	NO
4	4	13C8-PFOA	1701851-01 FT-PZ-462S-20171202 0.2...	6.43e3	56.8	NO
5	5	13C9-PFNA	1701851-01 FT-PZ-462S-20171202 0.2...	6.18e3	48.8	YES
6	6	13C4-PFOS	1701851-01 FT-PZ-462S-20171202 0.2...	1.67e3	59.0	NO
7	7	13C6-PFDA	1701851-01 FT-PZ-462S-20171202 0.2...	4.21e3	51.5	NO
8	8	13C7-PFUdA	1701851-01 FT-PZ-462S-20171202 0.2...	6.44e3	67.3	NO

Name: 180111M2_10, Date: 12-Jan-2018, Time: 05:19:28, ID: 1701851-02 FT-PZ-462I-20171202 0.25131,
Description: FT-PZ-462I-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-02 FT-PZ-462I-20171202 0.25...	5.86e3	56.4	NO
2	2	13C5-PFHxA	1701851-02 FT-PZ-462I-20171202 0.25...	7.24e3	56.9	NO
3	3	13C3-PFHxS	1701851-02 FT-PZ-462I-20171202 0.25...	2.05e3	69.0	NO
4	4	13C8-PFOA	1701851-02 FT-PZ-462I-20171202 0.25...	6.94e3	61.3	NO
5	5	13C9-PFNA	1701851-02 FT-PZ-462I-20171202 0.25...	6.87e3	54.2	NO
6	6	13C4-PFOS	1701851-02 FT-PZ-462I-20171202 0.25...	1.77e3	62.4	NO
7	7	13C6-PFDA	1701851-02 FT-PZ-462I-20171202 0.25...	4.99e3	61.1	NO
8	8	13C7-PFUdA	1701851-02 FT-PZ-462I-20171202 0.25...	7.35e3	76.9	NO

Name: 180111M2_11, Date: 12-Jan-2018, Time: 05:30:39, ID: 1701851-03 FT-PZ-455S-20171202 0.2638,
Description: FT-PZ-455S-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-03 FT-PZ-455S-20171202 0.2...	5.29e3	51.0	NO
2	2	13C5-PFHxA	1701851-03 FT-PZ-455S-20171202 0.2...	6.09e3	47.9	YES
3	3	13C3-PFHxS	1701851-03 FT-PZ-455S-20171202 0.2...	1.80e3	60.6	NO
4	4	13C8-PFOA	1701851-03 FT-PZ-455S-20171202 0.2...	5.55e3	49.0	YES
5	5	13C9-PFNA	1701851-03 FT-PZ-455S-20171202 0.2...	6.61e3	52.2	NO
6	6	13C4-PFOS	1701851-03 FT-PZ-455S-20171202 0.2...	1.70e3	59.9	NO
7	7	13C6-PFDA	1701851-03 FT-PZ-455S-20171202 0.2...	4.95e3	60.5	NO
8	8	13C7-PFUdA	1701851-03 FT-PZ-455S-20171202 0.2...	7.24e3	75.7	NO

Name: 180111M2_12, Date: 12-Jan-2018, Time: 05:41:50, ID: 1701851-04 FT-PZ-455I-20171202 0.25637,
Description: FT-PZ-455I-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-04 FT-PZ-455I-20171202 0.25...	5.08e3	48.9	YES
2	2	13C5-PFHxA	1701851-04 FT-PZ-455I-20171202 0.25...	6.59e3	51.8	NO
3	3	13C3-PFHxS	1701851-04 FT-PZ-455I-20171202 0.25...	1.78e3	59.9	NO
4	4	13C8-PFOA	1701851-04 FT-PZ-455I-20171202 0.25...	6.17e3	54.5	NO
5	5	13C9-PFNA	1701851-04 FT-PZ-455I-20171202 0.25...	6.89e3	54.4	NO
6	6	13C4-PFOS	1701851-04 FT-PZ-455I-20171202 0.25...	1.64e3	57.7	NO
7	7	13C6-PFDA	1701851-04 FT-PZ-455I-20171202 0.25...	4.76e3	58.3	NO
8	8	13C7-PFUdA	1701851-04 FT-PZ-455I-20171202 0.25...	6.17e3	64.6	NO

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Name: 180111M2_13, Date: 12-Jan-2018, Time: 05:53:01, ID: 1701851-05 FT-PZ-453S-20171202 0.23285,
Description: FT-PZ-453S-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-05 FT-PZ-453S-20171202 0.2...	5.26e3	50.7	NO
2	2	13C5-PFHxA	1701851-05 FT-PZ-453S-20171202 0.2...	6.01e3	47.3	YES
3	3	13C3-PFHxS	1701851-05 FT-PZ-453S-20171202 0.2...	1.83e3	61.5	NO
4	4	13C8-PFOA	1701851-05 FT-PZ-453S-20171202 0.2...	5.62e3	49.7	YES
5	5	13C9-PFNA	1701851-05 FT-PZ-453S-20171202 0.2...	6.24e3	49.3	YES
6	6	13C4-PFOS	1701851-05 FT-PZ-453S-20171202 0.2...	1.61e3	56.6	NO
7	7	13C6-PFDA	1701851-05 FT-PZ-453S-20171202 0.2...	4.03e3	49.3	YES
8	8	13C7-PFUdA	1701851-05 FT-PZ-453S-20171202 0.2...	4.58e3	47.9	YES

Name: 180111M2_14, Date: 12-Jan-2018, Time: 06:04:12, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159,
Description: FT-PZ-453S-FRB-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-06 FT-PZ-453S-FRB-2017120...	5.87e3	56.5	NO
2	2	13C5-PFHxA	1701851-06 FT-PZ-453S-FRB-2017120...	6.18e3	48.6	YES
3	3	13C3-PFHxS	1701851-06 FT-PZ-453S-FRB-2017120...	2.01e3	67.7	NO
4	4	13C8-PFOA	1701851-06 FT-PZ-453S-FRB-2017120...	6.66e3	58.9	NO
5	5	13C9-PFNA	1701851-06 FT-PZ-453S-FRB-2017120...	6.07e3	47.9	YES
6	6	13C4-PFOS	1701851-06 FT-PZ-453S-FRB-2017120...	1.62e3	57.0	NO
7	7	13C6-PFDA	1701851-06 FT-PZ-453S-FRB-2017120...	4.40e3	53.9	NO
8	8	13C7-PFUdA	1701851-06 FT-PZ-453S-FRB-2017120...	6.34e3	66.3	NO

Name: 180111M2_15, Date: 12-Jan-2018, Time: 06:15:23, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536,
Description: FT-PZ-456I-FRB-20171204

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-07 FT-PZ-456I-FRB-2017120...	4.55e3	43.8	YES
2	2	13C5-PFHxA	1701851-07 FT-PZ-456I-FRB-2017120...	5.30e3	41.7	YES
3	3	13C3-PFHxS	1701851-07 FT-PZ-456I-FRB-2017120...	1.34e3	45.1	YES
4	4	13C8-PFOA	1701851-07 FT-PZ-456I-FRB-2017120...	5.40e3	47.7	YES
5	5	13C9-PFNA	1701851-07 FT-PZ-456I-FRB-2017120...	6.05e3	47.8	YES
6	6	13C4-PFOS	1701851-07 FT-PZ-456I-FRB-2017120...	1.36e3	48.1	YES
7	7	13C6-PFDA	1701851-07 FT-PZ-456I-FRB-2017120...	3.61e3	44.2	YES
8	8	13C7-PFUdA	1701851-07 FT-PZ-456I-FRB-2017120...	6.06e3	63.4	NO

Name: 180111M2_16, Date: 12-Jan-2018, Time: 06:26:36, ID: 1701851-08 FT-PZ-456I-20171204 0.26041,
Description: FT-PZ-456I-20171204

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-08 FT-PZ-456I-20171204 0.26...	6.02e3	57.9	NO
2	2	13C5-PFHxA	1701851-08 FT-PZ-456I-20171204 0.26...	7.06e3	55.6	NO
3	3	13C3-PFHxS	1701851-08 FT-PZ-456I-20171204 0.26...	1.77e3	59.5	NO
4	4	13C8-PFOA	1701851-08 FT-PZ-456I-20171204 0.26...	6.34e3	56.0	NO
5	5	13C9-PFNA	1701851-08 FT-PZ-456I-20171204 0.26...	7.21e3	57.0	NO
6	6	13C4-PFOS	1701851-08 FT-PZ-456I-20171204 0.26...	2.12e3	74.9	NO
7	7	13C6-PFDA	1701851-08 FT-PZ-456I-20171204 0.26...	3.92e3	48.0	YES
8	8	13C7-PFUdA	1701851-08 FT-PZ-456I-20171204 0.26...	6.90e3	72.2	NO

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Name: 180111M2_17, Date: 12-Jan-2018, Time: 06:37:48, ID: 1701851-09 FT-PZ-456S-20171204 0.25898,
Description: FT-PZ-456S-20171204

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-09 FT-PZ-456S-20171204 0.2...	5.12e3	49.3	YES
2	2	13C5-PFHxA	1701851-09 FT-PZ-456S-20171204 0.2...	5.71e3	44.9	YES
3	3	13C3-PFHxS	1701851-09 FT-PZ-456S-20171204 0.2...	1.58e3	53.2	NO
4	4	13C8-PFOA	1701851-09 FT-PZ-456S-20171204 0.2...	5.63e3	49.7	YES
5	5	13C9-PFNA	1701851-09 FT-PZ-456S-20171204 0.2...	5.63e3	44.5	YES
6	6	13C4-PFOS	1701851-09 FT-PZ-456S-20171204 0.2...	1.29e3	45.4	YES
7	7	13C6-PFDA	1701851-09 FT-PZ-456S-20171204 0.2...	4.23e3	51.8	NO
8	8	13C7-PFUDa	1701851-09 FT-PZ-456S-20171204 0.2...	6.85e3	71.7	NO

Name: 180111M2_18, Date: 12-Jan-2018, Time: 06:48:59, ID: IPA, Description: IPA

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

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180111M2-2 PFC CS3 17L2611	1.40e4	134.8	NO
2	2	13C5-PFHxA	ST180111M2-2 PFC CS3 17L2611	1.63e4	128.5	NO
3	3	13C3-PFHxS	ST180111M2-2 PFC CS3 17L2611	4.06e3	136.6	NO
4	4	13C8-PFOA	ST180111M2-2 PFC CS3 17L2611	1.47e4	130.0	NO
5	5	13C9-PFNA	ST180111M2-2 PFC CS3 17L2611	1.39e4	109.5	NO
6	6	13C4-PFOS	ST180111M2-2 PFC CS3 17L2611	3.47e3	122.1	NO
7	7	13C6-PFDA	ST180111M2-2 PFC CS3 17L2611	1.14e4	139.1	NO
8	8	13C7-PFUDa	ST180111M2-2 PFC CS3 17L2611	1.34e4	140.5	NO

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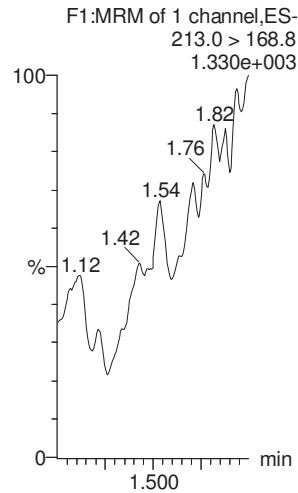
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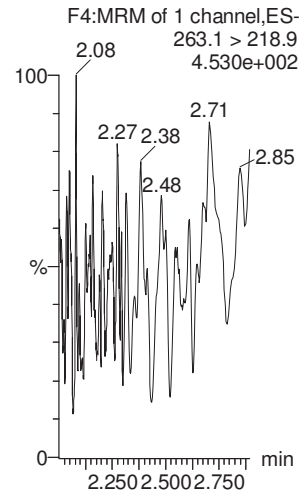
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Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

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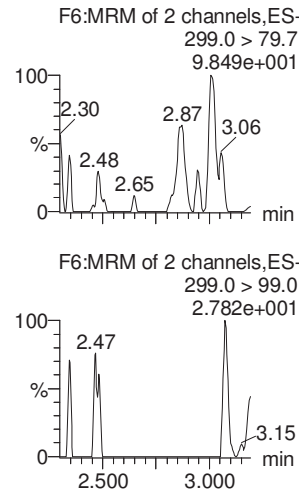
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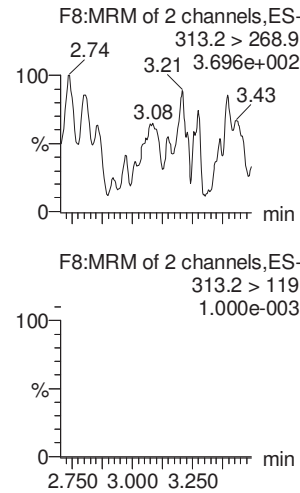
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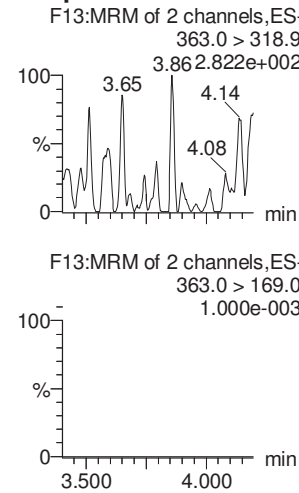
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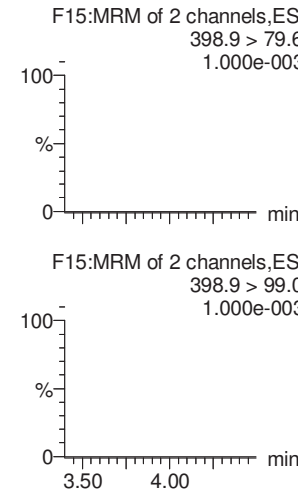
PFHxA



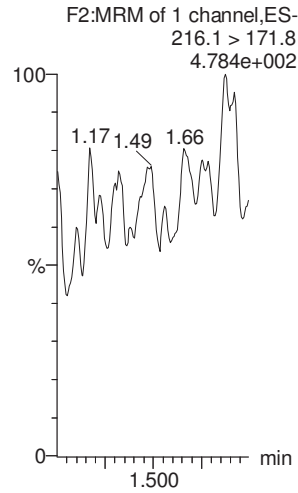
PFHpA



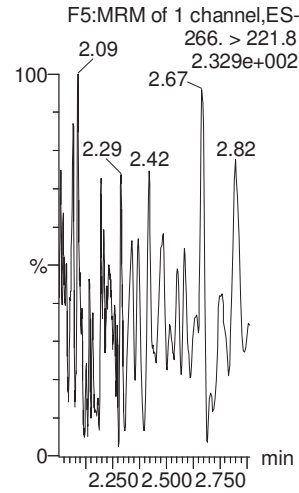
L-PFHxS



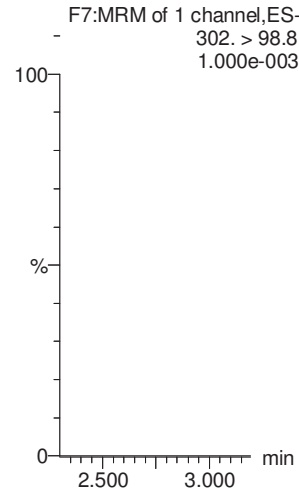
13C3-PFBA



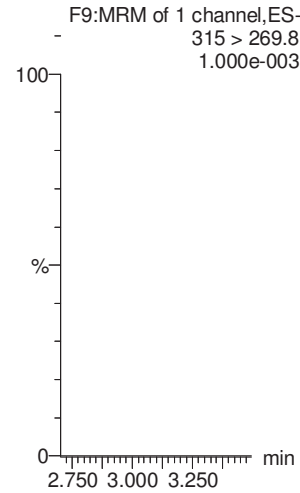
13C3-PFPeA



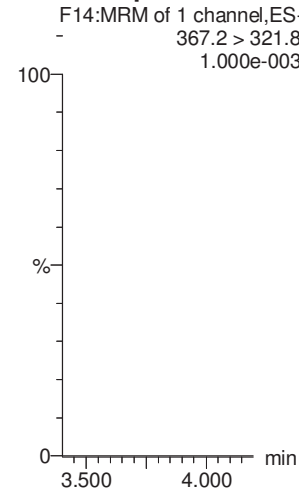
13C3-PFBS



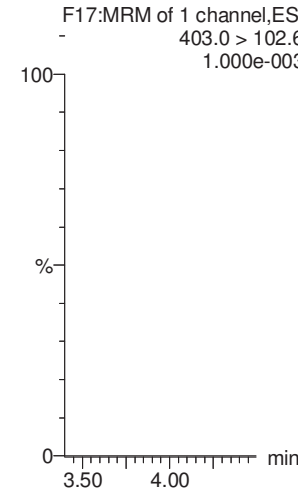
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



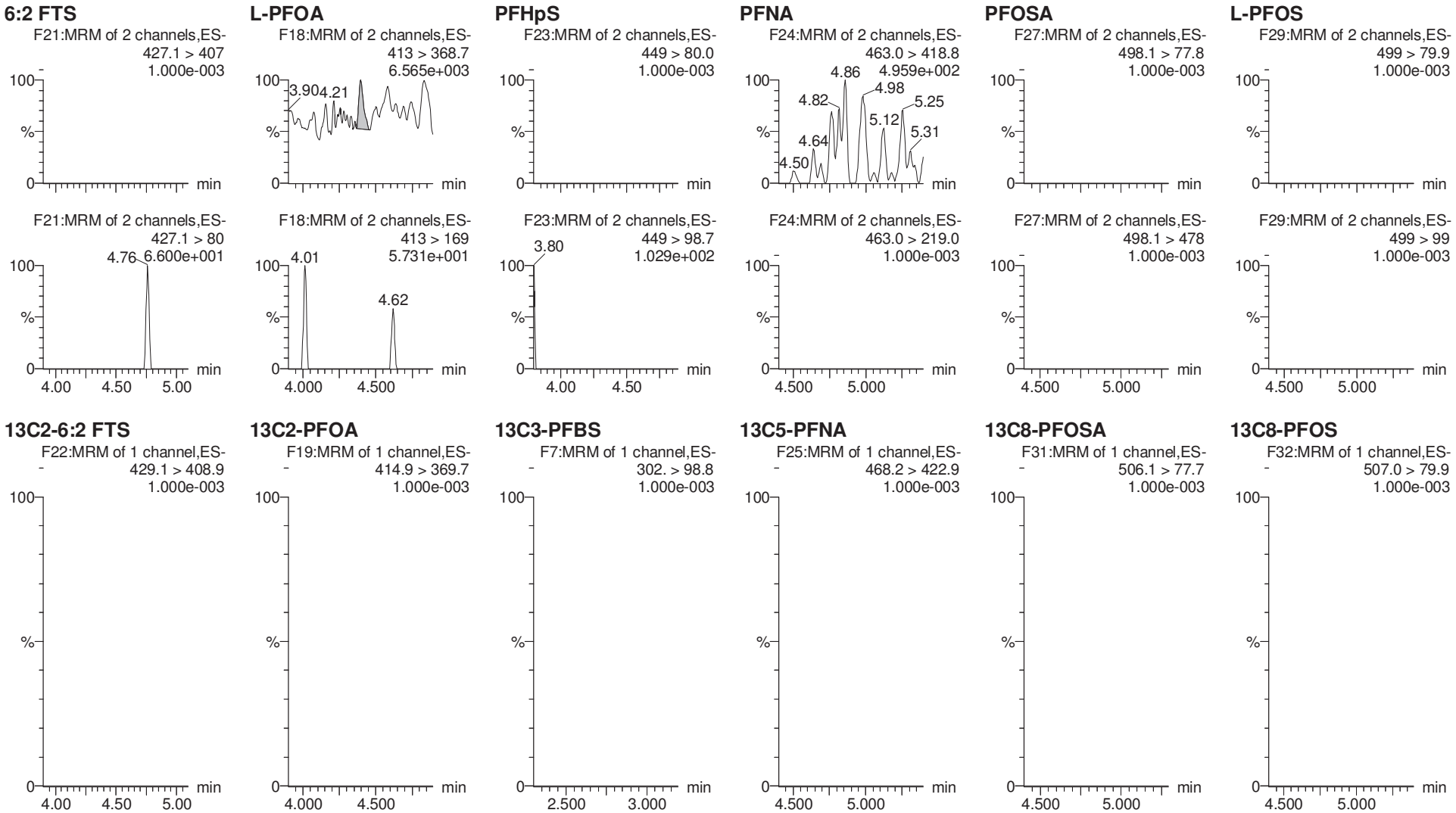
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180111M2\1801111M2-2.qld

Last Altered: Saturday, January 13, 2018 11:17:02 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:17:57 Pacific Standard Time

Name: 180111M2_2, Date: 12-Jan-2018, Time: 03:49:59, ID: IPA, Description: IPA



Vista Analytical Laboratory

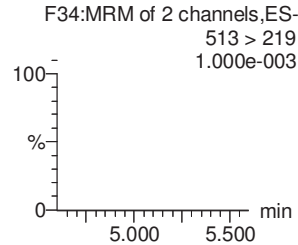
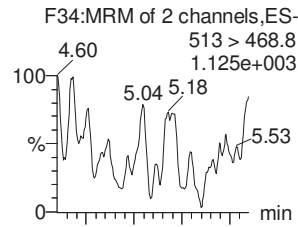
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Last Altered: Saturday, January 13, 2018 11:17:02 Pacific Standard Time

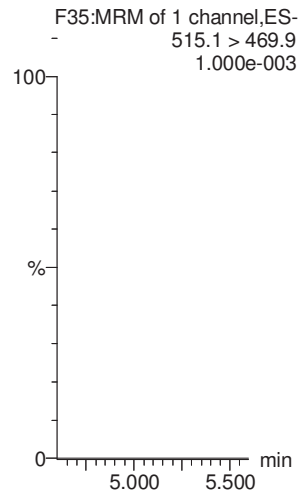
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Name: 180111M2_2, Date: 12-Jan-2018, Time: 03:49:59, ID: IPA, Description: IPA

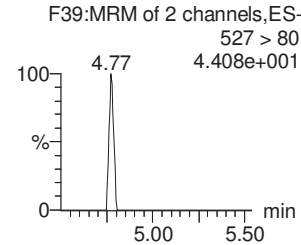
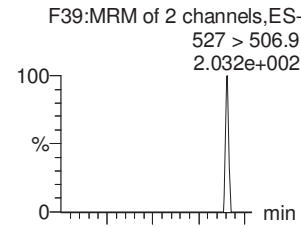
PFDA



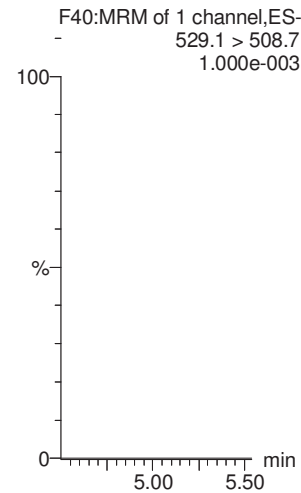
13C2-PFDA



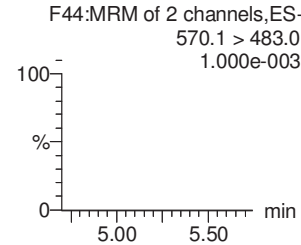
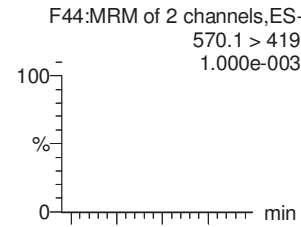
8:2 FTS



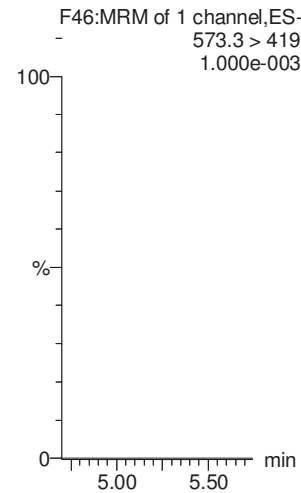
13C2-8:2 FTS



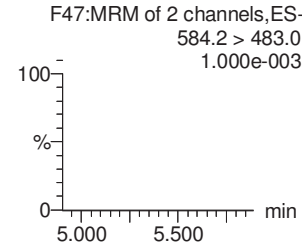
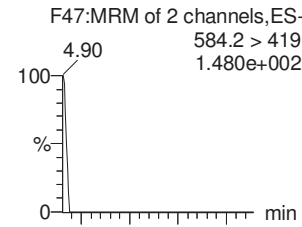
N-MeFOSAA



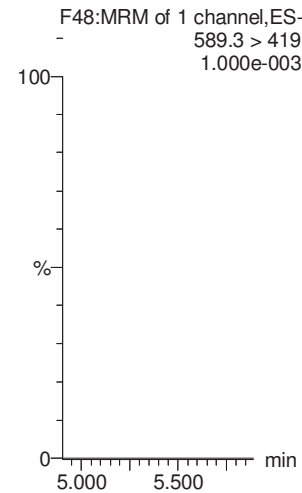
d3-N-MeFOSAA



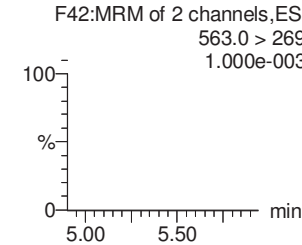
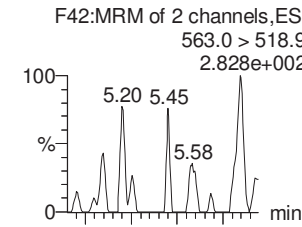
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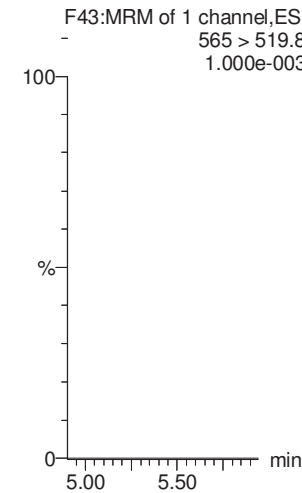
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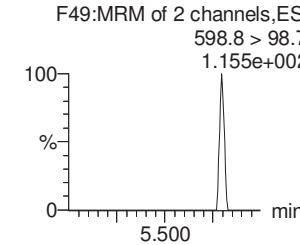
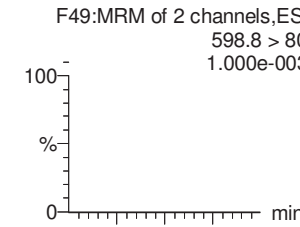
PFUdA



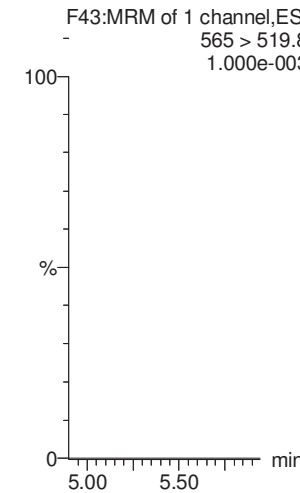
13C2-PFUdA



PFDS



13C2-PFUdA

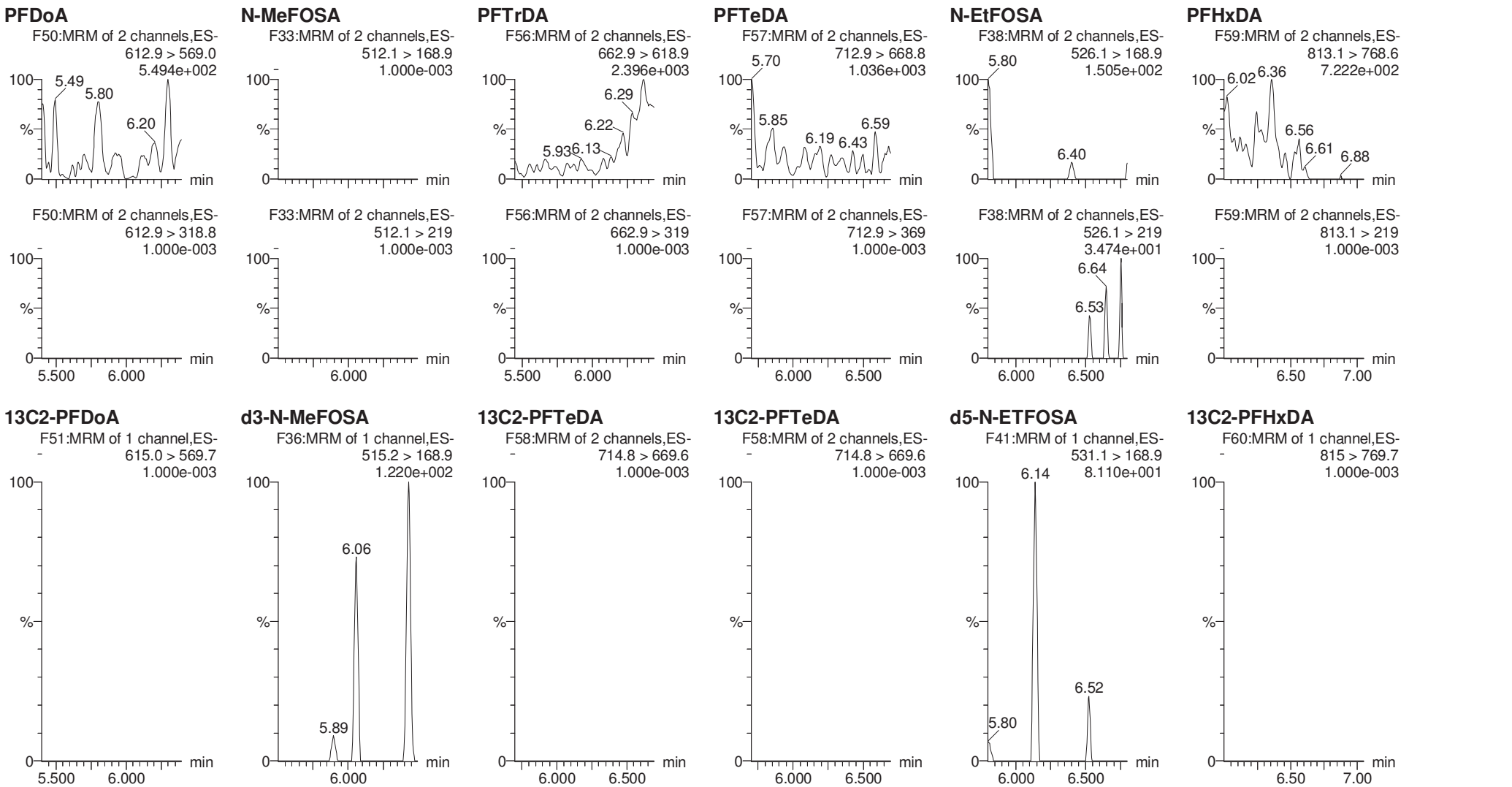


Dataset: U:\Q4.PRO\results\180111M2\180111M2-2.qld

Last Altered: Saturday, January 13, 2018 11:17:02 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:17:57 Pacific Standard Time

Name: 180111M2_2, Date: 12-Jan-2018, Time: 03:49:59, ID: IPA, Description: IPA

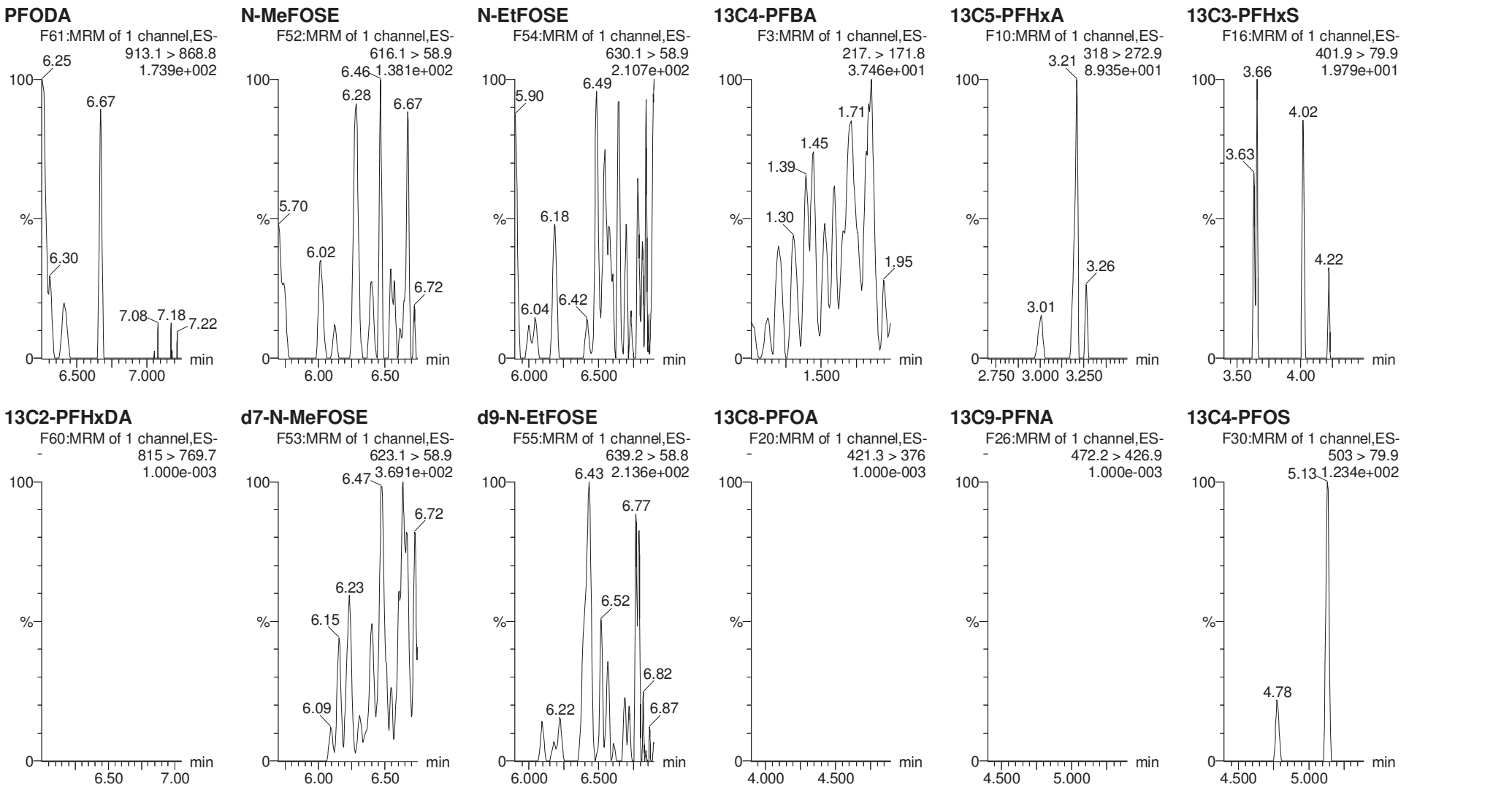


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Last Altered: Saturday, January 13, 2018 11:17:02 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:17:57 Pacific Standard Time

Name: 180111M2_2, Date: 12-Jan-2018, Time: 03:49:59, ID: IPA, Description: IPA

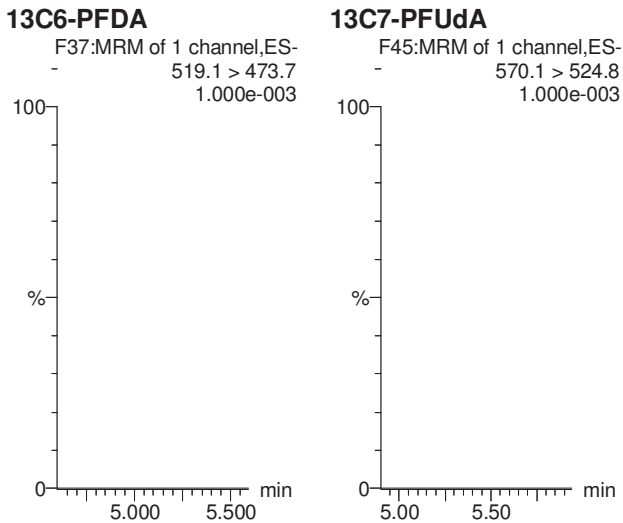


Dataset: U:\Q4.PRO\results\180111M2\180111M2-2.qld

Last Altered: Saturday, January 13, 2018 11:17:02 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:17:57 Pacific Standard Time

Name: 180111M2_2, Date: 12-Jan-2018, Time: 03:49:59, ID: IPA, Description: IPA



Dataset: U:\Q4.PRO\results\180111M2\180111M2-1.qld

Last Altered: Saturday, January 13, 2018 11:12:24 Pacific Standard Time
Printed: Saturday, January 13, 2018 11:12:37 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 11 Jan 2018 15:33:36
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608

Pi/13/18
YJA-01/15/2018

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
1	1 PFBA	213.0 > 168.8	8.03e2	7.85e3		1.38	1.32	1.28	0.901	90.1	NO
2	2 PFPeA	263.1 > 218.9	8.52e2	9.81e3		2.37	2.30	1.09	0.908	90.8	NO
3	3 PFBS	299.0 > 79.7	1.83e2	1.20e3		2.66	2.59	1.90	0.892	89.2	NO
4	4 PFHxA	313.2 > 268.9	1.11e3	3.02e3		3.15	3.08	1.84	0.960	96.0	NO
5	5 PFHpA	363.0 > 318.9	8.83e2	8.02e3		3.78	3.70	1.38	0.904	90.4	NO
6	6 L-PFHxS	398.9 > 79.6	1.13e2	9.65e2		3.94	3.85	1.46	0.789	78.9	NO
7	8 6:2 FTS	427.1 > 407	2.34e2	9.65e2		4.25	4.17	3.03	1.06	106.2	NO
8	9 L-PFOA	413 > 368.7	1.28e3	9.97e3		4.31	4.23	1.60	1.12	112.4	NO
9	11 PFHpS	449 > 80.0	1.24e2	9.97e3		4.42	4.34	0.155	0.611	61.1	YES
10	12 PFNA	463.0 > 418.8	9.29e2	9.51e3		4.81	4.66	1.22	0.861	86.1	NO
11	13 PFOSA	498.1 > 77.8	2.44e2	2.47e3		4.87	4.72	1.24	0.919	91.9	NO
12	14 L-PFOS	499 > 79.9	2.36e2	2.51e3		4.75	4.74	1.18	0.974	97.4	NO
13	16 PFDA	513 > 468.8	1.06e3	8.44e3		5.18	5.03	1.57	1.13	112.6	NO
14	17 8:2 FTS	527 > 506.9	1.29e2	8.44e3		5.15	5.01	0.191	0.720	72.0	NO
15	18 N-MeFOSAA	570.1 > 419	4.48e2	3.69e3		5.32	5.19	1.52	0.895	89.5	NO
16	19 N-EiFOSAA	584.2 > 419	4.04e2	3.94e3		5.48	5.34	1.28	1.06	106.4	NO
17	20 PFUdA	563.0 > 518.9	9.73e2	9.41e3		5.50	5.36	1.29	1.04	104.2	NO
18	21 PFDS	598.8 > 80	2.53e2	9.41e3		5.54	5.40	0.337	0.929	92.9	NO
19	22 PFDoA	612.9 > 569.0	1.16e3	6.69e3		5.77	5.64	2.16	0.957	95.7	NO
20	23 N-MeFOSA	512.1 > 168.9	4.85e2	1.55e4		5.80	5.72	4.70	4.40	88.0	NO
21	24 PFTrDA	662.9 > 618.9	9.91e2	6.69e3		6.00	5.89	1.85	0.773	77.3	NO
22	25 PFTeDA	712.9 > 668.8	5.68e2	2.44e3		6.22	6.11	2.91	1.05	104.5	NO
23	26 N-EiFOSA	526.1 > 168.9	7.41e2	2.30e4		6.17	6.12	4.84	4.92	98.5	NO
24	27 PFHxDA	813.1 > 768.6	4.24e2	1.93e3		6.53	6.44	1.10	1.05	104.7	NO
25	28 PFODA	913.1 > 868.8	4.81e2	1.93e3		6.74	6.67	1.25	1.10	109.9	NO
26	29 N-MeFOSE	616.1 > 58.9	7.84e2	2.31e4		6.27	6.27	5.09	4.97	99.5	NO
27	30 N-EiFOSE	630.1 > 58.9	8.25e2	2.17e4		6.43	6.42	5.71	4.22	84.4	NO
28	31 13C3-PFBA	216.1 > 171.8	7.85e3	1.04e4	0.764	1.38	1.32	9.45	12.4	99.1	NO
29	32 13C3-PFPeA	266. > 221.8	9.81e3	1.27e4	0.730	2.37	2.30	9.64	13.2	105.7	NO
30	33 13C3-PFBS	302. > 98.8	1.20e3	1.27e4	0.095	2.77	2.58	1.18	12.4	99.1	NO
31	Work Order 1701051	315 > 269.8	3.02e3	1.27e4	0.597	3.15	3.08	2.97	4.98	99.5	NO

70-130

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Dataset: U:\Q4.PRO\results\180111M2\180111M2-1.qld

Last Altered: Saturday, January 13, 2018 11:12:24 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:12:37 Pacific Standard Time

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
32	35 13C4-PFHpa	367.2 > 321.8	8.02e3	1.27e4	0.604	3.78	3.70	7.89	13.1	104.4	NO
33	36 18O2-PFHxS	403.0 > 102.6	9.65e2	2.97e3	0.293	3.94	3.85	4.06	13.8	110.7	NO
34	37 13C2-6:2 FTS	429.1 > 408.9	2.04e3	1.13e4	0.215	4.25	4.17	2.26	10.5	83.8	NO
35	38 13C2-PFOA	414.9 > 369.7	9.97e3	1.13e4	0.916	4.31	4.22	11.0	12.0	96.2	NO
36	39 13C5-PFNA	468.2 > 422.9	9.51e3	1.27e4	0.817	4.81	4.66	9.39	11.5	91.9	NO
37	40 13C8-PFOSA	506.1 > 77.7	2.47e3	9.56e3	0.223	4.87	4.72	3.22	14.5	115.7	NO
38	41 13C8-PFOS	507.0 > 79.9	2.51e3	2.84e3	0.875	4.89	4.74	11.1	12.6	101.1	NO
39	42 13C2-PFDA	515.1 > 469.9	8.44e3	8.17e3	1.105	5.18	5.03	12.9	11.7	93.5	NO
40	43 13C2-8:2 FTS	529.1 > 508.7	8.64e2	1.27e4	0.101	5.15	5.01	0.850	8.42	67.4	NO
41	44 d3-N-MeFOSAA	573.3 > 419	3.69e3	9.56e3	0.345	5.32	5.18	4.83	14.0	111.9	NO
42	45 d5-N-EtFOSAA	589.3 > 419	3.94e3	9.56e3	0.390	5.47	5.34	5.15	13.2	105.5	NO
43	46 13C2-PFUdA	565 > 519.8	9.41e3	9.56e3	0.958	5.49	5.36	12.3	12.8	102.7	NO
44	47 13C2-PFDaA	615.0 > 569.7	6.69e3	9.56e3	0.599	5.77	5.64	8.75	14.6	116.9	NO
45	48 d3-N-MeFOSA	515.2 > 168.9	1.55e4	9.56e3	0.124	5.83	5.75	20.2	163	108.7	NO
46	49 13C2-PFTeDA	714.8 > 669.6	2.44e3	9.56e3	0.282	6.22	6.11	3.18	11.3	90.4	NO
47	50 d5-N-ETFOSA	531.1 > 168.9	2.30e4	9.56e3	0.184	6.18	6.13	30.0	163	108.6	NO
48	51 13C2-PFHxDA	815 > 769.7	1.93e3	9.56e3	0.540	6.53	6.44	2.52	4.67	93.5	NO
49	52 d7-N-MeFOSE	623.1 > 58.9	2.31e4	9.56e3	0.182	6.27	6.26	30.2	166	110.4	NO
50	53 d9-N-EtFOSE	639.2 > 58.8	2.17e4	9.56e3	0.173	6.42	6.42	28.4	164	109.6	NO
51	54 13C4-PFBA	217. > 171.8	1.04e4	1.04e4	1.000	1.38	1.32	12.5	12.5	100.0	NO
52	55 13C5-PFHxA	318 > 272.9	1.27e4	1.27e4	1.000	3.15	3.08	12.5	12.5	100.0	NO
53	56 13C3-PFHxS	401.9 > 79.9	2.97e3	2.97e3	1.000	4.02	3.85	12.5	12.5	100.0	NO
54	57 13C8-PFOA	421.3 > 376	1.13e4	1.13e4	1.000	4.38	4.23	12.5	12.5	100.0	NO
55	58 13C9-PFNA	472.2 > 426.9	1.27e4	1.27e4	1.000	4.81	4.66	12.5	12.5	100.0	NO
56	59 13C4-PFOS	503 > 79.9	2.84e3	2.84e3	1.000	4.89	4.74	12.5	12.5	100.0	NO
57	60 13C6-PFDA	519.1 > 473.7	8.17e3	8.17e3	1.000	5.18	5.03	12.5	12.5	100.0	NO
58	61 13C7-PFUdA	570.1 > 524.8	9.56e3	9.56e3	1.000	5.49	5.36	12.5	12.5	100.0	NO

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↓

Dataset: Untitled

Last Altered: Saturday, January 13, 2018 11:19:22 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:21:12 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 11 Jan 2018 15:33:36

Calibration: 13 Jan 2018 11:19:22

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	180111M2_1	ST180111M2-1 PFC CS0 17L2608	12-Jan-18	03:38:50
2	180111M2_2	IPA	12-Jan-18	03:49:59
3	180111M2_3	B7L0101-BS1 OPR 0.25	12-Jan-18	04:01:09
4	180111M2_4	B7L0101-BSD1 LCSD 0.25	12-Jan-18	04:12:24
5	180111M2_5	B7L0101-BLK1 Method Blank 0.25	12-Jan-18	04:23:34
6	180111M2_6	1701840-04 YS22-GW16-1217 0.1211	12-Jan-18	04:34:44
7	180111M2_7	1701840-05 YS22-GW10-1217 0.11512	12-Jan-18	04:45:56
8	180111M2_8	1701840-10 YS22-GW18-1117 0.1082	12-Jan-18	04:57:07
9	180111M2_9	1701851-01 FT-PZ-462S-20171202 0.22334	12-Jan-18	05:08:18
10	180111M2_10	1701851-02 FT-PZ-462I-20171202 0.25131	12-Jan-18	05:19:28
11	180111M2_11	1701851-03 FT-PZ-455S-20171202 0.2638	12-Jan-18	05:30:39
12	180111M2_12	1701851-04 FT-PZ-455I-20171202 0.25637	12-Jan-18	05:41:50
13	180111M2_13	1701851-05 FT-PZ-453S-20171202 0.23285	12-Jan-18	05:53:01
14	180111M2_14	1701851-06 FT-PZ-453S-FRB-20171202 0.26...	12-Jan-18	06:04:12
15	180111M2_15	1701851-07 FT-PZ-456I-FRB-20171204 0.2536	12-Jan-18	06:15:23
16	180111M2_16	1701851-08 FT-PZ-456I-20171204 0.26041	12-Jan-18	06:26:36
17	180111M2_17	1701851-09 FT-PZ-456S-20171204 0.25898	12-Jan-18	06:37:48
18	180111M2_18	IPA	12-Jan-18	06:48:59
19	180111M2_19	ST180111M2-2 PFC CS3 17L2611	12-Jan-18	07:00:09
20	180111M2_20	IPA	12-Jan-18	07:11:21
21	180111M2_21	1701802-01RE1@5X FC-MW02SR1-NP-2017...	12-Jan-18	07:22:31
22	180111M2_22	1701802-02RE1@5X FC-MW02SR1-P1-2017...	12-Jan-18	07:33:43
23	180111M2_23	1701802-03RE1@5X FC-MW02SR1-P2-2017...	12-Jan-18	07:44:53
24	180111M2_24	1701802-04RE1@5X FC-MW02SR1-P3-2017...	12-Jan-18	07:56:04
25	180111M2_25	IPA	12-Jan-18	08:07:15
26	180111M2_26	ST180111M2-2 PFC CS3 17L2611	12-Jan-18	08:18:25
27	180111M2_27	IPA	12-Jan-18	08:29:37

Dataset: U:\Q4.PRO\results\180111M2\180111M2-1.qld

Last Altered: Saturday, January 13, 2018 11:12:24 Pacific Standard Time

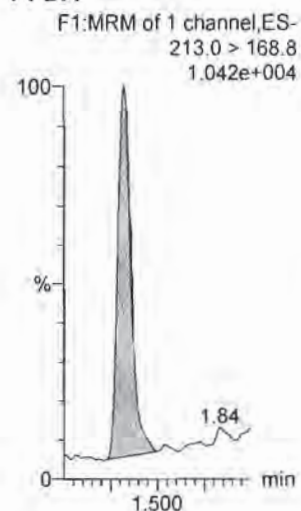
Printed: Saturday, January 13, 2018 11:12:37 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 11 Jan 2018 15:33:36

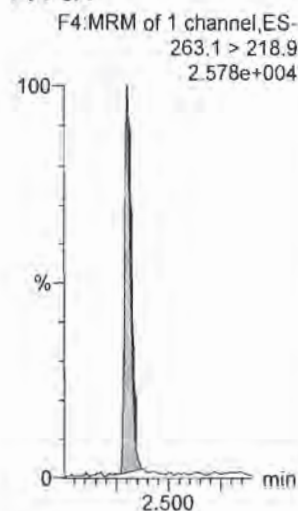
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608

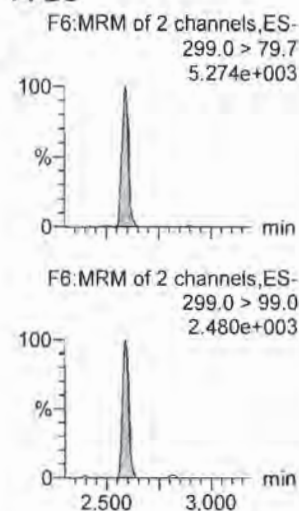
PFBA



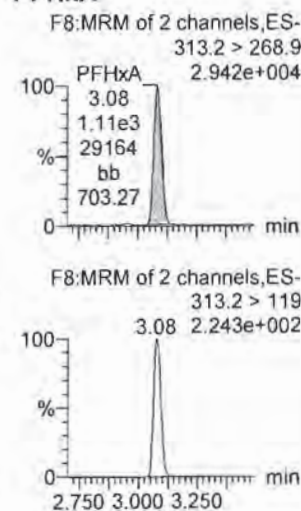
PFPeA



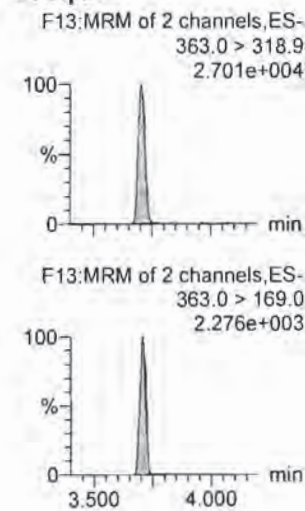
PFBS



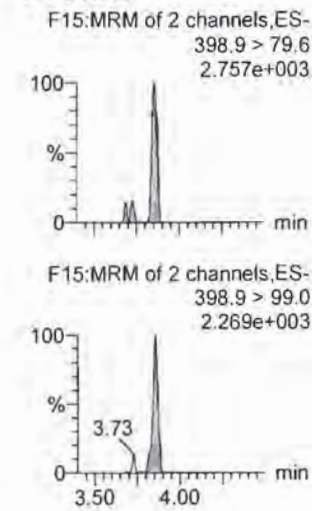
PFHxA



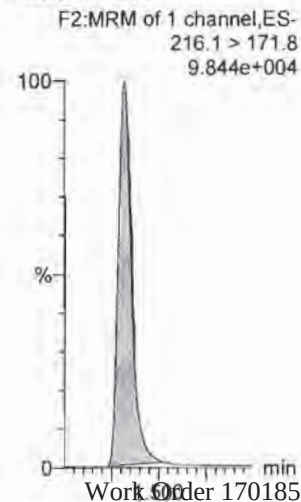
PFHpA



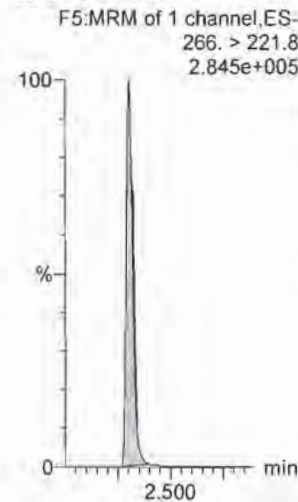
L-PFHxS



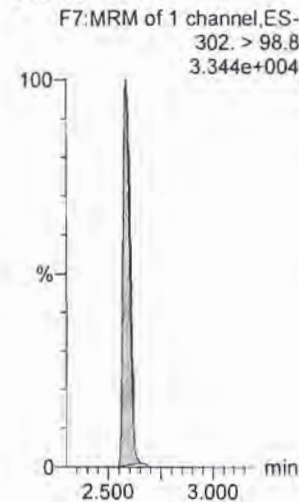
13C3-PFBA



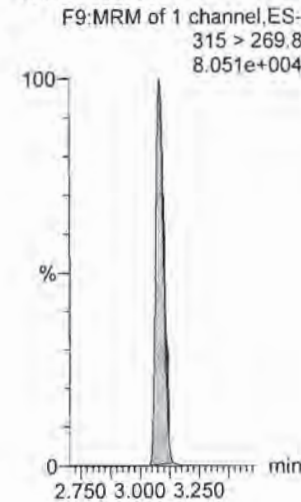
13C3-PFPeA



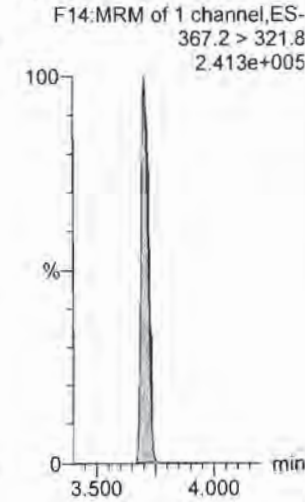
13C3-PFBS



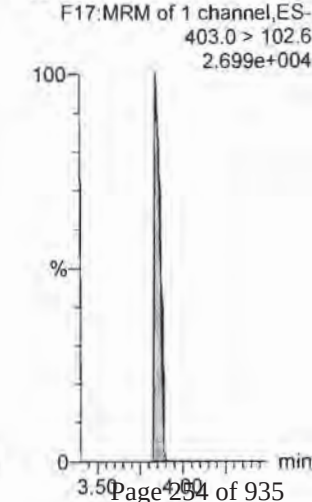
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



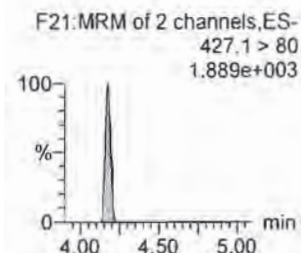
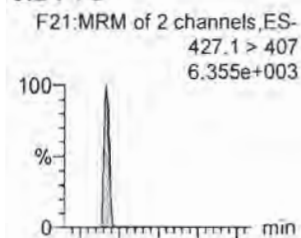
Dataset: U:\Q4.PRO\results\180111M2\180111M2-1.qld

Last Altered: Saturday, January 13, 2018 11:12:24 Pacific Standard Time

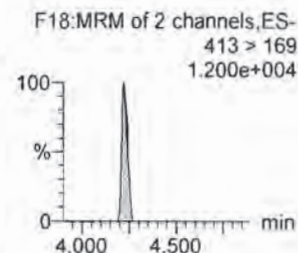
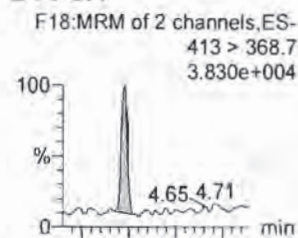
Printed: Saturday, January 13, 2018 11:12:37 Pacific Standard Time

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608

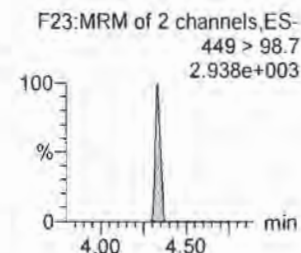
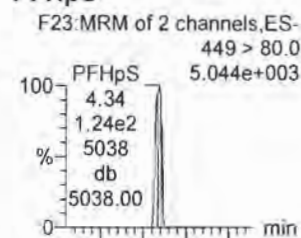
6:2 FTS



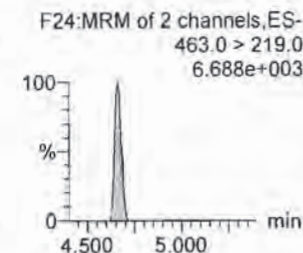
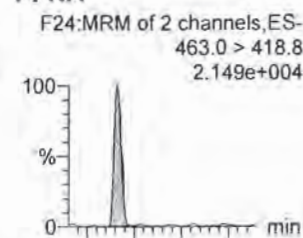
L-PFOA



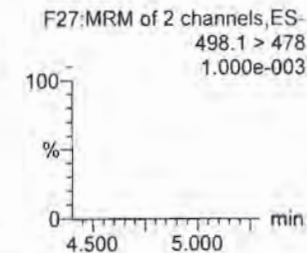
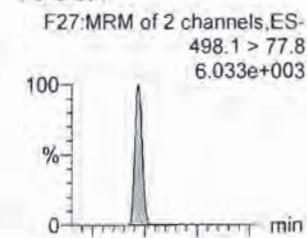
PFHpS



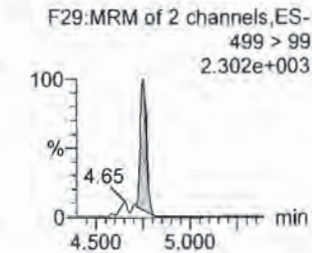
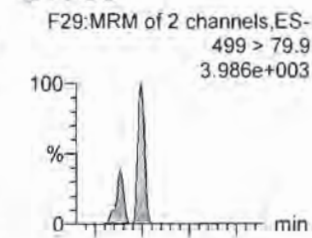
PFNA



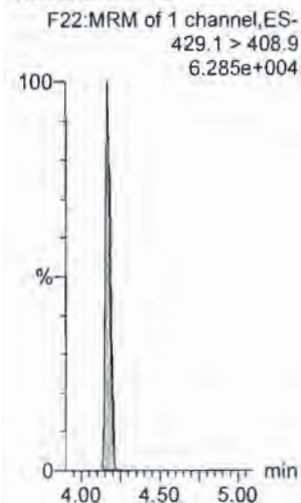
PFOSA



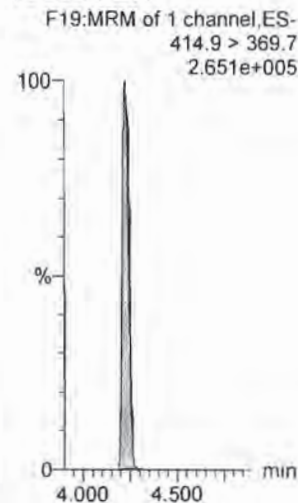
L-PFOS



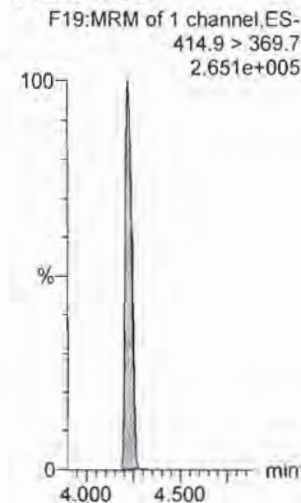
13C2-6:2 FTS



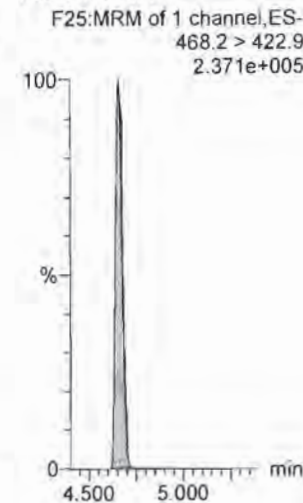
13C2-PFOA



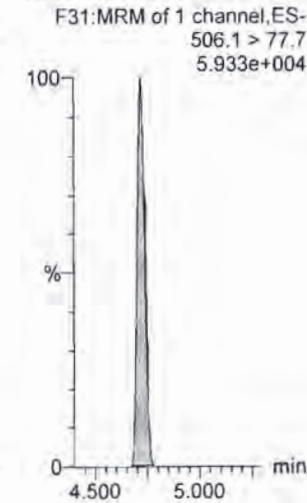
13C2-PFOA



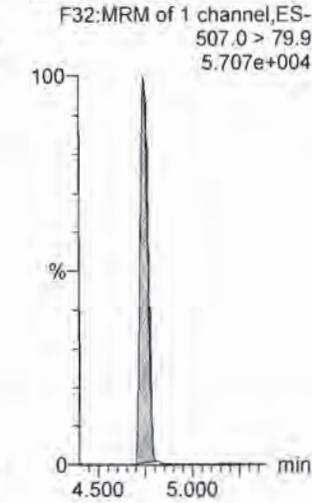
13C5-PFNA



13C8-PFOSA



13C8-PFOS



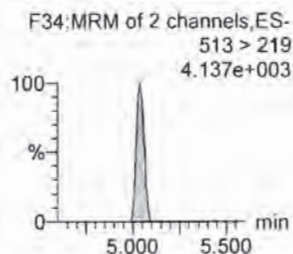
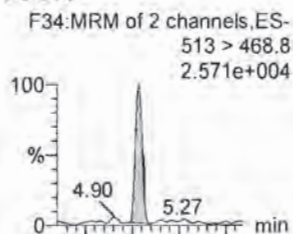
Dataset: U:\Q4.PRO\results\180111M2\180111M2-1.qld

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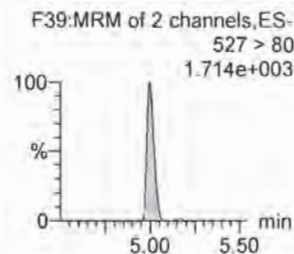
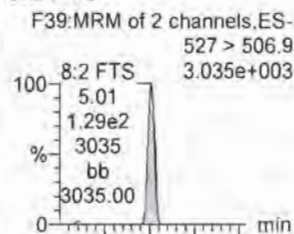
Printed: Saturday, January 13, 2018 11:12:37 Pacific Standard Time

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608

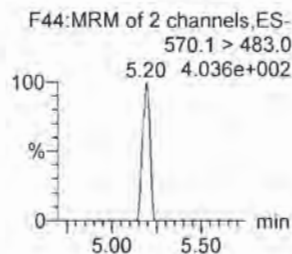
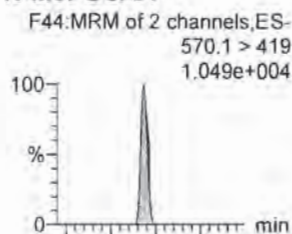
PFDA



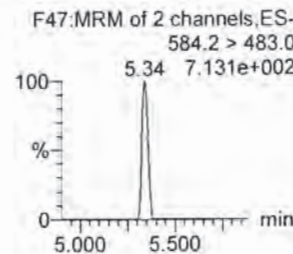
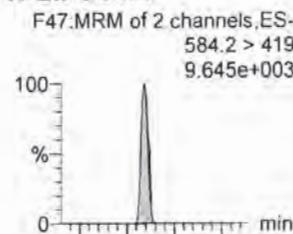
8:2 FTS



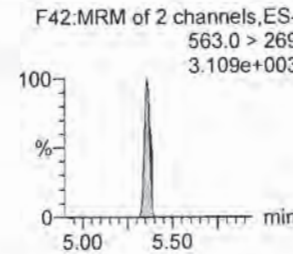
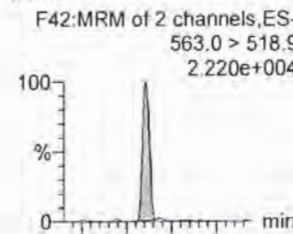
N-MeFOSAA



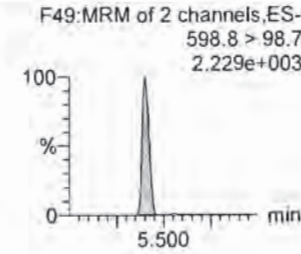
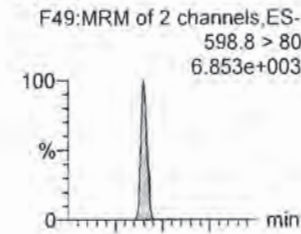
N-EtFOSAA



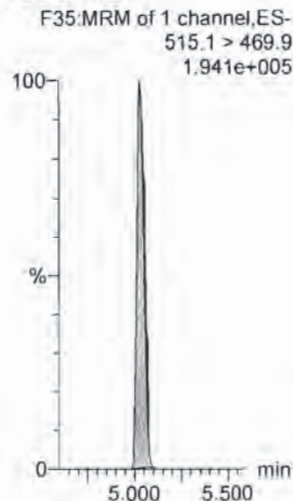
PFUdA



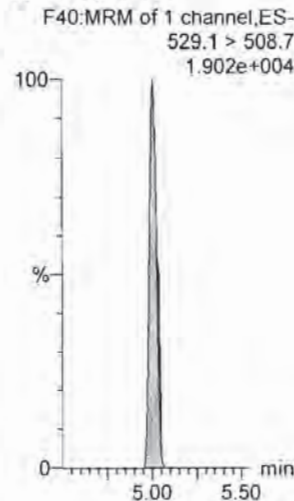
PFDS



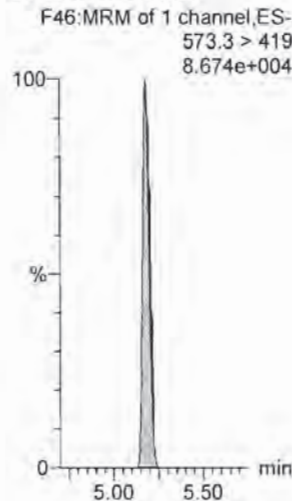
13C2-PFDA



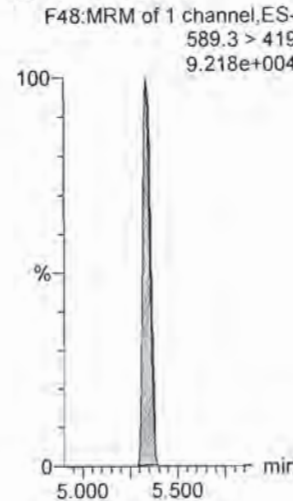
13C2-8:2 FTS



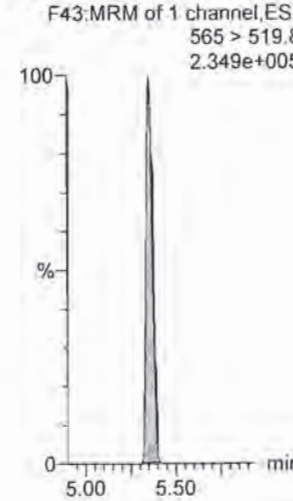
d3-N-MeFOSAA



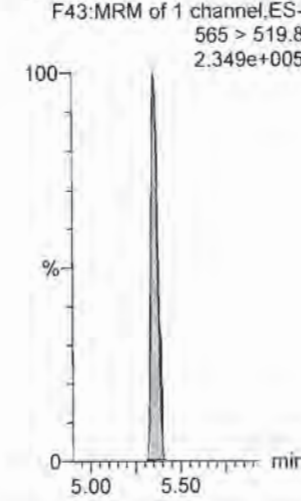
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA

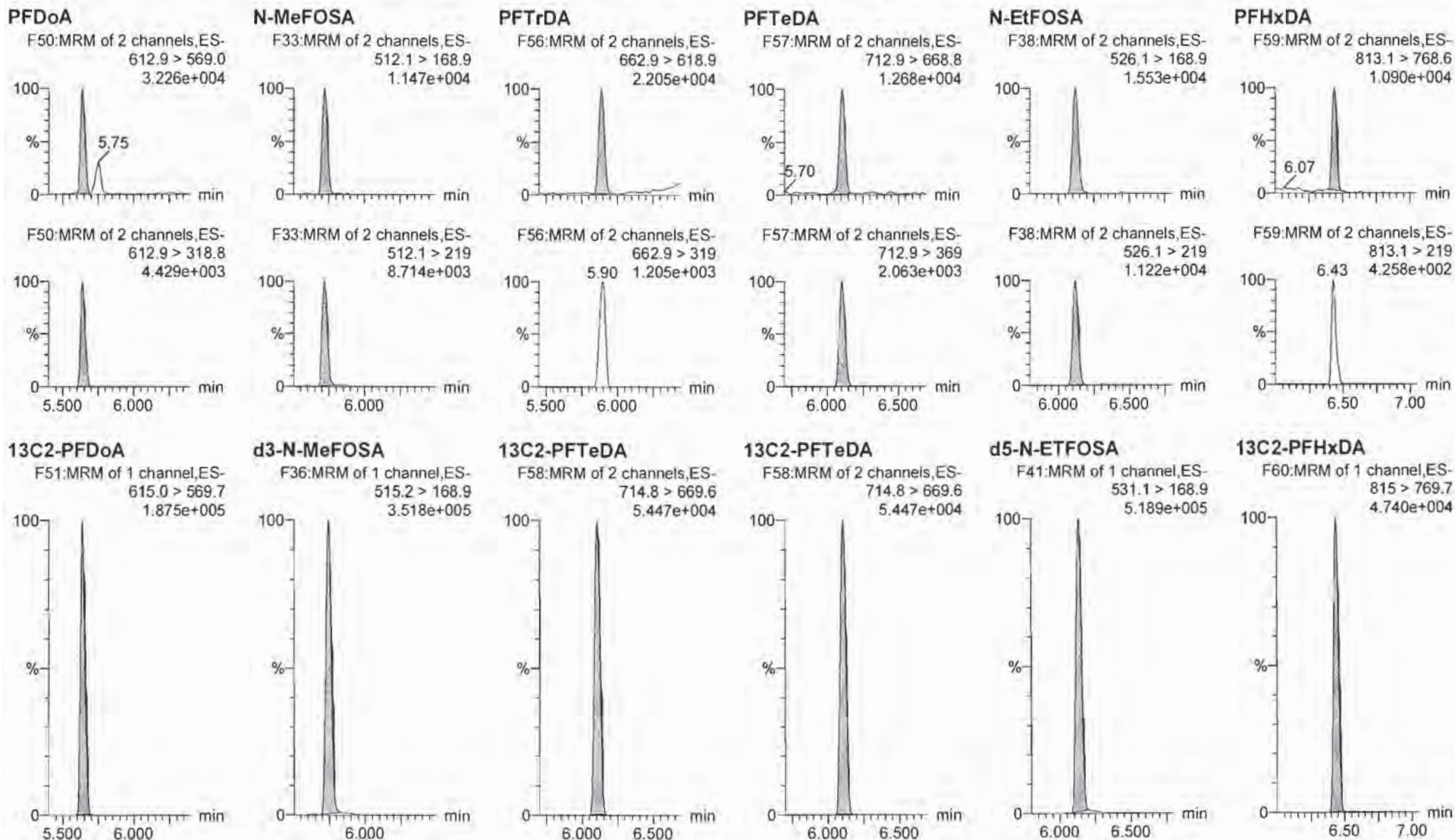


Dataset: U:\Q4.PRO\results\180111M2\180111M2-1.qld

Last Altered: Saturday, January 13, 2018 11:12:24 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:12:37 Pacific Standard Time

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608



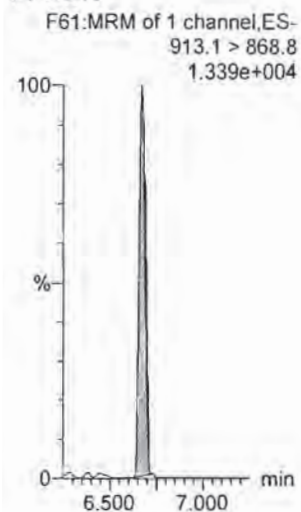
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Last Altered: Saturday, January 13, 2018 11:12:24 Pacific Standard Time

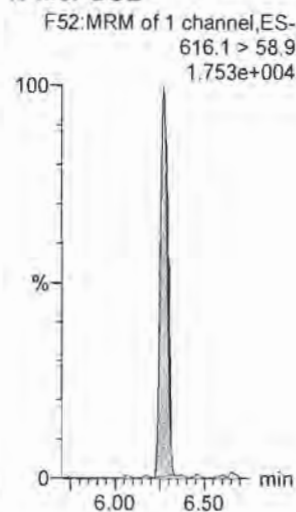
Printed: Saturday, January 13, 2018 11:12:37 Pacific Standard Time

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608

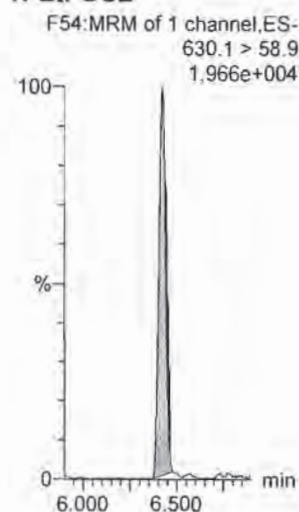
PFODA



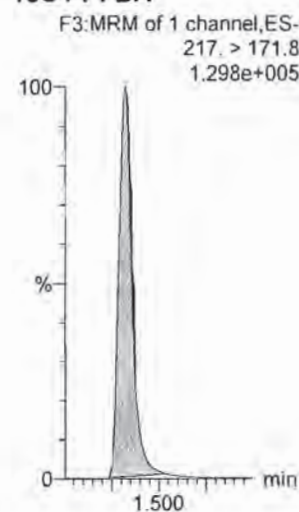
N-MeFOSE



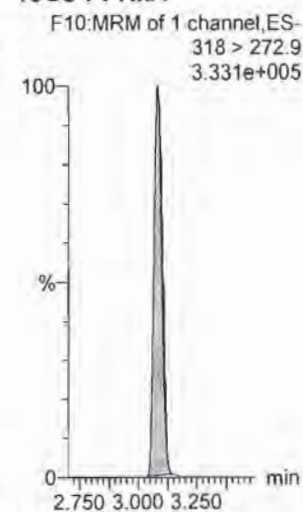
N-EtFOSE



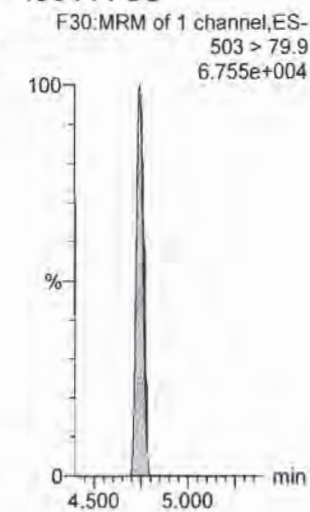
13C4-PFBA



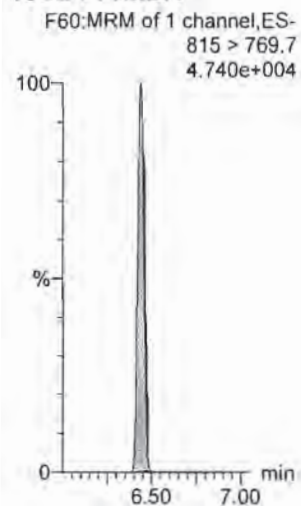
13C5-PFHxA



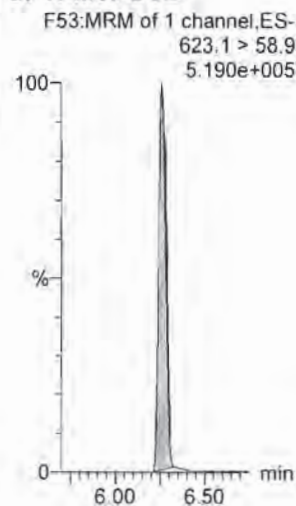
13C4-PFOS



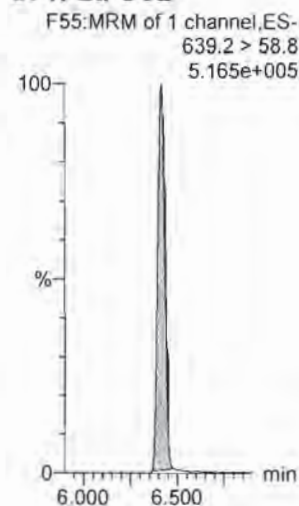
13C2-PFHxDA



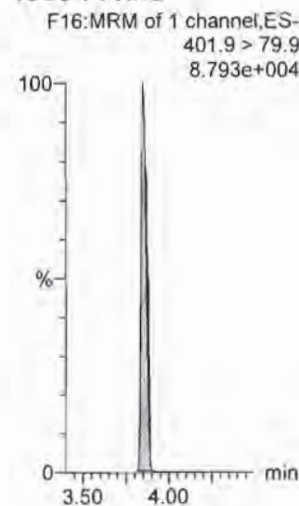
d7-N-MeFOSE



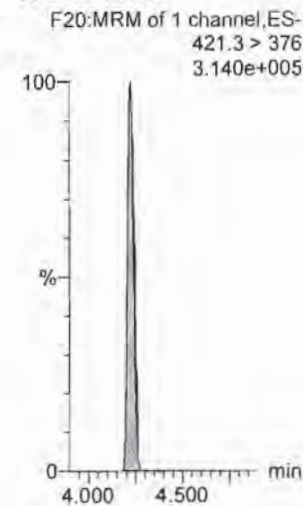
d9-N-EtFOSE



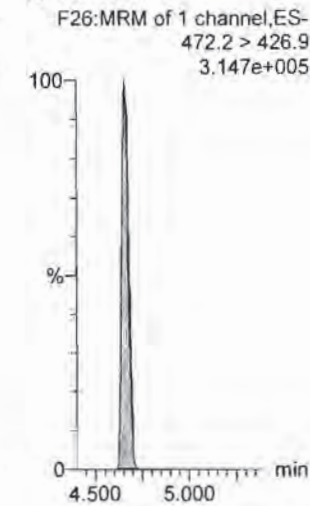
13C3-PFHxS



13C8-PFOA



13C9-PFNA



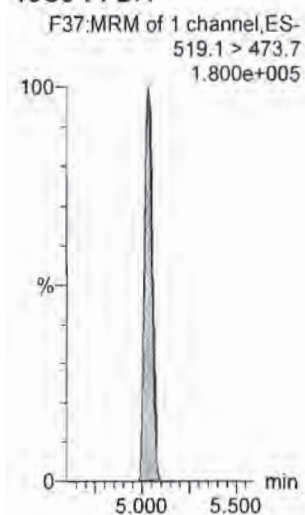
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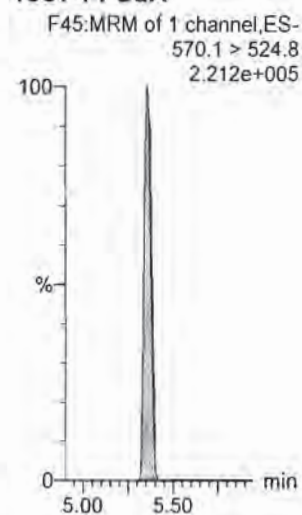
Printed: Saturday, January 13, 2018 11:12:37 Pacific Standard Time

Name: 180111M2_1, Date: 12-Jan-2018, Time: 03:38:50, ID: ST180111M2-1 PFC CS0 17L2608, Description: PFC CS0 17L2608

13C6-PFDA



13C7-PFUDa



Dataset: U:\Q4.PRO\results\180111M2\180111M2-19.qld

Last Altered: Saturday, January 13, 2018 11:14:12 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:14:27 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 11 Jan 2018 15:33:36

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611

CP 1/13/18
JHA 01/15/2018

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
1	1 PFBA	213.0 > 168.8	1.24e4	1.08e4		1.38	1.32	14.4	9.80	98.0	NO
2	2 PFPeA	263.1 > 218.9	1.25e4	1.21e4		2.37	2.30	12.9	10.3	102.6	NO
3	3 PFBS	299.0 > 79.7	2.85e3	1.65e3		2.66	2.59	21.6	10.2	101.5	NO
4	4 PFHxA	313.2 > 268.9	1.69e4	4.30e3		3.15	3.08	19.6	10.1	101.3	NO
5	5 PFHpA	363.0 > 318.9	1.29e4	9.83e3		3.78	3.70	16.5	10.0	100.2	NO
6	6 L-PFHxS	398.9 > 79.6	2.06e3	1.24e3		3.94	3.85	20.8	9.92	99.2	NO
7	8 6:2 FTS	427.1 > 407	2.92e3	1.24e3		4.25	4.17	29.5	9.67	96.7	NO
8	9 L-PFOA	413 > 368.7	1.42e4	1.50e4		4.31	4.22	11.8	9.20	92.0	NO
9	11 PFHpS	449 > 80.0	3.15e3	1.50e4		4.42	4.33	2.62	8.96	89.6	NO
10	12 PFNA	463.0 > 418.8	1.42e4	1.25e4		4.81	4.66	14.3	10.1	100.8	NO
11	13 PFOSA	498.1 > 77.8	3.51e3	2.75e3		4.87	4.72	15.9	12.2	121.5	NO
12	14 L-PFOS	499 > 79.9	3.38e3	3.64e3		4.75	4.75	11.6	9.86	98.6	NO
13	16 PFDA	513 > 468.8	1.32e4	9.53e3		5.18	5.04	17.4	10.6	106.0	NO
14	17 8:2 FTS	527 > 506.9	2.15e3	9.53e3		5.15	5.01	2.82	8.94	89.4	NO
15	18 N-MeFOSAA	570.1 > 419	6.69e3	4.90e3		5.32	5.19	17.1	8.58	85.8	NO
16	19 N-EtFOSAA	584.2 > 419	5.92e3	5.26e3		5.48	5.34	14.1	9.18	91.8	NO
17	20 PFUdA	563.0 > 518.9	1.32e4	1.18e4		5.50	5.36	13.9	10.5	105.3	NO
18	21 PFDS	598.8 > 80	3.50e3	1.18e4		5.54	5.41	3.69	9.90	99.0	NO
19	22 PFDoA	612.9 > 569.0	1.49e4	8.70e3		5.77	5.64	21.4	10.0	100.4	NO
20	23 N-MeFOSA	512.1 > 168.9	7.56e3	1.94e4		5.80	5.72	58.3	52.9	105.8	NO
21	24 PFTTrDA	662.9 > 618.9	1.70e4	8.70e3		6.00	5.89	24.3	10.2	101.8	NO
22	25 PFTeDA	712.9 > 668.8	8.87e3	3.38e3		6.22	6.10	32.8	11.1	110.9	NO
23	26 N-EtFOSA	526.1 > 168.9	1.04e4	2.99e4		6.17	6.12	52.3	51.4	102.7	NO
24	27 PFHxDA	813.1 > 768.6	5.03e3	2.44e3		6.53	6.44	10.3	10.5	105.2	NO
25	28 PFODA	913.1 > 868.8	6.54e3	2.44e3		6.74	6.67	13.4	10.5	104.5	NO
26	29 N-MeFOSE	616.1 > 58.9	1.11e4	3.07e4		6.27	6.27	54.2	46.8	93.6	NO
27	30 N-EtFOSE	630.1 > 58.9	1.33e4	2.89e4		6.43	6.42	68.9	49.3	98.6	NO
28	31 13C3-PFBA	216.1 > 171.8	1.08e4	1.40e4	0.764	1.38	1.33	9.63	12.6	100.9	NO
29	32 13C3-PFPeA	266. > 221.8	1.21e4	1.63e4	0.730	2.37	2.31	9.25	12.7	101.3	NO
30	33 13C3-PFBS	302. > 98.8	1.65e3	1.63e4	0.095	2.77	2.59	1.26	13.2	105.6	NO
31	Work Order 1701851	315 > 269.8	4.30e3	1.63e4	0.597	3.15	3.08	3.29	5.51	110.2	NO

20-130

50-130

Dataset: U:\Q4.PRO\results\180111M2\180111M2-19.qld

Last Altered: Saturday, January 13, 2018 11:14:12 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:14:27 Pacific Standard Time

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
32	35 13C4-PFHpA	367.2 > 321.8	9.83e3	1.63e4	0.604	3.78	3.71	7.52	12.4	99.5	NO
33	36 18O2-PFHxS	403.0 > 102.6	1.24e3	4.06e3	0.293	3.94	3.85	3.81	13.0	103.9	NO
34	37 13C2-6:2 FTS	429.1 > 408.9	3.01e3	1.47e4	0.215	4.25	4.17	2.56	11.9	95.1	NO
35	38 13C2-PFOA	414.9 > 369.7	1.50e4	1.47e4	0.916	4.31	4.22	12.8	14.0	111.6	NO
36	39 13C5-PFNA	468.2 > 422.9	1.25e4	1.39e4	0.817	4.81	4.66	11.2	13.8	110.0	NO
37	40 13C8-PFOSA	506.1 > 77.7	2.75e3	1.34e4	0.223	4.87	4.72	2.56	11.5	92.0	NO
38	41 13C8-PFOS	507.0 > 79.9	3.64e3	3.47e3	0.875	4.89	4.74	13.1	15.0	120.0	NO
39	42 13C2-PFDA	515.1 > 469.9	9.53e3	1.14e4	1.105	5.18	5.03	10.5	9.48	75.8	NO
40	43 13C2-8:2 FTS	529.1 > 508.7	1.26e3	1.63e4	0.101	5.15	5.00	0.964	9.56	76.4	NO
41	44 d3-N-MeFOSAA	573.3 > 419	4.90e3	1.34e4	0.345	5.32	5.18	4.56	13.2	105.7	NO
42	45 d5-N-EtFOSAA	589.3 > 419	5.26e3	1.34e4	0.390	5.47	5.34	4.90	12.5	100.4	NO
43	46 13C2-PFUDa	565 > 519.8	1.18e4	1.34e4	0.958	5.49	5.36	11.0	11.5	92.0	NO
44	47 13C2-PFDoA	615.0 > 569.7	8.70e3	1.34e4	0.599	5.77	5.64	8.10	13.5	108.2	NO
45	48 d3-N-MeFOSA	515.2 > 168.9	1.94e4	1.34e4	0.124	5.83	5.75	18.1	146	97.2	NO
46	49 13C2-PFTeDA	714.8 > 669.6	3.38e3	1.34e4	0.282	6.22	6.10	3.15	11.2	89.3	NO
47	50 d5-N-ETFOSA	531.1 > 168.9	2.99e4	1.34e4	0.184	6.18	6.14	27.8	151	100.7	NO
48	51 13C2-PFHxDA	815 > 769.7	2.44e3	1.34e4	0.540	6.53	6.44	2.27	4.21	84.2	NO
49	52 d7-N-MeFOSE	623.1 > 58.9	3.07e4	1.34e4	0.182	6.27	6.26	28.6	157	104.6	NO
50	53 d9-N-EtFOSE	639.2 > 58.8	2.89e4	1.34e4	0.173	6.42	6.41	26.9	156	103.8	NO
51	54 13C4-PFBA	217. > 171.8	1.40e4	1.40e4	1.000	1.38	1.33	12.5	12.5	100.0	NO
52	55 13C5-PFHxA	318 > 272.9	1.63e4	1.63e4	1.000	3.15	3.08	12.5	12.5	100.0	NO
53	56 13C3-PFHxS	401.9 > 79.9	4.06e3	4.06e3	1.000	4.02	3.85	12.5	12.5	100.0	NO
54	57 13C8-PFOA	421.3 > 376	1.47e4	1.47e4	1.000	4.38	4.22	12.5	12.5	100.0	NO
55	58 13C9-PFNA	472.2 > 426.9	1.39e4	1.39e4	1.000	4.81	4.66	12.5	12.5	100.0	NO
56	59 13C4-PFOS	503 > 79.9	3.47e3	3.47e3	1.000	4.89	4.74	12.5	12.5	100.0	NO
57	60 13C6-PFDA	519.1 > 473.7	1.14e4	1.14e4	1.000	5.18	5.03	12.5	12.5	100.0	NO
58	61 13C7-PFUDa	570.1 > 524.8	1.34e4	1.34e4	1.000	5.49	5.36	12.5	12.5	100.0	NO

50-50
↓

Dataset: Untitled

Last Altered: Saturday, January 13, 2018 11:19:22 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:21:12 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 11 Jan 2018 15:33:36

Calibration: 13 Jan 2018 11:19:22

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	180111M2_1	ST180111M2-1 PFC CS0 17L2608	12-Jan-18	03:38:50
2	180111M2_2	IPA	12-Jan-18	03:49:59
3	180111M2_3	B7L0101-BS1 OPR 0.25	12-Jan-18	04:01:09
4	180111M2_4	B7L0101-BS1 LCSD 0.25	12-Jan-18	04:12:24
5	180111M2_5	B7L0101-BLK1 Method Blank 0.25	12-Jan-18	04:23:34
6	180111M2_6	1701840-04 YS22-GW16-1217 0.1211	12-Jan-18	04:34:44
7	180111M2_7	1701840-05 YS22-GW10-1217 0.11512	12-Jan-18	04:45:56
8	180111M2_8	1701840-10 YS22-GW18-1117 0.1082	12-Jan-18	04:57:07
9	180111M2_9	1701851-01 FT-PZ-462S-20171202 0.22334	12-Jan-18	05:08:18
10	180111M2_10	1701851-02 FT-PZ-462I-20171202 0.25131	12-Jan-18	05:19:28
11	180111M2_11	1701851-03 FT-PZ-455S-20171202 0.2638	12-Jan-18	05:30:39
12	180111M2_12	1701851-04 FT-PZ-455I-20171202 0.25637	12-Jan-18	05:41:50
13	180111M2_13	1701851-05 FT-PZ-453S-20171202 0.23285	12-Jan-18	05:53:01
14	180111M2_14	1701851-06 FT-PZ-453S-FRB-20171202 0.26...	12-Jan-18	06:04:12
15	180111M2_15	1701851-07 FT-PZ-456I-FRB-20171204 0.2536	12-Jan-18	06:15:23
16	180111M2_16	1701851-08 FT-PZ-456I-20171204 0.26041	12-Jan-18	06:26:36
17	180111M2_17	1701851-09 FT-PZ-456S-20171204 0.25898	12-Jan-18	06:37:48
18	180111M2_18	IPA	12-Jan-18	06:48:59
19	180111M2_19	ST180111M2-2 PFC CS3 17L2611	12-Jan-18	07:00:09
20	180111M2_20	IPA	12-Jan-18	07:11:21
21	180111M2_21	1701802-01RE1@5X FC-MW02SR1-NP-2017...	12-Jan-18	07:22:31
22	180111M2_22	1701802-02RE1@5X FC-MW02SR1-P1-2017...	12-Jan-18	07:33:43
23	180111M2_23	1701802-03RE1@5X FC-MW02SR1-P2-2017...	12-Jan-18	07:44:53
24	180111M2_24	1701802-04RE1@5X FC-MW02SR1-P3-2017...	12-Jan-18	07:56:04
25	180111M2_25	IPA	12-Jan-18	08:07:15
26	180111M2_26	ST180111M2-2 PFC CS3 17L2611	12-Jan-18	08:18:25
27	180111M2_27	IPA	12-Jan-18	08:29:37

Dataset: U:\Q4.PRO\results\180111M2\180111M2-19.qld

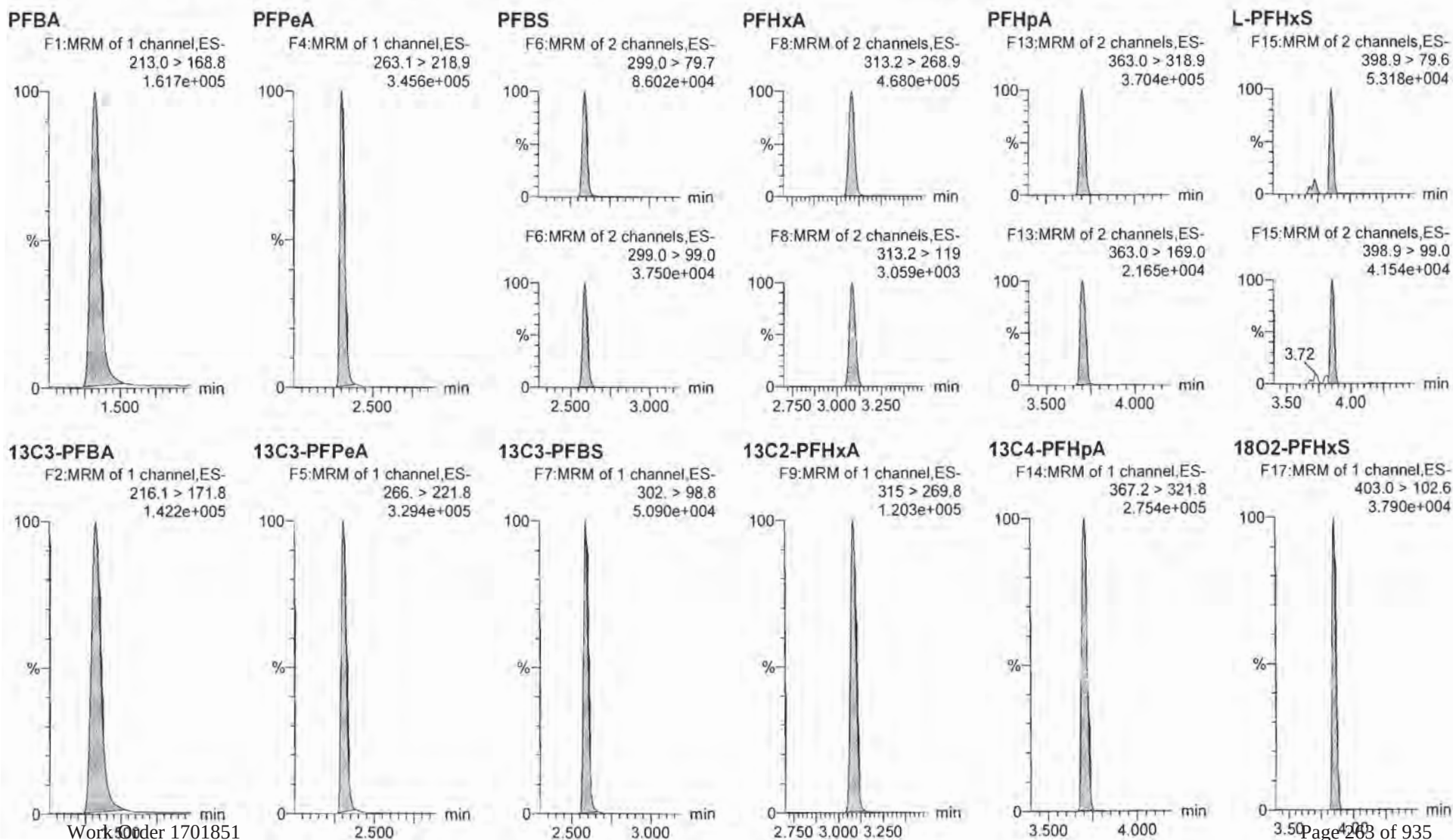
Last Altered: Saturday, January 13, 2018 11:14:12 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:14:27 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 11 Jan 2018 15:33:36

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611



Dataset: U:\Q4.PRO\results\180111M2\180111M2-19.qld

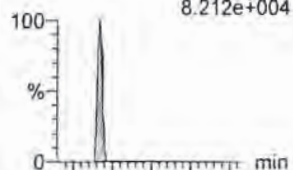
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Printed: Saturday, January 13, 2018 11:14:27 Pacific Standard Time

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611

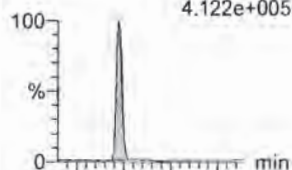
6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
8.212e+004



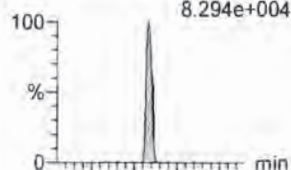
L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
4.122e+005



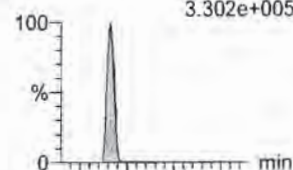
PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
8.294e+004



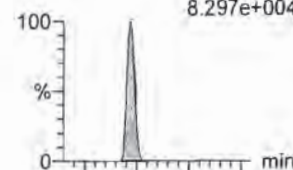
PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
3.302e+005



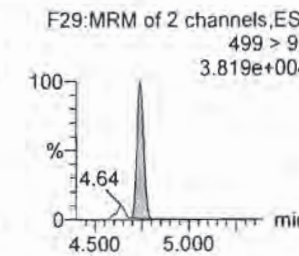
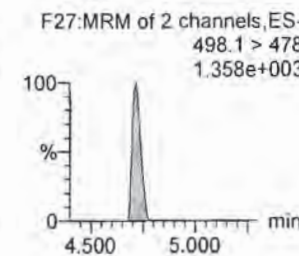
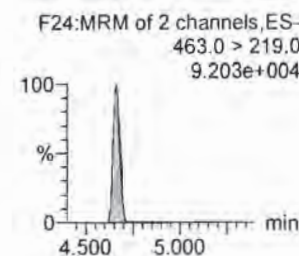
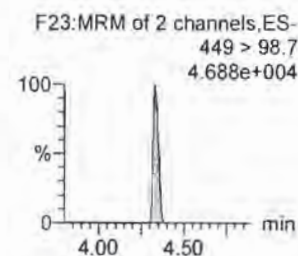
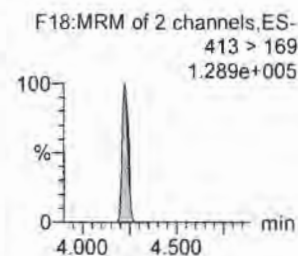
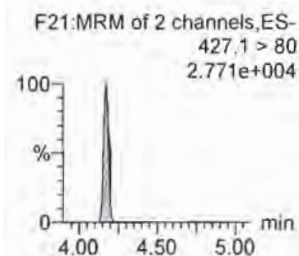
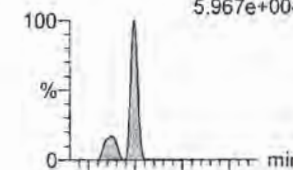
PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
8.297e+004



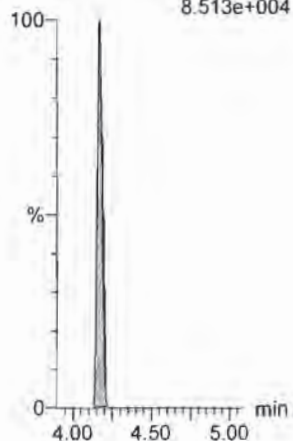
L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
5.967e+004



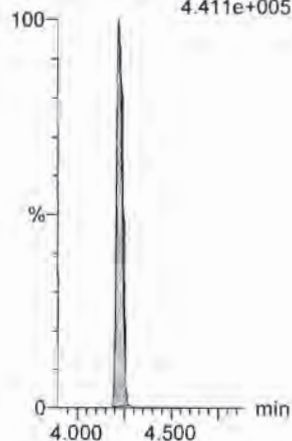
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
8.513e+004



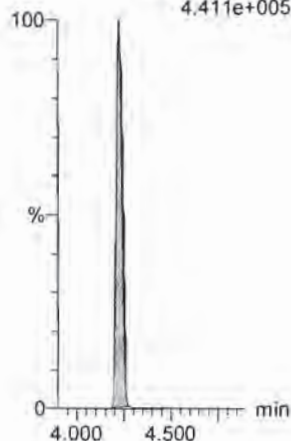
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
4.411e+005



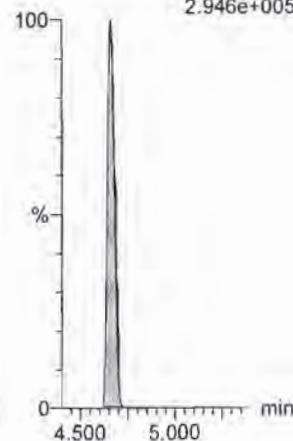
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
4.411e+005



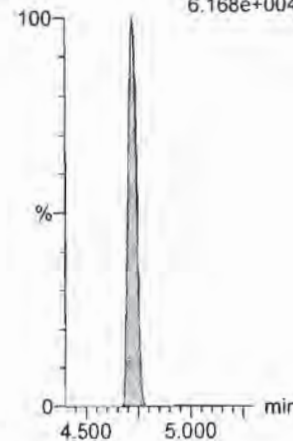
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
2.946e+005



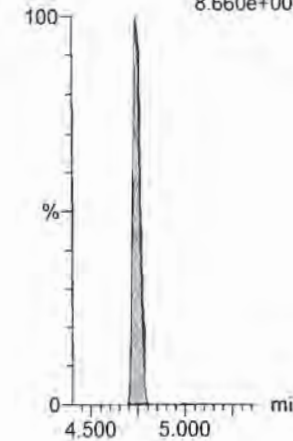
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
6.168e+004



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
8.660e+004



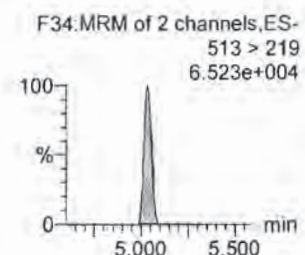
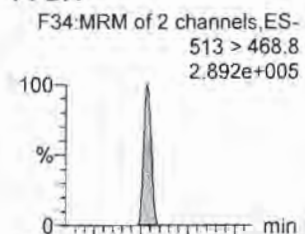
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Last Altered: Saturday, January 13, 2018 11:14:12 Pacific Standard Time

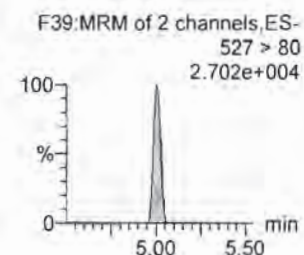
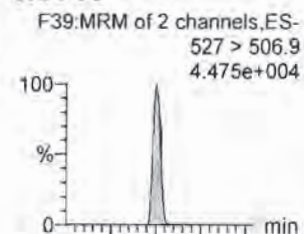
Printed: Saturday, January 13, 2018 11:14:27 Pacific Standard Time

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611

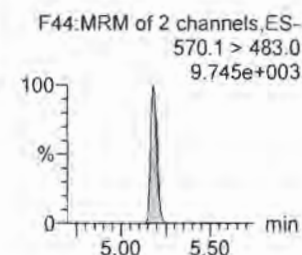
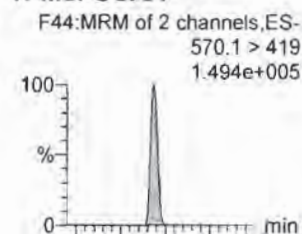
PFDA



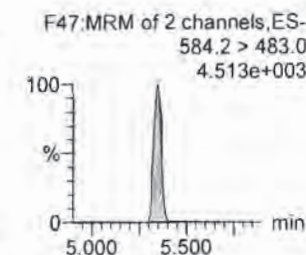
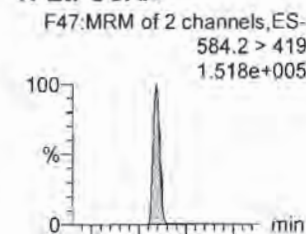
8:2 FTS



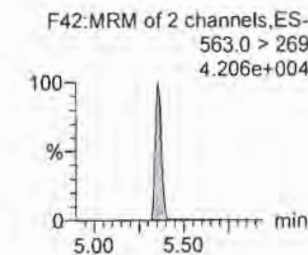
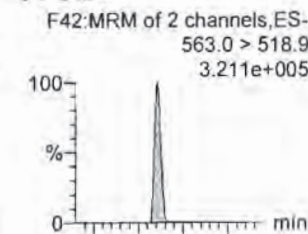
N-MeFOSAA



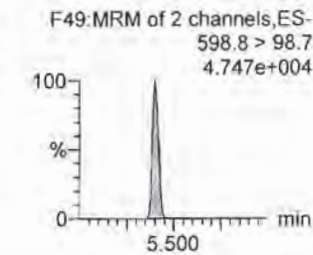
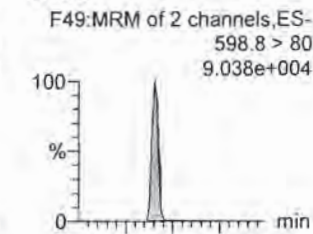
N-EtFOSAA



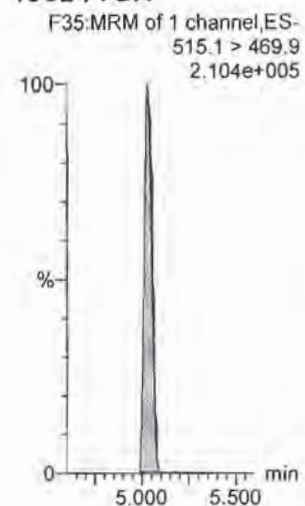
PFUdA



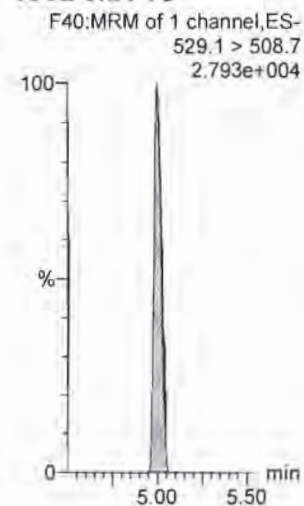
PFDS



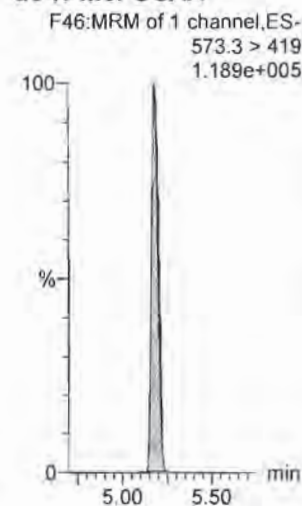
13C2-PFDA



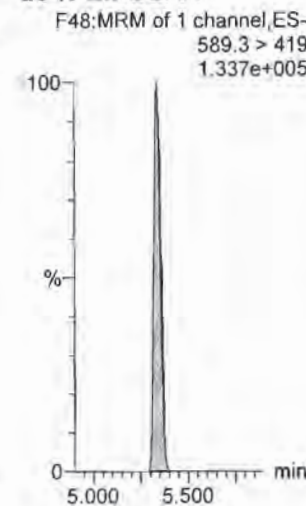
13C2-8:2 FTS



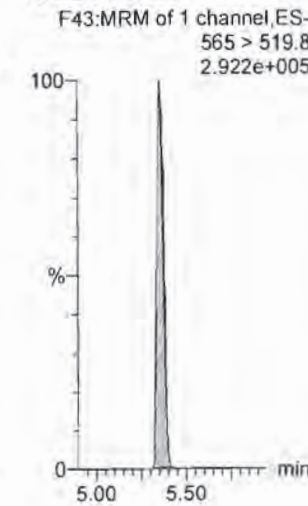
d3-N-MeFOSAA



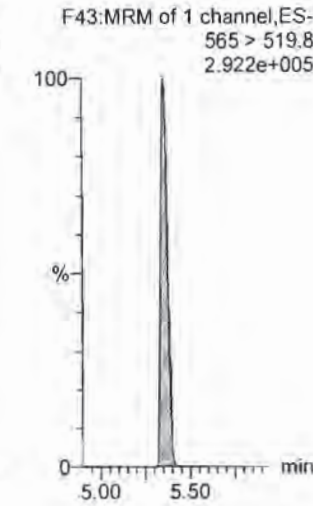
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA

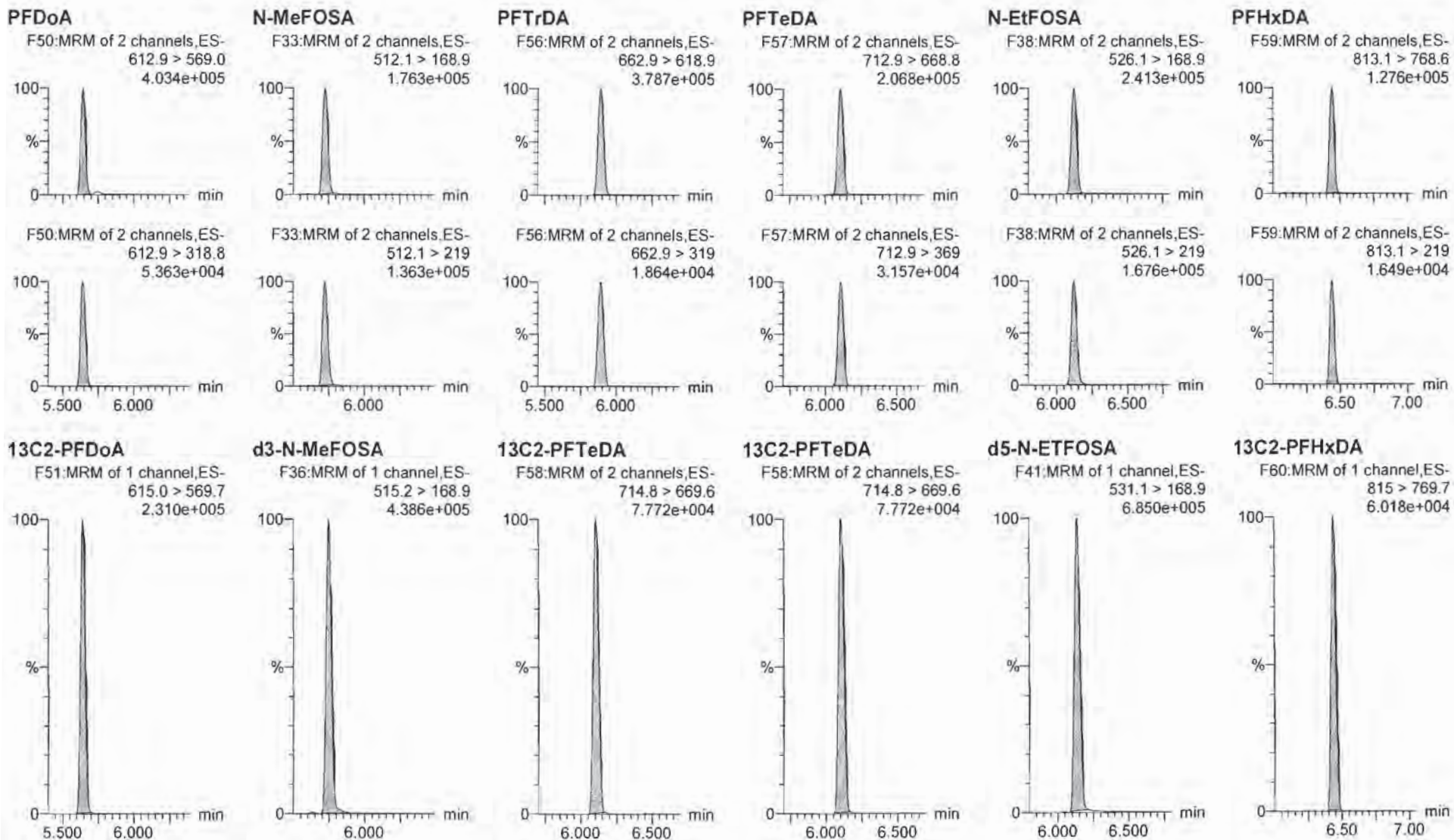


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Last Altered: Saturday, January 13, 2018 11:14:12 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:14:27 Pacific Standard Time

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611

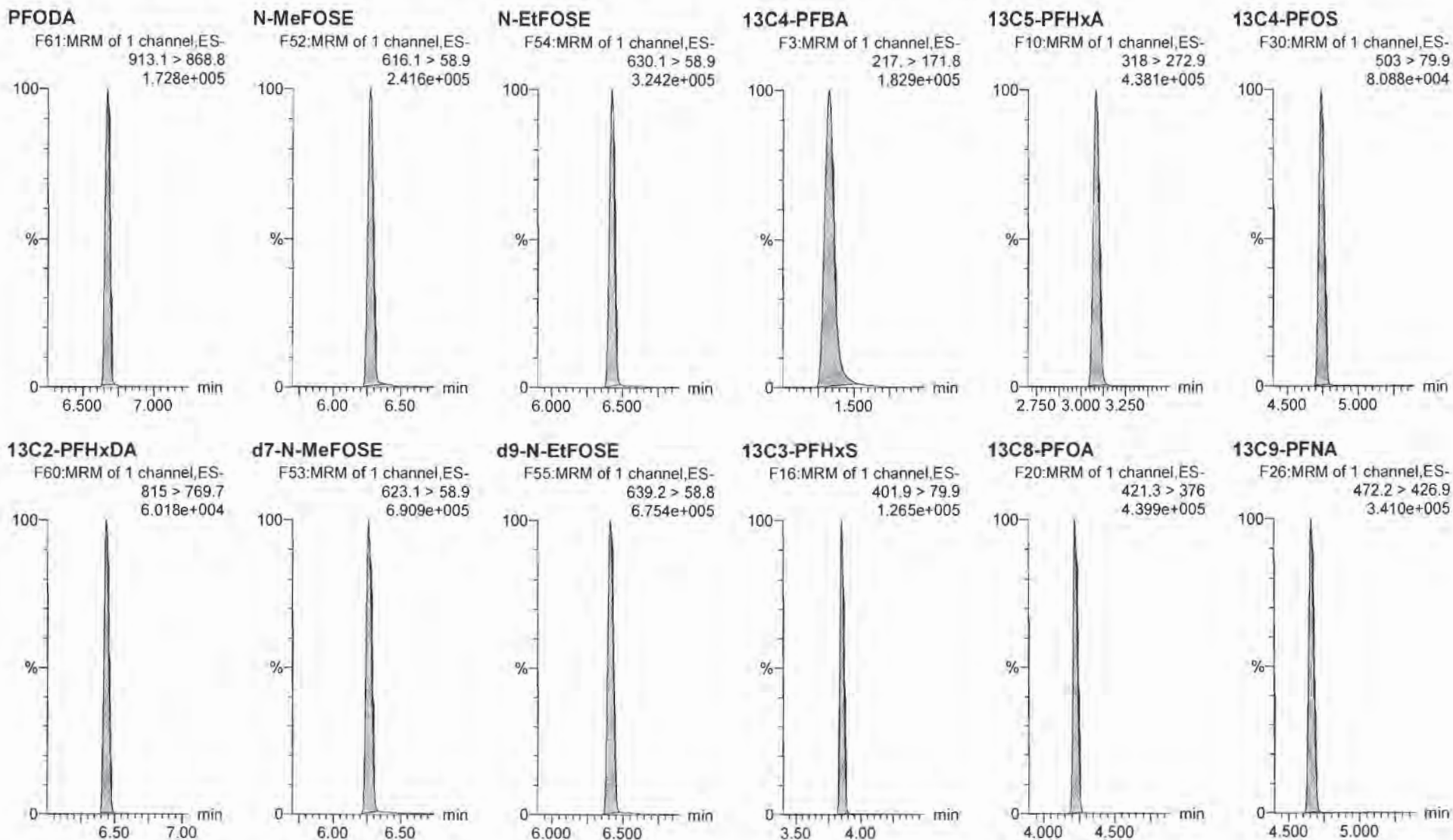


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Last Altered: Saturday, January 13, 2018 11:14:12 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:14:27 Pacific Standard Time

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611



Dataset: U:\Q4.PRO\results\180111M2\180111M2-19.qld

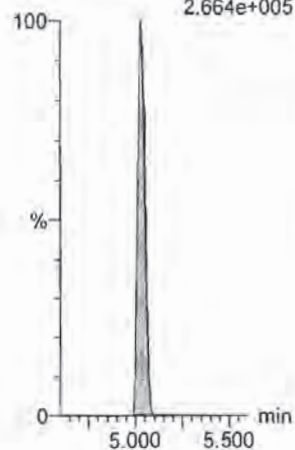
Last Altered: Saturday, January 13, 2018 11:14:12 Pacific Standard Time

Printed: Saturday, January 13, 2018 11:14:27 Pacific Standard Time

Name: 180111M2_19, Date: 12-Jan-2018, Time: 07:00:09, ID: ST180111M2-2 PFC CS3 17L2611, Description: PFC CS3 17L2611

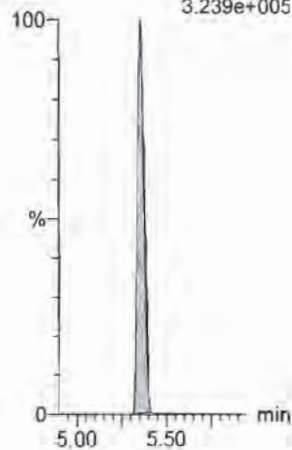
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.664e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-
570.1 > 524.8
3.239e+005



Dataset: U:\Q4.PRO\results\180114M1\180114M1-IIS.qld

Last Altered: Monday, January 15, 2018 14:17:44 Pacific Standard Time

Printed: Monday, January 15, 2018 14:19:21 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_RS-1-14-18.mdb 15 Jan 2018 13:53:53

Calibration: 15 Jan 2018 14:17:44

Name: 180114M1_6, Date: 14-Jan-2018, Time: 14:26:42, ID: ST180114M1-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180114M1-6 PFC CS3 17L2611	5.29e3	100.0	NO
2	2	13C5-PFHxA	ST180114M1-6 PFC CS3 17L2611	9.68e3	100.0	NO
3	3	13C3-PFHxS	ST180114M1-6 PFC CS3 17L2611	2.73e3	100.0	NO
4	4	13C8-PFOA	ST180114M1-6 PFC CS3 17L2611	1.09e4	100.0	NO
5	5	13C9-PFNA	ST180114M1-6 PFC CS3 17L2611	1.01e4	100.0	NO
6	6	13C4-PFOS	ST180114M1-6 PFC CS3 17L2611	2.23e3	100.0	NO
7	7	13C6-PFDA	ST180114M1-6 PFC CS3 17L2611	7.27e3	100.0	NO
8	8	13C7-PFUDa	ST180114M1-6 PFC CS3 17L2611	1.02e4	100.0	NO

Name: 180114M1_7, Date: 14-Jan-2018, Time: 14:37:53, ID: ST180114M1-7 PFC CS4 17L1208, Description: PFC CS4 17L1208

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180114M1-7 PFC CS4 17L1208	4.99e3	94.2	NO
2	2	13C5-PFHxA	ST180114M1-7 PFC CS4 17L1208	9.63e3	99.5	NO
3	3	13C3-PFHxS	ST180114M1-7 PFC CS4 17L1208	2.26e3	82.9	NO
4	4	13C8-PFOA	ST180114M1-7 PFC CS4 17L1208	1.04e4	95.2	NO
5	5	13C9-PFNA	ST180114M1-7 PFC CS4 17L1208	1.05e4	103.3	NO
6	6	13C4-PFOS	ST180114M1-7 PFC CS4 17L1208	2.41e3	108.0	NO
7	7	13C6-PFDA	ST180114M1-7 PFC CS4 17L1208	5.77e3	79.3	NO
8	8	13C7-PFUDa	ST180114M1-7 PFC CS4 17L1208	8.89e3	87.2	NO

Name: 180114M1_8, Date: 14-Jan-2018, Time: 14:49:04, ID: ST180114M1-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180114M1-8 PFC CS5 17L2613	4.62e3	87.2	NO
2	2	13C5-PFHxA	ST180114M1-8 PFC CS5 17L2613	9.02e3	93.2	NO
3	3	13C3-PFHxS	ST180114M1-8 PFC CS5 17L2613	2.29e3	84.0	NO
4	4	13C8-PFOA	ST180114M1-8 PFC CS5 17L2613	9.71e3	89.2	NO
5	5	13C9-PFNA	ST180114M1-8 PFC CS5 17L2613	8.46e3	83.4	NO
6	6	13C4-PFOS	ST180114M1-8 PFC CS5 17L2613	2.55e3	113.9	NO
7	7	13C6-PFDA	ST180114M1-8 PFC CS5 17L2613	6.62e3	91.1	NO
8	8	13C7-PFUDa	ST180114M1-8 PFC CS5 17L2613	9.73e3	95.4	NO

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA

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

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Name: 180114M1_11, Date: 14-Jan-2018, Time: 15:11:29, ID: ICV180114M1-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	ICV180114M1-1 PFC ICV 17L1201	3.25e4	613.2	YES
2	2 13C5-PFHxA	ICV180114M1-1 PFC ICV 17L1201	3.17e4	327.8	YES
3	3 13C3-PFHxS	ICV180114M1-1 PFC ICV 17L1201	8.73e3	319.9	YES
4	4 13C8-PFOA	ICV180114M1-1 PFC ICV 17L1201	3.70e4	340.5	YES
5	5 13C9-PFNA	ICV180114M1-1 PFC ICV 17L1201	3.21e4	316.4	YES
6	6 13C4-PFOS	ICV180114M1-1 PFC ICV 17L1201	9.76e3	436.8	YES
7	7 13C6-PFDA	ICV180114M1-1 PFC ICV 17L1201	2.43e4	334.3	YES
8	8 13C7-PFUdA	ICV180114M1-1 PFC ICV 17L1201	3.03e4	297.5	YES

Name: 180114M1_12, Date: 14-Jan-2018, Time: 15:31:46, ID: IPA, Description: IPA

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

Name: 180114M1_13, Date: 14-Jan-2018, Time: 15:43:14, ID: 1701852-01@10X IR03-MW034-C2-17D 0.26646, Description: IR03-MW034-C2-17D

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701852-01@10X IR03-MW034-C2-17...	9.86e2	18.6	YES
2	2 13C5-PFHxA	1701852-01@10X IR03-MW034-C2-17...	9.27e2	9.6	YES
3	3 13C3-PFHxS	1701852-01@10X IR03-MW034-C2-17...	2.25e2	8.3	YES
4	4 13C8-PFOA	1701852-01@10X IR03-MW034-C2-17...	1.15e3	10.6	YES
5	5 13C9-PFNA	1701852-01@10X IR03-MW034-C2-17...	9.49e2	9.3	YES
6	6 13C4-PFOS	1701852-01@10X IR03-MW034-C2-17...	2.51e2	11.2	YES
7	7 13C6-PFDA	1701852-01@10X IR03-MW034-C2-17...	7.95e2	10.9	YES
8	8 13C7-PFUdA	1701852-01@10X IR03-MW034-C2-17...	5.63e2	5.5	YES

Name: 180114M1_14, Date: 14-Jan-2018, Time: 16:07:42, ID: 1701852-02@10X IR03-MW018B-C1-17D 0.25583, Description: IR03-MW018B-C1-17D

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701852-02@10X IR03-MW018B-C1-1...	9.75e2	18.4	YES
2	2 13C5-PFHxA	1701852-02@10X IR03-MW018B-C1-1...	1.18e3	12.2	YES
3	3 13C3-PFHxS	1701852-02@10X IR03-MW018B-C1-1...	3.20e2	11.7	YES
4	4 13C8-PFOA	1701852-02@10X IR03-MW018B-C1-1...	1.38e3	12.7	YES
5	5 13C9-PFNA	1701852-02@10X IR03-MW018B-C1-1...	1.27e3	12.5	YES
6	6 13C4-PFOS	1701852-02@10X IR03-MW018B-C1-1...	3.18e2	14.2	YES
7	7 13C6-PFDA	1701852-02@10X IR03-MW018B-C1-1...	1.20e3	16.5	YES
8	8 13C7-PFUdA	1701852-02@10X IR03-MW018B-C1-1...	1.18e3	11.5	YES

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Name: 180114M1_15, Date: 14-Jan-2018, Time: 16:19:11, ID: 1701852-03@20X IR03-MW018A-C2-17D 0.26605, Description: IR03-MW018A-C2-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-03@20X IR03-MW018A-C2-1...	4.29e2	8.1	YES
2	2	13C5-PFHxA	1701852-03@20X IR03-MW018A-C2-1...	4.93e2	5.1	YES
3	3	13C3-PFHxS	1701852-03@20X IR03-MW018A-C2-1...	1.42e2	5.2	YES
4	4	13C8-PFOA	1701852-03@20X IR03-MW018A-C2-1...	6.01e2	5.5	YES
5	5	13C9-PFNA	1701852-03@20X IR03-MW018A-C2-1...	5.72e2	5.6	YES
6	6	13C4-PFOS	1701852-03@20X IR03-MW018A-C2-1...	1.11e2	5.0	YES
7	7	13C6-PFDA	1701852-03@20X IR03-MW018A-C2-1...	2.68e2	3.7	YES
8	8	13C7-PFUDa	1701852-03@20X IR03-MW018A-C2-1...	2.15e2	2.1	YES

Name: 180114M1_16, Date: 14-Jan-2018, Time: 16:30:38, ID: 1701852-03@10X IR03-MW018A-C2-17D 0.26605, Description: IR03-MW018A-C2-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-03@10X IR03-MW018A-C2-1...	1.05e3	19.8	YES
2	2	13C5-PFHxA	1701852-03@10X IR03-MW018A-C2-1...	1.26e3	13.1	YES
3	3	13C3-PFHxS	1701852-03@10X IR03-MW018A-C2-1...	2.92e2	10.7	YES
4	4	13C8-PFOA	1701852-03@10X IR03-MW018A-C2-1...	1.09e3	10.0	YES
5	5	13C9-PFNA	1701852-03@10X IR03-MW018A-C2-1...	1.46e3	14.4	YES
6	6	13C4-PFOS	1701852-03@10X IR03-MW018A-C2-1...	2.92e2	13.1	YES
7	7	13C6-PFDA	1701852-03@10X IR03-MW018A-C2-1...	1.01e3	13.8	YES
8	8	13C7-PFUDa	1701852-03@10X IR03-MW018A-C2-1...	8.48e2	8.3	YES

Name: 180114M1_17, Date: 14-Jan-2018, Time: 16:42:04, ID: 1701852-02 IR03-MW018B-C1-17D 0.25583, Description: IR03-MW018B-C1-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-02 IR03-MW018B-C1-17D 0.2...	4.84e3	91.4	NO
2	2	13C5-PFHxA	1701852-02 IR03-MW018B-C1-17D 0.2...	5.93e3	61.2	NO
3	3	13C3-PFHxS	1701852-02 IR03-MW018B-C1-17D 0.2...	1.45e3	53.2	NO
4	4	13C8-PFOA	1701852-02 IR03-MW018B-C1-17D 0.2...	6.28e3	57.7	NO
5	5	13C9-PFNA	1701852-02 IR03-MW018B-C1-17D 0.2...	6.45e3	63.5	NO
6	6	13C4-PFOS	1701852-02 IR03-MW018B-C1-17D 0.2...	1.39e3	62.3	NO
7	7	13C6-PFDA	1701852-02 IR03-MW018B-C1-17D 0.2...	4.52e3	62.1	NO
8	8	13C7-PFUDa	1701852-02 IR03-MW018B-C1-17D 0.2...	6.88e3	67.5	NO

Name: 180114M1_18, Date: 14-Jan-2018, Time: 16:53:31, ID: IPA, Description: IPA

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

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Name: 180114M1_19, Date: 14-Jan-2018, Time: 17:04:58, ID: 1701852-03 IR03-MW018A-C2-17D 0.26605, Description: IR03-MW018A-C2-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-03 IR03-MW018A-C2-17D 0.2...	9.55e3	180.5	YES
2	2	13C5-PFHxA	1701852-03 IR03-MW018A-C2-17D 0.2...	1.11e4	114.4	NO
3	3	13C3-PFHxS	1701852-03 IR03-MW018A-C2-17D 0.2...	2.29e3	83.8	NO
4	4	13C8-PFOA	1701852-03 IR03-MW018A-C2-17D 0.2...	1.23e4	113.4	NO
5	5	13C9-PFNA	1701852-03 IR03-MW018A-C2-17D 0.2...	1.22e4	120.5	NO
6	6	13C4-PFOS	1701852-03 IR03-MW018A-C2-17D 0.2...	1.75e3	78.5	NO
7	7	13C6-PFDA	1701852-03 IR03-MW018A-C2-17D 0.2...	8.34e3	114.7	NO
8	8	13C7-PFUdA	1701852-03 IR03-MW018A-C2-17D 0.2...	1.17e4	115.2	NO

Name: 180114M1_20, Date: 14-Jan-2018, Time: 17:16:25, ID: IPA, Description: IPA

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

Name: 180114M1_21, Date: 14-Jan-2018, Time: 17:27:52, ID: 1701905-03RE1@40X WINF1712061655JLB 0.25, Description: WINF1712061655JLB

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701905-03RE1@40X WINF17120616...			NO
2	2	13C5-PFHxA	1701905-03RE1@40X WINF17120616...			NO
3	3	13C3-PFHxS	1701905-03RE1@40X WINF17120616...			NO
4	4	13C8-PFOA	1701905-03RE1@40X WINF17120616...	5.35e0	0.0	YES
5	5	13C9-PFNA	1701905-03RE1@40X WINF17120616...			NO
6	6	13C4-PFOS	1701905-03RE1@40X WINF17120616...			NO
7	7	13C6-PFDA	1701905-03RE1@40X WINF17120616...			NO
8	8	13C7-PFUdA	1701905-03RE1@40X WINF17120616...			NO

Name: 180114M1_22, Date: 14-Jan-2018, Time: 17:39:19, ID: B7L0101-BS1 OPR 0.25, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0101-BS1 OPR 0.25	7.36e3	139.0	NO
2	2	13C5-PFHxA	B7L0101-BS1 OPR 0.25	9.12e3	94.3	NO
3	3	13C3-PFHxS	B7L0101-BS1 OPR 0.25	2.53e3	92.9	NO
4	4	13C8-PFOA	B7L0101-BS1 OPR 0.25	1.04e4	95.6	NO
5	5	13C9-PFNA	B7L0101-BS1 OPR 0.25	9.71e3	95.7	NO
6	6	13C4-PFOS	B7L0101-BS1 OPR 0.25	2.38e3	106.4	NO
7	7	13C6-PFDA	B7L0101-BS1 OPR 0.25	6.74e3	92.7	NO
8	8	13C7-PFUdA	B7L0101-BS1 OPR 0.25	8.26e3	81.0	NO

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Name: 180114M1_23, Date: 14-Jan-2018, Time: 17:50:46, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	IPA			NO
2	2	13C5-PFHxA	IPA			NO
3	3	13C3-PFHxS	IPA			NO
4	4	13C8-PFOA	IPA			NO
5	5	13C9-PFNA	IPA			NO
6	6	13C4-PFOS	IPA	6.34e0	0.3	YES
7	7	13C6-PFDA	IPA			NO
8	8	13C7-PFUdA	IPA			NO

Name: 180114M1_24, Date: 14-Jan-2018, Time: 18:02:13, ID: B7L0101-BLK1 Method Blank 0.25, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0101-BLK1 Method Blank 0.25	6.83e3	129.0	NO
2	2	13C5-PFHxA	B7L0101-BLK1 Method Blank 0.25	7.35e3	76.0	NO
3	3	13C3-PFHxS	B7L0101-BLK1 Method Blank 0.25	1.83e3	66.9	NO
4	4	13C8-PFOA	B7L0101-BLK1 Method Blank 0.25	9.99e3	91.9	NO
5	5	13C9-PFNA	B7L0101-BLK1 Method Blank 0.25	9.34e3	92.0	NO
6	6	13C4-PFOS	B7L0101-BLK1 Method Blank 0.25	2.43e3	108.6	NO
7	7	13C6-PFDA	B7L0101-BLK1 Method Blank 0.25	6.76e3	92.9	NO
8	8	13C7-PFUdA	B7L0101-BLK1 Method Blank 0.25	1.02e4	100.2	NO

Name: 180114M1_25, Date: 14-Jan-2018, Time: 18:13:39, ID: 1701840-04 YS22-GW16-1217 0.1211, Description: YS22-GW16-1217

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701840-04 YS22-GW16-1217 0.1211	6.44e3	121.6	NO
2	2	13C5-PFHxA	1701840-04 YS22-GW16-1217 0.1211	7.39e3	76.3	NO
3	3	13C3-PFHxS	1701840-04 YS22-GW16-1217 0.1211	2.35e3	86.3	NO
4	4	13C8-PFOA	1701840-04 YS22-GW16-1217 0.1211	8.27e3	76.0	NO
5	5	13C9-PFNA	1701840-04 YS22-GW16-1217 0.1211	9.58e3	94.4	NO
6	6	13C4-PFOS	1701840-04 YS22-GW16-1217 0.1211	2.35e3	105.1	NO
7	7	13C6-PFDA	1701840-04 YS22-GW16-1217 0.1211	8.03e3	110.4	NO
8	8	13C7-PFUdA	1701840-04 YS22-GW16-1217 0.1211	1.04e4	102.2	NO

Name: 180114M1_26, Date: 14-Jan-2018, Time: 18:25:06, ID: 1701840-05 YS22-GW10-1217 0.11512, Description: YS22-GW10-1217

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701840-05 YS22-GW10-1217 0.11512	6.20e3	117.2	NO
2	2	13C5-PFHxA	1701840-05 YS22-GW10-1217 0.11512	7.15e3	73.9	NO
3	3	13C3-PFHxS	1701840-05 YS22-GW10-1217 0.11512	1.82e3	66.8	NO
4	4	13C8-PFOA	1701840-05 YS22-GW10-1217 0.11512	8.30e3	76.3	NO
5	5	13C9-PFNA	1701840-05 YS22-GW10-1217 0.11512	9.26e3	91.2	NO
6	6	13C4-PFOS	1701840-05 YS22-GW10-1217 0.11512	2.18e3	97.6	NO
7	7	13C6-PFDA	1701840-05 YS22-GW10-1217 0.11512	6.11e3	84.1	NO
8	8	13C7-PFUdA	1701840-05 YS22-GW10-1217 0.11512	9.12e3	89.4	NO

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Name: 180114M1_27, Date: 14-Jan-2018, Time: 18:36:33, ID: 1701851-01 FT-PZ-462S-20171202 0.22334, Description: FT-PZ-462S-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-01 FT-PZ-462S-20171202 0.2...	7.13e3	134.6	NO
2	2	13C5-PFHxA	1701851-01 FT-PZ-462S-20171202 0.2...	9.94e3	102.7	NO
3	3	13C3-PFHxS	1701851-01 FT-PZ-462S-20171202 0.2...	2.32e3	84.9	NO
4	4	13C8-PFOA	1701851-01 FT-PZ-462S-20171202 0.2...	8.86e3	81.4	NO
5	5	13C9-PFNA	1701851-01 FT-PZ-462S-20171202 0.2...	1.06e4	104.3	NO
6	6	13C4-PFOS	1701851-01 FT-PZ-462S-20171202 0.2...	2.70e3	120.9	NO
7	7	13C6-PFDA	1701851-01 FT-PZ-462S-20171202 0.2...	8.06e3	110.9	NO
8	8	13C7-PFUDa	1701851-01 FT-PZ-462S-20171202 0.2...	9.43e3	92.5	NO

Name: 180114M1_28, Date: 14-Jan-2018, Time: 18:48:00, ID: IPA, Description: IPA

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

Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-10 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180114M1-10 PFC CS3 17L2611	3.86e3	72.9	NO
2	2	13C5-PFHxA	ST180114M1-10 PFC CS3 17L2611	9.74e3	100.7	NO
3	3	13C3-PFHxS	ST180114M1-10 PFC CS3 17L2611	2.33e3	85.5	NO
4	4	13C8-PFOA	ST180114M1-10 PFC CS3 17L2611	1.01e4	93.2	NO
5	5	13C9-PFNA	ST180114M1-10 PFC CS3 17L2611	1.05e4	103.5	NO
6	6	13C4-PFOS	ST180114M1-10 PFC CS3 17L2611	3.04e3	136.2	NO
7	7	13C6-PFDA	ST180114M1-10 PFC CS3 17L2611	7.99e3	109.9	NO
8	8	13C7-PFUDa	ST180114M1-10 PFC CS3 17L2611	9.44e3	92.6	NO

Vista Analytical Laboratory

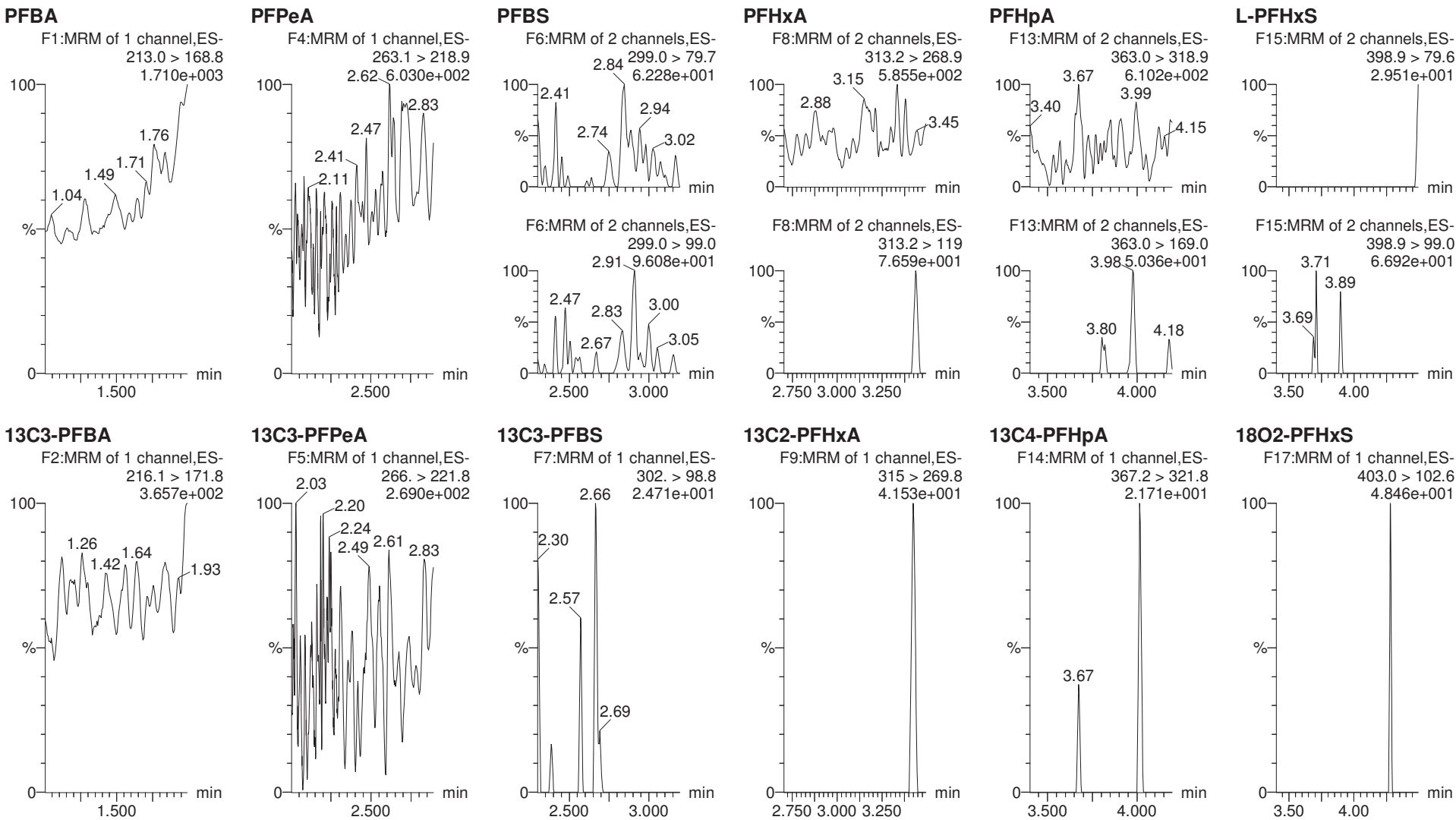
Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA



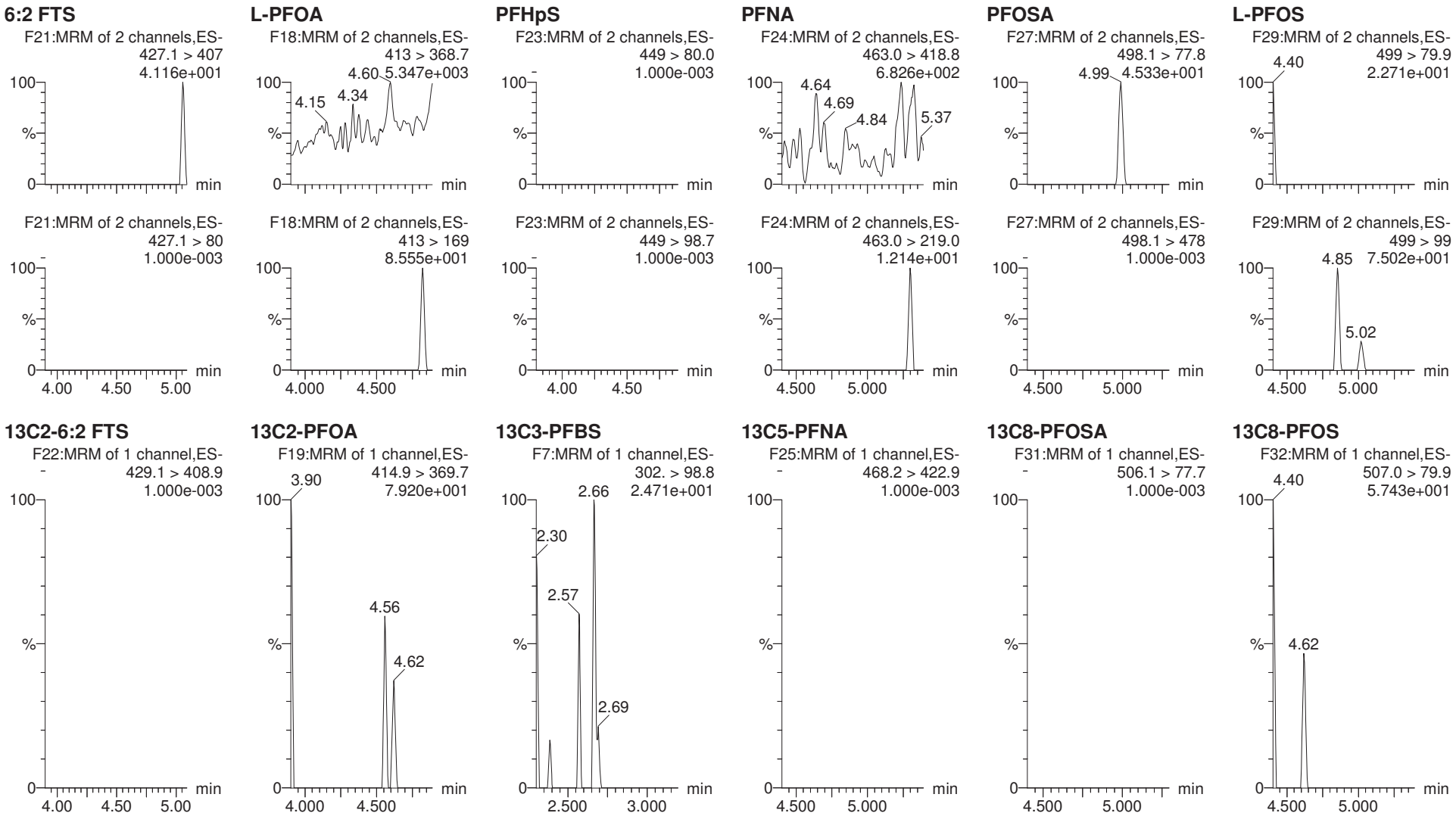
Vista Analytical Laboratory

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Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

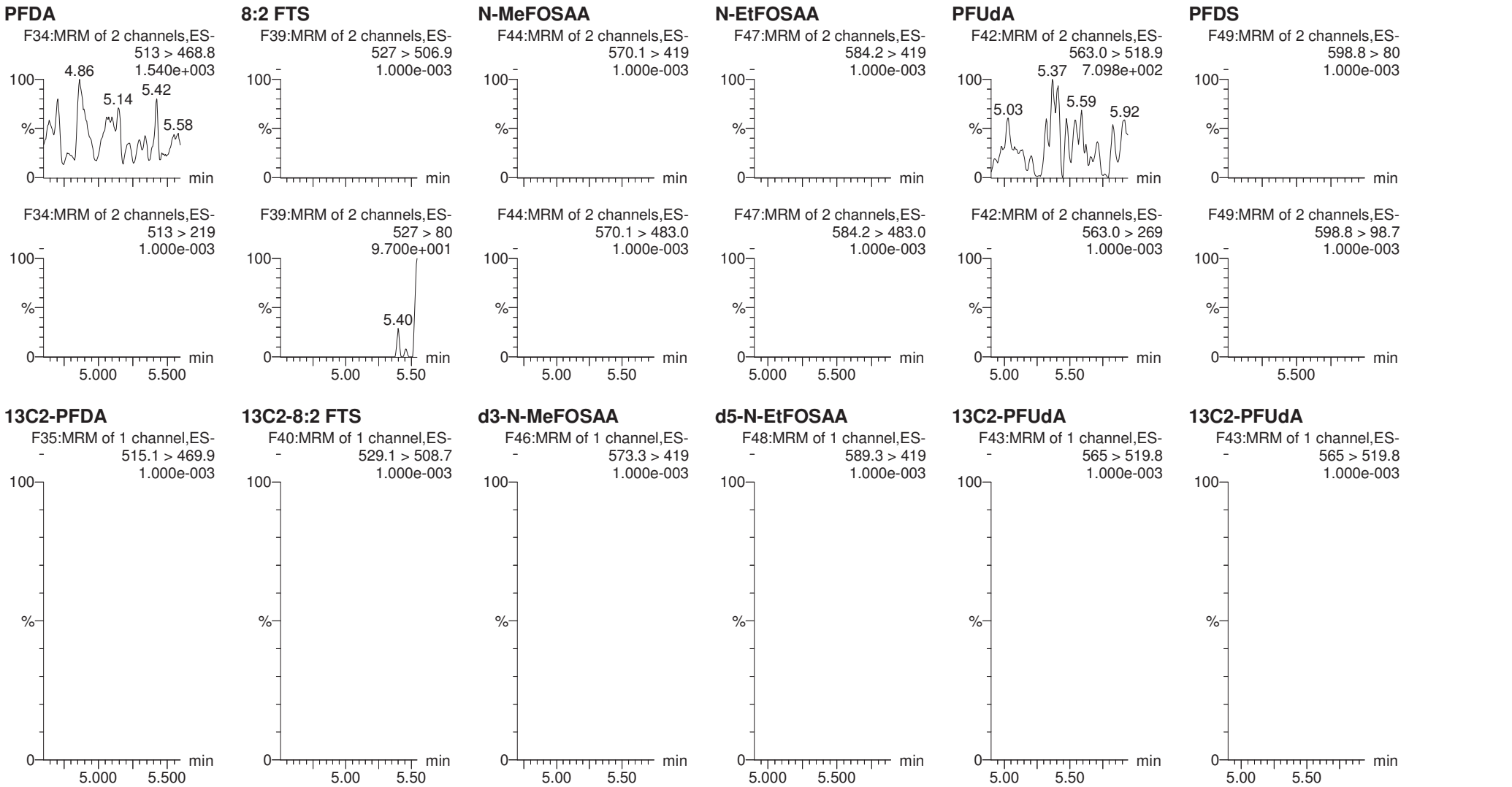
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Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA



Vista Analytical Laboratory

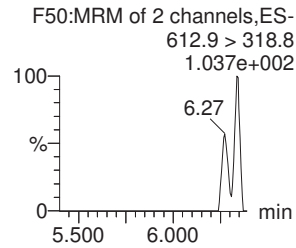
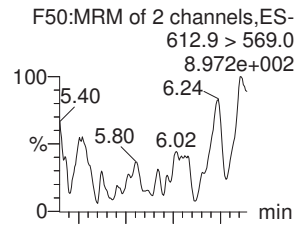
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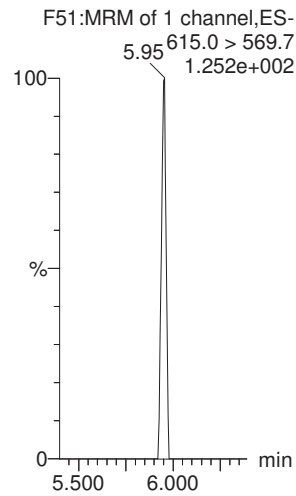
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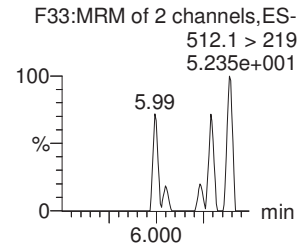
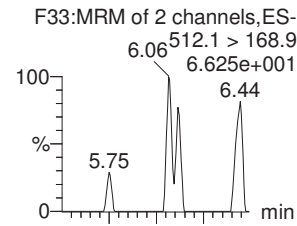
PFD_oA



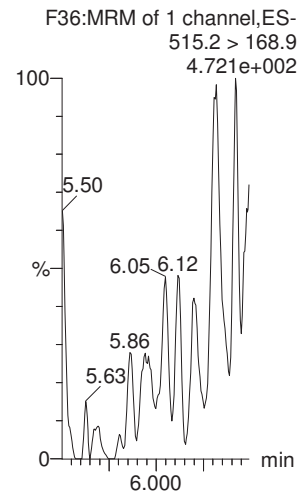
¹³C2-PFD_oA



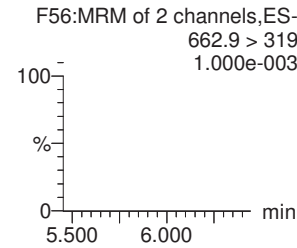
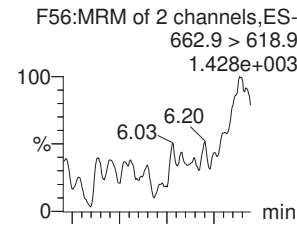
N-MeFOSA



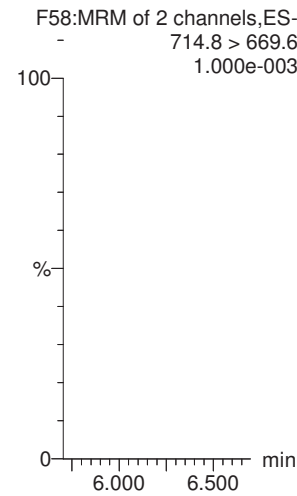
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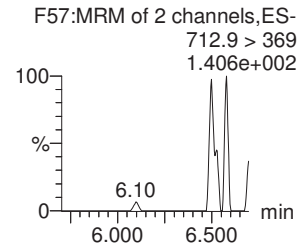
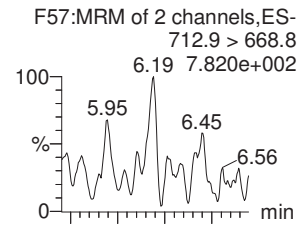
PFT_rDA



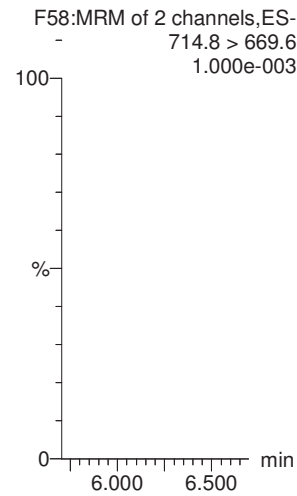
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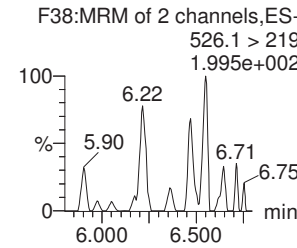
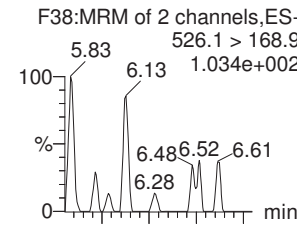
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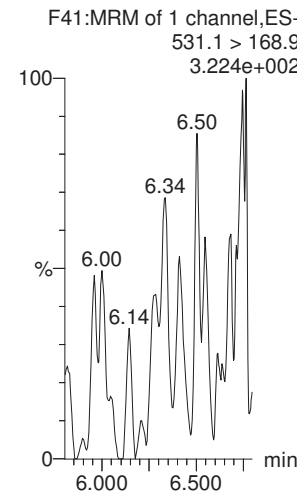
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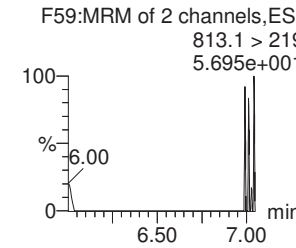
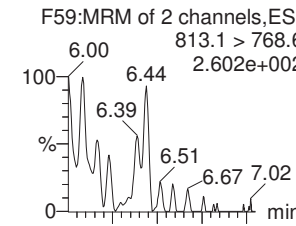
N-EtFOSA



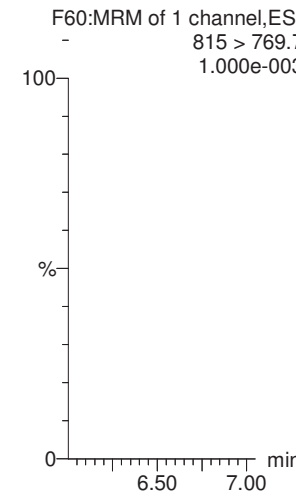
d5-N-ETFOSA



PFH_xDA



¹³C2-PFH_xDA



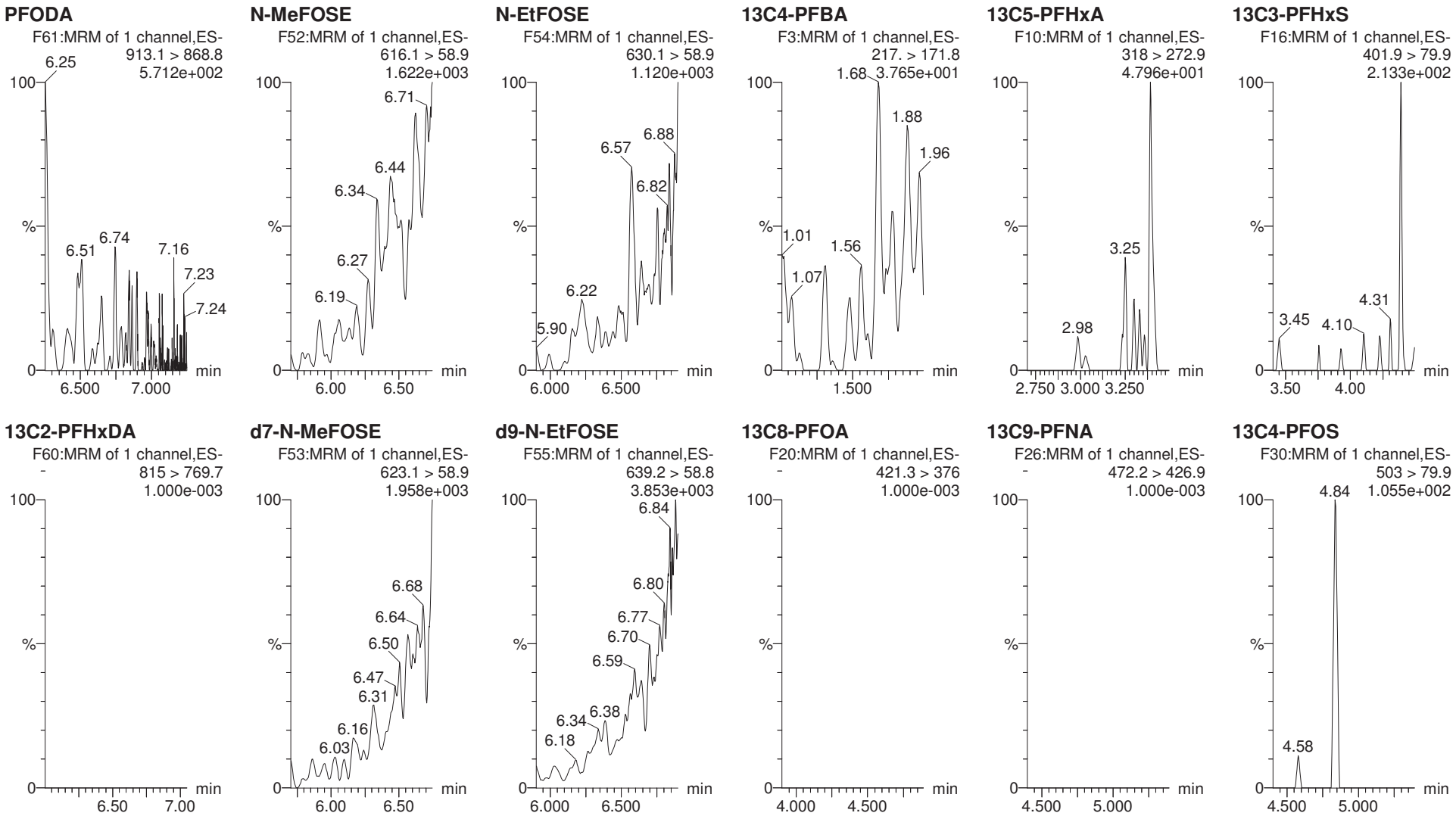
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA

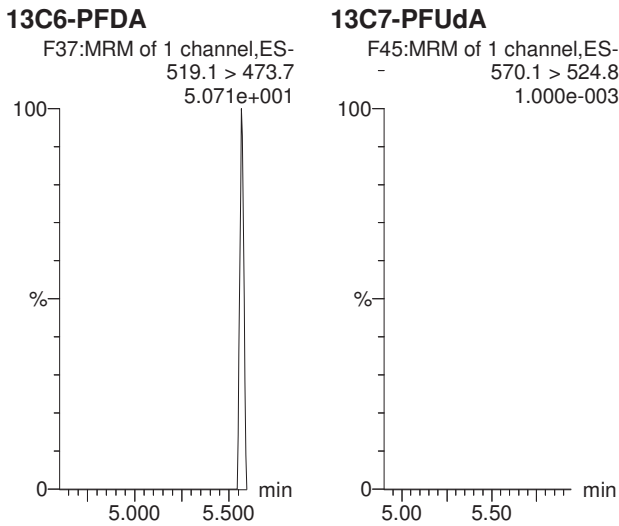


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Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA



Dataset: U:\Q4.PRO\results\180114M1\180114M1-29.qld

ⓐ >130%

Last Altered: Monday, January 15, 2018 15:18:22 Pacific Standard Time

Printed: Monday, January 15, 2018 15:18:32 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

CP/15/18

Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

#	Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery	Out
1	1 PFBA	213.0 > 168.8	3.52e3	2.95e3		1.44	1.31	14.9	11.0	109.7	NO	
2	2 PFPeA	263.1 > 218.9	6.91e3	7.01e3		2.37	2.22	12.3	10.3	103.2	NO	
3	3 PFBS	299.0 > 79.7	1.59e3	8.71e2		2.60	2.47	22.8	11.9	119.3	NO	
4	4 PFHxA	313.2 > 268.9	9.46e3	2.38e3		3.00	2.90	19.9	10.9	108.6	NO	
5	5 PFHpA	363.0 > 318.9	7.41e3	6.19e3		3.54	3.43	14.9	11.6	115.5	NO	
6	6 L-PFHxS	398.9 > 79.6	1.20e3	6.98e2		3.68	3.57	21.5	12.5	125.3	NO	
7	8 6:2 FTS	427.1 > 407	1.81e3	1.66e3		4.00	3.85	13.6	12.8	128.5	NO	
8	9 L-PFOA	413 > 368.7	9.81e3	9.22e3		4.07	3.94	13.3	11.1	110.6	NO	
9	11 PFHpS	449 > 80.0	2.01e3	9.22e3		4.20	4.06	2.73	10.8	107.7	NO	
10	12 PFNA	463.0 > 418.8	9.47e3	9.35e3		4.54	4.41	12.7	8.48	84.8	NO	
11	13 PFOSA	498.1 > 77.8	1.67e3	1.56e3		4.61	4.48	13.4	8.96	89.6	NO	
12	14 L-PFOS	499 > 79.9	2.35e3	2.35e3		4.63	4.50	12.5	10.5	105.3	NO	
13	16 PFDA	513 > 468.8	8.08e3	7.57e3		4.94	4.82	13.3	10.2	101.7	NO	
14	17 8:2 FTS	527 > 506.9	1.57e3	1.03e3		4.88	4.76	19.0	10.0	100.0	NO	
15	18 N-MeFOSAA	570.1 > 419	3.88e3	2.21e3		5.10	4.97	22.0	9.86	98.6	NO	
16	19 N-EtFOSAA	584.2 > 419	3.32e3	2.64e3		5.27	5.16	15.8	12.6	126.1	NO	
17	20 PFUdA	563.0 > 518.9	8.11e3	7.96e3		5.30	5.17	12.7	10.7	107.5	NO	
18	21 PFDS	598.8 > 80	2.89e3	7.96e3		5.33	5.22	4.53	13.2	132.2	ⓐ YES	
19	22 PFDoA	612.9 > 569.0	1.20e4	6.31e3		5.60	5.48	23.7	9.26	92.6	NO	
20	23 N-MeFOSA	512.1 > 168.9	5.83e3	1.43e4		5.91	5.86	61.2	56.2	112.4	NO	
21	24 PFTDA	662.9 > 618.9	1.14e4	2.99e3		5.85	5.74	47.9	8.00	80.0	NO	
22	25 PFTeDA	712.9 > 668.8	7.63e3	2.99e3		6.10	5.98	31.9	12.0	119.9	NO	
23	26 N-EtFOSA	526.1 > 168.9	5.90e3	1.61e4		6.33	6.30	55.1	55.8	111.6	NO	
24	27 PFHxDA	813.1 > 768.6	3.15e3	1.72e3		6.45	6.37	9.16	9.75	97.5	NO	
25	28 PFODA	913.1 > 868.8	3.12e3	1.72e3		6.70	6.63	9.06	9.36	93.6	NO	
26	29 N-MeFOSE	616.1 > 58.9	6.59e3	1.60e4		6.43	6.42	61.7	54.1	108.3	NO	
27	30 N-EtFOSE	630.1 > 58.9	6.82e3	1.48e4		6.60	6.57	68.9	54.4	108.8	NO	
28	31 13C3-PFBA	216.1 > 171.8	2.95e3	3.86e3	0.790	1.44	1.31	9.55	12.1	96.7	NO	
29	32 13C3-PFPeA	266. > 221.8	7.01e3	9.74e3	0.809	2.35	2.22	8.99	11.1	88.9	NO	
30	33 13C3-PFBS	302. > 98.8	8.71e2	9.74e3	0.097	2.60	2.47	1.12	11.6	92.7	NO	
31	Work Order 17011851	315 > 269.8	2.38e3	9.74e3	0.633	3.00	2.90	3.06	4.83	96.5	NO	

70-130

50-150

Dataset: U:\Q4.PRO\results\180114M1\180114M1-29.qld

Last Altered: Monday, January 15, 2018 15:18:22 Pacific Standard Time

Printed: Monday, January 15, 2018 15:18:32 Pacific Standard Time

Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
32	35 13C4-PFHpA	367.2 > 321.8	6.19e3	9.74e3	0.651	3.56	3.43	7.95	12.2	97.7	NO
33	36 18O2-PFHxS	403.0 > 102.6	6.98e2	2.33e3	0.326	3.68	3.57	3.74	11.5	91.9	NO
34	37 13C2-6:2 FTS	429.1 > 408.9	1.66e3	1.01e4	0.171	4.00	3.85	2.05	12.0	96.2	NO
35	38 13C2-PFOA	414.9 > 369.7	9.22e3	1.01e4	0.903	4.07	3.94	11.4	12.6	100.7	NO
36	39 13C5-PFNA	468.2 > 422.9	9.35e3	1.05e4	0.844	4.54	4.41	11.1	13.2	105.4	NO
37	40 13C8-PFOSA	506.1 > 77.7	1.56e3	9.44e3	0.165	4.61	4.48	2.07	12.5	99.9	NO
38	41 13C8-PFOS	507.0 > 79.9	2.35e3	3.04e3	0.920	4.62	4.50	9.67	10.5	84.1	NO
39	42 13C2-PFDA	515.1 > 469.9	7.57e3	7.99e3	1.044	4.82	4.82	11.8	11.3	90.8	NO
40	43 13C2-8:2 FTS	529.1 > 508.7	1.03e3	9.74e3	0.087	4.89	4.76	1.33	15.3	122.6	NO
41	44 d3-N-MeFOSAA	573.3 > 419	2.21e3	9.44e3	0.227	5.08	4.97	2.93	12.9	103.0	NO
42	45 d5-N-EtFOSAA	589.3 > 419	2.64e3	9.44e3	0.313	5.27	5.15	3.49	11.1	89.1	NO
43	46 13C2-PFUDa	565 > 519.8	7.96e3	9.44e3	0.899	5.28	5.17	10.6	11.7	93.9	NO
44	47 13C2-PFDoA	615.0 > 569.7	6.31e3	9.44e3	0.645	5.60	5.48	8.36	13.0	103.7	NO
45	48 d3-N-MeFOSA	515.2 > 168.9	1.43e4	9.44e3	0.122	5.94	5.89	18.9	155	103.4	NO
46	49 13C2-PFTeDA	714.8 > 669.6	2.99e3	9.44e3	0.290	6.10	5.98	3.96	13.7	109.2	NO
47	50 d5-N-ETFOSA	531.1 > 168.9	1.61e4	9.44e3	0.131	6.34	6.32	21.3	162	108.0	NO
48	51 13C2-PFHxDA	815 > 769.7	1.72e3	9.44e3	0.377	6.45	6.37	2.28	6.04	120.9	NO
49	52 d7-N-MeFOSE	623.1 > 58.9	1.60e4	9.44e3	0.140	6.42	6.41	21.2	152	101.5	NO
50	53 d9-N-EtFOSE	639.2 > 58.8	1.48e4	9.44e3	0.127	6.57	6.56	19.7	155	103.3	NO
51	54 13C4-PFBA	217. > 171.8	3.86e3	3.86e3	1.000	1.44	1.31	12.5	12.5	100.0	NO
52	55 13C5-PFHxA	318 > 272.9	9.74e3	9.74e3	1.000	3.00	2.90	12.5	12.5	100.0	NO
53	56 13C3-PFHxS	401.9 > 79.9	2.33e3	2.33e3	1.000	3.68	3.57	12.5	12.5	100.0	NO
54	57 13C8-PFOA	421.3 > 376	1.01e4	1.01e4	1.000	4.07	3.94	12.5	12.5	100.0	NO
55	58 13C9-PFNA	472.2 > 426.9	1.05e4	1.05e4	1.000	4.54	4.41	12.5	12.5	100.0	NO
56	59 13C4-PFOS	503 > 79.9	3.04e3	3.04e3	1.000	4.63	4.50	12.5	12.5	100.0	NO
57	60 13C6-PFDA	519.1 > 473.7	7.99e3	7.99e3	1.000	4.94	4.82	12.5	12.5	100.0	NO
58	61 13C7-PFUDa	570.1 > 524.8	9.44e3	9.44e3	1.000	5.28	5.17	12.5	12.5	100.0	NO

52-150

Dataset: Untitled

Last Altered: Monday, January 15, 2018 15:03:31 Pacific Standard Time

Printed: Monday, January 15, 2018 15:07:47 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: 15 Jan 2018 15:03:31

Compound name: PFBA

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2	180114M1_2	ST180114M1-2 PFC CS-1 17L2607	14-Jan-18	13:42:02
3	180114M1_3	ST180114M1-3 PFC CS0 17L2608	14-Jan-18	13:53:10
4	180114M1_4	ST180114M1-4 PFC CS1 17L2609	14-Jan-18	14:04:21
5	180114M1_5	ST180114M1-5 PFC CS2 17L2610	14-Jan-18	14:15:32
6	180114M1_6	ST180114M1-6 PFC CS3 17L2611	14-Jan-18	14:26:42
7	180114M1_7	ST180114M1-7 PFC CS4 17L1208	14-Jan-18	14:37:53
8	180114M1_8	ST180114M1-8 PFC CS5 17L2613	14-Jan-18	14:49:04
9	180114M1_9	IPA	14-Jan-18	15:00:15
10	180114M1_11	ICV180114M1-1 PFC ICV 17L1201	14-Jan-18	15:11:29
11	180114M1_12	IPA	14-Jan-18	15:31:46
12	180114M1_13	1701852-01@10X IR03-MW034-C2-17D 0.26...	14-Jan-18	15:43:14
13	180114M1_14	1701852-02@10X IR03-MW018B-C1-17D 0.2...	14-Jan-18	16:07:42
14	180114M1_15	1701852-03@20X IR03-MW018A-C2-17D 0.2...	14-Jan-18	16:19:11
15	180114M1_16	1701852-03@10X IR03-MW018A-C2-17D 0.2...	14-Jan-18	16:30:38
16	180114M1_17	1701852-02 IR03-MW018B-C1-17D 0.25583	14-Jan-18	16:42:04
17	180114M1_18	IPA	14-Jan-18	16:53:31
18	180114M1_19	1701852-03 IR03-MW018A-C2-17D 0.26605	14-Jan-18	17:04:58
19	180114M1_20	IPA	14-Jan-18	17:16:25
20	180114M1_21	1701905-03RE1@40X WINF1712061655JLB ...	14-Jan-18	17:27:52
21	180114M1_22	B7L0101-BS1 OPR 0.25	14-Jan-18	17:39:19
22	180114M1_23	IPA	14-Jan-18	17:50:46
23	180114M1_24	B7L0101-BLK1 Method Blank 0.25	14-Jan-18	18:02:13
24	180114M1_25	1701840-04 YS22-GW16-1217 0.1211	14-Jan-18	18:13:39
25	180114M1_26	1701840-05 YS22-GW10-1217 0.11512	14-Jan-18	18:25:06
26	180114M1_27	1701851-01 FT-PZ-462S-20171202 0.22334	14-Jan-18	18:36:33
27	180114M1_28	IPA	14-Jan-18	18:48:00
28	180114M1_29	ST180114M1-9 PFC CS3 17L2611	14-Jan-18	18:59:27

Dataset: U:\Q4.PRO\results\180114M1\180114M1-29.qld

Last Altered: Monday, January 15, 2018 15:18:22 Pacific Standard Time

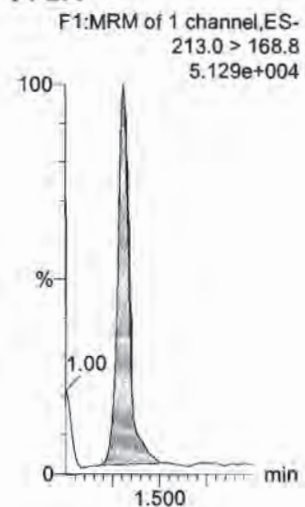
Printed: Monday, January 15, 2018 15:18:32 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

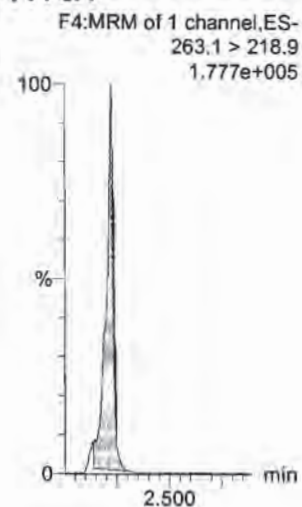
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

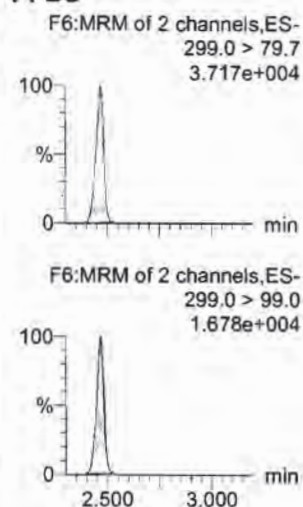
PFBA



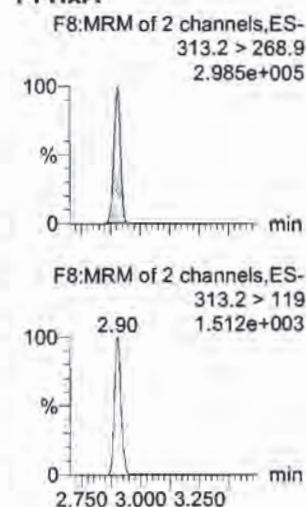
PFPeA



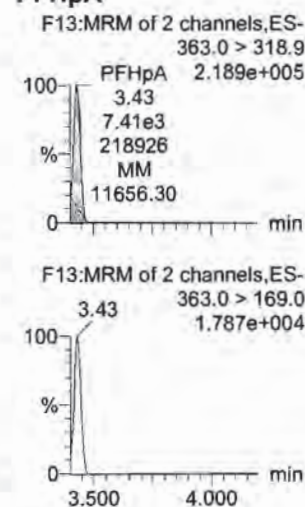
PFBS



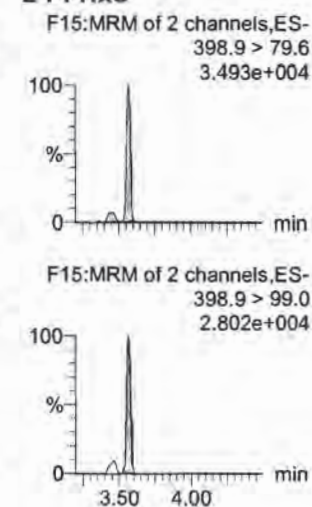
PFHxA



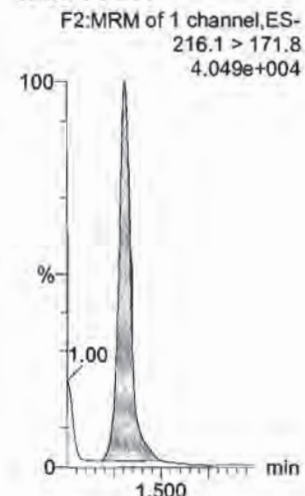
PFHpA



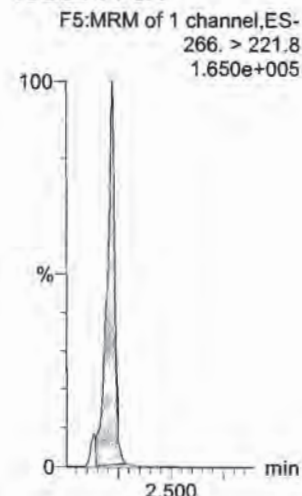
L-PFHxS



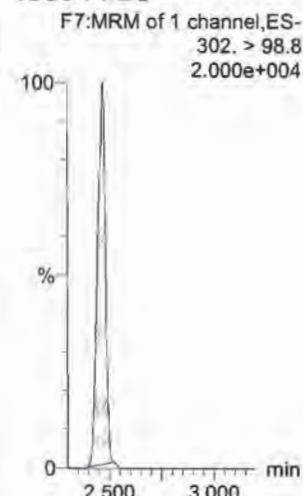
13C3-PFBA



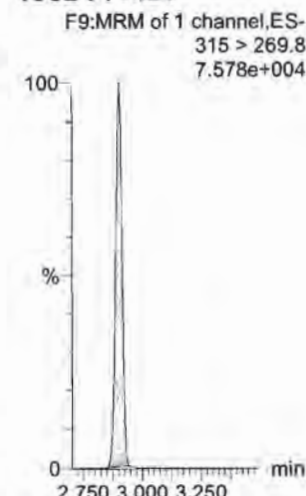
13C3-PFPeA



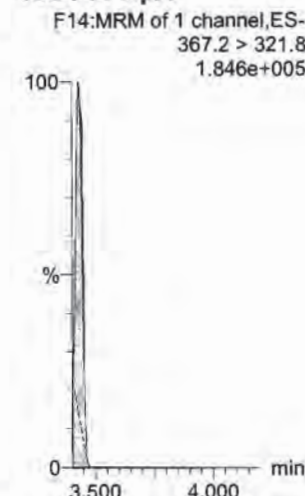
13C3-PFBS



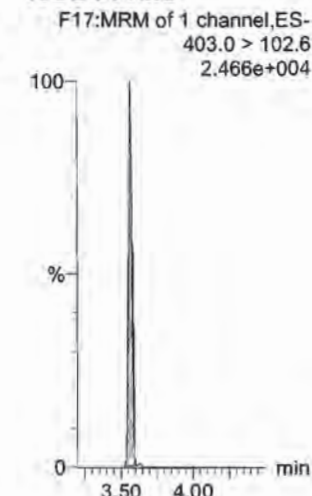
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



Dataset: U:\Q4.PRO\results\180114M1\180114M1-29.qld

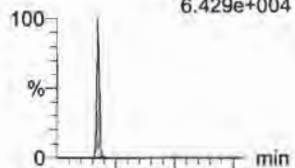
Last Altered: Monday, January 15, 2018 15:18:22 Pacific Standard Time

Printed: Monday, January 15, 2018 15:18:32 Pacific Standard Time

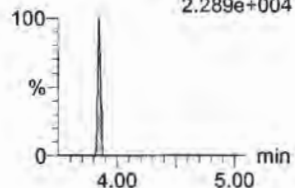
Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
6.429e+004



F21:MRM of 2 channels,ES-
427.1 > 80
2.289e+004

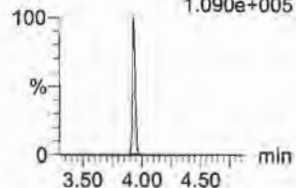


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
3.368e+005

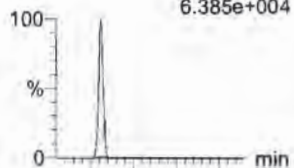


F18:MRM of 2 channels,ES-
413 > 169
1.090e+005

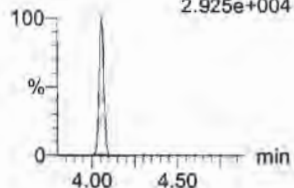


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
6.385e+004

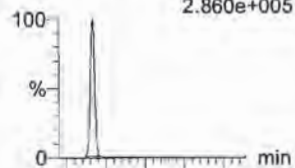


F23:MRM of 2 channels,ES-
449 > 98.7
2.925e+004

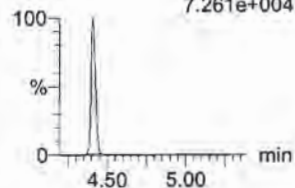


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
2.860e+005

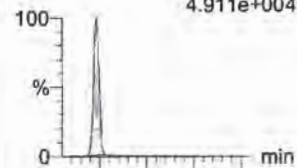


F24:MRM of 2 channels,ES-
463.0 > 219.0
7.261e+004

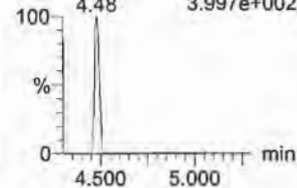


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
4.911e+004

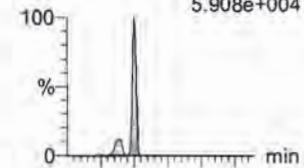


F27:MRM of 2 channels,ES-
498.1 > 478
3.997e+002

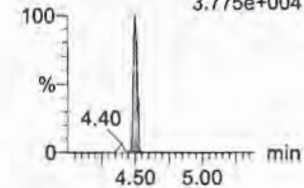


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
5.908e+004

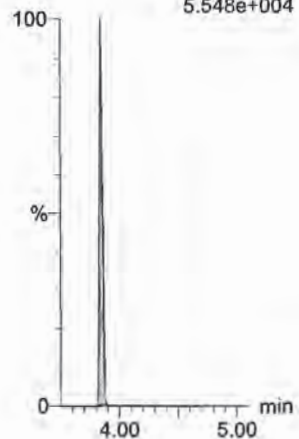


F29:MRM of 2 channels,ES-
499 > 99
3.775e+004



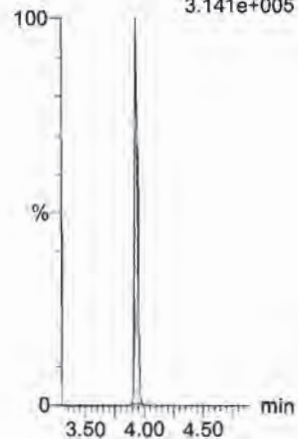
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
5.548e+004



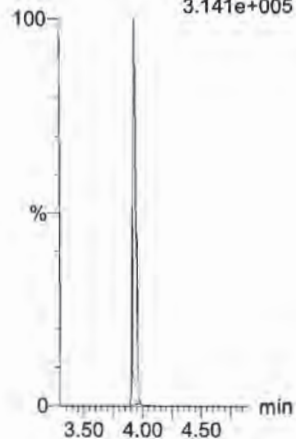
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
3.141e+005



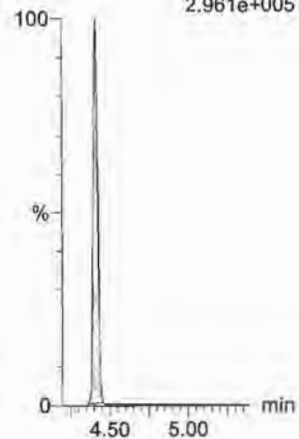
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
3.141e+005



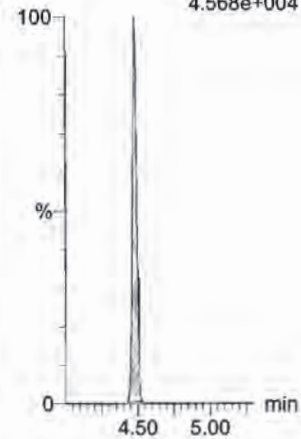
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
2.961e+005



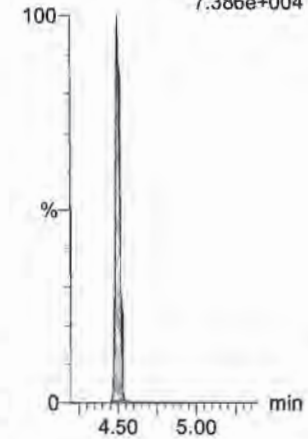
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
4.568e+004



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
7.386e+004



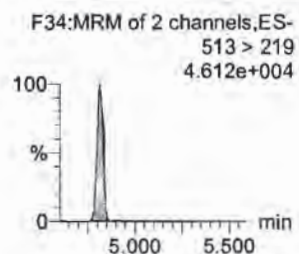
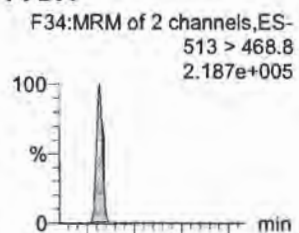
Dataset: U:\Q4.PRO\results\180114M1\180114M1-29.qld

Last Altered: Monday, January 15, 2018 15:18:22 Pacific Standard Time

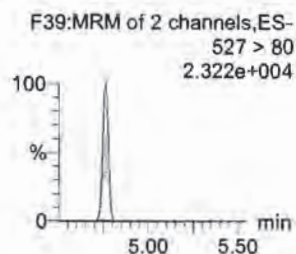
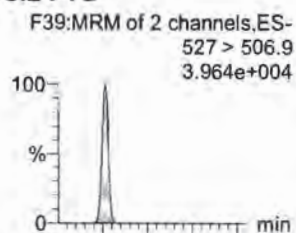
Printed: Monday, January 15, 2018 15:18:32 Pacific Standard Time

Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

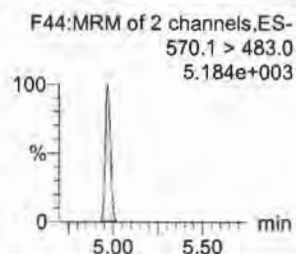
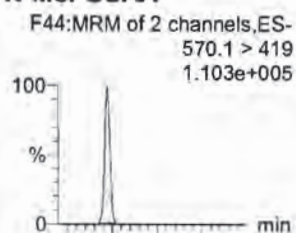
PFDA



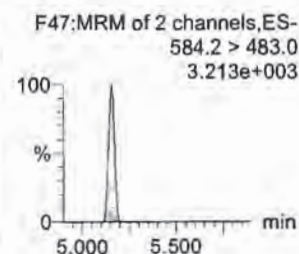
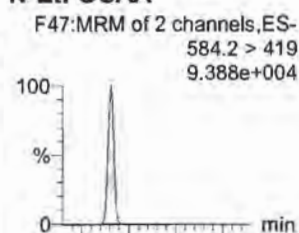
8:2 FTS



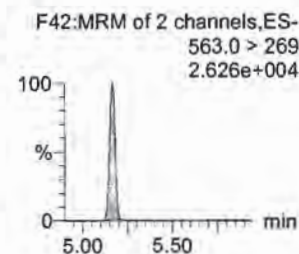
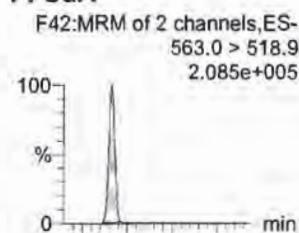
N-MeFOSAA



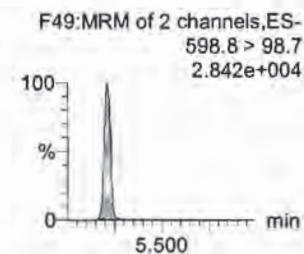
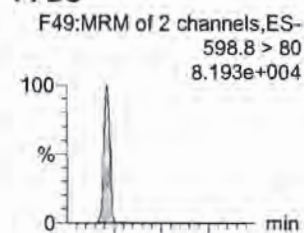
N-EtFOSAA



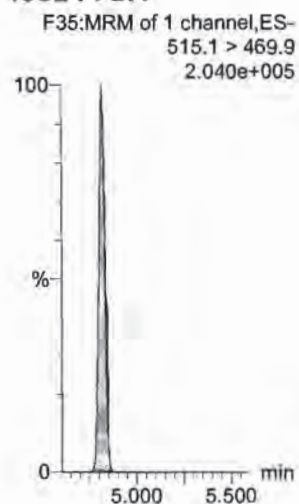
PFUdA



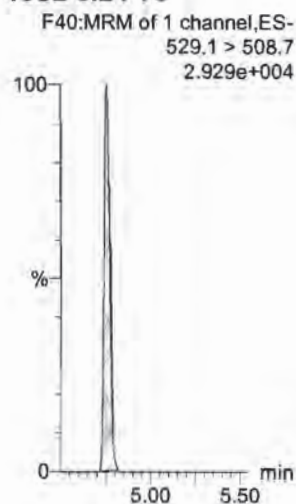
PFDS



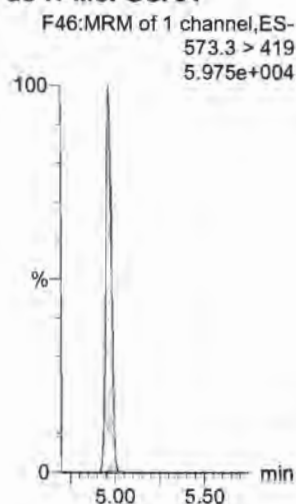
13C2-PFDA



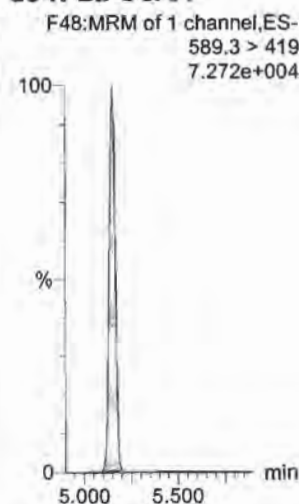
13C2-8:2 FTS



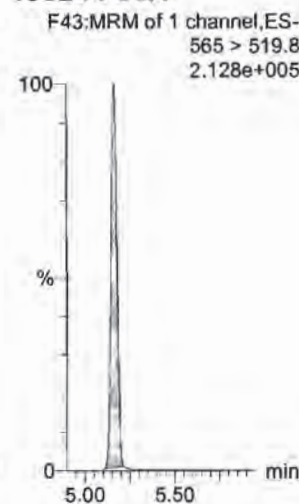
d3-N-MeFOSAA



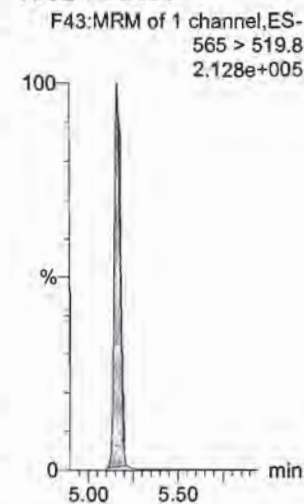
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



Dataset: U:\Q4.PRO\results\180114M1\180114M1-29.qld

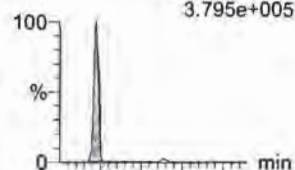
Last Altered: Monday, January 15, 2018 15:18:22 Pacific Standard Time

Printed: Monday, January 15, 2018 15:18:32 Pacific Standard Time

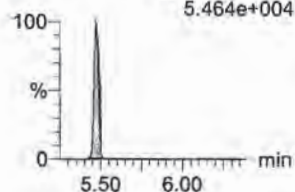
Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

PFD_oA

F50:MRM of 2 channels,ES-
612.9 > 569.0
3.795e+005

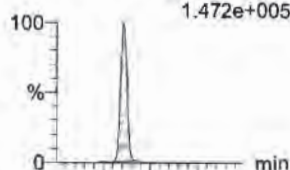


F50:MRM of 2 channels,ES-
612.9 > 318.8
5.464e+004

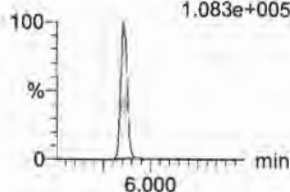


N-MeFOSA

F33:MRM of 2 channels,ES-
512.1 > 168.9
1.472e+005

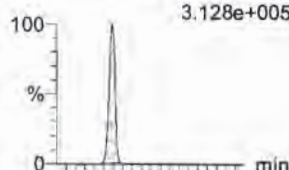


F33:MRM of 2 channels,ES-
512.1 > 219
1.083e+005

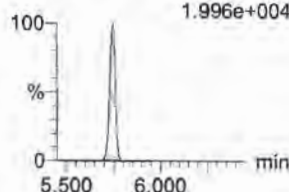


PFT_rDA

F56:MRM of 2 channels,ES-
662.9 > 618.9
3.128e+005

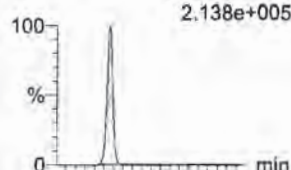


F56:MRM of 2 channels,ES-
662.9 > 319
1.996e+004

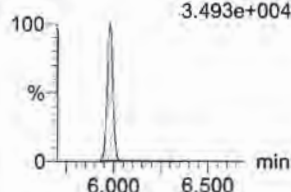


PFT_eDA

F57:MRM of 2 channels,ES-
712.9 > 668.8
2.138e+005

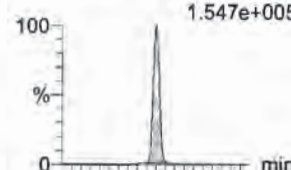


F57:MRM of 2 channels,ES-
712.9 > 369
3.493e+004

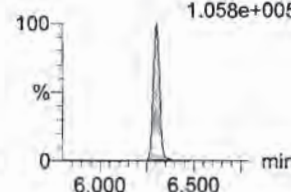


N-EtFOSA

F38:MRM of 2 channels,ES-
526.1 > 168.9
1.547e+005

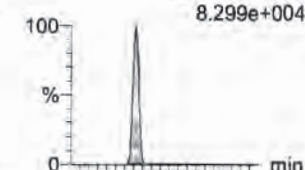


F38:MRM of 2 channels,ES-
526.1 > 219
1.058e+005

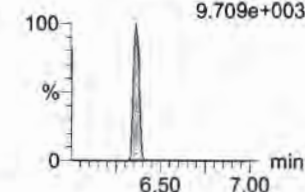


PFH_xDA

F59:MRM of 2 channels,ES-
813.1 > 768.6
8.299e+004

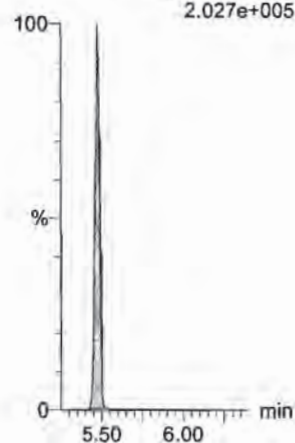


F59:MRM of 2 channels,ES-
813.1 > 219
9.709e+003



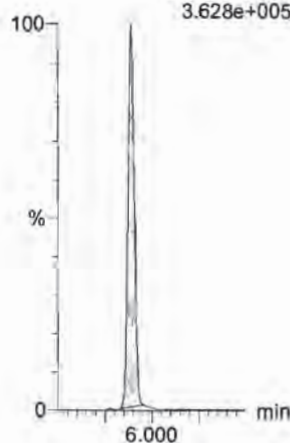
¹³C₂-PFD_oA

F51:MRM of 1 channel,ES-
615.0 > 569.7
2.027e+005



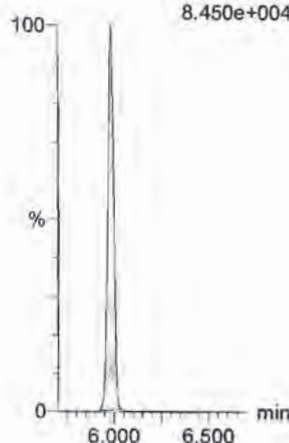
d₃-N-MeFOSA

F36:MRM of 1 channel,ES-
515.2 > 168.9
3.628e+005



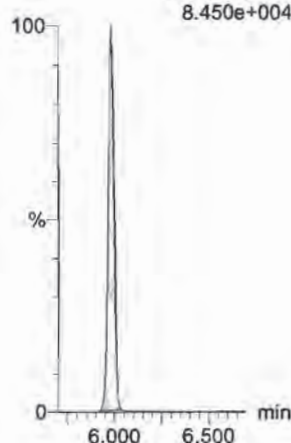
¹³C₂-PFT_eDA

F58:MRM of 2 channels,ES-
714.8 > 669.6
8.450e+004



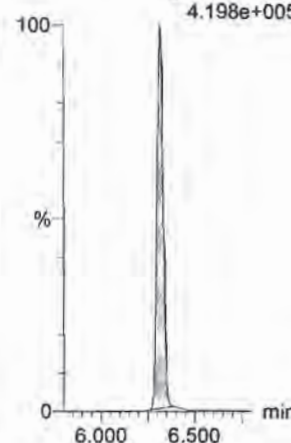
¹³C₂-PFT_eDA

F58:MRM of 2 channels,ES-
714.8 > 669.6
8.450e+004



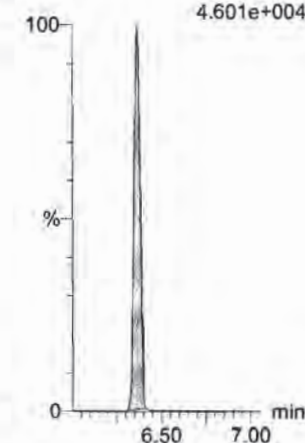
d₅-N-ETFOSA

F41:MRM of 1 channel,ES-
531.1 > 168.9
4.198e+005



¹³C₂-PFH_xDA

F60:MRM of 1 channel,ES-
815 > 769.7
4.601e+004

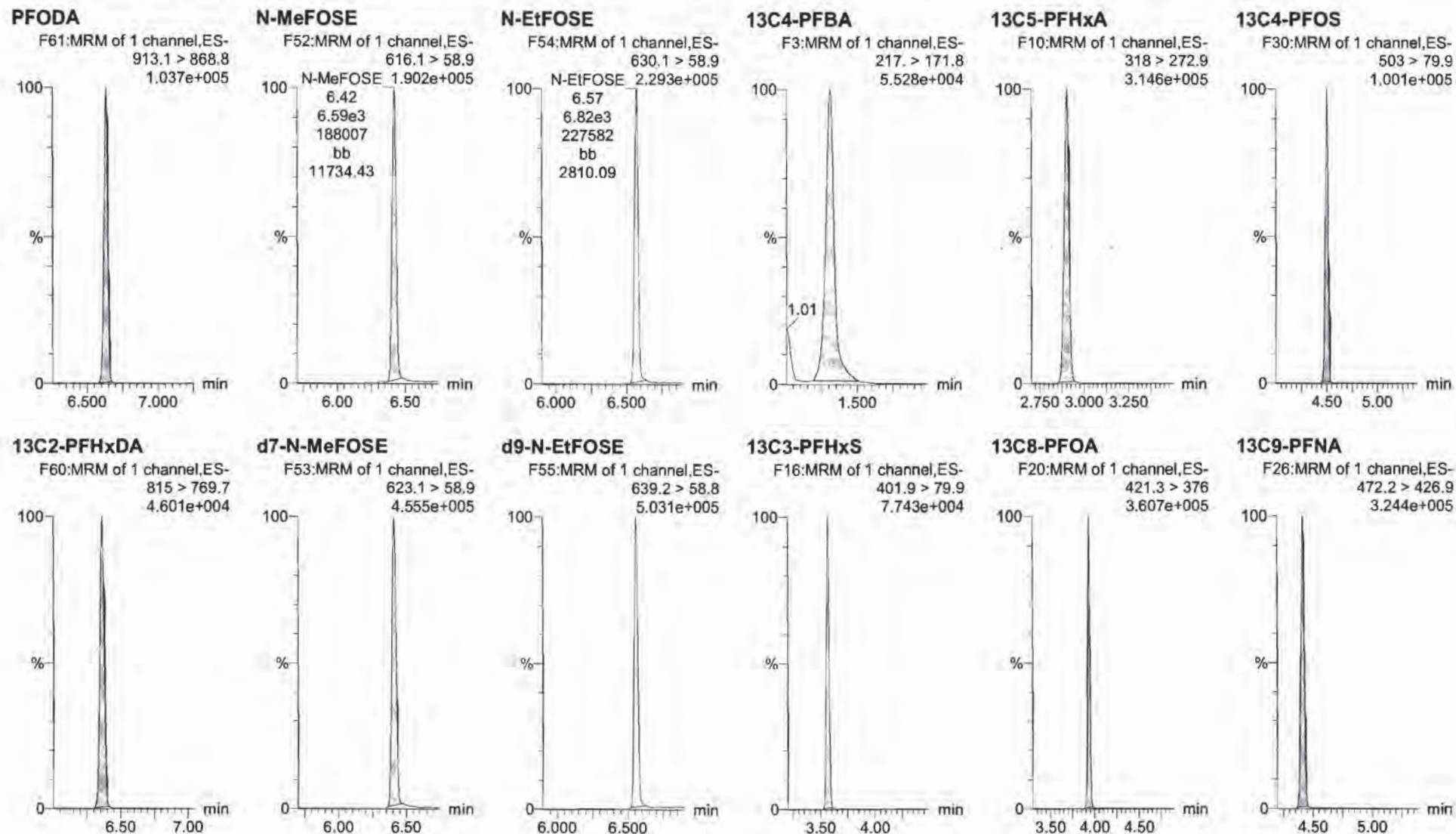


Dataset: U:\Q4.PRO\results\180114M1\180114M1-29.qld

Last Altered: Monday, January 15, 2018 15:18:22 Pacific Standard Time

Printed: Monday, January 15, 2018 15:18:32 Pacific Standard Time

Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-9 PFC CS3 17L2611, Description: PFC CS3 17L2611



Dataset: U:\Q4.PRO\results\180114M1\180114M1-29.qld

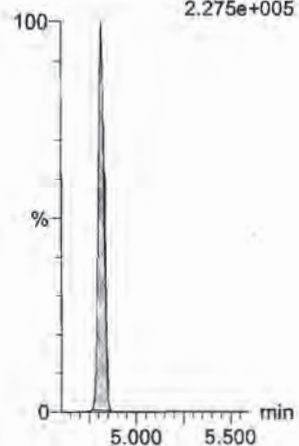
Last Altered: Monday, January 15, 2018 15:18:22 Pacific Standard Time

Printed: Monday, January 15, 2018 15:18:32 Pacific Standard Time

Name: 180114M1_29, Date: 14-Jan-2018, Time: 18:59:27, ID: ST180114M1-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

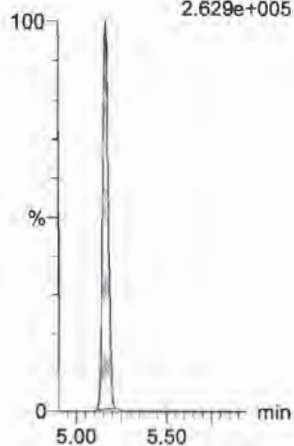
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.275e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.629e+005



Dataset: U:\Q4.PRO\results\180115M2\180115M2-IIS.qld

Last Altered: Wednesday, January 17, 2018 17:01:59 Pacific Standard Time

Printed: Wednesday, January 17, 2018 17:02:18 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_RS-1-14-18.mdb 17 Jan 2018 16:33:12

Calibration: 17 Jan 2018 16:54:20

Name: 180115M2_6, Date: 16-Jan-2018, Time: 01:11:44, ID: ST180115M2-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-6 PFC CS3 17L2611	1.47e4	100.0	NO
2	2	13C5-PFHxA	ST180115M2-6 PFC CS3 17L2611	1.62e4	100.0	NO
3	3	13C3-PFHxS	ST180115M2-6 PFC CS3 17L2611	3.99e3	100.0	NO
4	4	13C8-PFOA	ST180115M2-6 PFC CS3 17L2611	1.55e4	100.0	NO
5	5	13C9-PFNA	ST180115M2-6 PFC CS3 17L2611	1.67e4	100.0	NO
6	6	13C4-PFOS	ST180115M2-6 PFC CS3 17L2611	3.95e3	100.0	NO
7	7	13C6-PFDA	ST180115M2-6 PFC CS3 17L2611	1.06e4	100.0	NO
8	8	13C7-PFUDa	ST180115M2-6 PFC CS3 17L2611	1.44e4	100.0	NO

Name: 180115M2_7, Date: 16-Jan-2018, Time: 01:23:11, ID: ST180115M2-7 PFC CS4 17L1208, Description: PFC CS4 17L1208

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-7 PFC CS4 17L1208	1.15e4	78.0	NO
2	2	13C5-PFHxA	ST180115M2-7 PFC CS4 17L1208	1.18e4	73.1	NO
3	3	13C3-PFHxS	ST180115M2-7 PFC CS4 17L1208	2.61e3	65.4	NO
4	4	13C8-PFOA	ST180115M2-7 PFC CS4 17L1208	1.16e4	74.7	NO
5	5	13C9-PFNA	ST180115M2-7 PFC CS4 17L1208	1.16e4	69.3	NO
6	6	13C4-PFOS	ST180115M2-7 PFC CS4 17L1208	3.37e3	85.2	NO
7	7	13C6-PFDA	ST180115M2-7 PFC CS4 17L1208	9.39e3	88.8	NO
8	8	13C7-PFUDa	ST180115M2-7 PFC CS4 17L1208	1.01e4	69.8	NO

Name: 180115M2_8, Date: 16-Jan-2018, Time: 01:34:38, ID: ST180115M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-8 PFC CS5 17L2613	1.17e4	79.4	NO
2	2	13C5-PFHxA	ST180115M2-8 PFC CS5 17L2613	1.35e4	83.6	NO
3	3	13C3-PFHxS	ST180115M2-8 PFC CS5 17L2613	2.52e3	63.2	NO
4	4	13C8-PFOA	ST180115M2-8 PFC CS5 17L2613	1.20e4	77.4	NO
5	5	13C9-PFNA	ST180115M2-8 PFC CS5 17L2613	1.23e4	73.7	NO
6	6	13C4-PFOS	ST180115M2-8 PFC CS5 17L2613	2.59e3	65.5	NO
7	7	13C6-PFDA	ST180115M2-8 PFC CS5 17L2613	9.28e3	87.8	NO
8	8	13C7-PFUDa	ST180115M2-8 PFC CS5 17L2613	1.44e4	99.5	NO

Name: 180115M2_9, Date: 16-Jan-2018, Time: 01:46:05, ID: IPA, Description: IPA

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

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Name: 180115M2_10, Date: 16-Jan-2018, Time: 01:57:31, ID: ICV180115M2-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ICV180115M2-1 PFC ICV 17L1201	4.78e4	325.4	YES
2	2	13C5-PFHxA	ICV180115M2-1 PFC ICV 17L1201	5.13e4	317.8	YES
3	3	13C3-PFHxS	ICV180115M2-1 PFC ICV 17L1201	1.25e4	313.9	YES
4	4	13C8-PFOA	ICV180115M2-1 PFC ICV 17L1201	4.79e4	309.6	YES
5	5	13C9-PFNA	ICV180115M2-1 PFC ICV 17L1201	4.38e4	262.6	YES
6	6	13C4-PFOS	ICV180115M2-1 PFC ICV 17L1201	1.14e4	289.7	YES
7	7	13C6-PFDA	ICV180115M2-1 PFC ICV 17L1201	3.72e4	351.5	YES
8	8	13C7-PFUdA	ICV180115M2-1 PFC ICV 17L1201	1.79e4	124.3	NO

Name: 180115M2_11, Date: 16-Jan-2018, Time: 02:08:58, ID: IPA, Description: IPA

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

Name: 180115M2_12, Date: 16-Jan-2018, Time: 02:20:26, ID: 1701851-03 FT-PZ-455S-20171202 0.2638, Description: FT-PZ-455S-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-03 FT-PZ-455S-20171202 0.2...	8.60e3	58.5	NO
2	2	13C5-PFHxA	1701851-03 FT-PZ-455S-20171202 0.2...	1.04e4	64.2	NO
3	3	13C3-PFHxS	1701851-03 FT-PZ-455S-20171202 0.2...	2.42e3	60.7	NO
4	4	13C8-PFOA	1701851-03 FT-PZ-455S-20171202 0.2...	8.79e3	56.8	NO
5	5	13C9-PFNA	1701851-03 FT-PZ-455S-20171202 0.2...	1.07e4	64.3	NO
6	6	13C4-PFOS	1701851-03 FT-PZ-455S-20171202 0.2...	2.57e3	65.0	NO
7	7	13C6-PFDA	1701851-03 FT-PZ-455S-20171202 0.2...	7.87e3	74.5	NO
8	8	13C7-PFUdA	1701851-03 FT-PZ-455S-20171202 0.2...	9.26e3	64.2	NO

Name: 180115M2_13, Date: 16-Jan-2018, Time: 02:31:52, ID: 1701851-04 FT-PZ-455I-20171202 0.25637, Description: FT-PZ-455I-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-04 FT-PZ-455I-20171202 0.25...	8.34e3	56.8	NO
2	2	13C5-PFHxA	1701851-04 FT-PZ-455I-20171202 0.25...	1.01e4	62.6	NO
3	3	13C3-PFHxS	1701851-04 FT-PZ-455I-20171202 0.25...	2.64e3	66.2	NO
4	4	13C8-PFOA	1701851-04 FT-PZ-455I-20171202 0.25...	8.86e3	57.3	NO
5	5	13C9-PFNA	1701851-04 FT-PZ-455I-20171202 0.25...	9.84e3	58.9	NO
6	6	13C4-PFOS	1701851-04 FT-PZ-455I-20171202 0.25...	3.11e3	78.8	NO
7	7	13C6-PFDA	1701851-04 FT-PZ-455I-20171202 0.25...	7.12e3	67.4	NO
8	8	13C7-PFUdA	1701851-04 FT-PZ-455I-20171202 0.25...	9.78e3	67.8	NO

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Name: 180115M2_14, Date: 16-Jan-2018, Time: 02:43:19, ID: 1701851-05 FT-PZ-453S-20171202 0.23285,
Description: FT-PZ-453S-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-05 FT-PZ-453S-20171202 0.2...	8.35e3	56.8	NO
2	2	13C5-PFHxA	1701851-05 FT-PZ-453S-20171202 0.2...	9.66e3	59.8	NO
3	3	13C3-PFHxS	1701851-05 FT-PZ-453S-20171202 0.2...	2.35e3	58.8	NO
4	4	13C8-PFOA	1701851-05 FT-PZ-453S-20171202 0.2...	8.60e3	55.6	NO
5	5	13C9-PFNA	1701851-05 FT-PZ-453S-20171202 0.2...	8.81e3	52.8	NO
6	6	13C4-PFOS	1701851-05 FT-PZ-453S-20171202 0.2...	2.23e3	56.4	NO
7	7	13C6-PFDA	1701851-05 FT-PZ-453S-20171202 0.2...	7.23e3	68.4	NO
8	8	13C7-PFUdA	1701851-05 FT-PZ-453S-20171202 0.2...	7.83e3	54.3	NO

Name: 180115M2_15, Date: 16-Jan-2018, Time: 02:54:46, ID: 1701851-06 FT-PZ-453S-FRB-20171202 0.26159,
Description: FT-PZ-453S-FRB-20171202

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-06 FT-PZ-453S-FRB-2017120...	9.38e3	63.8	NO
2	2	13C5-PFHxA	1701851-06 FT-PZ-453S-FRB-2017120...	1.12e4	69.5	NO
3	3	13C3-PFHxS	1701851-06 FT-PZ-453S-FRB-2017120...	2.51e3	63.0	NO
4	4	13C8-PFOA	1701851-06 FT-PZ-453S-FRB-2017120...	1.03e4	66.9	NO
5	5	13C9-PFNA	1701851-06 FT-PZ-453S-FRB-2017120...	1.09e4	65.5	NO
6	6	13C4-PFOS	1701851-06 FT-PZ-453S-FRB-2017120...	2.34e3	59.3	NO
7	7	13C6-PFDA	1701851-06 FT-PZ-453S-FRB-2017120...	9.37e3	88.6	NO
8	8	13C7-PFUdA	1701851-06 FT-PZ-453S-FRB-2017120...	1.17e4	81.1	NO

Name: 180115M2_16, Date: 16-Jan-2018, Time: 03:06:13, ID: 1701851-07 FT-PZ-456I-FRB-20171204 0.2536,
Description: FT-PZ-456I-FRB-20171204

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-07 FT-PZ-456I-FRB-2017120...	7.89e3	53.7	NO
2	2	13C5-PFHxA	1701851-07 FT-PZ-456I-FRB-2017120...	8.86e3	54.8	NO
3	3	13C3-PFHxS	1701851-07 FT-PZ-456I-FRB-2017120...	2.28e3	57.1	NO
4	4	13C8-PFOA	1701851-07 FT-PZ-456I-FRB-2017120...	9.40e3	60.8	NO
5	5	13C9-PFNA	1701851-07 FT-PZ-456I-FRB-2017120...	7.59e3	45.5	YES
6	6	13C4-PFOS	1701851-07 FT-PZ-456I-FRB-2017120...	2.20e3	55.6	NO
7	7	13C6-PFDA	1701851-07 FT-PZ-456I-FRB-2017120...	7.25e3	68.6	NO
8	8	13C7-PFUdA	1701851-07 FT-PZ-456I-FRB-2017120...	9.02e3	62.5	NO

Name: 180115M2_17, Date: 16-Jan-2018, Time: 03:17:39, ID: 1701851-08 FT-PZ-456I-20171204 0.26041,
Description: FT-PZ-456I-20171204

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-08 FT-PZ-456I-20171204 0.26...	9.60e3	65.3	NO
2	2	13C5-PFHxA	1701851-08 FT-PZ-456I-20171204 0.26...	1.06e4	65.6	NO
3	3	13C3-PFHxS	1701851-08 FT-PZ-456I-20171204 0.26...	2.61e3	65.3	NO
4	4	13C8-PFOA	1701851-08 FT-PZ-456I-20171204 0.26...	9.59e3	62.0	NO
5	5	13C9-PFNA	1701851-08 FT-PZ-456I-20171204 0.26...	1.08e4	64.6	NO
6	6	13C4-PFOS	1701851-08 FT-PZ-456I-20171204 0.26...	2.56e3	64.9	NO
7	7	13C6-PFDA	1701851-08 FT-PZ-456I-20171204 0.26...	6.50e3	61.5	NO
8	8	13C7-PFUdA	1701851-08 FT-PZ-456I-20171204 0.26...	9.51e3	65.9	NO

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Name: 180115M2_18, Date: 16-Jan-2018, Time: 03:29:06, ID: 1701851-09 FT-PZ-456S-20171204 0.25898,
Description: FT-PZ-456S-20171204

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701851-09 FT-PZ-456S-20171204 0.2...	8.84e3	60.1	NO
2	2	13C5-PFHxA	1701851-09 FT-PZ-456S-20171204 0.2...	9.17e3	56.8	NO
3	3	13C3-PFHxS	1701851-09 FT-PZ-456S-20171204 0.2...	2.47e3	61.8	NO
4	4	13C8-PFOA	1701851-09 FT-PZ-456S-20171204 0.2...	9.26e3	59.9	NO
5	5	13C9-PFNA	1701851-09 FT-PZ-456S-20171204 0.2...	8.88e3	53.2	NO
6	6	13C4-PFOS	1701851-09 FT-PZ-456S-20171204 0.2...	2.17e3	54.8	NO
7	7	13C6-PFDA	1701851-09 FT-PZ-456S-20171204 0.2...	7.57e3	71.6	NO
8	8	13C7-PFUDa	1701851-09 FT-PZ-456S-20171204 0.2...	1.04e4	72.0	NO

Name: 180115M2_19, Date: 16-Jan-2018, Time: 03:40:33, ID: 1701944-01 GW-PT-CHIN-254.5-260.5 0.11993,
Description: GW-PT-CHIN-254.5-260.5

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-01 GW-PT-CHIN-254.5-260.5 ...	6.98e3	47.5	YES
2	2	13C5-PFHxA	1701944-01 GW-PT-CHIN-254.5-260.5 ...	7.85e3	48.6	YES
3	3	13C3-PFHxS	1701944-01 GW-PT-CHIN-254.5-260.5 ...	2.26e3	56.6	NO
4	4	13C8-PFOA	1701944-01 GW-PT-CHIN-254.5-260.5 ...	7.24e3	46.8	YES
5	5	13C9-PFNA	1701944-01 GW-PT-CHIN-254.5-260.5 ...	7.45e3	44.6	YES
6	6	13C4-PFOS	1701944-01 GW-PT-CHIN-254.5-260.5 ...	2.34e3	59.2	NO
7	7	13C6-PFDA	1701944-01 GW-PT-CHIN-254.5-260.5 ...	6.01e3	56.9	NO
8	8	13C7-PFUDa	1701944-01 GW-PT-CHIN-254.5-260.5 ...	8.17e3	56.7	NO

Name: 180115M2_20, Date: 16-Jan-2018, Time: 03:52:00, ID: 1701944-02 GW-PT-CHIN-71-77 0.11916,
Description: GW-PT-CHIN-71-77

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-02 GW-PT-CHIN-71-77 0.11916	7.34e3	49.9	NO
2	2	13C5-PFHxA	1701944-02 GW-PT-CHIN-71-77 0.11916	9.19e3	56.9	NO
3	3	13C3-PFHxS	1701944-02 GW-PT-CHIN-71-77 0.11916	2.43e3	60.9	NO
4	4	13C8-PFOA	1701944-02 GW-PT-CHIN-71-77 0.11916	8.91e3	57.6	NO
5	5	13C9-PFNA	1701944-02 GW-PT-CHIN-71-77 0.11916	9.21e3	55.2	NO
6	6	13C4-PFOS	1701944-02 GW-PT-CHIN-71-77 0.11916	2.21e3	56.0	NO
7	7	13C6-PFDA	1701944-02 GW-PT-CHIN-71-77 0.11916	7.93e3	75.0	NO
8	8	13C7-PFUDa	1701944-02 GW-PT-CHIN-71-77 0.11916	8.31e3	57.6	NO

Name: 180115M2_21, Date: 16-Jan-2018, Time: 04:03:27, ID: 1701944-03 GW-PT-CHIN-178-184 0.11889,
Description: GW-PT-CHIN-178-184

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-03 GW-PT-CHIN-178-184 0.1...	7.24e3	49.3	YES
2	2	13C5-PFHxA	1701944-03 GW-PT-CHIN-178-184 0.1...	8.77e3	54.3	NO
3	3	13C3-PFHxS	1701944-03 GW-PT-CHIN-178-184 0.1...	2.32e3	58.2	NO
4	4	13C8-PFOA	1701944-03 GW-PT-CHIN-178-184 0.1...	7.74e3	50.1	NO
5	5	13C9-PFNA	1701944-03 GW-PT-CHIN-178-184 0.1...	8.14e3	48.8	YES
6	6	13C4-PFOS	1701944-03 GW-PT-CHIN-178-184 0.1...	2.31e3	58.5	NO
7	7	13C6-PFDA	1701944-03 GW-PT-CHIN-178-184 0.1...	6.14e3	58.1	NO
8	8	13C7-PFUDa	1701944-03 GW-PT-CHIN-178-184 0.1...	7.98e3	55.3	NO

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Name: 180115M2_22, Date: 16-Jan-2018, Time: 04:14:54, ID: 1701944-04 GW-PT-CHIN-108-114 0.12008,
Description: GW-PT-CHIN-108-114

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-04 GW-PT-CHIN-108-114 0.1...	7.61e3	51.7	NO
2	2	13C5-PFHxA	1701944-04 GW-PT-CHIN-108-114 0.1...	9.93e3	61.5	NO
3	3	13C3-PFHxS	1701944-04 GW-PT-CHIN-108-114 0.1...	2.66e3	66.6	NO
4	4	13C8-PFOA	1701944-04 GW-PT-CHIN-108-114 0.1...	7.85e3	50.7	NO
5	5	13C9-PFNA	1701944-04 GW-PT-CHIN-108-114 0.1...	8.66e3	51.9	NO
6	6	13C4-PFOS	1701944-04 GW-PT-CHIN-108-114 0.1...	2.39e3	60.4	NO
7	7	13C6-PFDA	1701944-04 GW-PT-CHIN-108-114 0.1...	5.87e3	55.5	NO
8	8	13C7-PFUdA	1701944-04 GW-PT-CHIN-108-114 0.1...	9.31e3	64.5	NO

Name: 180115M2_23, Date: 16-Jan-2018, Time: 04:26:21, ID: 1701944-05 GW-PT-CHIN-57-63 0.11948,
Description: GW-PT-CHIN-57-63

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-05 GW-PT-CHIN-57-63 0.11948	6.76e3	46.0	YES
2	2	13C5-PFHxA	1701944-05 GW-PT-CHIN-57-63 0.11948	8.03e3	49.7	YES
3	3	13C3-PFHxS	1701944-05 GW-PT-CHIN-57-63 0.11948	2.16e3	54.1	NO
4	4	13C8-PFOA	1701944-05 GW-PT-CHIN-57-63 0.11948	8.59e3	55.5	NO
5	5	13C9-PFNA	1701944-05 GW-PT-CHIN-57-63 0.11948	6.49e3	38.9	YES
6	6	13C4-PFOS	1701944-05 GW-PT-CHIN-57-63 0.11948	2.00e3	50.8	NO
7	7	13C6-PFDA	1701944-05 GW-PT-CHIN-57-63 0.11948	6.27e3	59.3	NO
8	8	13C7-PFUdA	1701944-05 GW-PT-CHIN-57-63 0.11948	8.23e3	57.0	NO

Name: 180115M2_24, Date: 16-Jan-2018, Time: 04:37:48, ID: 1701944-06 FB-PT-Diwater 0.11902, Description: FB-PT-Diwater

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-06 FB-PT-Diwater 0.11902	8.06e3	54.9	NO
2	2	13C5-PFHxA	1701944-06 FB-PT-Diwater 0.11902	9.54e3	59.0	NO
3	3	13C3-PFHxS	1701944-06 FB-PT-Diwater 0.11902	2.38e3	59.7	NO
4	4	13C8-PFOA	1701944-06 FB-PT-Diwater 0.11902	8.10e3	52.3	NO
5	5	13C9-PFNA	1701944-06 FB-PT-Diwater 0.11902	8.91e3	53.4	NO
6	6	13C4-PFOS	1701944-06 FB-PT-Diwater 0.11902	2.22e3	56.1	NO
7	7	13C6-PFDA	1701944-06 FB-PT-Diwater 0.11902	7.41e3	70.1	NO
8	8	13C7-PFUdA	1701944-06 FB-PT-Diwater 0.11902	9.42e3	65.3	NO

Name: 180115M2_25, Date: 16-Jan-2018, Time: 04:49:15, ID: IPA, Description: IPA

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

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Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-9 PFC CS3 17L2611	1.55e4	105.5	NO
2	2	13C5-PFHxA	ST180115M2-9 PFC CS3 17L2611	1.78e4	109.9	NO
3	3	13C3-PFHxS	ST180115M2-9 PFC CS3 17L2611	4.51e3	113.1	NO
4	4	13C8-PFOA	ST180115M2-9 PFC CS3 17L2611	1.33e4	85.9	NO
5	5	13C9-PFNA	ST180115M2-9 PFC CS3 17L2611	1.40e4	84.1	NO
6	6	13C4-PFOS	ST180115M2-9 PFC CS3 17L2611	3.96e3	100.2	NO
7	7	13C6-PFDA	ST180115M2-9 PFC CS3 17L2611	1.08e4	102.5	NO
8	8	13C7-PFUdA	ST180115M2-9 PFC CS3 17L2611	1.63e4	113.2	NO

Name: 180115M2_27, Date: 16-Jan-2018, Time: 05:12:08, ID: IPA, Description: IPA

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

Name: 180115M2_28, Date: 16-Jan-2018, Time: 05:23:43, ID: 1701944-07 GW-PT-CHIN-254.5-260.5-Dup 0.11913, Description: GW-PT-CHIN-254.5-260.5-Dup

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-07 GW-PT-CHIN-254.5-260.5-...	6.74e3	45.8	YES
2	2	13C5-PFHxA	1701944-07 GW-PT-CHIN-254.5-260.5-...	7.67e3	47.5	YES
3	3	13C3-PFHxS	1701944-07 GW-PT-CHIN-254.5-260.5-...	2.17e3	54.4	NO
4	4	13C8-PFOA	1701944-07 GW-PT-CHIN-254.5-260.5-...	6.41e3	41.4	YES
5	5	13C9-PFNA	1701944-07 GW-PT-CHIN-254.5-260.5-...	6.97e3	41.8	YES
6	6	13C4-PFOS	1701944-07 GW-PT-CHIN-254.5-260.5-...	2.11e3	53.4	NO
7	7	13C6-PFDA	1701944-07 GW-PT-CHIN-254.5-260.5-...	5.30e3	50.2	NO
8	8	13C7-PFUdA	1701944-07 GW-PT-CHIN-254.5-260.5-...	8.44e3	58.5	NO

Name: 180115M2_29, Date: 16-Jan-2018, Time: 05:35:10, ID: 1701944-08 GW-PT-CHIN-116-122 0.11949, Description: GW-PT-CHIN-116-122

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-08 GW-PT-CHIN-116-122 0.1...	7.70e3	52.4	NO
2	2	13C5-PFHxA	1701944-08 GW-PT-CHIN-116-122 0.1...	7.98e3	49.4	YES
3	3	13C3-PFHxS	1701944-08 GW-PT-CHIN-116-122 0.1...	2.51e3	62.8	NO
4	4	13C8-PFOA	1701944-08 GW-PT-CHIN-116-122 0.1...	8.37e3	54.1	NO
5	5	13C9-PFNA	1701944-08 GW-PT-CHIN-116-122 0.1...	7.95e3	47.6	YES
6	6	13C4-PFOS	1701944-08 GW-PT-CHIN-116-122 0.1...	2.34e3	59.3	NO
7	7	13C6-PFDA	1701944-08 GW-PT-CHIN-116-122 0.1...	5.90e3	55.8	NO
8	8	13C7-PFUdA	1701944-08 GW-PT-CHIN-116-122 0.1...	9.04e3	62.6	NO

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Name: 180115M2_30, Date: 16-Jan-2018, Time: 05:46:37, ID: 1701944-09 EB-PT-Waterlevel 0.10468, Description: EB-PT-Waterlevel

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-09 EB-PT-Waterlevel 0.10468	8.59e3	58.4	NO
2	2	13C5-PFHxA	1701944-09 EB-PT-Waterlevel 0.10468	9.71e3	60.1	NO
3	3	13C3-PFHxS	1701944-09 EB-PT-Waterlevel 0.10468	2.43e3	61.0	NO
4	4	13C8-PFOA	1701944-09 EB-PT-Waterlevel 0.10468	8.49e3	54.9	NO
5	5	13C9-PFNA	1701944-09 EB-PT-Waterlevel 0.10468	8.11e3	48.6	YES
6	6	13C4-PFOS	1701944-09 EB-PT-Waterlevel 0.10468	2.55e3	64.5	NO
7	7	13C6-PFDA	1701944-09 EB-PT-Waterlevel 0.10468	6.69e3	63.3	NO
8	8	13C7-PFUdA	1701944-09 EB-PT-Waterlevel 0.10468	9.80e3	67.9	NO

Name: 180115M2_31, Date: 16-Jan-2018, Time: 05:58:04, ID: 1701944-10 EB-PT-grundfos 0.11733, Description: EB-PT-grundfos

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-10 EB-PT-grundfos 0.11733	7.26e3	49.4	YES
2	2	13C5-PFHxA	1701944-10 EB-PT-grundfos 0.11733	8.99e3	55.6	NO
3	3	13C3-PFHxS	1701944-10 EB-PT-grundfos 0.11733	2.33e3	58.3	NO
4	4	13C8-PFOA	1701944-10 EB-PT-grundfos 0.11733	7.78e3	50.3	NO
5	5	13C9-PFNA	1701944-10 EB-PT-grundfos 0.11733	8.60e3	51.5	NO
6	6	13C4-PFOS	1701944-10 EB-PT-grundfos 0.11733	1.99e3	50.4	NO
7	7	13C6-PFDA	1701944-10 EB-PT-grundfos 0.11733	6.96e3	65.8	NO
8	8	13C7-PFUdA	1701944-10 EB-PT-grundfos 0.11733	8.31e3	57.6	NO

Name: 180115M2_32, Date: 16-Jan-2018, Time: 06:09:30, ID: 1701944-11 GW-PT-CHIN-170-176 0.11561, Description: GW-PT-CHIN-170-176

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-11 GW-PT-CHIN-170-176 0.1...	7.24e3	49.3	YES
2	2	13C5-PFHxA	1701944-11 GW-PT-CHIN-170-176 0.1...	8.31e3	51.4	NO
3	3	13C3-PFHxS	1701944-11 GW-PT-CHIN-170-176 0.1...	2.21e3	55.5	NO
4	4	13C8-PFOA	1701944-11 GW-PT-CHIN-170-176 0.1...	8.17e3	52.8	NO
5	5	13C9-PFNA	1701944-11 GW-PT-CHIN-170-176 0.1...	7.85e3	47.0	YES
6	6	13C4-PFOS	1701944-11 GW-PT-CHIN-170-176 0.1...	2.17e3	54.9	NO
7	7	13C6-PFDA	1701944-11 GW-PT-CHIN-170-176 0.1...	6.49e3	61.4	NO
8	8	13C7-PFUdA	1701944-11 GW-PT-CHIN-170-176 0.1...	8.57e3	59.4	NO

Name: 180115M2_33, Date: 16-Jan-2018, Time: 06:20:58, ID: 1701944-12 GW-PT-CHIN-271.5-277.5 0.11931, Description: GW-PT-CHIN-271.5-277.5

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-12 GW-PT-CHIN-271.5-277.5 ...	7.19e3	48.9	YES
2	2	13C5-PFHxA	1701944-12 GW-PT-CHIN-271.5-277.5 ...	8.78e3	54.3	NO
3	3	13C3-PFHxS	1701944-12 GW-PT-CHIN-271.5-277.5 ...	2.01e3	50.4	NO
4	4	13C8-PFOA	1701944-12 GW-PT-CHIN-271.5-277.5 ...	7.80e3	50.4	NO
5	5	13C9-PFNA	1701944-12 GW-PT-CHIN-271.5-277.5 ...	6.71e3	40.2	YES
6	6	13C4-PFOS	1701944-12 GW-PT-CHIN-271.5-277.5 ...	2.40e3	60.7	NO
7	7	13C6-PFDA	1701944-12 GW-PT-CHIN-271.5-277.5 ...	5.62e3	53.2	NO
8	8	13C7-PFUdA	1701944-12 GW-PT-CHIN-271.5-277.5 ...	9.57e3	66.3	NO

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Name: 180115M2_34, Date: 16-Jan-2018, Time: 06:32:24, ID: 1701944-13 EB-PT-Packers 0.11813, Description: EB-PT-Packers

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701944-13 EB-PT-Packers 0.11813	7.34e3	49.9	NO
2	2	13C5-PFHxA	1701944-13 EB-PT-Packers 0.11813	8.26e3	51.1	NO
3	3	13C3-PFHxS	1701944-13 EB-PT-Packers 0.11813	2.05e3	51.5	NO
4	4	13C8-PFOA	1701944-13 EB-PT-Packers 0.11813	7.73e3	50.0	NO
5	5	13C9-PFNA	1701944-13 EB-PT-Packers 0.11813	7.71e3	46.2	YES
6	6	13C4-PFOS	1701944-13 EB-PT-Packers 0.11813	2.31e3	58.5	NO
7	7	13C6-PFDA	1701944-13 EB-PT-Packers 0.11813	5.96e3	56.4	NO
8	8	13C7-PFUdA	1701944-13 EB-PT-Packers 0.11813	8.92e3	61.8	NO

Name: 180115M2_35, Date: 16-Jan-2018, Time: 06:43:51, ID: B7L0120-BS1 OPR 0.25, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0120-BS1 OPR 0.25	7.98e3	54.3	NO
2	2	13C5-PFHxA	B7L0120-BS1 OPR 0.25	9.24e3	57.2	NO
3	3	13C3-PFHxS	B7L0120-BS1 OPR 0.25	2.10e3	52.5	NO
4	4	13C8-PFOA	B7L0120-BS1 OPR 0.25	7.88e3	50.9	NO
5	5	13C9-PFNA	B7L0120-BS1 OPR 0.25	9.11e3	54.6	NO
6	6	13C4-PFOS	B7L0120-BS1 OPR 0.25	2.47e3	62.6	NO
7	7	13C6-PFDA	B7L0120-BS1 OPR 0.25	5.96e3	56.3	NO
8	8	13C7-PFUdA	B7L0120-BS1 OPR 0.25	8.95e3	62.0	NO

Name: 180115M2_36, Date: 16-Jan-2018, Time: 06:55:18, ID: B7L0120-BSD1 LCSD 0.25, Description: LCSD

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0120-BSD1 LCSD 0.25	8.49e3	57.7	NO
2	2	13C5-PFHxA	B7L0120-BSD1 LCSD 0.25	9.21e3	57.0	NO
3	3	13C3-PFHxS	B7L0120-BSD1 LCSD 0.25	2.35e3	58.8	NO
4	4	13C8-PFOA	B7L0120-BSD1 LCSD 0.25	7.90e3	51.1	NO
5	5	13C9-PFNA	B7L0120-BSD1 LCSD 0.25	1.10e4	65.8	NO
6	6	13C4-PFOS	B7L0120-BSD1 LCSD 0.25	2.66e3	67.2	NO
7	7	13C6-PFDA	B7L0120-BSD1 LCSD 0.25	6.14e3	58.1	NO
8	8	13C7-PFUdA	B7L0120-BSD1 LCSD 0.25	9.78e3	67.8	NO

Name: 180115M2_37, Date: 16-Jan-2018, Time: 07:06:45, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	IPA			NO
2	2	13C5-PFHxA	IPA			NO
3	3	13C3-PFHxS	IPA			NO
4	4	13C8-PFOA	IPA			NO
5	5	13C9-PFNA	IPA			NO
6	6	13C4-PFOS	IPA			NO
7	7	13C6-PFDA	IPA			NO
8	8	13C7-PFUdA	IPA	5.88e0	0.0	YES

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Name: 180115M2_38, Date: 16-Jan-2018, Time: 07:18:12, ID: B7L0120-BLK1 Method Blank 0.25, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0120-BLK1 Method Blank 0.25	6.75e3	45.9	YES
2	2	13C5-PFHxA	B7L0120-BLK1 Method Blank 0.25	7.28e3	45.0	YES
3	3	13C3-PFHxS	B7L0120-BLK1 Method Blank 0.25	2.26e3	56.7	NO
4	4	13C8-PFOA	B7L0120-BLK1 Method Blank 0.25	6.70e3	43.3	YES
5	5	13C9-PFNA	B7L0120-BLK1 Method Blank 0.25	6.41e3	38.4	YES
6	6	13C4-PFOS	B7L0120-BLK1 Method Blank 0.25	1.74e3	43.9	YES
7	7	13C6-PFDA	B7L0120-BLK1 Method Blank 0.25	5.92e3	56.0	NO
8	8	13C7-PFUdA	B7L0120-BLK1 Method Blank 0.25	7.32e3	50.8	NO

Name: 180115M2_39, Date: 16-Jan-2018, Time: 07:29:39, ID: 1701886-01 YS22-EB01-120417 0.11748, Description: YS22-EB01-120417

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701886-01 YS22-EB01-120417 0.11748	8.55e3	58.2	NO
2	2	13C5-PFHxA	1701886-01 YS22-EB01-120417 0.11748	1.03e4	63.7	NO
3	3	13C3-PFHxS	1701886-01 YS22-EB01-120417 0.11748	2.56e3	64.0	NO
4	4	13C8-PFOA	1701886-01 YS22-EB01-120417 0.11748	9.58e3	61.9	NO
5	5	13C9-PFNA	1701886-01 YS22-EB01-120417 0.11748	9.68e3	58.0	NO
6	6	13C4-PFOS	1701886-01 YS22-EB01-120417 0.11748	2.76e3	69.9	NO
7	7	13C6-PFDA	1701886-01 YS22-EB01-120417 0.11748	8.14e3	77.0	NO
8	8	13C7-PFUdA	1701886-01 YS22-EB01-120417 0.11748	8.53e3	59.1	NO

Name: 180115M2_40, Date: 16-Jan-2018, Time: 07:41:05, ID: 1701886-02 YS22-AQ-120517 0.11801, Description: YS22-AQ-120517

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701886-02 YS22-AQ-120517 0.11801	7.58e3	51.5	NO
2	2	13C5-PFHxA	1701886-02 YS22-AQ-120517 0.11801	8.53e3	52.8	NO
3	3	13C3-PFHxS	1701886-02 YS22-AQ-120517 0.11801	2.28e3	57.2	NO
4	4	13C8-PFOA	1701886-02 YS22-AQ-120517 0.11801	8.41e3	54.4	NO
5	5	13C9-PFNA	1701886-02 YS22-AQ-120517 0.11801	7.46e3	44.7	YES
6	6	13C4-PFOS	1701886-02 YS22-AQ-120517 0.11801	2.08e3	52.7	NO
7	7	13C6-PFDA	1701886-02 YS22-AQ-120517 0.11801	6.28e3	59.4	NO
8	8	13C7-PFUdA	1701886-02 YS22-AQ-120517 0.11801	7.43e3	51.5	NO

Name: 180115M2_41, Date: 16-Jan-2018, Time: 07:52:32, ID: 1701886-03 YS22-GW18-1217 0.11927, Description: YS22-GW18-1217

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701886-03 YS22-GW18-1217 0.11927	7.00e3	47.6	YES
2	2	13C5-PFHxA	1701886-03 YS22-GW18-1217 0.11927	7.86e3	48.6	YES
3	3	13C3-PFHxS	1701886-03 YS22-GW18-1217 0.11927	1.77e3	44.4	YES
4	4	13C8-PFOA	1701886-03 YS22-GW18-1217 0.11927	7.53e3	48.7	YES
5	5	13C9-PFNA	1701886-03 YS22-GW18-1217 0.11927	8.68e3	52.0	NO
6	6	13C4-PFOS	1701886-03 YS22-GW18-1217 0.11927	2.08e3	52.7	NO
7	7	13C6-PFDA	1701886-03 YS22-GW18-1217 0.11927	5.56e3	52.6	NO
8	8	13C7-PFUdA	1701886-03 YS22-GW18-1217 0.11927	7.73e3	53.5	NO

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Name: 180115M2_42, Date: 16-Jan-2018, Time: 08:04:00, ID: IPA, Description: IPA

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

Name: 180115M2_43, Date: 16-Jan-2018, Time: 08:15:26, ID: ST180115M2-10 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-10 PFC CS3 17L2611	1.64e4	111.3	NO
2	2	13C5-PFHxA	ST180115M2-10 PFC CS3 17L2611	1.94e4	120.0	NO
3	3	13C3-PFHxS	ST180115M2-10 PFC CS3 17L2611	4.50e3	112.7	NO
4	4	13C8-PFOA	ST180115M2-10 PFC CS3 17L2611	1.50e4	96.9	NO
5	5	13C9-PFNA	ST180115M2-10 PFC CS3 17L2611	1.69e4	101.2	NO
6	6	13C4-PFOS	ST180115M2-10 PFC CS3 17L2611	3.84e3	97.3	NO
7	7	13C6-PFDA	ST180115M2-10 PFC CS3 17L2611	1.14e4	108.0	NO
8	8	13C7-PFUdA	ST180115M2-10 PFC CS3 17L2611	1.60e4	110.6	NO

Name: 180115M2_44, Date: 16-Jan-2018, Time: 08:26:53, ID: IPA, Description: IPA

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

Name: 180115M2_45, Date: 16-Jan-2018, Time: 08:38:20, ID: B7L0183-BS1 OPR 0.25, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0183-BS1 OPR 0.25	7.71e3	52.4	NO
2	2	13C5-PFHxA	B7L0183-BS1 OPR 0.25	9.16e3	56.7	NO
3	3	13C3-PFHxS	B7L0183-BS1 OPR 0.25	2.85e3	71.5	NO
4	4	13C8-PFOA	B7L0183-BS1 OPR 0.25	8.34e3	53.9	NO
5	5	13C9-PFNA	B7L0183-BS1 OPR 0.25	7.64e3	45.8	YES
6	6	13C4-PFOS	B7L0183-BS1 OPR 0.25	1.96e3	49.6	YES
7	7	13C6-PFDA	B7L0183-BS1 OPR 0.25	5.96e3	56.3	NO
8	8	13C7-PFUdA	B7L0183-BS1 OPR 0.25	8.06e3	55.9	NO

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Name: 180115M2_46, Date: 16-Jan-2018, Time: 08:49:46, ID: B7L0183-BSD1 LCSD 0.25, Description: LCSD

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0183-BSD1 LCSD 0.25	7.61e3	51.8	NO
2	2	13C5-PFHxA	B7L0183-BSD1 LCSD 0.25	8.87e3	54.9	NO
3	3	13C3-PFHxS	B7L0183-BSD1 LCSD 0.25	2.54e3	63.7	NO
4	4	13C8-PFOA	B7L0183-BSD1 LCSD 0.25	8.07e3	52.2	NO
5	5	13C9-PFNA	B7L0183-BSD1 LCSD 0.25	8.19e3	49.1	YES
6	6	13C4-PFOS	B7L0183-BSD1 LCSD 0.25	2.14e3	54.2	NO
7	7	13C6-PFDA	B7L0183-BSD1 LCSD 0.25	6.27e3	59.3	NO
8	8	13C7-PFUdA	B7L0183-BSD1 LCSD 0.25	7.79e3	54.0	NO

Name: 180115M2_47, Date: 16-Jan-2018, Time: 09:01:13, ID: B7L0183-BLK1 Method Blank 0.25, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0183-BLK1 Method Blank 0.25	7.43e3	50.6	NO
2	2	13C5-PFHxA	B7L0183-BLK1 Method Blank 0.25	8.88e3	54.9	NO
3	3	13C3-PFHxS	B7L0183-BLK1 Method Blank 0.25	2.08e3	52.1	NO
4	4	13C8-PFOA	B7L0183-BLK1 Method Blank 0.25	8.04e3	52.0	NO
5	5	13C9-PFNA	B7L0183-BLK1 Method Blank 0.25	7.57e3	45.4	YES
6	6	13C4-PFOS	B7L0183-BLK1 Method Blank 0.25	2.28e3	57.7	NO
7	7	13C6-PFDA	B7L0183-BLK1 Method Blank 0.25	5.64e3	53.4	NO
8	8	13C7-PFUdA	B7L0183-BLK1 Method Blank 0.25	8.81e3	61.0	NO

Name: 180115M2_48, Date: 16-Jan-2018, Time: 09:12:40, ID: 1701953-01 CV-Dup09-20171213 0.2568, Description: CV-Dup09-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-01 CV-Dup09-20171213 0.2568	7.32e3	49.8	YES
2	2	13C5-PFHxA	1701953-01 CV-Dup09-20171213 0.2568	8.71e3	53.9	NO
3	3	13C3-PFHxS	1701953-01 CV-Dup09-20171213 0.2568	2.16e3	54.1	NO
4	4	13C8-PFOA	1701953-01 CV-Dup09-20171213 0.2568	8.05e3	52.0	NO
5	5	13C9-PFNA	1701953-01 CV-Dup09-20171213 0.2568	8.15e3	48.9	YES
6	6	13C4-PFOS	1701953-01 CV-Dup09-20171213 0.2568	2.42e3	61.3	NO
7	7	13C6-PFDA	1701953-01 CV-Dup09-20171213 0.2568	6.78e3	64.1	NO
8	8	13C7-PFUdA	1701953-01 CV-Dup09-20171213 0.2568	6.80e3	47.1	YES

Name: 180115M2_49, Date: 16-Jan-2018, Time: 09:24:07, ID: 1701953-02 SA-MW127S-20171213 0.23624, Description: SA-MW127S-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-02 SA-MW127S-20171213 0....	7.00e3	47.6	YES
2	2	13C5-PFHxA	1701953-02 SA-MW127S-20171213 0....	8.33e3	51.6	NO
3	3	13C3-PFHxS	1701953-02 SA-MW127S-20171213 0....	2.11e3	53.0	NO
4	4	13C8-PFOA	1701953-02 SA-MW127S-20171213 0....	7.75e3	50.1	NO
5	5	13C9-PFNA	1701953-02 SA-MW127S-20171213 0....	7.42e3	44.4	YES
6	6	13C4-PFOS	1701953-02 SA-MW127S-20171213 0....	2.07e3	52.4	NO
7	7	13C6-PFDA	1701953-02 SA-MW127S-20171213 0....	5.39e3	51.0	NO
8	8	13C7-PFUdA	1701953-02 SA-MW127S-20171213 0....	7.17e3	49.7	YES

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Name: 180115M2_50, Date: 16-Jan-2018, Time: 09:42:12, ID: 1701953-03 SA-MW126S-20171213 0.24287,
Description: SA-MW126S-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-03 SA-MW126S-20171213 0....	7.29e3	49.6	YES
2	2	13C5-PFHxA	1701953-03 SA-MW126S-20171213 0....	8.98e3	55.6	NO
3	3	13C3-PFHxS	1701953-03 SA-MW126S-20171213 0....	1.95e3	48.9	YES
4	4	13C8-PFOA	1701953-03 SA-MW126S-20171213 0....	7.51e3	48.6	YES
5	5	13C9-PFNA	1701953-03 SA-MW126S-20171213 0....	6.92e3	41.4	YES
6	6	13C4-PFOS	1701953-03 SA-MW126S-20171213 0....	2.23e3	56.5	NO
7	7	13C6-PFDA	1701953-03 SA-MW126S-20171213 0....	7.24e3	68.5	NO
8	8	13C7-PFUdA	1701953-03 SA-MW126S-20171213 0....	8.67e3	60.1	NO

Name: 180115M2_51, Date: 16-Jan-2018, Time: 09:53:46, ID: 1701953-04 SA-MW126I-20171213 0.24106,
Description: SA-MW126I-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-04 SA-MW126I-20171213 0.2...	7.05e3	48.0	YES
2	2	13C5-PFHxA	1701953-04 SA-MW126I-20171213 0.2...	8.32e3	51.5	NO
3	3	13C3-PFHxS	1701953-04 SA-MW126I-20171213 0.2...	2.14e3	53.5	NO
4	4	13C8-PFOA	1701953-04 SA-MW126I-20171213 0.2...	7.69e3	49.7	YES
5	5	13C9-PFNA	1701953-04 SA-MW126I-20171213 0.2...	8.82e3	52.8	NO
6	6	13C4-PFOS	1701953-04 SA-MW126I-20171213 0.2...	2.12e3	53.6	NO
7	7	13C6-PFDA	1701953-04 SA-MW126I-20171213 0.2...	5.87e3	55.5	NO
8	8	13C7-PFUdA	1701953-04 SA-MW126I-20171213 0.2...	8.27e3	57.3	NO

Name: 180115M2_52, Date: 16-Jan-2018, Time: 10:05:14, ID: 1701953-05 SA-MW127S-FRB-20171213 0.25506,
Description: SA-MW127S-FRB-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-05 SA-MW127S-FRB-201712...	9.04e3	61.5	NO
2	2	13C5-PFHxA	1701953-05 SA-MW127S-FRB-201712...	1.05e4	64.9	NO
3	3	13C3-PFHxS	1701953-05 SA-MW127S-FRB-201712...	2.55e3	64.0	NO
4	4	13C8-PFOA	1701953-05 SA-MW127S-FRB-201712...	9.97e3	64.5	NO
5	5	13C9-PFNA	1701953-05 SA-MW127S-FRB-201712...	1.08e4	64.7	NO
6	6	13C4-PFOS	1701953-05 SA-MW127S-FRB-201712...	3.45e3	87.3	NO
7	7	13C6-PFDA	1701953-05 SA-MW127S-FRB-201712...	6.59e3	62.3	NO
8	8	13C7-PFUdA	1701953-05 SA-MW127S-FRB-201712...	8.61e3	59.7	NO

Name: 180115M2_53, Date: 16-Jan-2018, Time: 10:16:50, ID: 1701953-06 SA-Dup10-20171213 0.25769,
Description: SA-Dup10-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-06 SA-Dup10-20171213 0.25...	7.73e3	52.6	NO
2	2	13C5-PFHxA	1701953-06 SA-Dup10-20171213 0.25...	8.73e3	54.0	NO
3	3	13C3-PFHxS	1701953-06 SA-Dup10-20171213 0.25...	2.15e3	53.8	NO
4	4	13C8-PFOA	1701953-06 SA-Dup10-20171213 0.25...	7.01e3	45.4	YES
5	5	13C9-PFNA	1701953-06 SA-Dup10-20171213 0.25...	8.48e3	50.8	NO
6	6	13C4-PFOS	1701953-06 SA-Dup10-20171213 0.25...	2.25e3	56.9	NO
7	7	13C6-PFDA	1701953-06 SA-Dup10-20171213 0.25...	5.73e3	54.2	NO
8	8	13C7-PFUdA	1701953-06 SA-Dup10-20171213 0.25...	7.45e3	51.6	NO

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Description: SA-PZ123S-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-07 SA-PZ123S-20171213 0.2...	8.33e3	56.7	NO
2	2	13C5-PFHxA	1701953-07 SA-PZ123S-20171213 0.2...	9.48e3	58.7	NO
3	3	13C3-PFHxS	1701953-07 SA-PZ123S-20171213 0.2...	2.26e3	56.5	NO
4	4	13C8-PFOA	1701953-07 SA-PZ123S-20171213 0.2...	9.61e3	62.2	NO
5	5	13C9-PFNA	1701953-07 SA-PZ123S-20171213 0.2...	8.09e3	48.4	YES
6	6	13C4-PFOS	1701953-07 SA-PZ123S-20171213 0.2...	2.61e3	66.0	NO
7	7	13C6-PFDA	1701953-07 SA-PZ123S-20171213 0.2...	5.92e3	56.0	NO
8	8	13C7-PFUdA	1701953-07 SA-PZ123S-20171213 0.2...	8.43e3	58.4	NO

Name: 180115M2_55, Date: 16-Jan-2018, Time: 10:39:51, ID: 1701953-08 SA-PZ123I-20171213 0.25702,
Description: SA-PZ123I-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-08 SA-PZ123I-20171213 0.25...	7.44e3	50.6	NO
2	2	13C5-PFHxA	1701953-08 SA-PZ123I-20171213 0.25...	8.84e3	54.7	NO
3	3	13C3-PFHxS	1701953-08 SA-PZ123I-20171213 0.25...	2.34e3	58.6	NO
4	4	13C8-PFOA	1701953-08 SA-PZ123I-20171213 0.25...	8.64e3	55.9	NO
5	5	13C9-PFNA	1701953-08 SA-PZ123I-20171213 0.25...	7.35e3	44.0	YES
6	6	13C4-PFOS	1701953-08 SA-PZ123I-20171213 0.25...	2.57e3	65.0	NO
7	7	13C6-PFDA	1701953-08 SA-PZ123I-20171213 0.25...	4.27e3	40.4	YES
8	8	13C7-PFUdA	1701953-08 SA-PZ123I-20171213 0.25...	6.79e3	47.0	YES

Name: 180115M2_56, Date: 16-Jan-2018, Time: 10:51:18, ID: 1701953-09 SA-PZ123I1-20171213 0.25747,
Description: SA-PZ123I1-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-09 SA-PZ123I1-20171213 0.2...	7.87e3	53.6	NO
2	2	13C5-PFHxA	1701953-09 SA-PZ123I1-20171213 0.2...	9.62e3	59.5	NO
3	3	13C3-PFHxS	1701953-09 SA-PZ123I1-20171213 0.2...	2.60e3	65.1	NO
4	4	13C8-PFOA	1701953-09 SA-PZ123I1-20171213 0.2...	8.20e3	53.0	NO
5	5	13C9-PFNA	1701953-09 SA-PZ123I1-20171213 0.2...	7.31e3	43.8	YES
6	6	13C4-PFOS	1701953-09 SA-PZ123I1-20171213 0.2...	2.26e3	57.2	NO
7	7	13C6-PFDA	1701953-09 SA-PZ123I1-20171213 0.2...	5.74e3	54.3	NO
8	8	13C7-PFUdA	1701953-09 SA-PZ123I1-20171213 0.2...	8.84e3	61.3	NO

Name: 180115M2_57, Date: 16-Jan-2018, Time: 11:02:44, ID: 1701953-10 SA-PZ118S-20171213 0.23505,
Description: SA-PZ118S-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-10 SA-PZ118S-20171213 0.2...	7.26e3	49.4	YES
2	2	13C5-PFHxA	1701953-10 SA-PZ118S-20171213 0.2...	8.67e3	53.6	NO
3	3	13C3-PFHxS	1701953-10 SA-PZ118S-20171213 0.2...	1.88e3	47.0	YES
4	4	13C8-PFOA	1701953-10 SA-PZ118S-20171213 0.2...	7.26e3	47.0	YES
5	5	13C9-PFNA	1701953-10 SA-PZ118S-20171213 0.2...	6.77e3	40.6	YES
6	6	13C4-PFOS	1701953-10 SA-PZ118S-20171213 0.2...	1.95e3	49.3	YES
7	7	13C6-PFDA	1701953-10 SA-PZ118S-20171213 0.2...	5.75e3	54.4	NO
8	8	13C7-PFUdA	1701953-10 SA-PZ118S-20171213 0.2...	6.73e3	46.6	YES

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Name: 180115M2_58, Date: 16-Jan-2018, Time: 11:14:11, ID: 1701953-11 SA-PZ118I-20171213 0.24112, Description: SA-PZ118I-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-11 SA-PZ118I-20171213 0.24...	7.67e3	52.2	NO
2	2	13C5-PFHxA	1701953-11 SA-PZ118I-20171213 0.24...	8.62e3	53.3	NO
3	3	13C3-PFHxS	1701953-11 SA-PZ118I-20171213 0.24...	2.22e3	55.7	NO
4	4	13C8-PFOA	1701953-11 SA-PZ118I-20171213 0.24...	7.29e3	47.1	YES
5	5	13C9-PFNA	1701953-11 SA-PZ118I-20171213 0.24...	6.87e3	41.2	YES
6	6	13C4-PFOS	1701953-11 SA-PZ118I-20171213 0.24...	1.99e3	50.3	NO
7	7	13C6-PFDA	1701953-11 SA-PZ118I-20171213 0.24...	6.03e3	57.0	NO
8	8	13C7-PFUdA	1701953-11 SA-PZ118I-20171213 0.24...	7.81e3	54.2	NO

Name: 180115M2_59, Date: 16-Jan-2018, Time: 11:25:38, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	IPA			NO
2	2	13C5-PFHxA	IPA			NO
3	3	13C3-PFHxS	IPA			NO
4	4	13C8-PFOA	IPA			NO
5	5	13C9-PFNA	IPA	6.16e0	0.0	YES
6	6	13C4-PFOS	IPA			NO
7	7	13C6-PFDA	IPA			NO
8	8	13C7-PFUdA	IPA			NO

Name: 180115M2_60, Date: 16-Jan-2018, Time: 11:37:05, ID: ST180115M2-11 PFC CS0 17L2608, Description: PFC CS0 17L2608

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-11 PFC CS0 17L2608	1.74e4	118.1	NO
2	2	13C5-PFHxA	ST180115M2-11 PFC CS0 17L2608	1.96e4	121.4	NO
3	3	13C3-PFHxS	ST180115M2-11 PFC CS0 17L2608	4.84e3	121.4	NO
4	4	13C8-PFOA	ST180115M2-11 PFC CS0 17L2608	1.80e4	116.6	NO
5	5	13C9-PFNA	ST180115M2-11 PFC CS0 17L2608	1.79e4	107.1	NO
6	6	13C4-PFOS	ST180115M2-11 PFC CS0 17L2608	5.14e3	130.2	NO
7	7	13C6-PFDA	ST180115M2-11 PFC CS0 17L2608	1.18e4	111.7	NO
8	8	13C7-PFUdA	ST180115M2-11 PFC CS0 17L2608	1.63e4	113.0	NO

Name: 180115M2_61, Date: 16-Jan-2018, Time: 11:48:32, ID: IPA, Description: IPA

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

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Description: WINF1712061655JLB

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701905-03RE1@40X WINF17120616...	2.57e2	1.8	YES
2	2	13C5-PFHxA	1701905-03RE1@40X WINF17120616...	2.84e2	1.8	YES
3	3	13C3-PFHxS	1701905-03RE1@40X WINF17120616...	6.38e1	1.6	YES
4	4	13C8-PFOA	1701905-03RE1@40X WINF17120616...	2.50e2	1.6	YES
5	5	13C9-PFNA	1701905-03RE1@40X WINF17120616...	2.63e2	1.6	YES
6	6	13C4-PFOS	1701905-03RE1@40X WINF17120616...	2.52e1	0.6	YES
7	7	13C6-PFDA	1701905-03RE1@40X WINF17120616...	1.32e2	1.3	YES
8	8	13C7-PFUDa	1701905-03RE1@40X WINF17120616...	1.81e2	1.3	YES

Name: 180115M2_63, Date: 16-Jan-2018, Time: 12:11:26, ID: 1701852-01@20X IR03-MW034-C2-17D 0.26646,
Description: IR03-MW034-C2-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-01@20X IR03-MW034-C2-17...	4.78e2	3251.6	YES
2	2	13C5-PFHxA	1701852-01@20X IR03-MW034-C2-17...	4.86e2	3005.1	YES
3	3	13C3-PFHxS	1701852-01@20X IR03-MW034-C2-17...	9.95e1	2493.3	YES
4	4	13C8-PFOA	1701852-01@20X IR03-MW034-C2-17...	4.07e2	2628.8	YES
5	5	13C9-PFNA	1701852-01@20X IR03-MW034-C2-17...	3.52e2	2108.9	YES
6	6	13C4-PFOS	1701852-01@20X IR03-MW034-C2-17...	1.03e2	2613.0	YES
7	7	13C6-PFDA	1701852-01@20X IR03-MW034-C2-17...	2.66e2	2514.7	YES
8	8	13C7-PFUDa	1701852-01@20X IR03-MW034-C2-17...	3.52e2	2439.9	YES

Name: 180115M2_64, Date: 16-Jan-2018, Time: 12:22:53, ID: 1701852-02@20X IR03-MW018B-C1-17D 0.25583,
Description: IR03-MW018B-C1-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-02@20X IR03-MW018B-C1-1...	5.22e2	3.5	YES
2	2	13C5-PFHxA	1701852-02@20X IR03-MW018B-C1-1...	5.82e2	3.6	YES
3	3	13C3-PFHxS	1701852-02@20X IR03-MW018B-C1-1...	1.41e2	3.5	YES
4	4	13C8-PFOA	1701852-02@20X IR03-MW018B-C1-1...	5.41e2	3.5	YES
5	5	13C9-PFNA	1701852-02@20X IR03-MW018B-C1-1...	4.42e2	2.6	YES
6	6	13C4-PFOS	1701852-02@20X IR03-MW018B-C1-1...	1.24e2	3.1	YES
7	7	13C6-PFDA	1701852-02@20X IR03-MW018B-C1-1...	3.61e2	3.4	YES
8	8	13C7-PFUDa	1701852-02@20X IR03-MW018B-C1-1...	3.98e2	2.8	YES

Name: 180115M2_65, Date: 16-Jan-2018, Time: 12:34:19, ID: 1701852-03@40X IR03-MW018A-C2-17D 0.26605,
Description: IR03-MW018A-C2-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-03@40X IR03-MW018A-C2-1...	2.16e2	1467.1	YES
2	2	13C5-PFHxA	1701852-03@40X IR03-MW018A-C2-1...	2.66e2	1644.3	YES
3	3	13C3-PFHxS	1701852-03@40X IR03-MW018A-C2-1...	6.78e1	1699.4	YES
4	4	13C8-PFOA	1701852-03@40X IR03-MW018A-C2-1...	1.85e2	1199.4	YES
5	5	13C9-PFNA	1701852-03@40X IR03-MW018A-C2-1...	2.01e2	1206.7	YES
6	6	13C4-PFOS	1701852-03@40X IR03-MW018A-C2-1...	5.35e1	1354.3	YES
7	7	13C6-PFDA	1701852-03@40X IR03-MW018A-C2-1...	1.87e2	1767.7	YES
8	8	13C7-PFUDa	1701852-03@40X IR03-MW018A-C2-1...	2.28e2	1578.5	YES

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Name: 180115M2_66, Date: 16-Jan-2018, Time: 12:45:47, ID: 1701852-03@20X IR03-MW018A-C2-17D 0.26605, Description: IR03-MW018A-C2-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-03@20X IR03-MW018A-C2-1...	6.28e2	4270.4	YES
2	2	13C5-PFHxA	1701852-03@20X IR03-MW018A-C2-1...	6.94e2	4295.0	YES
3	3	13C3-PFHxS	1701852-03@20X IR03-MW018A-C2-1...	1.73e2	4331.4	YES
4	4	13C8-PFOA	1701852-03@20X IR03-MW018A-C2-1...	6.79e2	4387.5	YES
5	5	13C9-PFNA	1701852-03@20X IR03-MW018A-C2-1...	6.93e2	4152.4	YES
6	6	13C4-PFOS	1701852-03@20X IR03-MW018A-C2-1...	1.24e2	3144.6	YES
7	7	13C6-PFDA	1701852-03@20X IR03-MW018A-C2-1...	3.79e2	3581.6	YES
8	8	13C7-PFUdA	1701852-03@20X IR03-MW018A-C2-1...	5.56e2	3851.4	YES

Name: 180115M2_67, Date: 16-Jan-2018, Time: 12:57:13, ID: IPA, Description: IPA

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

Name: 180115M2_68, Date: 16-Jan-2018, Time: 13:08:40, ID: 1701852-02 IR03-MW018B-C1-17D 0.25583, Description: IR03-MW018B-C1-17D

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701852-02 IR03-MW018B-C1-17D 0.2...	5.59e3	38.0	YES
2	2	13C5-PFHxA	1701852-02 IR03-MW018B-C1-17D 0.2...	6.33e3	39.2	YES
3	3	13C3-PFHxS	1701852-02 IR03-MW018B-C1-17D 0.2...	1.53e3	38.3	YES
4	4	13C8-PFOA	1701852-02 IR03-MW018B-C1-17D 0.2...	6.39e3	41.3	YES
5	5	13C9-PFNA	1701852-02 IR03-MW018B-C1-17D 0.2...	5.89e3	35.3	YES
6	6	13C4-PFOS	1701852-02 IR03-MW018B-C1-17D 0.2...	1.27e3	32.2	YES
7	7	13C6-PFDA	1701852-02 IR03-MW018B-C1-17D 0.2...	4.24e3	40.1	YES
8	8	13C7-PFUdA	1701852-02 IR03-MW018B-C1-17D 0.2...	6.94e3	48.1	YES

Name: 180115M2_69, Date: 16-Jan-2018, Time: 13:20:07, ID: IPA, Description: IPA

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

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Name: 180115M2_70, Date: 16-Jan-2018, Time: 13:31:34, ID: 1701840-05 YS22-GW10-1217 0.11512, Description: YS22-GW10-1217

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701840-05 YS22-GW10-1217 0.11512	7.95e3	54.1	NO
2	2	13C5-PFHxA	1701840-05 YS22-GW10-1217 0.11512	9.09e3	56.3	NO
3	3	13C3-PFHxS	1701840-05 YS22-GW10-1217 0.11512	2.39e3	59.8	NO
4	4	13C8-PFOA	1701840-05 YS22-GW10-1217 0.11512	8.05e3	52.1	NO
5	5	13C9-PFNA	1701840-05 YS22-GW10-1217 0.11512	8.27e3	49.6	YES
6	6	13C4-PFOS	1701840-05 YS22-GW10-1217 0.11512	2.22e3	56.3	NO
7	7	13C6-PFDA	1701840-05 YS22-GW10-1217 0.11512	4.40e3	41.6	YES
8	8	13C7-PFUdA	1701840-05 YS22-GW10-1217 0.11512	7.44e3	51.6	NO

Name: 180115M2_71, Date: 16-Jan-2018, Time: 13:43:01, ID: IPA, Description: IPA

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

Name: 180115M2_72, Date: 16-Jan-2018, Time: 13:54:28, ID: ST180115M2-12 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-12 PFC CS3 17L2611	1.85e4	125.7	NO
2	2	13C5-PFHxA	ST180115M2-12 PFC CS3 17L2611	2.19e4	135.7	NO
3	3	13C3-PFHxS	ST180115M2-12 PFC CS3 17L2611	5.43e3	136.0	NO
4	4	13C8-PFOA	ST180115M2-12 PFC CS3 17L2611	1.68e4	108.5	NO
5	5	13C9-PFNA	ST180115M2-12 PFC CS3 17L2611	2.02e4	121.0	NO
6	6	13C4-PFOS	ST180115M2-12 PFC CS3 17L2611	5.71e3	144.6	NO
7	7	13C6-PFDA	ST180115M2-12 PFC CS3 17L2611	1.42e4	134.6	NO
8	8	13C7-PFUdA	ST180115M2-12 PFC CS3 17L2611	1.50e4	103.6	NO

Name: 180115M2_73, Date: 16-Jan-2018, Time: 14:05:55, ID: IPA, Description: IPA

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	IPA			NO
2	2	13C5-PFHxA	IPA			NO
3	3	13C3-PFHxS	IPA			NO
4	4	13C8-PFOA	IPA			NO
5	5	13C9-PFNA	IPA			NO
6	6	13C4-PFOS	IPA	5.12e0	0.1	YES
7	7	13C6-PFDA	IPA			NO
8	8	13C7-PFUdA	IPA			NO

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Name: 180115M2_74, Date: 16-Jan-2018, Time: 14:17:32, ID: B7L0208-BS1 OPR 0.25, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0208-BS1 OPR 0.25	8.46e3	57.5	NO
2	2	13C5-PFHxA	B7L0208-BS1 OPR 0.25	1.05e4	65.0	NO
3	3	13C3-PFHxS	B7L0208-BS1 OPR 0.25			
4	4	13C8-PFOA	B7L0208-BS1 OPR 0.25			
5	5	13C9-PFNA	B7L0208-BS1 OPR 0.25			
6	6	13C4-PFOS	B7L0208-BS1 OPR 0.25			
7	7	13C6-PFDA	B7L0208-BS1 OPR 0.25			
8	8	13C7-PFUdA	B7L0208-BS1 OPR 0.25			

Name: 180115M2_75, Date: 16-Jan-2018, Time: 14:29:05, ID: B7L0208-BLK1 Method Blank 0.25, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0208-BLK1 Method Blank 0.25	7.86e3	53.5	NO
2	2	13C5-PFHxA	B7L0208-BLK1 Method Blank 0.25	9.31e3	57.6	NO
3	3	13C3-PFHxS	B7L0208-BLK1 Method Blank 0.25	2.36e3	59.2	NO
4	4	13C8-PFOA	B7L0208-BLK1 Method Blank 0.25	7.91e3	51.1	NO
5	5	13C9-PFNA	B7L0208-BLK1 Method Blank 0.25	8.65e3	51.8	NO
6	6	13C4-PFOS	B7L0208-BLK1 Method Blank 0.25	2.52e3	63.7	NO
7	7	13C6-PFDA	B7L0208-BLK1 Method Blank 0.25	6.65e3	62.9	NO
8	8	13C7-PFUdA	B7L0208-BLK1 Method Blank 0.25	7.94e3	55.0	NO

Name: 180115M2_76, Date: 16-Jan-2018, Time: 15:00:31, ID: 1701820-01RE1 WR1711281315MK 0.25712, Description: WR1711281315MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-01RE1 WR1711281315MK 0....	7.34e3	49.9	NO
2	2	13C5-PFHxA	1701820-01RE1 WR1711281315MK 0....	8.64e3	53.5	NO
3	3	13C3-PFHxS	1701820-01RE1 WR1711281315MK 0....	1.84e3	46.2	YES
4	4	13C8-PFOA	1701820-01RE1 WR1711281315MK 0....	7.60e3	49.1	YES
5	5	13C9-PFNA	1701820-01RE1 WR1711281315MK 0....	7.59e3	45.5	YES
6	6	13C4-PFOS	1701820-01RE1 WR1711281315MK 0....	2.02e3	51.3	NO
7	7	13C6-PFDA	1701820-01RE1 WR1711281315MK 0....	6.23e3	58.9	NO
8	8	13C7-PFUdA	1701820-01RE1 WR1711281315MK 0....	9.14e3	63.4	NO

Name: 180115M2_77, Date: 16-Jan-2018, Time: 15:12:02, ID: 1701820-02RE1 WR1711281330MK 0.24648, Description: WR1711281330MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-02RE1 WR1711281330MK 0....	7.62e3	51.9	NO
2	2	13C5-PFHxA	1701820-02RE1 WR1711281330MK 0....	8.78e3	54.3	NO
3	3	13C3-PFHxS	1701820-02RE1 WR1711281330MK 0....	2.40e3	60.0	NO
4	4	13C8-PFOA	1701820-02RE1 WR1711281330MK 0....	8.49e3	54.9	NO
5	5	13C9-PFNA	1701820-02RE1 WR1711281330MK 0....	7.19e3	43.1	YES
6	6	13C4-PFOS	1701820-02RE1 WR1711281330MK 0....	2.12e3	53.7	NO
7	7	13C6-PFDA	1701820-02RE1 WR1711281330MK 0....	5.64e3	53.3	NO
8	8	13C7-PFUdA	1701820-02RE1 WR1711281330MK 0....	7.05e3	48.8	YES

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Description: WR1711281345MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-03RE1 WR1711281345MK 0....	8.34e3	56.8	NO
2	2	13C5-PFHxA	1701820-03RE1 WR1711281345MK 0....	8.65e3	53.5	NO
3	3	13C3-PFHxS	1701820-03RE1 WR1711281345MK 0....	2.39e3	59.9	NO
4	4	13C8-PFOA	1701820-03RE1 WR1711281345MK 0....	1.02e4	66.1	NO
5	5	13C9-PFNA	1701820-03RE1 WR1711281345MK 0....	8.57e3	51.4	NO
6	6	13C4-PFOS	1701820-03RE1 WR1711281345MK 0....	2.48e3	62.9	NO
7	7	13C6-PFDA	1701820-03RE1 WR1711281345MK 0....	5.05e3	47.8	YES
8	8	13C7-PFUDa	1701820-03RE1 WR1711281345MK 0....	6.57e3	45.5	YES

Name: 180115M2_79, Date: 16-Jan-2018, Time: 15:34:56, ID: 1701820-04RE1 WT1711281420MK 0.26647,
Description: WT1711281420MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-04RE1 WT1711281420MK 0....	7.57e3	51.5	NO
2	2	13C5-PFHxA	1701820-04RE1 WT1711281420MK 0....	8.99e3	55.7	NO
3	3	13C3-PFHxS	1701820-04RE1 WT1711281420MK 0....	1.98e3	49.7	YES
4	4	13C8-PFOA	1701820-04RE1 WT1711281420MK 0....	7.97e3	51.5	NO
5	5	13C9-PFNA	1701820-04RE1 WT1711281420MK 0....	8.80e3	52.7	NO
6	6	13C4-PFOS	1701820-04RE1 WT1711281420MK 0....	2.52e3	63.7	NO
7	7	13C6-PFDA	1701820-04RE1 WT1711281420MK 0....	4.18e3	39.6	YES
8	8	13C7-PFUDa	1701820-04RE1 WT1711281420MK 0....	6.38e3	44.2	YES

Name: 180115M2_80, Date: 16-Jan-2018, Time: 15:46:23, ID: 1701820-05RE1 WT1711281440MK 0.25752,
Description: WT1711281440MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-05RE1 WT1711281440MK 0....	8.05e3	54.8	NO
2	2	13C5-PFHxA	1701820-05RE1 WT1711281440MK 0....	9.24e3	57.2	NO
3	3	13C3-PFHxS	1701820-05RE1 WT1711281440MK 0....	2.38e3	59.7	NO
4	4	13C8-PFOA	1701820-05RE1 WT1711281440MK 0....	9.22e3	59.6	NO
5	5	13C9-PFNA	1701820-05RE1 WT1711281440MK 0....	8.82e3	52.8	NO
6	6	13C4-PFOS	1701820-05RE1 WT1711281440MK 0....	2.71e3	68.6	NO
7	7	13C6-PFDA	1701820-05RE1 WT1711281440MK 0....	6.05e3	57.3	NO
8	8	13C7-PFUDa	1701820-05RE1 WT1711281440MK 0....	8.86e3	61.4	NO

Name: 180115M2_81, Date: 16-Jan-2018, Time: 15:57:50, ID: 1701820-06RE1 FB1711281445MK 0.2552,
Description: FB1711281445MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-06RE1 FB1711281445MK 0.2...	8.92e3	60.7	NO
2	2	13C5-PFHxA	1701820-06RE1 FB1711281445MK 0.2...	1.01e4	62.6	NO
3	3	13C3-PFHxS	1701820-06RE1 FB1711281445MK 0.2...	2.26e3	56.5	NO
4	4	13C8-PFOA	1701820-06RE1 FB1711281445MK 0.2...	8.07e3	52.2	NO
5	5	13C9-PFNA	1701820-06RE1 FB1711281445MK 0.2...	8.95e3	53.6	NO
6	6	13C4-PFOS	1701820-06RE1 FB1711281445MK 0.2...	2.50e3	63.2	NO
7	7	13C6-PFDA	1701820-06RE1 FB1711281445MK 0.2...	5.97e3	56.5	NO
8	8	13C7-PFUDa	1701820-06RE1 FB1711281445MK 0.2...	7.83e3	54.3	NO

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Description: WT1711281535MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-07RE1 WT1711281535MK 0....	8.11e3	55.2	NO
2	2	13C5-PFHxA	1701820-07RE1 WT1711281535MK 0....	9.77e3	60.4	NO
3	3	13C3-PFHxS	1701820-07RE1 WT1711281535MK 0....	2.36e3	59.0	NO
4	4	13C8-PFOA	1701820-07RE1 WT1711281535MK 0....	8.78e3	56.8	NO
5	5	13C9-PFNA	1701820-07RE1 WT1711281535MK 0....	9.22e3	55.2	NO
6	6	13C4-PFOS	1701820-07RE1 WT1711281535MK 0....	2.43e3	61.4	NO
7	7	13C6-PFDA	1701820-07RE1 WT1711281535MK 0....	5.41e3	51.1	NO
8	8	13C7-PFUdA	1701820-07RE1 WT1711281535MK 0....	7.34e3	50.9	NO

Name: 180115M2_83, Date: 16-Jan-2018, Time: 16:20:43, ID: 1701820-08RE1 WR1711281555MK 0.26231,
Description: WR1711281555MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-08RE1 WR1711281555MK 0....	8.01e3	54.5	NO
2	2	13C5-PFHxA	1701820-08RE1 WR1711281555MK 0....	9.80e3	60.7	NO
3	3	13C3-PFHxS	1701820-08RE1 WR1711281555MK 0....	2.38e3	59.6	NO
4	4	13C8-PFOA	1701820-08RE1 WR1711281555MK 0....	8.09e3	52.3	NO
5	5	13C9-PFNA	1701820-08RE1 WR1711281555MK 0....	7.32e3	43.8	YES
6	6	13C4-PFOS	1701820-08RE1 WR1711281555MK 0....	2.44e3	61.9	NO
7	7	13C6-PFDA	1701820-08RE1 WR1711281555MK 0....	5.43e3	51.4	NO
8	8	13C7-PFUdA	1701820-08RE1 WR1711281555MK 0....	6.39e3	44.3	YES

Name: 180115M2_84, Date: 16-Jan-2018, Time: 16:32:11, ID: 1701820-09RE1 WR1711290820MK 0.24977,
Description: WR1711290820MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-09RE1 WR1711290820MK 0....	8.04e3	54.7	NO
2	2	13C5-PFHxA	1701820-09RE1 WR1711290820MK 0....	8.89e3	55.0	NO
3	3	13C3-PFHxS	1701820-09RE1 WR1711290820MK 0....	2.41e3	60.3	NO
4	4	13C8-PFOA	1701820-09RE1 WR1711290820MK 0....	8.31e3	53.7	NO
5	5	13C9-PFNA	1701820-09RE1 WR1711290820MK 0....	9.28e3	55.6	NO
6	6	13C4-PFOS	1701820-09RE1 WR1711290820MK 0....	2.21e3	56.0	NO
7	7	13C6-PFDA	1701820-09RE1 WR1711290820MK 0....	5.15e3	48.7	YES
8	8	13C7-PFUdA	1701820-09RE1 WR1711290820MK 0....	7.06e3	48.9	YES

Name: 180115M2_85, Date: 16-Jan-2018, Time: 16:43:37, ID: 1701820-10RE1 WT1711290835MK 0.26178,
Description: WT1711290835MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-10RE1 WT1711290835MK 0....	7.99e3	54.3	NO
2	2	13C5-PFHxA	1701820-10RE1 WT1711290835MK 0....	9.10e3	56.4	NO
3	3	13C3-PFHxS	1701820-10RE1 WT1711290835MK 0....	2.44e3	61.2	NO
4	4	13C8-PFOA	1701820-10RE1 WT1711290835MK 0....	8.30e3	53.7	NO
5	5	13C9-PFNA	1701820-10RE1 WT1711290835MK 0....	8.15e3	48.8	YES
6	6	13C4-PFOS	1701820-10RE1 WT1711290835MK 0....	2.28e3	57.7	NO
7	7	13C6-PFDA	1701820-10RE1 WT1711290835MK 0....	5.52e3	52.2	NO
8	8	13C7-PFUdA	1701820-10RE1 WT1711290835MK 0....	7.67e3	53.2	NO

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Name: 180115M2_86, Date: 16-Jan-2018, Time: 16:55:04, ID: 1701820-11RE1 WT1711290845MK 0.26795, Description: WT1711290845MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-11RE1 WT1711290845MK 0....	8.57e3	58.3	NO
2	2	13C5-PFHxA	1701820-11RE1 WT1711290845MK 0....	8.82e3	54.6	NO
3	3	13C3-PFHxS	1701820-11RE1 WT1711290845MK 0....	2.43e3	60.8	NO
4	4	13C8-PFOA	1701820-11RE1 WT1711290845MK 0....	7.70e3	49.8	YES
5	5	13C9-PFNA	1701820-11RE1 WT1711290845MK 0....	8.03e3	48.1	YES
6	6	13C4-PFOS	1701820-11RE1 WT1711290845MK 0....	2.04e3	51.7	NO
7	7	13C6-PFDA	1701820-11RE1 WT1711290845MK 0....	5.31e3	50.2	NO
8	8	13C7-PFUdA	1701820-11RE1 WT1711290845MK 0....	7.82e3	54.2	NO

Name: 180115M2_87, Date: 16-Jan-2018, Time: 17:06:34, ID: IPA, Description: IPA

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

Name: 180115M2_88, Date: 16-Jan-2018, Time: 17:18:06, ID: ST180115M2-13 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-13 PFC CS3 17L2611	1.53e4	104.3	NO
2	2	13C5-PFHxA	ST180115M2-13 PFC CS3 17L2611	1.68e4	103.9	NO
3	3	13C3-PFHxS	ST180115M2-13 PFC CS3 17L2611	3.90e3	97.8	NO
4	4	13C8-PFOA	ST180115M2-13 PFC CS3 17L2611	1.46e4	94.6	NO
5	5	13C9-PFNA	ST180115M2-13 PFC CS3 17L2611	1.43e4	85.5	NO
6	6	13C4-PFOS	ST180115M2-13 PFC CS3 17L2611	3.94e3	99.8	NO
7	7	13C6-PFDA	ST180115M2-13 PFC CS3 17L2611	9.31e3	88.1	NO
8	8	13C7-PFUdA	ST180115M2-13 PFC CS3 17L2611	1.35e4	93.7	NO

Name: 180115M2_89, Date: 16-Jan-2018, Time: 17:29:33, ID: IPA, Description: IPA

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

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Name: 180115M2_90, Date: 16-Jan-2018, Time: 17:41:00, ID: 1701820-12RE1 WT1711290910MK 0.2463,
Description: WT1711290910MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-12RE1 WT1711290910MK 0....	8.87e3	60.3	NO
2	2	13C5-PFHxA	1701820-12RE1 WT1711290910MK 0....	1.02e4	63.3	NO
3	3	13C3-PFHxS	1701820-12RE1 WT1711290910MK 0....	2.57e3	64.3	NO
4	4	13C8-PFOA	1701820-12RE1 WT1711290910MK 0....	8.34e3	54.0	NO
5	5	13C9-PFNA	1701820-12RE1 WT1711290910MK 0....	1.02e4	61.2	NO
6	6	13C4-PFOS	1701820-12RE1 WT1711290910MK 0....	2.55e3	64.7	NO
7	7	13C6-PFDA	1701820-12RE1 WT1711290910MK 0....	5.60e3	52.9	NO
8	8	13C7-PFUdA	1701820-12RE1 WT1711290910MK 0....	8.39e3	58.2	NO

Name: 180115M2_91, Date: 16-Jan-2018, Time: 17:52:26, ID: 1701820-13RE1 WT1711290925MK 0.2633,
Description: WT1711290925MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-13RE1 WT1711290925MK 0....	8.39e3	57.1	NO
2	2	13C5-PFHxA	1701820-13RE1 WT1711290925MK 0....	9.82e3	60.8	NO
3	3	13C3-PFHxS	1701820-13RE1 WT1711290925MK 0....	2.29e3	57.3	NO
4	4	13C8-PFOA	1701820-13RE1 WT1711290925MK 0....	7.31e3	47.2	YES
5	5	13C9-PFNA	1701820-13RE1 WT1711290925MK 0....	9.02e3	54.0	NO
6	6	13C4-PFOS	1701820-13RE1 WT1711290925MK 0....	2.93e3	74.2	NO
7	7	13C6-PFDA	1701820-13RE1 WT1711290925MK 0....	5.18e3	49.0	YES
8	8	13C7-PFUdA	1701820-13RE1 WT1711290925MK 0....	6.38e3	44.2	YES

Name: 180115M2_92, Date: 16-Jan-2018, Time: 18:03:53, ID: 1701820-14RE1 WR1711290940MK 0.2514,
Description: WR1711290940MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-14RE1 WR1711290940MK 0....	7.97e3	54.2	NO
2	2	13C5-PFHxA	1701820-14RE1 WR1711290940MK 0....	8.88e3	54.9	NO
3	3	13C3-PFHxS	1701820-14RE1 WR1711290940MK 0....	2.36e3	59.2	NO
4	4	13C8-PFOA	1701820-14RE1 WR1711290940MK 0....	8.19e3	53.0	NO
5	5	13C9-PFNA	1701820-14RE1 WR1711290940MK 0....	6.49e3	38.9	YES
6	6	13C4-PFOS	1701820-14RE1 WR1711290940MK 0....	1.81e3	45.7	YES
7	7	13C6-PFDA	1701820-14RE1 WR1711290940MK 0....	4.91e3	46.4	YES
8	8	13C7-PFUdA	1701820-14RE1 WR1711290940MK 0....	6.10e3	42.3	YES

Name: 180115M2_93, Date: 16-Jan-2018, Time: 18:15:20, ID: 1701820-15RE1 WR1711290950MK 0.25988,
Description: WR1711290950MK

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701820-15RE1 WR1711290950MK 0....	7.93e3	53.9	NO
2	2	13C5-PFHxA	1701820-15RE1 WR1711290950MK 0....	9.17e3	56.8	NO
3	3	13C3-PFHxS	1701820-15RE1 WR1711290950MK 0....	2.16e3	54.0	NO
4	4	13C8-PFOA	1701820-15RE1 WR1711290950MK 0....	7.75e3	50.1	NO
5	5	13C9-PFNA	1701820-15RE1 WR1711290950MK 0....	7.59e3	45.5	YES
6	6	13C4-PFOS	1701820-15RE1 WR1711290950MK 0....	2.12e3	53.6	NO
7	7	13C6-PFDA	1701820-15RE1 WR1711290950MK 0....	4.98e3	47.1	YES
8	8	13C7-PFUdA	1701820-15RE1 WR1711290950MK 0....	6.57e3	45.5	YES

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Name: 180115M2_94, Date: 16-Jan-2018, Time: 18:26:47, ID: B7L0183-BS1 OPR 0.25, Description: OPR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0183-BS1 OPR 0.25	8.05e3	54.8	NO
2	2	13C5-PFHxA	B7L0183-BS1 OPR 0.25	9.98e3	61.8	NO
3	3	13C3-PFHxS	B7L0183-BS1 OPR 0.25	2.55e3	64.0	NO
4	4	13C8-PFOA	B7L0183-BS1 OPR 0.25	8.04e3	52.0	NO
5	5	13C9-PFNA	B7L0183-BS1 OPR 0.25	8.80e3	52.7	NO
6	6	13C4-PFOS	B7L0183-BS1 OPR 0.25	2.26e3	57.3	NO
7	7	13C6-PFDA	B7L0183-BS1 OPR 0.25	5.36e3	50.7	NO
8	8	13C7-PFUdA	B7L0183-BS1 OPR 0.25	8.71e3	60.3	NO

Name: 180115M2_95, Date: 16-Jan-2018, Time: 18:38:14, ID: B7L0183-BSD1 LCSD 0.25, Description: LCSD

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0183-BSD1 LCSD 0.25	8.13e3	55.3	NO
2	2	13C5-PFHxA	B7L0183-BSD1 LCSD 0.25	8.56e3	53.0	NO
3	3	13C3-PFHxS	B7L0183-BSD1 LCSD 0.25	2.30e3	57.7	NO
4	4	13C8-PFOA	B7L0183-BSD1 LCSD 0.25	8.48e3	54.8	NO
5	5	13C9-PFNA	B7L0183-BSD1 LCSD 0.25	9.65e3	57.8	NO
6	6	13C4-PFOS	B7L0183-BSD1 LCSD 0.25	2.45e3	62.0	NO
7	7	13C6-PFDA	B7L0183-BSD1 LCSD 0.25	5.46e3	51.6	NO
8	8	13C7-PFUdA	B7L0183-BSD1 LCSD 0.25	8.11e3	56.2	NO

Name: 180115M2_96, Date: 16-Jan-2018, Time: 18:49:41, ID: B7L0183-BLK1 Method Blank 0.25, Description: Method Blank

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	B7L0183-BLK1 Method Blank 0.25	7.54e3	51.3	NO
2	2	13C5-PFHxA	B7L0183-BLK1 Method Blank 0.25	8.96e3	55.4	NO
3	3	13C3-PFHxS	B7L0183-BLK1 Method Blank 0.25	2.27e3	56.9	NO
4	4	13C8-PFOA	B7L0183-BLK1 Method Blank 0.25	7.98e3	51.6	NO
5	5	13C9-PFNA	B7L0183-BLK1 Method Blank 0.25	9.08e3	54.4	NO
6	6	13C4-PFOS	B7L0183-BLK1 Method Blank 0.25	2.16e3	54.7	NO
7	7	13C6-PFDA	B7L0183-BLK1 Method Blank 0.25	5.18e3	49.0	YES
8	8	13C7-PFUdA	B7L0183-BLK1 Method Blank 0.25	7.86e3	54.5	NO

Name: 180115M2_97, Date: 16-Jan-2018, Time: 19:01:07, ID: 1701953-01@5X CV-Dup09-20171213 0.2568, Description: CV-Dup09-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-01@5X CV-Dup09-20171213 ...	1.96e3	13.3	YES
2	2	13C5-PFHxA	1701953-01@5X CV-Dup09-20171213 ...	2.14e3	13.3	YES
3	3	13C3-PFHxS	1701953-01@5X CV-Dup09-20171213 ...	5.72e2	14.3	YES
4	4	13C8-PFOA	1701953-01@5X CV-Dup09-20171213 ...	2.07e3	13.4	YES
5	5	13C9-PFNA	1701953-01@5X CV-Dup09-20171213 ...	1.95e3	11.7	YES
6	6	13C4-PFOS	1701953-01@5X CV-Dup09-20171213 ...	5.78e2	14.6	YES
7	7	13C6-PFDA	1701953-01@5X CV-Dup09-20171213 ...	1.35e3	12.8	YES
8	8	13C7-PFUdA	1701953-01@5X CV-Dup09-20171213 ...	1.90e3	13.2	YES

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Description: SA-MW126S-20171213

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701953-03@5X SA-MW126S-201712...	1.59e3	10.8	YES
2	2 13C5-PFHxA	1701953-03@5X SA-MW126S-201712...	1.89e3	11.7	YES
3	3 13C3-PFHxS	1701953-03@5X SA-MW126S-201712...	5.09e2	12.8	YES
4	4 13C8-PFOA	1701953-03@5X SA-MW126S-201712...	1.28e3	8.3	YES
5	5 13C9-PFNA	1701953-03@5X SA-MW126S-201712...	1.48e3	8.9	YES
6	6 13C4-PFOS	1701953-03@5X SA-MW126S-201712...	3.75e2	9.5	YES
7	7 13C6-PFDA	1701953-03@5X SA-MW126S-201712...	9.50e2	9.0	YES
8	8 13C7-PFUDa	1701953-03@5X SA-MW126S-201712...	1.44e3	10.0	YES

Name: 180115M2_99, Date: 16-Jan-2018, Time: 19:24:01, ID: 1701953-08@5X SA-PZ123I-20171213 0.25702,
Description: SA-PZ123I-20171213

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701953-08@5X SA-PZ123I-20171213...	1.68e3	11.4	YES
2	2 13C5-PFHxA	1701953-08@5X SA-PZ123I-20171213...	1.84e3	11.4	YES
3	3 13C3-PFHxS	1701953-08@5X SA-PZ123I-20171213...	4.63e2	11.6	YES
4	4 13C8-PFOA	1701953-08@5X SA-PZ123I-20171213...	1.67e3	10.8	YES
5	5 13C9-PFNA	1701953-08@5X SA-PZ123I-20171213...	1.82e3	10.9	YES
6	6 13C4-PFOS	1701953-08@5X SA-PZ123I-20171213...	5.38e2	13.6	YES
7	7 13C6-PFDA	1701953-08@5X SA-PZ123I-20171213...	9.33e2	8.8	YES
8	8 13C7-PFUDa	1701953-08@5X SA-PZ123I-20171213...	1.47e3	10.2	YES

Name: 180115M2_100, Date: 16-Jan-2018, Time: 19:35:28, ID: 1701953-09@5X SA-PZ123I1-20171213 0.25747,
Description: SA-PZ123I1-20171213

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701953-09@5X SA-PZ123I1-2017121...	1.87e3	12.7	YES
2	2 13C5-PFHxA	1701953-09@5X SA-PZ123I1-2017121...	2.14e3	13.3	YES
3	3 13C3-PFHxS	1701953-09@5X SA-PZ123I1-2017121...	5.16e2	12.9	YES
4	4 13C8-PFOA	1701953-09@5X SA-PZ123I1-2017121...	1.72e3	11.1	YES
5	5 13C9-PFNA	1701953-09@5X SA-PZ123I1-2017121...	1.93e3	11.6	YES
6	6 13C4-PFOS	1701953-09@5X SA-PZ123I1-2017121...	5.72e2	14.5	YES
7	7 13C6-PFDA	1701953-09@5X SA-PZ123I1-2017121...	1.47e3	13.9	YES
8	8 13C7-PFUDa	1701953-09@5X SA-PZ123I1-2017121...	1.69e3	11.7	YES

Name: 180115M2_101, Date: 16-Jan-2018, Time: 19:46:55, ID: 1701953-10@5X SA-PZ118S-20171213 0.23505,
Description: SA-PZ118S-20171213

	# Name	ID	Area	%Rec	Area Out
1	1 13C4-PFBA	1701953-10@5X SA-PZ118S-2017121...	1.66e3	11.3	YES
2	2 13C5-PFHxA	1701953-10@5X SA-PZ118S-2017121...	1.89e3	11.7	YES
3	3 13C3-PFHxS	1701953-10@5X SA-PZ118S-2017121...	5.33e2	13.4	YES
4	4 13C8-PFOA	1701953-10@5X SA-PZ118S-2017121...	1.73e3	11.2	YES
5	5 13C9-PFNA	1701953-10@5X SA-PZ118S-2017121...	1.76e3	10.5	YES
6	6 13C4-PFOS	1701953-10@5X SA-PZ118S-2017121...	5.21e2	13.2	YES
7	7 13C6-PFDA	1701953-10@5X SA-PZ118S-2017121...	1.20e3	11.4	YES
8	8 13C7-PFUDa	1701953-10@5X SA-PZ118S-2017121...	1.40e3	9.7	YES

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Name: 180115M2_102, Date: 16-Jan-2018, Time: 19:58:22, ID: 1701953-01 CV-Dup09-20171213 0.2568, Description: CV-Dup09-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-01 CV-Dup09-20171213 0.2568	7.80e3	53.0	NO
2	2	13C5-PFHxA	1701953-01 CV-Dup09-20171213 0.2568	8.45e3	52.3	NO
3	3	13C3-PFHxS	1701953-01 CV-Dup09-20171213 0.2568	2.20e3	55.2	NO
4	4	13C8-PFOA	1701953-01 CV-Dup09-20171213 0.2568	7.05e3	45.6	YES
5	5	13C9-PFNA	1701953-01 CV-Dup09-20171213 0.2568	7.02e3	42.1	YES
6	6	13C4-PFOS	1701953-01 CV-Dup09-20171213 0.2568	2.17e3	55.0	NO
7	7	13C6-PFDA	1701953-01 CV-Dup09-20171213 0.2568	4.47e3	42.3	YES
8	8	13C7-PFUDa	1701953-01 CV-Dup09-20171213 0.2568	6.50e3	45.1	YES

Name: 180115M2_103, Date: 16-Jan-2018, Time: 20:09:49, ID: 1701953-02 SA-MW127S-20171213 0.23624, Description: SA-MW127S-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-02 SA-MW127S-20171213 0....	7.59e3	51.6	NO
2	2	13C5-PFHxA	1701953-02 SA-MW127S-20171213 0....	8.23e3	50.9	NO
3	3	13C3-PFHxS	1701953-02 SA-MW127S-20171213 0....	2.40e3	60.1	NO
4	4	13C8-PFOA	1701953-02 SA-MW127S-20171213 0....	8.10e3	52.4	NO
5	5	13C9-PFNA	1701953-02 SA-MW127S-20171213 0....	7.20e3	43.1	YES
6	6	13C4-PFOS	1701953-02 SA-MW127S-20171213 0....	2.00e3	50.7	NO
7	7	13C6-PFDA	1701953-02 SA-MW127S-20171213 0....	4.12e3	39.0	YES
8	8	13C7-PFUDa	1701953-02 SA-MW127S-20171213 0....	6.07e3	42.1	YES

Name: 180115M2_104, Date: 16-Jan-2018, Time: 20:21:16, ID: IPA, Description: IPA

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

Name: 180115M2_105, Date: 16-Jan-2018, Time: 20:32:42, ID: ST180115M2-14 PFC CS0 17L2608, Description: PFC CS0 17L2608

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-14 PFC CS0 17L2608	1.82e4	123.8	NO
2	2	13C5-PFHxA	ST180115M2-14 PFC CS0 17L2608	1.90e4	117.7	NO
3	3	13C3-PFHxS	ST180115M2-14 PFC CS0 17L2608	4.67e3	117.1	NO
4	4	13C8-PFOA	ST180115M2-14 PFC CS0 17L2608	1.83e4	118.4	NO
5	5	13C9-PFNA	ST180115M2-14 PFC CS0 17L2608	1.92e4	114.8	NO
6	6	13C4-PFOS	ST180115M2-14 PFC CS0 17L2608	4.58e3	115.9	NO
7	7	13C6-PFDA	ST180115M2-14 PFC CS0 17L2608	1.13e4	107.2	NO
8	8	13C7-PFUDa	ST180115M2-14 PFC CS0 17L2608	1.56e4	108.1	NO

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Name: 180115M2_106, Date: 16-Jan-2018, Time: 20:44:08, ID: IPA, Description: IPA

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

Name: 180115M2_107, Date: 16-Jan-2018, Time: 20:55:35, ID: 1701953-03 SA-MW126S-20171213 0.24287, Description: SA-MW126S-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-03 SA-MW126S-20171213 0....	7.45e3	50.7	NO
2	2	13C5-PFHxA	1701953-03 SA-MW126S-20171213 0....	8.66e3	53.6	NO
3	3	13C3-PFHxS	1701953-03 SA-MW126S-20171213 0....	2.35e3	58.9	NO
4	4	13C8-PFOA	1701953-03 SA-MW126S-20171213 0....	7.54e3	48.8	YES
5	5	13C9-PFNA	1701953-03 SA-MW126S-20171213 0....	8.07e3	48.4	YES
6	6	13C4-PFOS	1701953-03 SA-MW126S-20171213 0....	2.31e3	58.5	NO
7	7	13C6-PFDA	1701953-03 SA-MW126S-20171213 0....	4.58e3	43.3	YES
8	8	13C7-PFUdA	1701953-03 SA-MW126S-20171213 0....	8.14e3	56.4	NO

Name: 180115M2_108, Date: 16-Jan-2018, Time: 21:07:02, ID: 1701953-04 SA-MW126I-20171213 0.24106, Description: SA-MW126I-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-04 SA-MW126I-20171213 0.2...	7.69e3	52.3	NO
2	2	13C5-PFHxA	1701953-04 SA-MW126I-20171213 0.2...	8.59e3	53.2	NO
3	3	13C3-PFHxS	1701953-04 SA-MW126I-20171213 0.2...	2.55e3	63.8	NO
4	4	13C8-PFOA	1701953-04 SA-MW126I-20171213 0.2...	7.39e3	47.8	YES
5	5	13C9-PFNA	1701953-04 SA-MW126I-20171213 0.2...	8.50e3	51.0	NO
6	6	13C4-PFOS	1701953-04 SA-MW126I-20171213 0.2...	2.51e3	63.7	NO
7	7	13C6-PFDA	1701953-04 SA-MW126I-20171213 0.2...	5.24e3	49.5	YES
8	8	13C7-PFUdA	1701953-04 SA-MW126I-20171213 0.2...	7.43e3	51.5	NO

Name: 180115M2_109, Date: 16-Jan-2018, Time: 21:18:29, ID: 1701953-06 SA-Dup10-20171213 0.25769, Description: SA-Dup10-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-06 SA-Dup10-20171213 0.25...	8.55e3	58.2	NO
2	2	13C5-PFHxA	1701953-06 SA-Dup10-20171213 0.25...	9.14e3	56.6	NO
3	3	13C3-PFHxS	1701953-06 SA-Dup10-20171213 0.25...	2.43e3	60.8	NO
4	4	13C8-PFOA	1701953-06 SA-Dup10-20171213 0.25...	8.71e3	56.3	NO
5	5	13C9-PFNA	1701953-06 SA-Dup10-20171213 0.25...	7.33e3	43.9	YES
6	6	13C4-PFOS	1701953-06 SA-Dup10-20171213 0.25...	2.60e3	65.9	NO
7	7	13C6-PFDA	1701953-06 SA-Dup10-20171213 0.25...	5.66e3	53.5	NO
8	8	13C7-PFUdA	1701953-06 SA-Dup10-20171213 0.25...	7.06e3	48.9	YES

Dataset: U:\Q4.PRO\results\180115M2\180115M2-IIS.qld

Last Altered: Wednesday, January 17, 2018 17:01:59 Pacific Standard Time
Printed: Wednesday, January 17, 2018 17:02:18 Pacific Standard Time**Name: 180115M2_110, Date: 16-Jan-2018, Time: 21:29:55, ID: 1701953-07 SA-PZ123S-20171213 0.24245,**
Description: SA-PZ123S-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-07 SA-PZ123S-20171213 0.2...	9.38e3	63.8	NO
2	2	13C5-PFHxA	1701953-07 SA-PZ123S-20171213 0.2...	9.97e3	61.7	NO
3	3	13C3-PFHxS	1701953-07 SA-PZ123S-20171213 0.2...	2.54e3	63.8	NO
4	4	13C8-PFOA	1701953-07 SA-PZ123S-20171213 0.2...	8.80e3	56.9	NO
5	5	13C9-PFNA	1701953-07 SA-PZ123S-20171213 0.2...	9.80e3	58.7	NO
6	6	13C4-PFOS	1701953-07 SA-PZ123S-20171213 0.2...	2.70e3	68.3	NO
7	7	13C6-PFDA	1701953-07 SA-PZ123S-20171213 0.2...	5.50e3	52.0	NO
8	8	13C7-PFUdA	1701953-07 SA-PZ123S-20171213 0.2...	8.48e3	58.7	NO

Name: 180115M2_111, Date: 16-Jan-2018, Time: 21:41:23, ID: 1701953-08 SA-PZ123I-20171213 0.25702,
Description: SA-PZ123I-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-08 SA-PZ123I-20171213 0.25...	7.47e3	50.8	NO
2	2	13C5-PFHxA	1701953-08 SA-PZ123I-20171213 0.25...	8.21e3	50.8	NO
3	3	13C3-PFHxS	1701953-08 SA-PZ123I-20171213 0.25...	2.41e3	60.4	NO
4	4	13C8-PFOA	1701953-08 SA-PZ123I-20171213 0.25...	7.57e3	49.0	YES
5	5	13C9-PFNA	1701953-08 SA-PZ123I-20171213 0.25...	7.44e3	44.6	YES
6	6	13C4-PFOS	1701953-08 SA-PZ123I-20171213 0.25...	2.34e3	59.3	NO
7	7	13C6-PFDA	1701953-08 SA-PZ123I-20171213 0.25...	5.67e3	53.6	NO
8	8	13C7-PFUdA	1701953-08 SA-PZ123I-20171213 0.25...	6.94e3	48.1	YES

Name: 180115M2_112, Date: 16-Jan-2018, Time: 21:52:49, ID: 1701953-09 SA-PZ123I1-20171213 0.25747,
Description: SA-PZ123I1-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-09 SA-PZ123I1-20171213 0.2...	8.80e3	59.9	NO
2	2	13C5-PFHxA	1701953-09 SA-PZ123I1-20171213 0.2...	1.01e4	62.7	NO
3	3	13C3-PFHxS	1701953-09 SA-PZ123I1-20171213 0.2...	2.41e3	60.5	NO
4	4	13C8-PFOA	1701953-09 SA-PZ123I1-20171213 0.2...	8.17e3	52.8	NO
5	5	13C9-PFNA	1701953-09 SA-PZ123I1-20171213 0.2...	8.54e3	51.2	NO
6	6	13C4-PFOS	1701953-09 SA-PZ123I1-20171213 0.2...	2.34e3	59.2	NO
7	7	13C6-PFDA	1701953-09 SA-PZ123I1-20171213 0.2...	5.20e3	49.2	YES
8	8	13C7-PFUdA	1701953-09 SA-PZ123I1-20171213 0.2...	7.00e3	48.5	YES

Name: 180115M2_113, Date: 16-Jan-2018, Time: 22:04:16, ID: 1701953-10 SA-PZ118S-20171213 0.23505,
Description: SA-PZ118S-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-10 SA-PZ118S-20171213 0.2...	7.55e3	51.4	NO
2	2	13C5-PFHxA	1701953-10 SA-PZ118S-20171213 0.2...	8.93e3	55.3	NO
3	3	13C3-PFHxS	1701953-10 SA-PZ118S-20171213 0.2...	2.39e3	59.8	NO
4	4	13C8-PFOA	1701953-10 SA-PZ118S-20171213 0.2...	8.33e3	53.8	NO
5	5	13C9-PFNA	1701953-10 SA-PZ118S-20171213 0.2...	9.02e3	54.0	NO
6	6	13C4-PFOS	1701953-10 SA-PZ118S-20171213 0.2...	2.25e3	57.1	NO
7	7	13C6-PFDA	1701953-10 SA-PZ118S-20171213 0.2...	5.14e3	48.6	YES
8	8	13C7-PFUdA	1701953-10 SA-PZ118S-20171213 0.2...	6.48e3	44.9	YES

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Name: 180115M2_114, Date: 16-Jan-2018, Time: 22:15:43, ID: 1701953-11 SA-PZ118I-20171213 0.24112, Description: SA-PZ118I-20171213

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701953-11 SA-PZ118I-20171213 0.24...	8.06e3	54.8	NO
2	2	13C5-PFHxA	1701953-11 SA-PZ118I-20171213 0.24...	9.08e3	56.2	NO
3	3	13C3-PFHxS	1701953-11 SA-PZ118I-20171213 0.24...	2.32e3	58.1	NO
4	4	13C8-PFOA	1701953-11 SA-PZ118I-20171213 0.24...	8.03e3	51.9	NO
5	5	13C9-PFNA	1701953-11 SA-PZ118I-20171213 0.24...	9.48e3	56.8	NO
6	6	13C4-PFOS	1701953-11 SA-PZ118I-20171213 0.24...	2.22e3	56.3	NO
7	7	13C6-PFDA	1701953-11 SA-PZ118I-20171213 0.24...	4.60e3	43.5	YES
8	8	13C7-PFUDa	1701953-11 SA-PZ118I-20171213 0.24...	6.27e3	43.5	YES

Name: 180115M2_115, Date: 16-Jan-2018, Time: 22:27:10, ID: IPA, Description: IPA

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

Name: 180115M2_116, Date: 16-Jan-2018, Time: 22:38:37, ID: 1701905-04RE1 WR1712070930JNR 0.25, Description: WR1712070930JNR

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	1701905-04RE1 WR1712070930JNR 0...	8.37e3	57.0	NO
2	2	13C5-PFHxA	1701905-04RE1 WR1712070930JNR 0...	8.28e3	51.2	NO
3	3	13C3-PFHxS	1701905-04RE1 WR1712070930JNR 0...	2.27e3	57.0	NO
4	4	13C8-PFOA	1701905-04RE1 WR1712070930JNR 0...	6.97e3	45.1	YES
5	5	13C9-PFNA	1701905-04RE1 WR1712070930JNR 0...	7.03e3	42.1	YES
6	6	13C4-PFOS	1701905-04RE1 WR1712070930JNR 0...	2.15e3	54.4	NO
7	7	13C6-PFDA	1701905-04RE1 WR1712070930JNR 0...	4.41e3	41.7	YES
8	8	13C7-PFUDa	1701905-04RE1 WR1712070930JNR 0...	8.03e3	55.6	NO

Name: 180115M2_117, Date: 16-Jan-2018, Time: 22:50:04, ID: ST180115M2-15 PFC CS3 17L2611, Description: PFC CS3 17L2611

	#	Name	ID	Area	%Rec	Area Out
1	1	13C4-PFBA	ST180115M2-15 PFC CS3 17L2611	1.83e4	124.8	NO
2	2	13C5-PFHxA	ST180115M2-15 PFC CS3 17L2611	2.07e4	128.2	NO
3	3	13C3-PFHxS	ST180115M2-15 PFC CS3 17L2611	4.70e3	117.9	NO
4	4	13C8-PFOA	ST180115M2-15 PFC CS3 17L2611	1.95e4	126.3	NO
5	5	13C9-PFNA	ST180115M2-15 PFC CS3 17L2611	1.63e4	97.7	NO
6	6	13C4-PFOS	ST180115M2-15 PFC CS3 17L2611	4.34e3	109.9	NO
7	7	13C6-PFDA	ST180115M2-15 PFC CS3 17L2611	1.25e4	118.1	NO
8	8	13C7-PFUDa	ST180115M2-15 PFC CS3 17L2611	1.65e4	114.3	NO

Dataset: U:\Q4.PRO\results\180115M1\180115M1-3.qld

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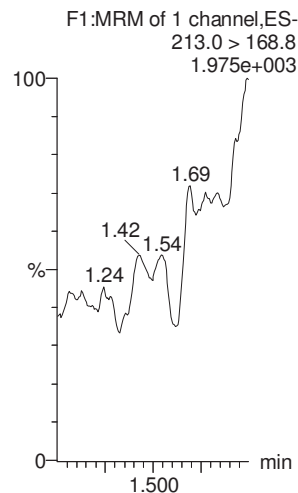
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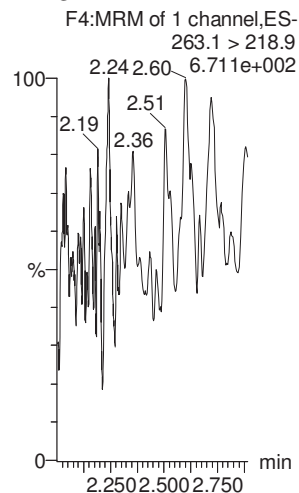
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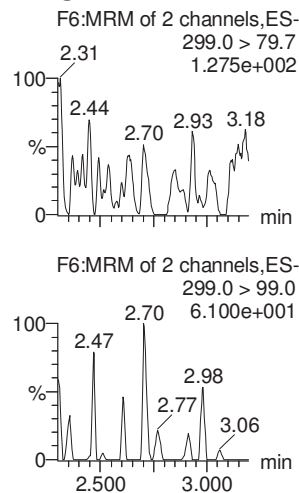
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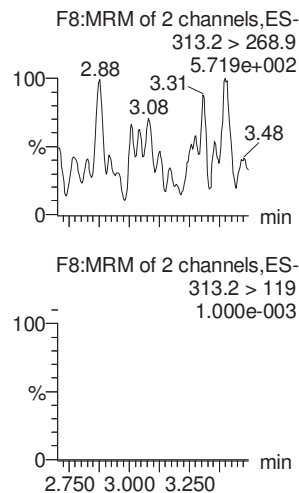
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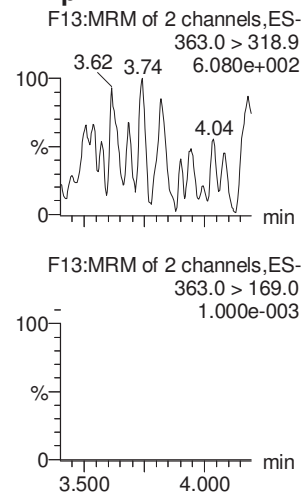
PFBS



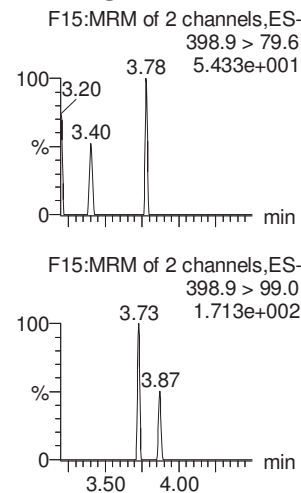
PFHxA



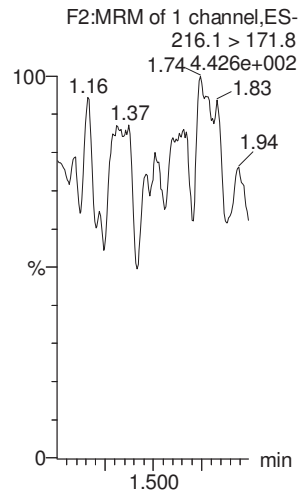
PFHpA



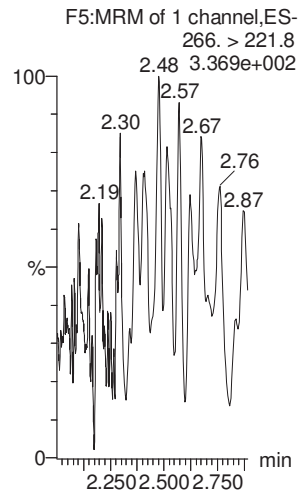
L-PFHxS



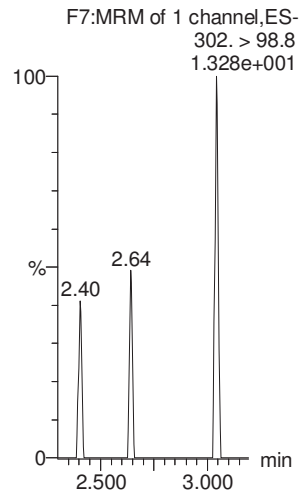
13C3-PFBA



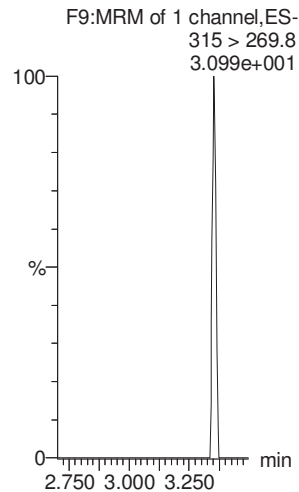
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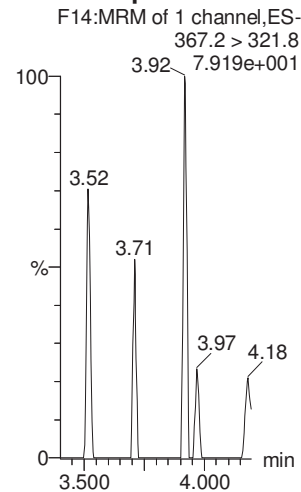
13C3-PFBS



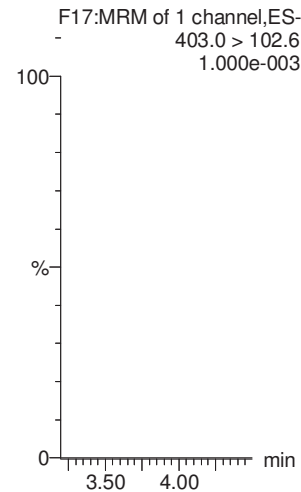
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



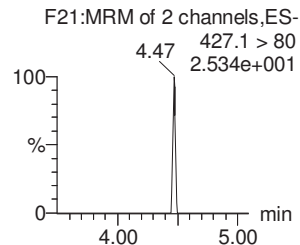
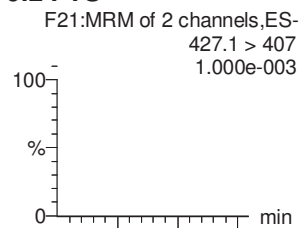
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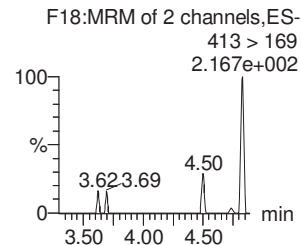
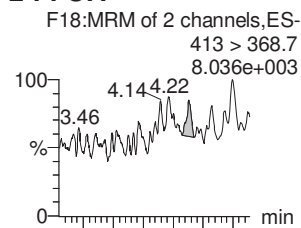
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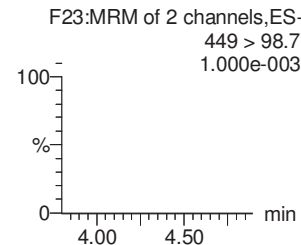
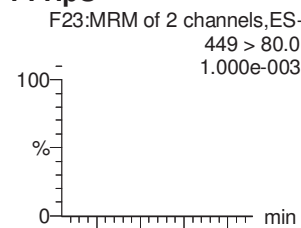
6:2 FTS



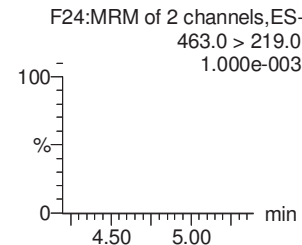
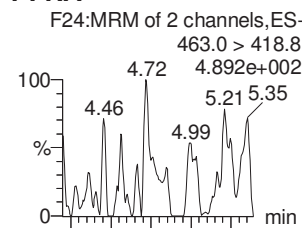
L-PFOA



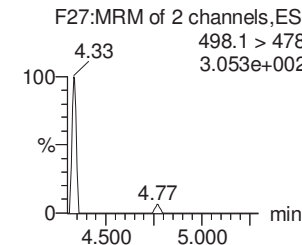
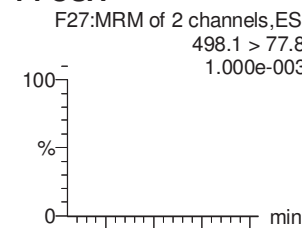
PFHpS



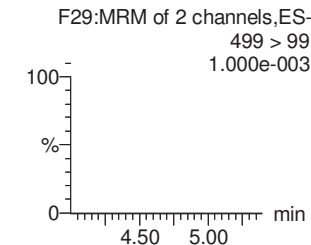
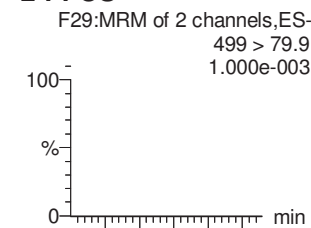
PFNA



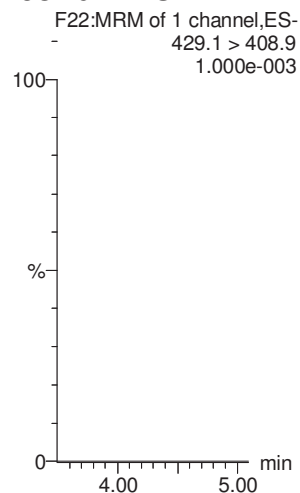
PFOSA



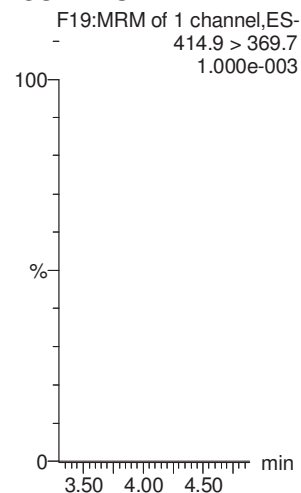
L-PFOS



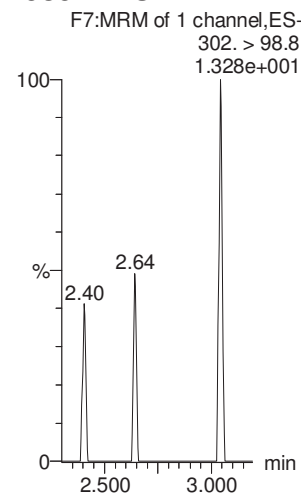
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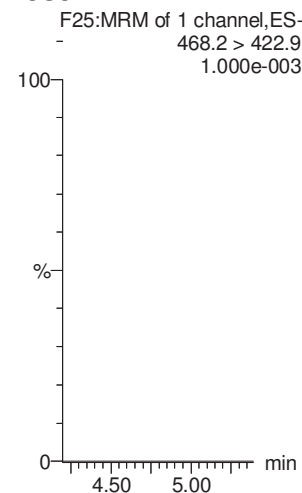
13C2-PFOA



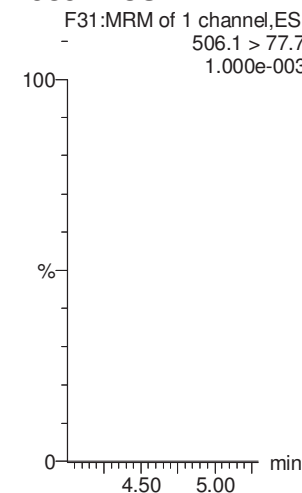
13C3-PFBS



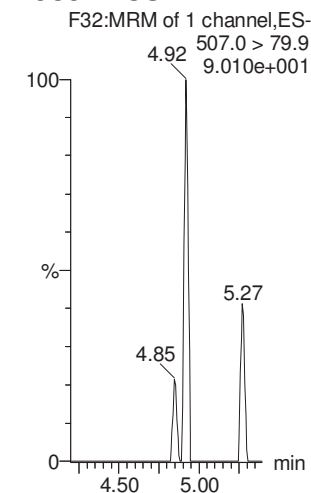
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13C8-PFOSA



13C8-PFOS

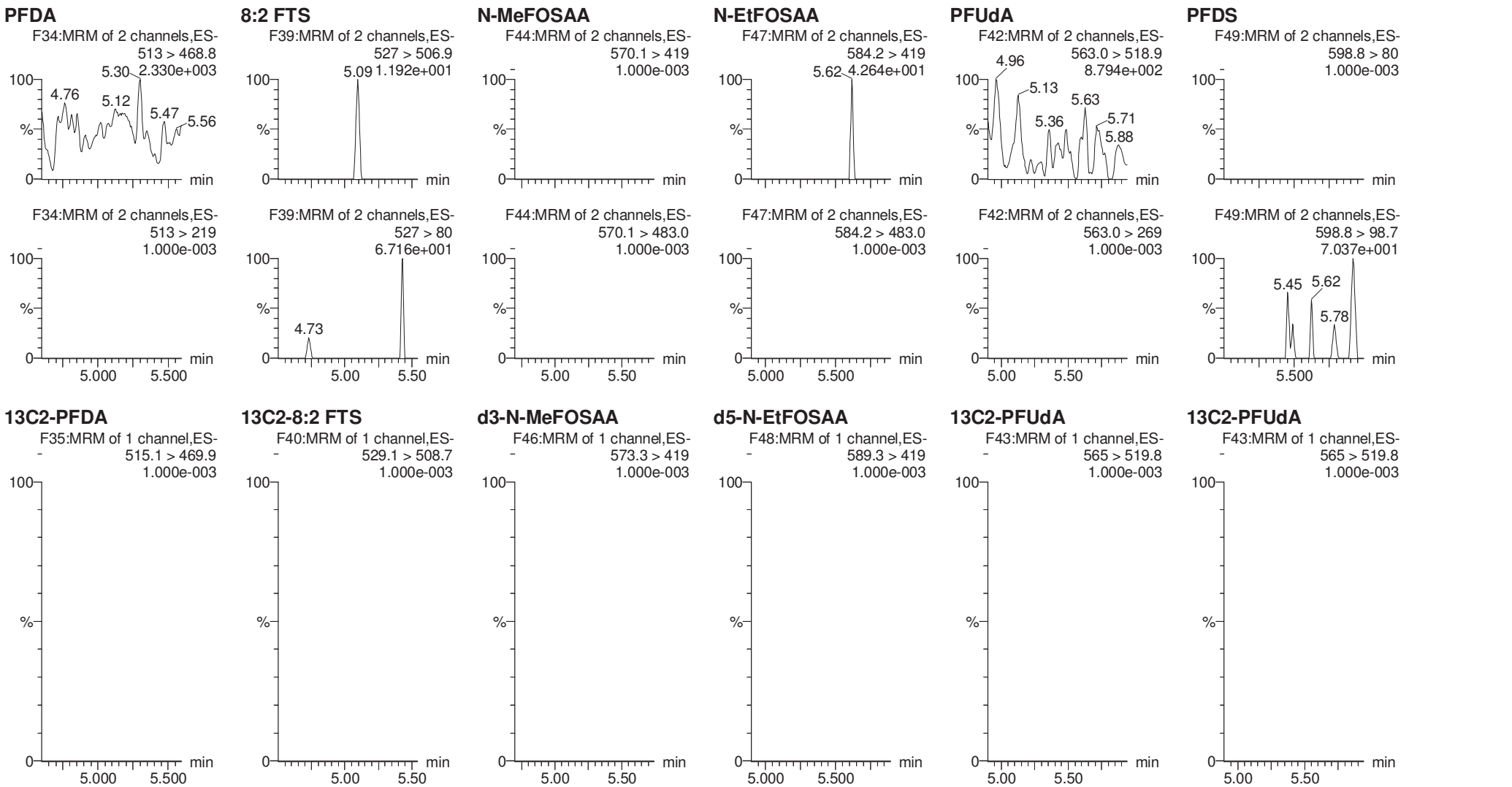


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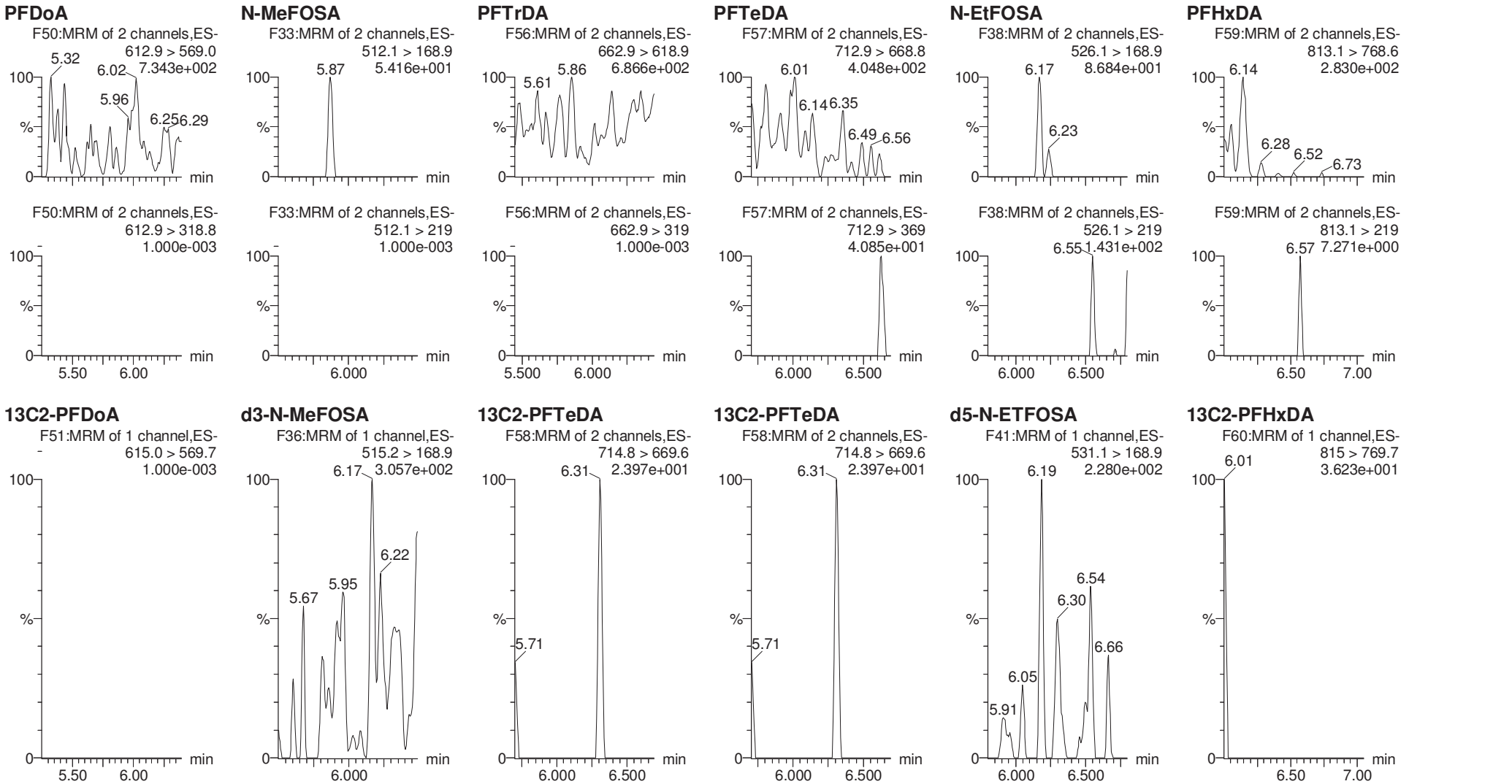
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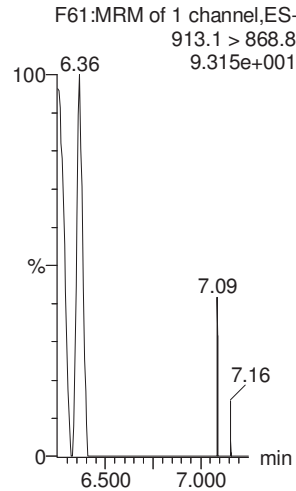
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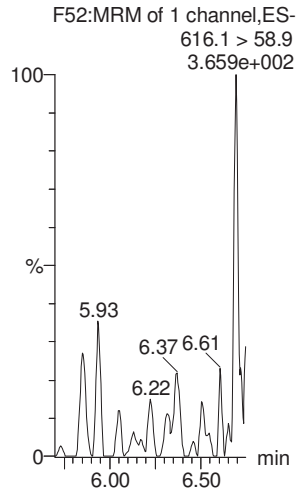
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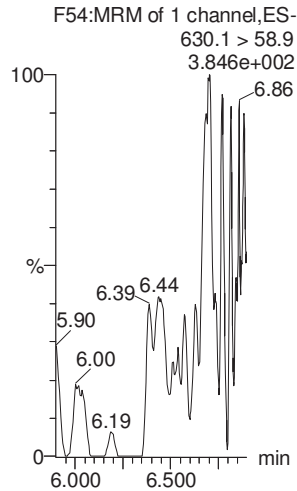
PFODA



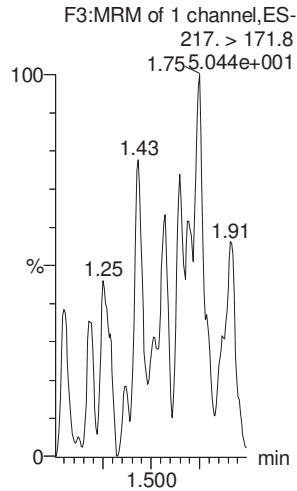
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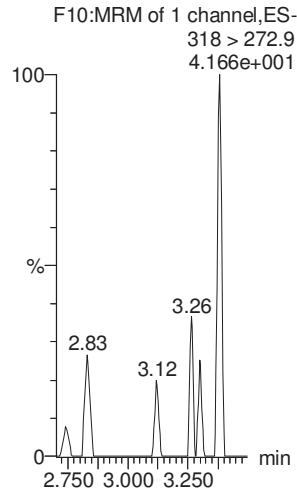
N-EtFOSE



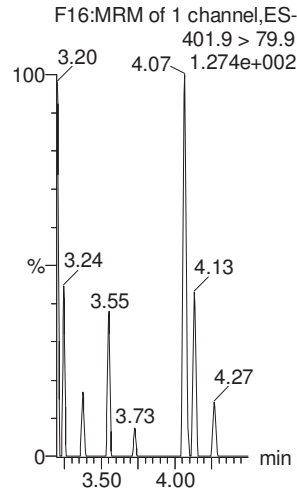
13C4-PFBA



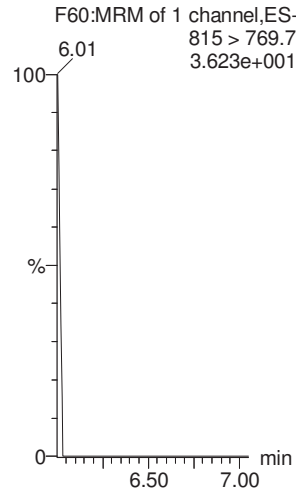
13C5-PFHxA



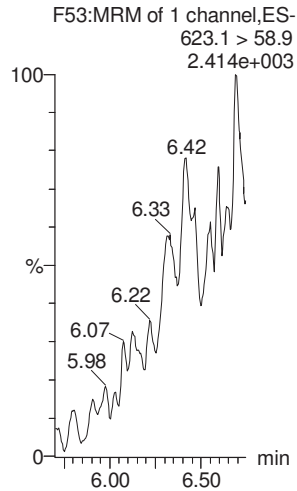
13C3-PFHxS



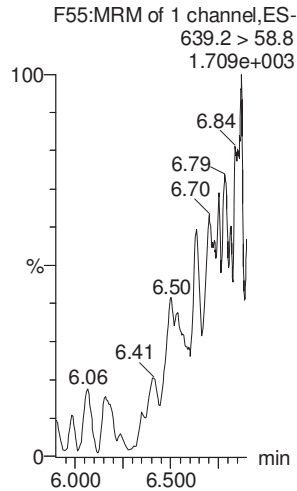
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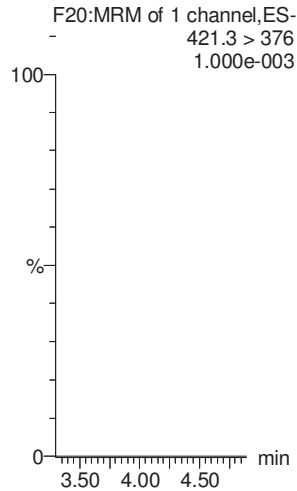
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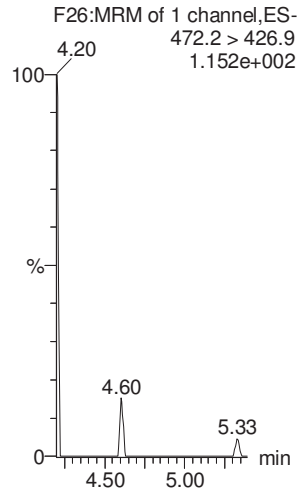
d9-N-EtFOSE



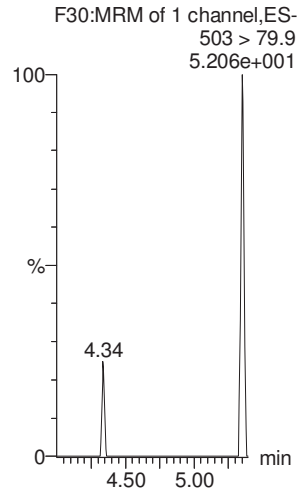
13C8-PFOA



13C9-PFNA



13C4-PFOS

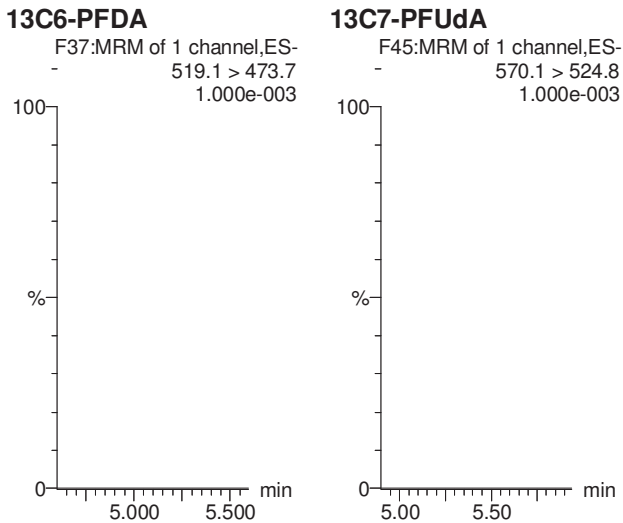


Dataset: U:\Q4.PRO\results\180115M1\180115M1-3.qld

Last Altered: Monday, January 15, 2018 13:35:05 Pacific Standard Time

Printed: Monday, January 15, 2018 13:35:38 Pacific Standard Time

Name: 180115M1_3, Date: 15-Jan-2018, Time: 10:52:47, ID: IPA, Description: IPA



Dataset: U:\Q4.PRO\results\180115M2\180115M2-26.qld

Last Altered: Tuesday, January 16, 2018 10:44:16 Pacific Standard Time
Printed: Tuesday, January 16, 2018 10:44:51 Pacific Standard Time

PFD0A
① PFDS > 130%

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

AC
1/16/18

JA
01/16/2018

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.36e4	1.21e4	1.0000		1.64	1.51	14.1	10.538	105.4
2	2 PFPeA	263.1 > 218.9	1.41e4	1.36e4	1.0000		2.60	2.47	13.0	11.239	112.4
3	3 PFBS	299.0 > 79.7	2.88e3	1.63e3	1.0000		2.87	2.74	22.1	11.505	115.0
4	4 PFHxA	313.2 > 268.9	1.64e4	4.24e3	1.0000		3.36	3.23	19.3	10.991	109.9
5	5 PFHpA	363.0 > 318.9	1.32e4	1.05e4	1.0000		4.00	3.85	15.7	10.511	105.1
6	6 L-PFHxS	398.9 > 79.6	2.36e3	1.18e3	1.0000		4.14	4.00	25.0	12.722	127.2
7	8 6:2 FTS	427.1 > 407	2.75e3	1.18e3	1.0000		4.46	4.31	29.1	10.162	101.6
8	9 L-PFOA	413 > 368.7	1.45e4	1.46e4	1.0000		4.50	4.37	12.5	10.804	108.0
9	11 PFHpS	449 > 80.0	3.63e3	1.46e4	1.0000		4.60	4.47	3.12	11.122	111.2
10	12 PFNA	463.0 > 418.8	1.65e4	1.18e4	1.0000		4.94	4.80	17.5	12.785	127.8
11	13 PFOSA	498.1 > 77.8	3.48e3	3.04e3	1.0000		5.00	4.86	14.3	11.905	119.0
12	14 L-PFOS	499 > 79.9	3.60e3	3.32e3	1.0000		5.02	4.88	13.6	12.148	121.5
13	16 PFDA	513 > 468.8	1.46e4	1.18e4	1.0000		5.31	5.17	15.5	10.744	107.4
14	17 8:2 FTS	527 > 506.9	2.71e3	1.18e4	1.0000		5.28	5.14	2.86	11.690	116.9
15	18 N-MeFOSAA	570.1 > 419	9.25e3	5.54e3	1.0000		5.45	5.32	20.9	12.719	127.2
16	19 N-EiFOSAA	584.2 > 419	6.27e3	5.85e3	1.0000		5.60	5.47	13.4	10.367	103.7
17	20 PFUDa	563.0 > 518.9	1.68e4	1.45e4	1.0000		5.62	5.49	14.4	11.421	114.2
18	21 PFDS	598.8 > 80	4.25e3	1.45e4	1.0000		5.67	5.53	3.65	10.812	108.1
19	22 PFD0A	612.9 > 569.0	1.65e4	1.04e4	1.0000		5.91	5.77	19.8	13.619	136.2
20	23 N-MeFOSA	512.1 > 168.9	9.60e3	2.38e4	1.0000		5.87	5.84	60.6	54.246	108.5
21	24 PFTrDA	662.9 > 618.9	2.08e4	1.04e4	1.0000		6.15	6.01	25.1	11.741	117.4
22	25 PFTeDA	712.9 > 668.8	1.53e4	5.64e3	1.0000		6.35	6.22	33.9	10.353	103.5
23	26 N-EiFOSA	526.1 > 168.9	1.30e4	3.45e4	1.0000		6.25	6.20	56.7	56.488	113.0
24	27 PFHxDA	813.1 > 768.6	6.51e3	3.41e3	1.0000		6.64	6.53	9.53	11.697	117.0
25	28 PFODA	913.1 > 868.8	7.22e3	3.41e3	1.0000		6.85	6.75	10.6	11.536	115.4
26	29 N-MeFOSE	616.1 > 58.9	1.38e4	3.32e4	1.0000		6.31	6.30	62.3	53.838	107.7
27	30 N-EiFOSE	630.1 > 58.9	1.67e4	3.42e4	1.0000		6.45	6.45	73.0	59.640	119.3
28	31 13C3-PFBA	216.1 > 171.8	1.21e4	1.55e4	1.0000	0.779	1.64	1.51	9.74	12.496	100.0
29	32 13C3-PFPeA	266. > 221.8	1.36e4	1.78e4	1.0000	0.797	2.60	2.47	9.56	11.993	95.9
30	33 13C3-PFBS	302. > 98.8	1.63e3	1.78e4	1.0000	0.095	2.87	2.74	1.15	12.066	96.5
31	34 13C2-PFHxA	315 > 269.8	4.24e3	1.78e4	1.0000	0.636	3.36	3.23	2.98	4.690	93.8

70-130

50-150

Dataset: U:\Q4.PRO\results\180115M2\180115M2-26.qld

Last Altered: Tuesday, January 16, 2018 10:44:16 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:44:51 Pacific Standard Time

Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHxA	367.2 > 321.8	1.05e4	1.78e4	1.0000	0.621	4.00	3.85	7.39	11.904	95.2
33	36 18O2-PFHxS	403.0 > 102.6	1.18e3	4.51e3	1.0000	0.336	4.14	4.00	3.27	9.742	77.9
34	37 13C2-6:2 FTS	429.1 > 408.9	3.09e3	1.33e4	1.0000	0.192	4.46	4.31	2.91	15.115	120.9
35	38 13C2-PFOA	414.9 > 369.7	1.46e4	1.33e4	1.0000	1.001	4.50	4.37	13.7	13.692	109.5
36	39 13C5-PFNA	468.2 > 422.9	1.18e4	1.40e4	1.0000	0.811	4.94	4.80	10.5	12.998	104.0
37	40 13C8-PFOSA	506.1 > 77.7	3.04e3	1.63e4	1.0000	0.196	5.00	4.86	2.32	11.824	94.6
38	41 13C8-PFOS	507.0 > 79.9	3.32e3	3.96e3	1.0000	0.862	5.02	4.87	10.5	12.188	97.5
39	42 13C2-PFDA	515.1 > 469.9	1.18e4	1.08e4	1.0000	0.996	5.31	5.17	13.6	13.690	109.5
40	43 13C2-8:2 FTS	529.1 > 508.7	1.70e3	1.78e4	1.0000	0.103	5.28	5.14	1.20	11.640	93.1
41	44 d3-N-MeFOSAA	573.3 > 419	5.54e3	1.63e4	1.0000	0.340	5.45	5.31	4.24	12.466	99.7
42	45 d5-N-ElFOSAA	589.3 > 419	5.85e3	1.63e4	1.0000	0.377	5.60	5.47	4.48	11.877	95.0
43	46 13C2-PFUDa	565 > 519.8	1.45e4	1.63e4	1.0000	0.944	5.62	5.49	11.1	11.780	94.2
44	47 13C2-PFDoA	615.0 > 569.7	1.04e4	1.63e4	1.0000	0.726	5.91	5.77	7.93	10.916	87.3
45	48 d3-N-MeFOSA	515.2 > 168.9	2.38e4	1.63e4	1.0000	0.119	5.87	5.86	18.2	152.924	101.9
46	49 13C2-PFTeDA	714.8 > 669.6	5.64e3	1.63e4	1.0000	0.371	6.35	6.22	4.31	11.607	92.9
47	50 d5-N-ETFOSA	531.1 > 168.9	3.45e4	1.63e4	1.0000	0.174	6.25	6.21	26.4	152.100	101.4
48	51 13C2-PFHxDA	815 > 769.7	3.41e3	1.63e4	1.0000	0.559	6.64	6.53	2.61	4.667	93.3
49	52 d7-N-MeFOSE	623.1 > 58.9	3.32e4	1.63e4	1.0000	0.179	6.31	6.29	25.4	141.415	94.3
50	53 d9-N-ElFOSE	639.2 > 58.8	3.42e4	1.63e4	1.0000	0.160	6.45	6.44	26.2	163.978	109.3
51	54 13C4-PFBA	217. > 171.8	1.55e4	1.55e4	1.0000	1.000	1.64	1.51	12.5	12.500	100.0
52	55 13C5-PFHxA	318 > 272.9	1.78e4	1.78e4	1.0000	1.000	3.36	3.24	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	4.51e3	4.51e3	1.0000	1.000	4.14	4.00	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.33e4	1.33e4	1.0000	1.000	4.50	4.36	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.40e4	1.40e4	1.0000	1.000	4.94	4.80	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	3.96e3	3.96e3	1.0000	1.000	5.02	4.87	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	1.08e4	1.08e4	1.0000	1.000	5.31	5.17	12.5	12.500	100.0
58	61 13C7-PFUDa	570.1 > 524.8	1.63e4	1.63e4	1.0000	1.000	5.62	5.49	12.5	12.500	100.0

50-150



Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 14:20:11 Pacific Standard Time

Printed: Tuesday, January 16, 2018 14:20:51 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 16 Jan 2018 13:43:12

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Compound name: PFBA

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1	180115M2_1	ST180115M2-1 PFC CS-2 17L2606	16-Jan-18	00:14:07
2	180115M2_2	ST180115M2-2 PFC CS-1 17L2607	16-Jan-18	00:25:32
3	180115M2_3	ST180115M2-3 PFC CS0 17L2608	16-Jan-18	00:37:02
4	180115M2_4	ST180115M2-4 PFC CS1 17L2609	16-Jan-18	00:48:46
5	180115M2_5	ST180115M2-5 PFC CS2 17L2610	16-Jan-18	01:00:17
6	180115M2_6	ST180115M2-6 PFC CS3 17L2611	16-Jan-18	01:11:44
7	180115M2_7	ST180115M2-7 PFC CS4 17L1208	16-Jan-18	01:23:11
8	180115M2_8	ST180115M2-8 PFC CS5 17L2613	16-Jan-18	01:34:38
9	180115M2_9	IPA	16-Jan-18	01:46:05
10	180115M2_10	ICV180115M2-1 PFC ICV 17L1201	16-Jan-18	01:57:31
11	180115M2_11	IPA	16-Jan-18	02:08:58
12	180115M2_12	1701851-03 FT-PZ-455S-20171202 0.2638	16-Jan-18	02:20:26
13	180115M2_13	1701851-04 FT-PZ-455I-20171202 0.25637	16-Jan-18	02:31:52
14	180115M2_14	1701851-05 FT-PZ-453S-20171202 0.23285	16-Jan-18	02:43:19
15	180115M2_15	1701851-06 FT-PZ-453S-FRB-20171202 0.26...	16-Jan-18	02:54:46
16	180115M2_16	1701851-07 FT-PZ-456I-FRB-20171204 0.2536	16-Jan-18	03:06:13
17	180115M2_17	1701851-08 FT-PZ-456I-20171204 0.26041	16-Jan-18	03:17:39
18	180115M2_18	1701851-09 FT-PZ-456S-20171204 0.25898	16-Jan-18	03:29:06
19	180115M2_19	1701944-01 GW-PT-CHIN-254.5-260.5 0.11993	16-Jan-18	03:40:33
20	180115M2_20	1701944-02 GW-PT-CHIN-71-77 0.11916	16-Jan-18	03:52:00
21	180115M2_21	1701944-03 GW-PT-CHIN-178-184 0.11889	16-Jan-18	04:03:27
22	180115M2_22	1701944-04 GW-PT-CHIN-108-114 0.12008	16-Jan-18	04:14:54
23	180115M2_23	1701944-05 GW-PT-CHIN-57-63 0.11948	16-Jan-18	04:26:21
24	180115M2_24	1701944-06 FB-PT-Diwater 0.11902	16-Jan-18	04:37:48
25	180115M2_25	IPA	16-Jan-18	04:49:15
26	180115M2_26	ST180115M2-9 PFC CS3 17L2611	16-Jan-18	05:00:41
27	180115M2_27	IPA	16-Jan-18	05:12:08
28	180115M2_28	1701944-07 GW-PT-CHIN-254.5-260.5-Dup 0...	16-Jan-18	05:23:43
29	180115M2_29	1701944-08 GW-PT-CHIN-116-122 0.11949	16-Jan-18	05:35:10
30	180115M2_30	1701944-09 EB-PT-Waterlevel 0.10468	16-Jan-18	05:46:37
31	180115M2_31	1701944-10 EB-PT-grundfos 0.11733	16-Jan-18	05:58:04

Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 14:20:11 Pacific Standard Time

Printed: Tuesday, January 16, 2018 14:20:51 Pacific Standard Time

Compound name: PFBA

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32	180115M2_32	1701944-11 GW-PT-CHIN-170-176 0.11561	16-Jan-18	06:09:30
33	180115M2_33	1701944-12 GW-PT-CHIN-271.5-277.5 0.11931	16-Jan-18	06:20:58
34	180115M2_34	1701944-13 EB-PT-Packers 0.11813	16-Jan-18	06:32:24
35	180115M2_35	B7L0120-BS1 OPR 0.25	16-Jan-18	06:43:51
36	180115M2_36	B7L0120-BSD1 LCSD 0.25	16-Jan-18	06:55:18
37	180115M2_37	IPA	16-Jan-18	07:06:45
38	180115M2_38	B7L0120-BLK1 Method Blank 0.25	16-Jan-18	07:18:12
39	180115M2_39	1701886-01 YS22-EB01-120417 0.11748	16-Jan-18	07:29:39
40	180115M2_40	1701886-02 YS22-AQ-120517 0.11801	16-Jan-18	07:41:05
41	180115M2_41	1701886-03 YS22-GW18-1217 0.11927	16-Jan-18	07:52:32
42	180115M2_42	IPA	16-Jan-18	08:04:00
43	180115M2_43	ST180115M2-10 PFC CS3 17L2611	16-Jan-18	08:15:26
44	180115M2_44	IPA	16-Jan-18	08:26:53
45	180115M2_45	B7L0183-BS1 OPR 0.25	16-Jan-18	08:38:20
46	180115M2_46	B7L0183-BSD1 LCSD 0.25	16-Jan-18	08:49:46
47	180115M2_47	B7L0183-BLK1 Method Blank 0.25	16-Jan-18	09:01:13
48	180115M2_48	1701953-01 CV-Dup09-20171213 0.2568	16-Jan-18	09:12:40
49	180115M2_49	1701953-02 SA-MW127S-20171213 0.23624	16-Jan-18	09:24:07
50	180115M2_50	1701953-03 SA-MW126S-20171213 0.24287	16-Jan-18	09:42:12
51	180115M2_51	1701953-04 SA-MW126I-20171213 0.24106	16-Jan-18	09:53:46
52	180115M2_52	1701953-05 SA-MW127S-FRB-20171213 0.2...	16-Jan-18	10:05:14
53	180115M2_53	1701953-06 SA-Dup10-20171213 0.25769	16-Jan-18	10:16:50
54	180115M2_54	1701953-07 SA-PZ123S-20171213 0.24245	16-Jan-18	10:28:24
55	180115M2_55	1701953-08 SA-PZ123I-20171213 0.25702	16-Jan-18	10:39:51
56	180115M2_56	1701953-09 SA-PZ123II-20171213 0.25747	16-Jan-18	10:51:18
57	180115M2_57	1701953-10 SA-PZ118S-20171213 0.23505	16-Jan-18	11:02:44
58	180115M2_58	1701953-11 SA-PZ118I-20171213 0.24112	16-Jan-18	11:14:11
59	180115M2_59	IPA	16-Jan-18	11:25:38
60	180115M2_60	ST180115M2-11 PFC CS0 17L2608	16-Jan-18	11:37:05
61	180115M2_61	IPA	16-Jan-18	11:48:32
62	180115M2_62	1701905-03RE1@40X WINF1712061655JLB ...	16-Jan-18	11:59:59
63	180115M2_63	1701852-01@20X IR03-MW034-C2-17D 0.26...	16-Jan-18	12:11:26
64	180115M2_64	1701852-02@20X IR03-MW018B-C1-17D 0.2...	16-Jan-18	12:22:53
65	180115M2_65	1701852-03@40X IR03-MW018A-C2-17D 0.2...	16-Jan-18	12:34:19

Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 14:20:11 Pacific Standard Time

Printed: Tuesday, January 16, 2018 14:20:51 Pacific Standard Time

Compound name: PFBA

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67	180115M2_67	IPA	16-Jan-18	12:57:13
68	180115M2_68	1701852-02 IR03-MW018B-C1-17D 0.25583	16-Jan-18	13:08:40
69	180115M2_69	IPA	16-Jan-18	13:20:07
70	180115M2_70	1701840-05 YS22-GW10-1217 0.11512	16-Jan-18	13:31:34
71	180115M2_71	IPA	16-Jan-18	13:43:01
72	180115M2_72	ST180115M2-12 PFC CS3 17L2611	16-Jan-18	13:54:28

Dataset: U:\Q4.PRO\results\180115M2\180115M2-26.qld

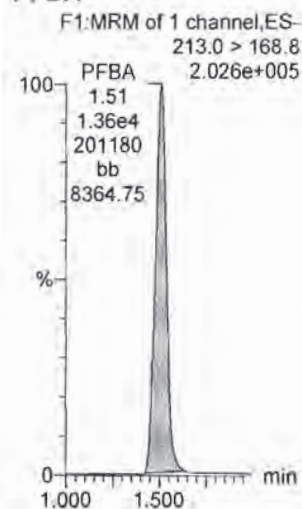
Last Altered: Tuesday, January 16, 2018 10:44:16 Pacific Standard Time
 Printed: Tuesday, January 16, 2018 10:44:51 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

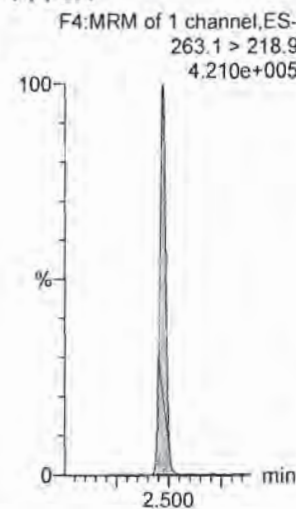
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Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

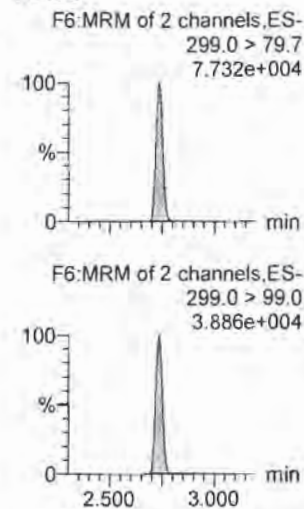
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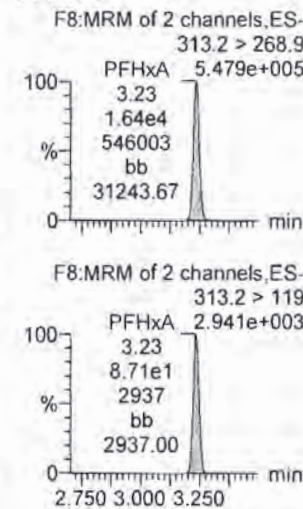
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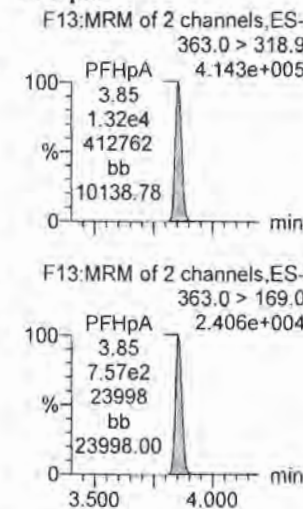
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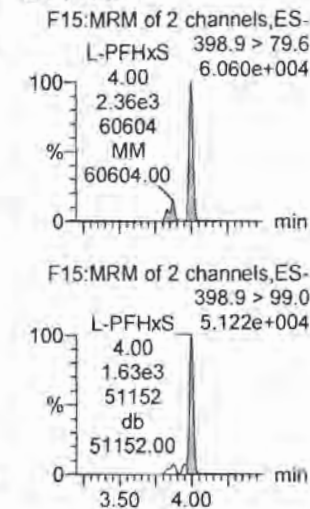
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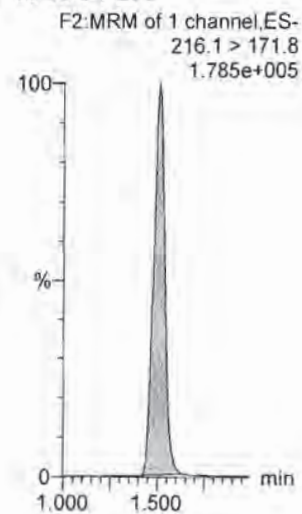
PFHpA



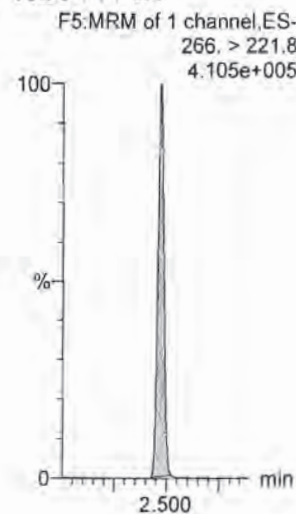
L-PFHxS



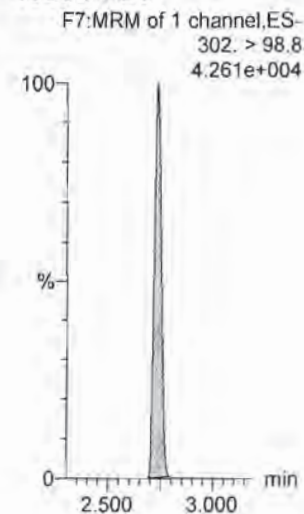
13C3-PFBA



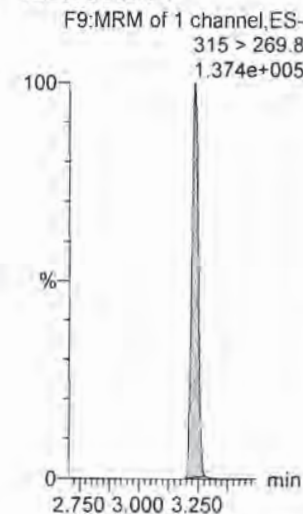
13C3-PFPeA



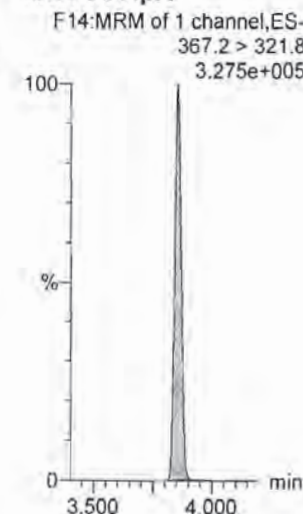
13C3-PFBS



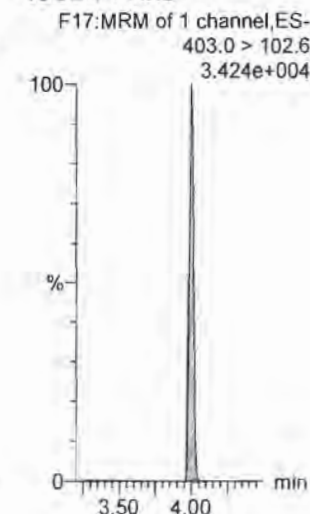
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



Dataset: U:\Q4.PRO\results\180115M2\180115M2-26.qld

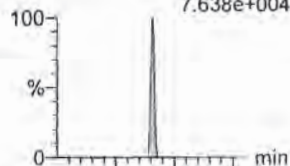
Last Altered: Tuesday, January 16, 2018 10:44:16 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:44:51 Pacific Standard Time

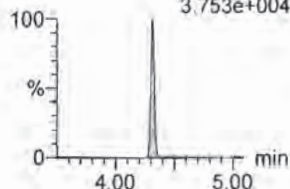
Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
7.638e+004

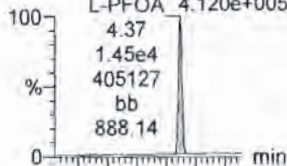


F21:MRM of 2 channels,ES-
427.1 > 80
3.753e+004

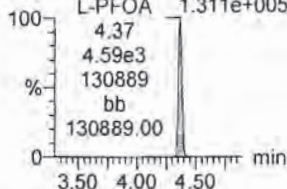


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
4.120e+005

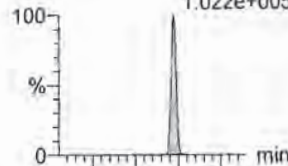


F18:MRM of 2 channels,ES-
413 > 169
1.311e+005

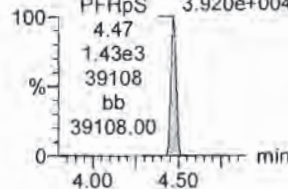


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
1.022e+005

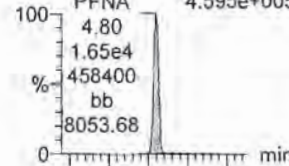


F23:MRM of 2 channels,ES-
449 > 98.7
3.920e+004

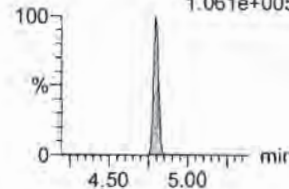


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
4.595e+005

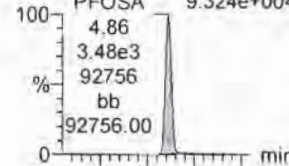


F24:MRM of 2 channels,ES-
463.0 > 219.0
1.061e+005

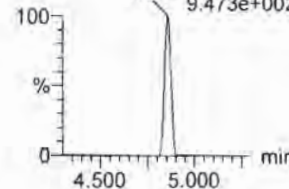


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
9.324e+004

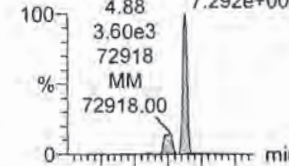


F27:MRM of 2 channels,ES-
498.1 > 478
9.473e+002

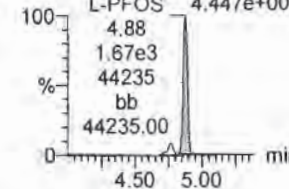


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
7.292e+004

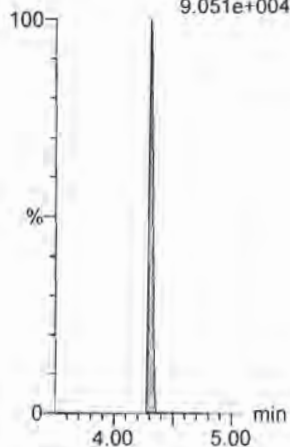


F29:MRM of 2 channels,ES-
499 > 99
4.447e+004



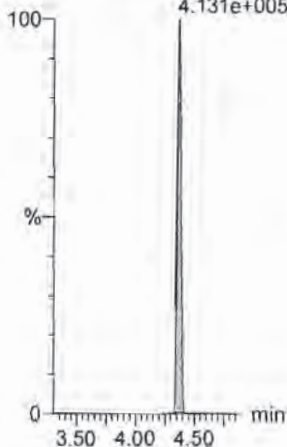
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
9.051e+004



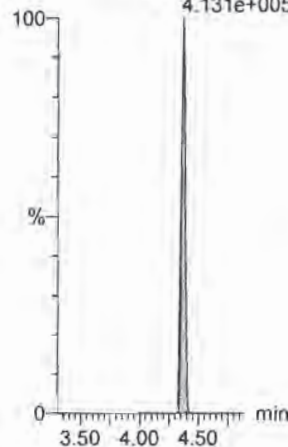
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
4.131e+005



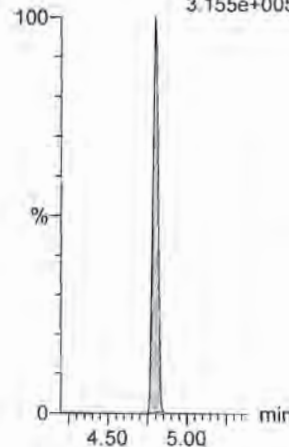
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
4.131e+005



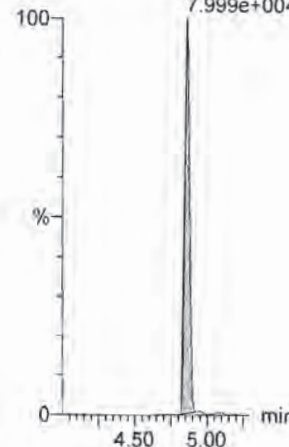
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
3.155e+005



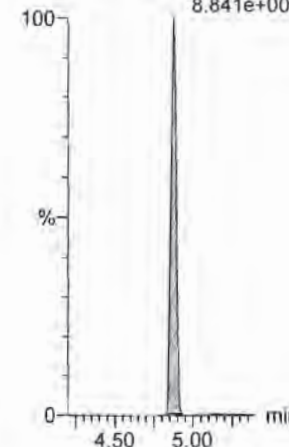
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
7.999e+004



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
8.841e+004



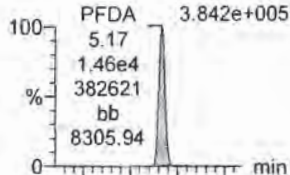
Dataset: U:\Q4.PRO\results\180115M2\180115M2-26.qld

Last Altered: Tuesday, January 16, 2018 10:44:16 Pacific Standard Time
 Printed: Tuesday, January 16, 2018 10:44:51 Pacific Standard Time

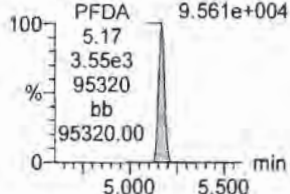
Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

PFDA

F34:MRM of 2 channels,ES-
 513 > 468.8
 3.842e+005

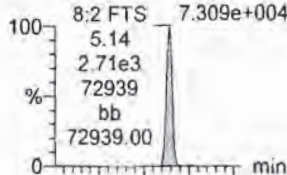


F34:MRM of 2 channels,ES-
 513 > 219
 9.561e+004

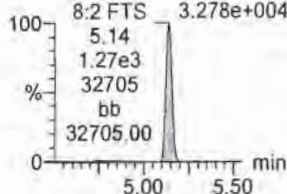


8:2 FTS

F39:MRM of 2 channels,ES-
 527 > 506.9
 7.309e+004

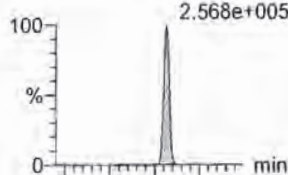


F39:MRM of 2 channels,ES-
 527 > 80
 3.278e+004

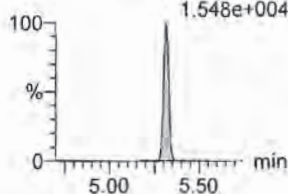


N-MeFOSAA

F44:MRM of 2 channels,ES-
 570.1 > 419
 2.568e+005

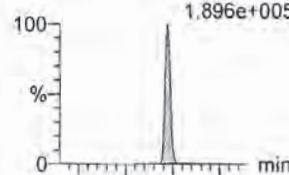


F44:MRM of 2 channels,ES-
 570.1 > 483.0
 1.548e+004

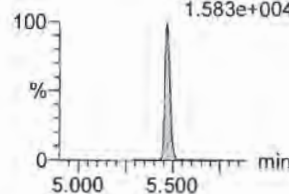


N-EtFOSAA

F47:MRM of 2 channels,ES-
 584.2 > 419
 1.896e+005

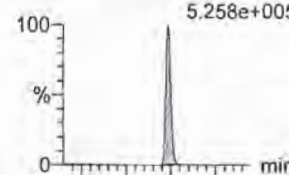


F47:MRM of 2 channels,ES-
 584.2 > 483.0
 1.583e+004

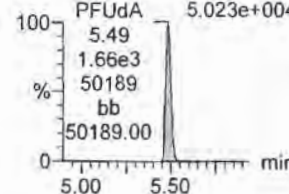


PFUdA

F42:MRM of 2 channels,ES-
 563.0 > 518.9
 5.258e+005

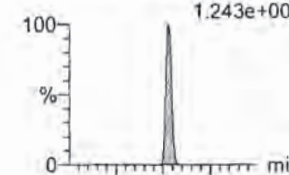


F42:MRM of 2 channels,ES-
 563.0 > 269
 5.023e+004

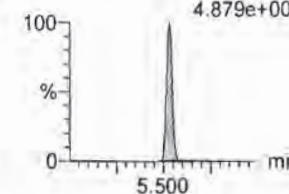


PFDS

F49:MRM of 2 channels,ES-
 598.8 > 80
 1.243e+005

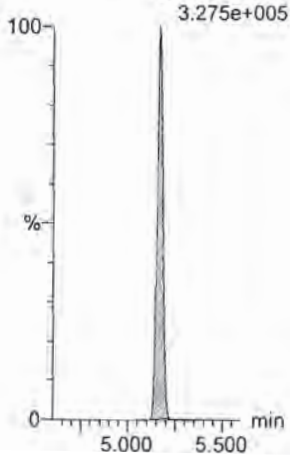


F49:MRM of 2 channels,ES-
 598.8 > 98.7
 4.879e+004



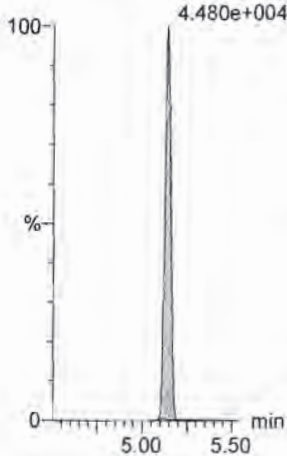
13C2-PFDA

F35:MRM of 1 channel,ES-
 515.1 > 469.9
 3.275e+005



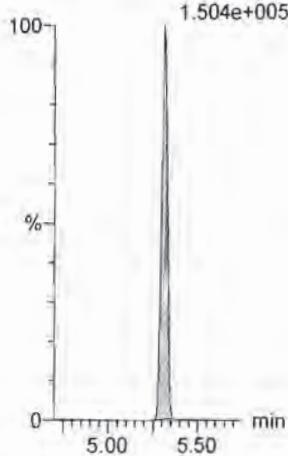
13C2-8:2 FTS

F40:MRM of 1 channel,ES-
 529.1 > 508.7
 4.480e+004



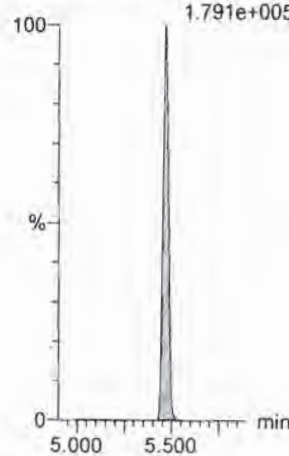
d3-N-MeFOSAA

F46:MRM of 1 channel,ES-
 573.3 > 419
 1.504e+005



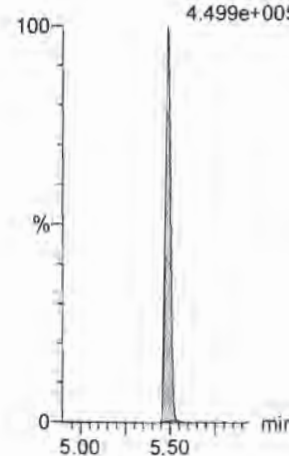
d5-N-EtFOSAA

F48:MRM of 1 channel,ES-
 589.3 > 419
 1.791e+005



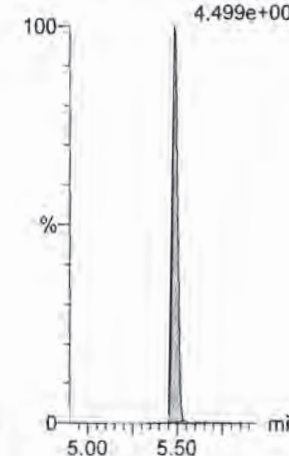
13C2-PFUdA

F43:MRM of 1 channel,ES-
 565 > 519.8
 4.499e+005



13C2-PFUdA

F43:MRM of 1 channel,ES-
 565 > 519.8
 4.499e+005



Dataset: U:\Q4.PRO\results\180115M2\180115M2-26.qld

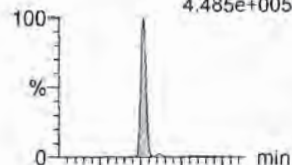
Last Altered: Tuesday, January 16, 2018 10:44:16 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:44:51 Pacific Standard Time

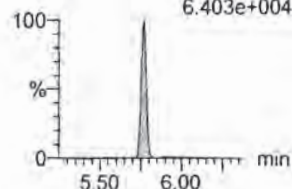
Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

PFDaA

F50:MRM of 2 channels,ES-
612.9 > 569.0
4.485e+005

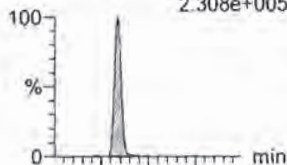


F50:MRM of 2 channels,ES-
612.9 > 318.8
6.403e+004

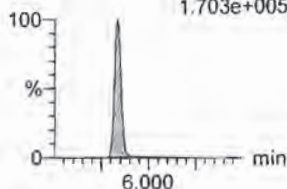


N-MeFOSA

F33:MRM of 2 channels,ES-
512.1 > 168.9
2.308e+005

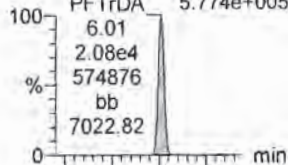


F33:MRM of 2 channels,ES-
512.1 > 219
1.703e+005

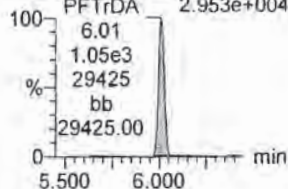


PFTTrDA

F56:MRM of 2 channels,ES-
662.9 > 618.9
5.774e+005

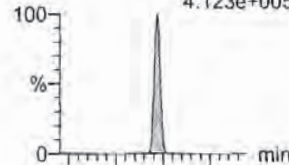


F56:MRM of 2 channels,ES-
662.9 > 319
2.953e+004

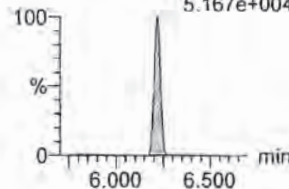


PFTeDA

F57:MRM of 2 channels,ES-
712.9 > 668.8
4.123e+005

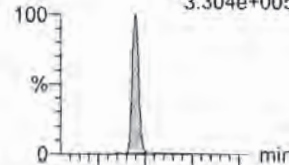


F57:MRM of 2 channels,ES-
712.9 > 369
5.167e+004

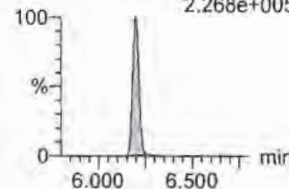


N-EtFOSA

F38:MRM of 2 channels,ES-
526.1 > 168.9
3.304e+005

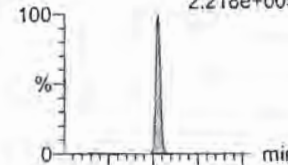


F38:MRM of 2 channels,ES-
526.1 > 219
2.268e+005

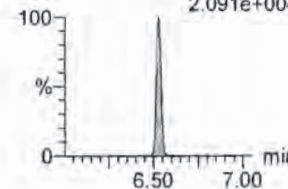


PFHxDA

F59:MRM of 2 channels,ES-
813.1 > 768.6
2.218e+005

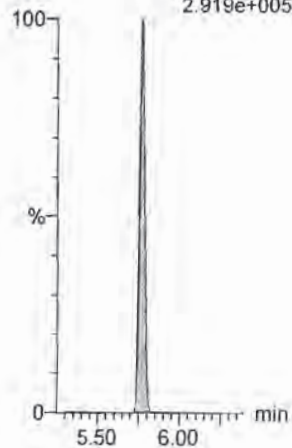


F59:MRM of 2 channels,ES-
813.1 > 219
2.091e+004



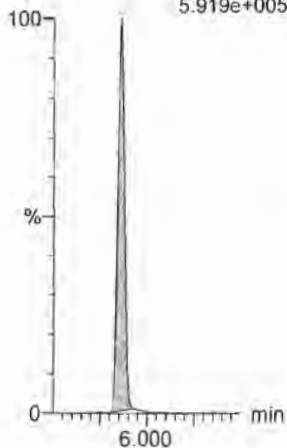
13C2-PFDaA

F51:MRM of 1 channel,ES-
615.0 > 569.7
2.919e+005



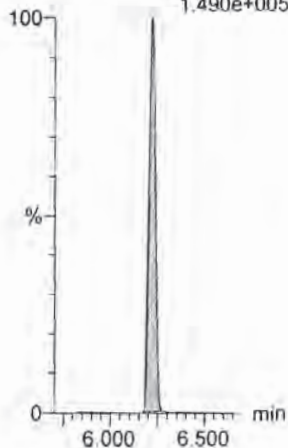
d3-N-MeFOSA

F36:MRM of 1 channel,ES-
515.2 > 168.9
5.919e+005



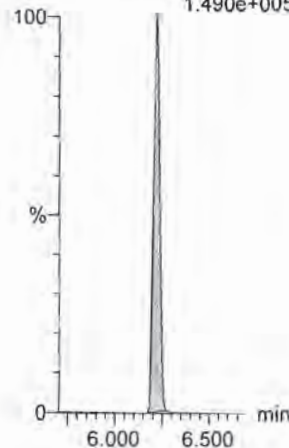
13C2-PFTeDA

F58:MRM of 2 channels,ES-
714.8 > 669.6
1.490e+005



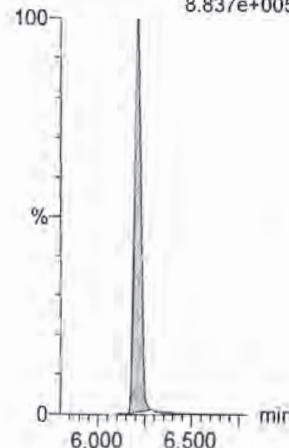
13C2-PFTeDA

F58:MRM of 2 channels,ES-
714.8 > 669.6
1.490e+005



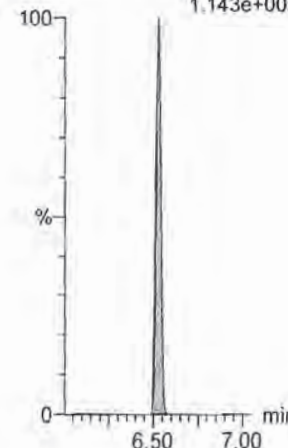
d5-N-ETFOSA

F41:MRM of 1 channel,ES-
531.1 > 168.9
8.837e+005



13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
1.143e+005



Dataset: U:\Q4.PRO\results\180115M2\180115M2-26.qld

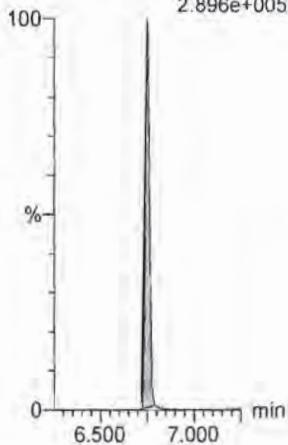
Last Altered: Tuesday, January 16, 2018 10:44:16 Pacific Standard Time

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Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

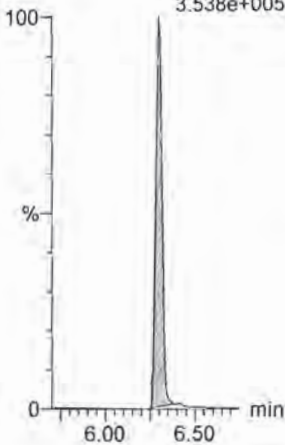
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
2.896e+005



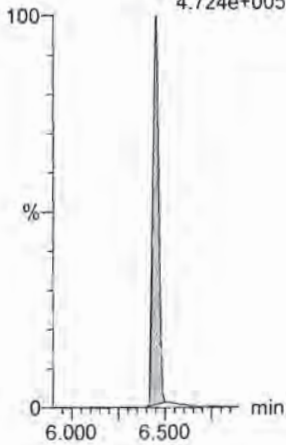
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
3.538e+005



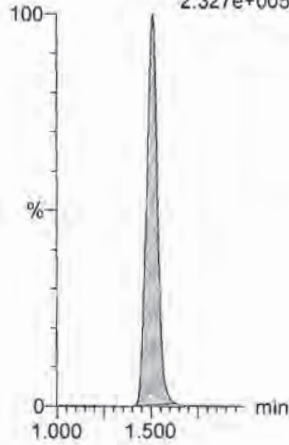
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
4.724e+005



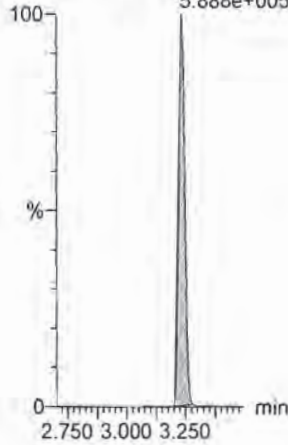
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
2.327e+005



13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
5.888e+005



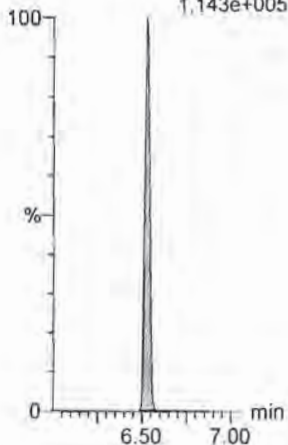
TCDA

F28:MRM of 3 channels,ES-
498.3 > 106.9
1.000e-003



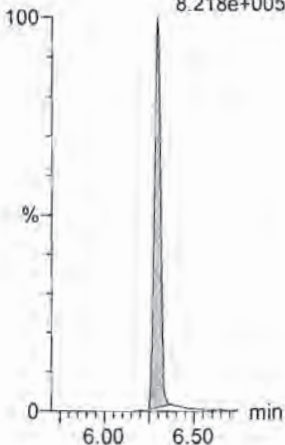
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
1.143e+005



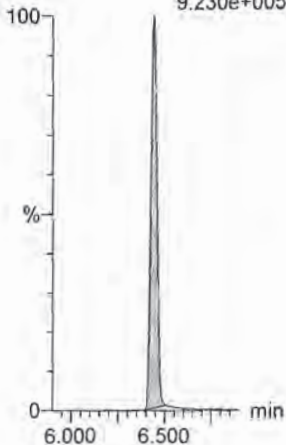
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
8.218e+005



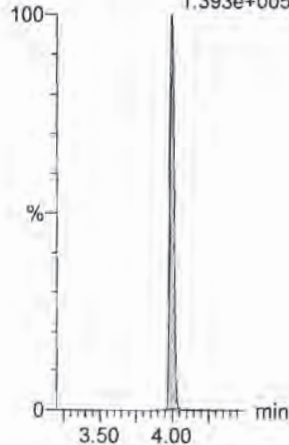
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
9.230e+005



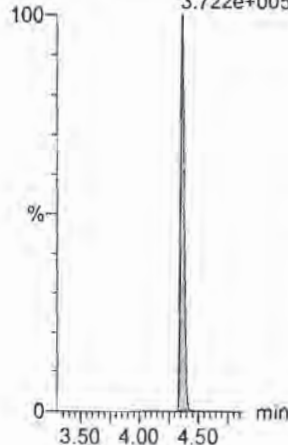
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
1.393e+005



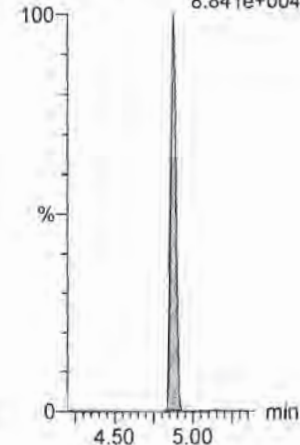
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.722e+005



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
8.841e+004



Dataset: U:\Q4.PRO\results\180115M2\180115M2-26.qld

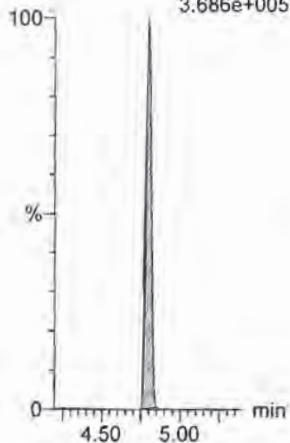
Last Altered: Tuesday, January 16, 2018 10:44:16 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:44:51 Pacific Standard Time

Name: 180115M2_26, Date: 16-Jan-2018, Time: 05:00:41, ID: ST180115M2-9 PFC CS3 17L2611, Description: PFC CS3 17L2611

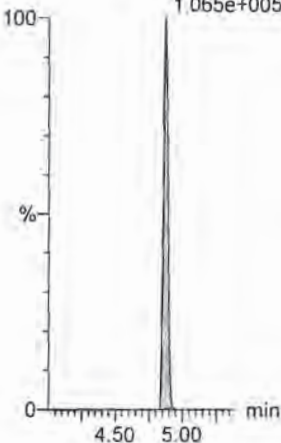
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
3.686e+005



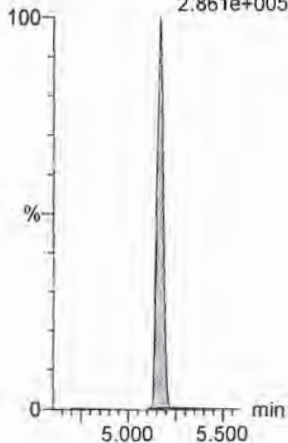
13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
1.065e+005



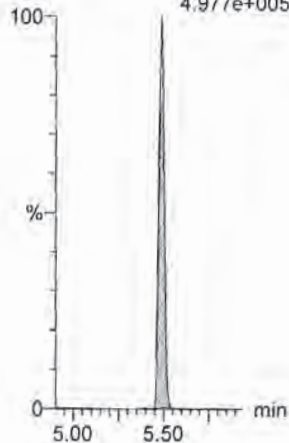
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.861e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
4.977e+005



INITIAL CALIBRATION (ICAL)
INCLUDING ASSOCIATED
INITIAL CALIBRATION VERIFICATION (ICV) AND INSTRUMENT BLANK (IB)

Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:26:56 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818.mdb 09 Jan 2018 10:39:49

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Compound name: PFBACorrelation coefficient: $r = 0.999526$, $r^2 = 0.999051$ Calibration curve: $1.47179 * x + -0.0484807$

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

CP 1/11/18
✓ JJA 01/11/2018

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	1.34	158.015	5445.118	0.363	0.3	11.8	NO	0.999	NO	MM
2	2 180110M3_3	Standard	0.500	1.34	298.382	5531.277	0.674	0.5	-1.8	NO	0.999	NO	MM
3	3 180110M3_4	Standard	1.000	1.34	656.323	6197.237	1.324	0.9	-6.8	NO	0.999	NO	bb
4	4 180110M3_5	Standard	2.000	1.34	1397.959	6682.359	2.615	1.8	-9.5	NO	0.999	NO	bb
5	5 180110M3_6	Standard	5.000	1.33	5018.948	8645.433	7.257	5.0	-0.7	NO	0.999	NO	bb
6	6 180110M3_7	Standard	10.000	1.34	8762.965	7475.106	14.654	10.0	-0.1	NO	0.999	NO	bb
7	7 180110M3_8	Standard	50.000	1.34	47496.918	8574.918	69.238	47.1	-5.8	NO	0.999	NO	bb
8	8 180110M3_9	Standard	100.000	1.34	92845.438	8087.149	143.508	97.5	-2.5	NO	0.999	NO	bb
9	9 180110M3_10	Standard	250.000	1.34	322793.250	10724.149	376.246	255.7	2.3	NO	0.999	NO	bb

Compound name: PFPeACorrelation coefficient: $r = 0.999692$, $r^2 = 0.999384$ Calibration curve: $1.26321 * x + -0.0617763$

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 180110M3_2	Standard	0.250	2.31	137.895	6191.314	0.278	0.3	7.7	NO	0.999	NO	bb
2	2 180110M3_3	Standard	0.500	2.32	294.900	6388.503	0.577	0.5	1.1	NO	0.999	NO	bb
3	3 180110M3_4	Standard	1.000	2.31	611.176	7240.874	1.055	0.9	-11.6	NO	0.999	NO	bb
4	4 180110M3_5	Standard	2.000	2.31	1403.153	7656.253	2.291	1.9	-6.9	NO	0.999	NO	bb
5	5 180110M3_6	Standard	5.000	2.31	5529.848	10067.521	6.866	5.5	9.7	NO	0.999	NO	bb
6	6 180110M3_7	Standard	10.000	2.32	9436.634	9432.145	12.506	9.9	-0.5	NO	0.999	NO	bb
7	7 180110M3_8	Standard	50.000	2.32	48777.508	9361.531	65.130	51.6	3.2	NO	0.999	NO	bb
8	8 180110M3_9	Standard	100.000	2.31	87627.469	8984.164	121.919	96.6	-3.4	NO	0.999	NO	bb
9	9 180110M3_10	Standard	250.000	2.32	298433.719	11738.701	317.788	251.6	0.6	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

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Compound name: PFBS

Coefficient of Determination: $R^2 = 0.999640$

Calibration curve: $0.00081362 * x^2 + 2.12043 * x + 0.00999409$

Response type: Internal Std (Ref 33), 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 180110M3_2	Standard	0.250	2.59	40.093	843.391	0.594	0.3	10.2	NO	1.000	NO	MM
2	2 180110M3_3	Standard	0.500	2.60	65.625	875.797	0.937	0.4	-12.6	NO	1.000	NO	MM
3	3 180110M3_4	Standard	1.000	2.60	157.137	894.616	2.196	1.0	3.0	NO	1.000	NO	bb
4	4 180110M3_5	Standard	2.000	2.60	324.442	1011.215	4.011	1.9	-5.7	NO	1.000	NO	bb
5	5 180110M3_6	Standard	5.000	2.59	1100.859	1232.651	11.164	5.2	5.0	NO	1.000	NO	bb
6	6 180110M3_7	Standard	10.000	2.60	2102.512	1207.154	21.771	10.2	2.2	NO	1.000	NO	bb
7	7 180110M3_8	Standard	50.000	2.59	10660.588	1285.018	103.701	48.0	-4.0	NO	1.000	NO	bb
8	8 180110M3_9	Standard	100.000	2.59	21287.502	1183.646	224.809	102.0	2.0	NO	1.000	NO	bb
9	9 180110M3_10	Standard	250.000	2.60	69073.766	1488.746	579.966	249.6	-0.2	NO	1.000	NO	bb

Compound name: PFHxA

Correlation coefficient: $r = 0.999048$, $r^2 = 0.998098$

Calibration curve: $1.9385 * x + -0.0246659$

Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	3.09	216.357	2081.847	0.520	0.3	12.3	NO	0.998	NO	bb
2	2 180110M3_3	Standard	0.500	3.09	311.359	2064.240	0.754	0.4	-19.6	NO	0.998	NO	bb
3	3 180110M3_4	Standard	1.000	3.09	809.112	2293.726	1.764	0.9	-7.7	NO	0.998	NO	bb
4	4 180110M3_5	Standard	2.000	3.09	1863.764	2353.448	3.960	2.1	2.8	NO	0.998	NO	bb
5	5 180110M3_6	Standard	5.000	3.09	6463.479	3551.324	9.100	4.7	-5.9	NO	0.998	NO	bb
6	6 180110M3_7	Standard	10.000	3.09	12226.492	2750.103	22.229	11.5	14.8	NO	0.998	NO	bb
7	7 180110M3_8	Standard	50.000	3.09	62812.871	3223.589	97.427	50.3	0.5	NO	0.998	NO	bb
8	8 180110M3_9	Standard	100.000	3.09	121751.227	2973.789	204.707	105.6	5.6	NO	0.998	NO	bb
9	9 180110M3_10	Standard	250.000	3.09	379602.906	4029.222	471.062	243.0	-2.8	NO	0.998	NO	bb

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Compound name: PFHpA

Correlation coefficient: $r = 0.999839$, $r^2 = 0.999677$

Calibration curve: $1.65421 * x + -0.120464$

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 180110M3_2	Standard	0.250	3.71	153.400	5439.776	0.352	0.3	14.4	NO	1.000	NO	bb
2	2 180110M3_3	Standard	0.500	3.71	280.672	5317.372	0.660	0.5	-5.7	NO	1.000	NO	bb
3	3 180110M3_4	Standard	1.000	3.71	717.935	6029.103	1.488	1.0	-2.7	NO	1.000	NO	bb
4	4 180110M3_5	Standard	2.000	3.71	1492.550	6373.487	2.927	1.8	-7.9	NO	1.000	NO	bb
5	5 180110M3_6	Standard	5.000	3.71	5516.071	8559.692	8.055	4.9	-1.2	NO	1.000	NO	bb
6	6 180110M3_7	Standard	10.000	3.71	9751.433	7383.596	16.509	10.1	0.5	NO	1.000	NO	bb
7	7 180110M3_8	Standard	50.000	3.71	51160.898	7430.805	86.062	52.1	4.2	NO	1.000	NO	bb
8	8 180110M3_9	Standard	100.000	3.70	97725.922	7501.529	162.843	98.5	-1.5	NO	1.000	NO	bb
9	9 180110M3_10	Standard	250.000	3.71	316358.625	9581.552	412.718	249.6	-0.2	NO	1.000	NO	bb

Compound name: L-PFHxS

Correlation coefficient: $r = 0.999101$, $r^2 = 0.998203$

Calibration curve: $2.11856 * x + -0.208942$

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	3.85	19.254	607.107	0.396	0.3	14.3	NO	0.998	NO	MM
2	2 180110M3_3	Standard	0.500	3.86	48.454	587.859	1.030	0.6	17.0	NO	0.998	NO	MM
3	3 180110M3_4	Standard	1.000	3.85	74.238	721.191	1.287	0.7	-29.4	NO	0.998	NO	MM
4	4 180110M3_5	Standard	2.000	3.85	208.085	841.432	3.091	1.6	-22.1	NO	0.998	NO	MM
5	5 180110M3_6	Standard	5.000	3.86	868.133	928.808	11.683	5.6	12.3	NO	0.998	NO	MM
6	6 180110M3_7	Standard	10.000	3.86	1509.147	837.404	22.527	10.7	7.3	NO	0.998	NO	MM
7	7 180110M3_8	Standard	50.000	3.85	7829.683	881.507	111.027	52.5	5.0	NO	0.998	NO	MM
8	8 180110M3_9	Standard	100.000	3.85	15222.428	947.682	200.785	94.9	-5.1	NO	0.998	NO	MM
9	9 180110M3_10	Standard	250.000	3.86	50756.664	1189.369	533.441	251.9	0.8	NO	0.998	NO	MM

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Compound name: 6:2 FTS

Coefficient of Determination: $R^2 = 0.995180$

Calibration curve: $0.0125368 * x^2 + 2.94435 * x + -0.110501$

Response type: Internal Std (Ref 36), 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 180110M3_2	Standard	0.250	4.17	27.306	607.107	0.562	0.2	-8.7	NO	0.995	NO	MM
2	2 180110M3_3	Standard	0.500	4.18	82.592	587.859	1.756	0.6	26.5	NO	0.995	NO	bb
3	3 180110M3_4	Standard	1.000	4.17	113.301	721.191	1.964	0.7	-29.8	NO	0.995	NO	bb
4	4 180110M3_5	Standard	2.000	4.17	318.644	841.432	4.734	1.6	-18.3	NO	0.995	NO	bb
5	5 180110M3_6	Standard	5.000	4.17	1331.516	928.808	17.920	6.0	19.4	NO	0.995	NO	bb
6	6 180110M3_7	Standard	10.000	4.17	1956.682	837.404	29.208	9.6	-4.3	NO	0.995	NO	bb
7	7 180110M3_8	Standard	50.000	4.17	12586.734	881.507	178.483	50.0	0.0	NO	0.995	NO	bb
8	8 180110M3_9	Standard	100.000	4.17	18243.367	947.682	240.631	64.2	-35.8	NO	0.995	NO	bbX
9	9 180110M3_10	Standard	250.000	4.17	67354.156	1189.369	707.877	147.6	-40.9	NO	0.995	NO	bbX

Compound name: L-PFOA

Coefficient of Determination: $R^2 = 0.998464$

Calibration curve: $-9.7055e-005 * x^2 + 1.26022 * x + 0.185633$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	4.23	298.790	6843.800	0.546	0.3	14.3	NO	0.998	NO	MM
2	2 180110M3_3	Standard	0.500	4.23	519.394	7076.908	0.917	0.6	16.1	NO	0.998	NO	MM
3	3 180110M3_4	Standard	1.000	4.22	859.486	9304.335	1.155	0.8	-23.1	NO	0.998	NO	bb
4	4 180110M3_5	Standard	2.000	4.23	1848.242	8455.973	2.732	2.0	1.1	NO	0.998	NO	db
5	5 180110M3_6	Standard	5.000	4.22	5524.569	11446.934	6.033	4.6	-7.2	NO	0.998	NO	bb
6	6 180110M3_7	Standard	10.000	4.23	10129.542	10524.176	12.031	9.4	-5.9	NO	0.998	NO	bb
7	7 180110M3_8	Standard	50.000	4.22	52634.219	9660.232	68.107	54.1	8.2	NO	0.998	NO	bb
8	8 180110M3_9	Standard	100.000	4.22	96777.461	10039.607	120.495	96.2	-3.8	NO	0.998	NO	bb
9	9 180110M3_10	Standard	250.000	4.22	349181.594	14076.219	310.081	250.7	0.3	NO	0.998	NO	bb

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Compound name: PFHpS

Coefficient of Determination: $R^2 = 0.999403$

Calibration curve: $0.00123665 * x^2 + 0.283611 * x + -0.0187761$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	4.34	40.899	6843.800	0.075	0.3	31.6	NO	0.999	NO	MMX
2	2 180110M3_3	Standard	0.500	4.33	68.354	7076.908	0.121	0.5	-1.8	NO	0.999	NO	bb
3	3 180110M3_4	Standard	1.000	4.33	197.523	9304.335	0.265	1.0	-0.2	NO	0.999	NO	bb
4	4 180110M3_5	Standard	2.000	4.33	365.727	8455.973	0.541	2.0	-2.2	NO	0.999	NO	bb
5	5 180110M3_6	Standard	5.000	4.33	1415.746	11446.934	1.546	5.4	7.8	NO	0.999	NO	bb
6	6 180110M3_7	Standard	10.000	4.34	2382.782	10524.176	2.830	9.6	-3.6	NO	0.999	NO	bb
7	7 180110M3_8	Standard	50.000	4.33	13342.360	9660.232	17.265	50.0	0.1	NO	0.999	NO	bb
8	8 180110M3_9	Standard	100.000	4.33	26513.092	10039.607	33.011	85.0	-15.0	NO	0.999	NO	bbX
9	9 180110M3_10	Standard	250.000	4.33	85610.664	14076.219	76.024	158.5	-36.6	NO	0.999	NO	bbX

Compound name: PFNA

Coefficient of Determination: $R^2 = 0.998092$

Calibration curve: $0.000693223 * x^2 + 1.40868 * x + 0.0082777$

Response type: Internal Std (Ref 39), 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 180110M3_2	Standard	0.250	4.66	214.934	6595.252	0.407	0.3	13.3	NO	0.998	NO	bb
2	2 180110M3_3	Standard	0.500	4.66	364.859	7834.280	0.582	0.4	-18.5	NO	0.998	NO	bb
3	3 180110M3_4	Standard	1.000	4.66	803.702	7113.500	1.412	1.0	-0.4	NO	0.998	NO	bb
4	4 180110M3_5	Standard	2.000	4.66	1676.318	7757.888	2.701	1.9	-4.5	NO	0.998	NO	bb
5	5 180110M3_6	Standard	5.000	4.66	5845.264	10243.467	7.133	5.0	0.9	NO	0.998	NO	bb
6	6 180110M3_7	Standard	10.000	4.66	10523.932	8076.588	16.288	11.5	14.9	NO	0.998	NO	bb
7	7 180110M3_8	Standard	50.000	4.66	56089.699	10747.179	65.238	45.3	-9.4	NO	0.998	NO	bb
8	8 180110M3_9	Standard	100.000	4.66	107733.680	8749.379	153.916	103.9	3.9	NO	0.998	NO	bb
9	9 180110M3_10	Standard	250.000	4.66	368969.406	11695.055	394.365	249.4	-0.3	NO	0.998	NO	bb

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Compound name: PFOSA

Correlation coefficient: $r = 0.999329$, $r^2 = 0.998658$

Calibration curve: $1.30775 * x + 0.0347805$

Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	4.72	50.514	1564.524	0.404	0.3	12.8	NO	0.999	NO	MM
2	2 180110M3_3	Standard	0.500	4.72	68.373	1375.187	0.621	0.4	-10.3	NO	0.999	NO	bb
3	3 180110M3_4	Standard	1.000	4.71	201.535	1766.893	1.426	1.1	6.4	NO	0.999	NO	bb
4	4 180110M3_5	Standard	2.000	4.72	360.366	1897.929	2.373	1.8	-10.6	NO	0.999	NO	bb
5	5 180110M3_6	Standard	5.000	4.72	1269.298	2478.382	6.402	4.9	-2.6	NO	0.999	NO	bb
6	6 180110M3_7	Standard	10.000	4.72	2319.396	2100.719	13.801	10.5	5.3	NO	0.999	NO	bb
7	7 180110M3_8	Standard	50.000	4.72	12512.175	2311.924	67.650	51.7	3.4	NO	0.999	NO	bb
8	8 180110M3_9	Standard	100.000	4.72	21843.365	2220.110	122.986	94.0	-6.0	NO	0.999	NO	bb
9	9 180110M3_10	Standard	250.000	4.72	79570.422	2993.427	332.271	254.1	1.6	NO	0.999	NO	bb

Compound name: L-PFOS

Coefficient of Determination: $R^2 = 0.997444$

Calibration curve: $-3.62431e-005 * x^2 + 1.17583 * x + 0.0311451$

Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	4.74	52.733	1618.655	0.407	0.3	27.9	NO	0.997	NO	MM
2	2 180110M3_3	Standard	0.500	4.75	80.186	1941.504	0.516	0.4	-17.5	NO	0.997	NO	MM
3	3 180110M3_4	Standard	1.000	4.74	227.959	1895.721	1.503	1.3	25.2	NO	0.997	NO	MM
4	4 180110M3_5	Standard	2.000	4.74	330.437	2275.169	1.815	1.5	-24.1	NO	0.997	NO	MM
5	5 180110M3_6	Standard	5.000	4.74	1373.176	3237.610	5.302	4.5	-10.3	NO	0.997	NO	MM
6	6 180110M3_7	Standard	10.000	4.75	2325.923	2589.350	11.228	9.5	-4.7	NO	0.997	NO	MM
7	7 180110M3_8	Standard	50.000	4.74	13028.005	2649.839	61.457	52.3	4.6	NO	0.997	NO	MM
8	8 180110M3_9	Standard	100.000	4.74	24612.139	2652.518	115.985	98.9	-1.1	NO	0.997	NO	MM
9	9 180110M3_10	Standard	250.000	4.74	94234.469	2938.436	400.870	344.6	37.8	NO	0.997	NO	MMX

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Compound name: PFDACoefficient of Determination: $R^2 = 0.999932$ Calibration curve: $0.00546964 * x^2 + 1.60165 * x - 0.235203$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	5.03	149.694	6621.417	0.283	0.3	29.2	NO	1.000	NO	bbX
2	2 180110M3_3	Standard	0.500	5.03	326.927	7011.031	0.583	0.5	2.0	NO	1.000	NO	bb
3	3 180110M3_4	Standard	1.000	5.03	882.103	7865.675	1.402	1.0	1.9	NO	1.000	NO	bb
4	4 180110M3_5	Standard	2.000	5.03	1805.777	7909.186	2.854	1.9	-4.2	NO	1.000	NO	bb
5	5 180110M3_6	Standard	5.000	5.03	5656.708	8990.281	7.865	5.0	-0.5	NO	1.000	NO	bb
6	6 180110M3_7	Standard	10.000	5.03	11071.540	8394.882	16.486	10.1	0.9	NO	1.000	NO	bb
7	7 180110M3_8	Standard	50.000	5.03	53691.906	7178.136	93.499	50.0	-0.0	NO	1.000	NO	bb
8	8 180110M3_9	Standard	100.000	5.03	106324.383	8067.630	164.739	80.7	-19.3	NO	1.000	NO	bbX
9	9 180110M3_10	Standard	250.000	5.03	334810.344	11784.516	355.138	147.5	-41.0	NO	1.000	NO	bbX

Compound name: 8:2 FTSCoefficient of Determination: $R^2 = 0.997732$ Calibration curve: $0.00123859 * x^2 + 0.307368 * x - 0.0309813$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	5.01	6.878	6621.417	0.013	0.1	-42.8	NO	0.998	NO	MMX
2	2 180110M3_3	Standard	0.500	5.00	69.176	7011.031	0.123	0.5	0.2	NO	0.998	NO	bb
3	3 180110M3_4	Standard	1.000	5.00	143.316	7865.675	0.228	0.8	-16.1	NO	0.998	NO	bb
4	4 180110M3_5	Standard	2.000	5.00	310.839	7909.186	0.491	1.7	-15.6	NO	0.998	NO	bb
5	5 180110M3_6	Standard	5.000	5.00	1255.848	8990.281	1.746	5.7	13.1	NO	0.998	NO	bb
6	6 180110M3_7	Standard	10.000	5.00	2087.793	8394.882	3.109	9.8	-1.7	NO	0.998	NO	bb
7	7 180110M3_8	Standard	50.000	5.00	10583.119	7178.136	18.429	50.0	-0.0	NO	0.998	NO	bb
8	8 180110M3_9	Standard	100.000	5.00	21826.646	8067.630	33.818	82.6	-17.4	NO	0.998	NO	bbX
9	9 180110M3_10	Standard	250.000	5.00	63576.629	11784.516	67.437	140.2	-43.9	NO	0.998	NO	bbX

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Compound name: N-MeFOSAA

Coefficient of Determination: $R^2 = 0.991446$

Calibration curve: $-0.00315911 * x^2 + 2.0555 * x - 0.320574$

Response type: Internal Std (Ref 44), 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 180110M3_2	Standard	0.250	5.18	36.415	2584.018	0.176	0.2	-3.3	NO	0.991	NO	MM
2	2 180110M3_3	Standard	0.500	5.18	80.226	2279.408	0.440	0.4	-26.0	NO	0.991	NO	bb
3	3 180110M3_4	Standard	1.000	5.18	378.250	2474.278	1.911	1.1	8.7	NO	0.991	NO	bb
4	4 180110M3_5	Standard	2.000	5.19	712.568	3010.187	2.959	1.6	-20.0	NO	0.991	NO	bb
5	5 180110M3_6	Standard	5.000	5.18	2686.279	4004.625	8.385	4.3	-14.7	NO	0.991	NO	bb
6	6 180110M3_7	Standard	10.000	5.18	4645.245	3453.088	16.816	8.4	-15.5	NO	0.991	NO	bb
7	7 180110M3_8	Standard	50.000	5.18	27682.430	3302.028	104.793	55.9	11.9	NO	0.991	NO	bb
8	8 180110M3_9	Standard	100.000	5.18	50942.434	3769.683	168.921	96.7	-3.3	NO	0.991	NO	bb
9	9 180110M3_10	Standard	250.000	5.18	168432.422	3847.682	547.188			NO	0.991	NO	bbXI

Compound name: N-EtFOSAA

Coefficient of Determination: $R^2 = 0.999097$

Calibration curve: $-0.000915461 * x^2 + 1.58258 * x - 0.401153$

Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	5.33	66.359	3050.200	0.272	0.4	70.2	NO	0.999	NO	bbX
2	2 180110M3_3	Standard	0.500	5.34	73.558	3056.172	0.301	0.4	-11.3	NO	0.999	NO	bb
3	3 180110M3_4	Standard	1.000	5.33	220.973	3257.867	0.848	0.8	-21.0	NO	0.999	NO	bb
4	4 180110M3_5	Standard	2.000	5.34	631.177	3281.707	2.404	1.8	-11.3	NO	0.999	NO	bb
5	5 180110M3_6	Standard	5.000	5.34	2480.533	4319.860	7.178	4.8	-4.0	NO	0.999	NO	bb
6	6 180110M3_7	Standard	10.000	5.34	4016.860	3499.391	14.348	9.4	-6.3	NO	0.999	NO	bb
7	7 180110M3_8	Standard	50.000	5.34	20914.289	3318.419	78.781	51.6	3.1	NO	0.999	NO	bb
8	8 180110M3_9	Standard	100.000	5.33	43324.688	3635.765	148.953	100.2	0.2	NO	0.999	NO	bb
9	9 180110M3_10	Standard	250.000	5.33	130110.156	4818.760	337.509	249.5	-0.2	NO	0.999	NO	bb

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Compound name: PFUdA

Coefficient of Determination: $R^2 = 0.997858$

Calibration curve: $-0.000355567 * x^2 + 1.33241 * x - 0.0949136$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	5.36	175.412	7775.131	0.282	0.3	13.2	NO	0.998	NO	bb
2	2 180110M3_3	Standard	0.500	5.35	241.658	5841.358	0.517	0.5	-8.1	NO	0.998	NO	MM
3	3 180110M3_4	Standard	1.000	5.35	652.062	6821.692	1.195	1.0	-3.2	NO	0.998	NO	MM
4	4 180110M3_5	Standard	2.000	5.35	1465.764	7907.348	2.317	1.8	-9.4	NO	0.998	NO	bb
5	5 180110M3_6	Standard	5.000	5.35	4824.436	9228.782	6.534	5.0	-0.4	NO	0.998	NO	bb
6	6 180110M3_7	Standard	10.000	5.35	11112.009	10040.164	13.834	10.5	4.8	NO	0.998	NO	bb
7	7 180110M3_8	Standard	50.000	5.35	54444.684	9539.813	71.339	54.4	8.8	NO	0.998	NO	bb
8	8 180110M3_9	Standard	100.000	5.35	92094.172	9474.396	121.504	93.6	-6.4	NO	0.998	NO	bb
9	9 180110M3_10	Standard	250.000	5.35	343973.500	13743.283	312.856	251.8	0.7	NO	0.998	NO	bb

Compound name: PFDS

Coefficient of Determination: $R^2 = 0.997344$

Calibration curve: $0.000962848 * x^2 + 0.363602 * x - 0.00209133$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	5.40	48.906	7775.131	0.079	0.2	-11.3	NO	0.997	NO	MM
2	2 180110M3_3	Standard	0.500	5.41	89.190	5841.358	0.191	0.5	6.0	NO	0.997	NO	bb
3	3 180110M3_4	Standard	1.000	5.40	200.620	6821.692	0.368	1.0	1.4	NO	0.997	NO	bb
4	4 180110M3_5	Standard	2.000	5.40	442.118	7907.348	0.699	1.9	-4.1	NO	0.997	NO	bb
5	5 180110M3_6	Standard	5.000	5.40	1573.748	9228.782	2.132	5.8	15.6	NO	0.997	NO	bb
6	6 180110M3_7	Standard	10.000	5.40	2755.989	10040.164	3.431	9.2	-7.8	NO	0.997	NO	bb
7	7 180110M3_8	Standard	50.000	5.40	15734.462	9539.813	20.617	50.1	0.1	NO	0.997	NO	bb
8	8 180110M3_9	Standard	100.000	5.40	26637.205	9474.396	35.144	79.8	-20.2	NO	0.997	NO	bbX
9	9 180110M3_10	Standard	250.000	5.40	84029.797	13743.283	76.428	150.3	-39.9	NO	0.997	NO	bbX

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Compound name: PFDoA

Coefficient of Determination: $R^2 = 0.998683$

Calibration curve: $0.00180407 * x^2 + 2.09493 * x + 0.150658$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	5.64	187.793	4189.487	0.560	0.2	-21.8	NO	0.999	NO	MM
2	2 180110M3_3	Standard	0.500	5.64	395.079	3969.021	1.244	0.5	4.4	NO	0.999	NO	bd
3	3 180110M3_4	Standard	1.000	5.64	711.553	4869.713	1.826	0.8	-20.1	NO	0.999	NO	bd
4	4 180110M3_5	Standard	2.000	5.64	1599.483	4575.956	4.369	2.0	0.5	NO	0.999	NO	bd
5	5 180110M3_6	Standard	5.000	5.63	7052.525	6385.208	13.806	6.5	29.6	NO	0.999	NO	bb
6	6 180110M3_7	Standard	10.000	5.64	10897.177	5791.910	23.518	11.0	10.5	NO	0.999	NO	bb
7	7 180110M3_8	Standard	50.000	5.63	62116.109	7164.268	108.378	49.5	-0.9	NO	0.999	NO	bb
8	8 180110M3_9	Standard	100.000	5.64	105146.766	5943.687	221.131	97.3	-2.7	NO	0.999	NO	bb
9	9 180110M3_10	Standard	250.000	5.63	373600.125	7304.709	639.314	250.9	0.4	NO	0.999	NO	bb

Compound name: N-MeFOSA

Correlation coefficient: $r = 0.999537$, $r^2 = 0.999075$

Calibration curve: $1.10666 * x + -0.170034$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	1.250	5.71	74.505	10743.257	1.040	1.1	-12.5	NO	0.999	NO	bb
2	2 180110M3_3	Standard	2.500	5.71	176.977	9835.262	2.699	2.6	3.7	NO	0.999	NO	bb
3	3 180110M3_4	Standard	5.000	5.71	344.751	12097.896	4.275	4.0	-19.7	NO	0.999	NO	bb
4	4 180110M3_5	Standard	10.000	5.71	911.162	12431.512	10.994	10.1	0.9	NO	0.999	NO	bb
5	5 180110M3_6	Standard	25.000	5.71	3012.821	16115.154	28.043	25.5	2.0	NO	0.999	NO	bb
6	6 180110M3_7	Standard	50.000	5.71	5797.346	14402.728	60.378	54.7	9.4	NO	0.999	NO	bb
7	7 180110M3_8	Standard	250.000	5.71	29412.832	15466.819	285.251	257.9	3.2	NO	0.999	NO	bb
8	8 180110M3_9	Standard	500.000	5.71	54924.184	14480.274	568.955	514.3	2.9	NO	0.999	NO	bb
9	9 180110M3_10	Standard	1250.000	5.71	171069.844	18952.975	1353.902	1223.6	-2.1	NO	0.999	NO	bb

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Compound name: PFTrDACoefficient of Determination: $R^2 = 0.999460$ Calibration curve: $0.000122781 * x^2 + 2.39065 * x + 0.000840038$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	5.88	174.970	4189.487	0.522	0.2	-12.8	NO	0.999	NO	bb
2	2 180110M3_3	Standard	0.500	5.88	376.310	3969.021	1.185	0.5	-0.9	NO	0.999	NO	bb
3	3 180110M3_4	Standard	1.000	5.88	950.586	4869.713	2.440	1.0	2.0	NO	0.999	NO	bb
4	4 180110M3_5	Standard	2.000	5.89	1891.809	4575.956	5.168	2.2	8.1	NO	0.999	NO	bb
5	5 180110M3_6	Standard	5.000	5.88	5659.594	6385.208	11.080	4.6	-7.3	NO	0.999	NO	bb
6	6 180110M3_7	Standard	10.000	5.89	12450.600	5791.910	26.871	11.2	12.3	NO	0.999	NO	bb
7	7 180110M3_8	Standard	50.000	5.88	68696.688	7164.268	119.860	50.0	0.0	NO	0.999	NO	bb
8	8 180110M3_9	Standard	100.000	5.88	112410.352	5943.687	236.407	98.4	-1.6	NO	0.999	NO	bb
9	9 180110M3_10	Standard	250.000	5.88	354589.906	7304.709	606.783	250.6	0.2	NO	0.999	NO	bb

Compound name: PFTeDACoefficient of Determination: $R^2 = 0.999533$ Calibration curve: $0.00349062 * x^2 + 2.93229 * x + -0.154941$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	6.09	124.998	1955.129	0.799	0.3	30.1	NO	1.000	NO	bbX
2	2 180110M3_3	Standard	0.500	6.10	236.010	1829.135	1.613	0.6	20.5	NO	1.000	NO	bb
3	3 180110M3_4	Standard	1.000	6.10	405.845	2327.717	2.179	0.8	-20.5	NO	1.000	NO	bb
4	4 180110M3_5	Standard	2.000	6.09	1041.416	2174.831	5.986	2.1	4.4	NO	1.000	NO	bb
5	5 180110M3_6	Standard	5.000	6.10	3533.474	3158.222	13.985	4.8	-4.1	NO	1.000	NO	bb
6	6 180110M3_7	Standard	10.000	6.10	6573.327	2821.178	29.125	9.9	-1.3	NO	1.000	NO	bb
7	7 180110M3_8	Standard	50.000	6.09	36266.531	2885.126	157.127	50.6	1.2	NO	1.000	NO	bb
8	8 180110M3_9	Standard	100.000	6.10	68578.852	2620.882	327.079	99.8	-0.2	NO	1.000	NO	db
9	9 180110M3_10	Standard	250.000	6.10	176036.891	3871.496	568.375	162.5	-35.0	NO	1.000	NO	dbX

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Compound name: N-EtFOSA

Coefficient of Determination: $R^2 = 0.999897$

Calibration curve: $-3.00904e-005 * x^2 + 1.02444 * x + -0.199244$

Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	1.250	6.10	131.383	16238.895	1.214	1.4	10.3	NO	1.000	NO	bb
2	2 180110M3_3	Standard	2.500	6.11	254.736	15620.249	2.446	2.6	3.3	NO	1.000	NO	bb
3	3 180110M3_4	Standard	5.000	6.10	520.024	17774.992	4.388	4.5	-10.4	NO	1.000	NO	bb
4	4 180110M3_5	Standard	10.000	6.10	1156.534	18942.303	9.158	9.1	-8.6	NO	1.000	NO	bb
5	5 180110M3_6	Standard	25.000	6.10	4408.425	24990.723	26.460	26.0	4.2	NO	1.000	NO	bb
6	6 180110M3_7	Standard	50.000	6.10	7411.040	21510.641	51.679	50.7	1.4	NO	1.000	NO	bb
7	7 180110M3_8	Standard	250.000	6.10	37406.688	22103.201	253.855	249.8	-0.1	NO	1.000	NO	bb
8	8 180110M3_9	Standard	500.000	6.10	71470.891	21279.357	503.804	499.3	-0.1	NO	1.000	NO	bb
9	9 180110M3_10	Standard	1250.000	6.10	207247.922	25200.256	1233.606	1250.3	0.0	NO	1.000	NO	bb

Compound name: PFHxDA

Coefficient of Determination: $R^2 = 0.997686$

Calibration curve: $-0.00114258 * x^2 + 0.984182 * x + 0.0683094$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	6.43	89.534	1428.470	0.313	0.2	-0.4	NO	0.998	NO	MM
2	2 180110M3_3	Standard	0.500	6.43	149.353	1602.730	0.466	0.4	-19.2	NO	0.998	NO	MM
3	3 180110M3_4	Standard	1.000	6.43	383.028	1624.887	1.179	1.1	13.0	NO	0.998	NO	bb
4	4 180110M3_5	Standard	2.000	6.43	604.669	1502.644	2.012	2.0	-1.0	NO	0.998	NO	bb
5	5 180110M3_6	Standard	5.000	6.43	2370.623	2226.881	5.323	5.4	7.4	NO	0.998	NO	bb
6	6 180110M3_7	Standard	10.000	6.43	3907.469	2045.703	9.550	9.7	-2.6	NO	0.998	NO	bb
7	7 180110M3_8	Standard	50.000	6.43	22137.709	2213.677	50.002	54.1	8.3	NO	0.998	NO	bb
8	8 180110M3_9	Standard	100.000	6.43	40541.285	2470.003	82.067	93.5	-6.5	NO	0.998	NO	bb
9	9 180110M3_10	Standard	250.000	6.43	106609.336	3028.907	175.986	253.1	1.3	NO	0.998	NO	bb

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Compound name: PFODA

Coefficient of Determination: $R^2 = 0.997999$

Calibration curve: $-0.00347318 * x^2 + 1.33796 * x + -0.219409$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	0.250	6.66	89.732	1428.470	0.314	0.4	59.7	NO	0.998	NO	bbX
2	2 180110M3_3	Standard	0.500	6.66	134.672	1602.730	0.420	0.5	-4.3	NO	0.998	NO	bb
3	3 180110M3_4	Standard	1.000	6.66	288.807	1624.887	0.889	0.8	-17.0	NO	0.998	NO	bb
4	4 180110M3_5	Standard	2.000	6.66	713.056	1502.644	2.373	1.9	-2.6	NO	0.998	NO	bb
5	5 180110M3_6	Standard	5.000	6.66	2483.912	2226.881	5.577	4.4	-12.4	NO	0.998	NO	bb
6	6 180110M3_7	Standard	10.000	6.66	5287.183	2045.703	12.923	10.1	0.9	NO	0.998	NO	bb
7	7 180110M3_8	Standard	50.000	6.66	26551.906	2213.677	59.972	52.0	4.0	NO	0.998	NO	bb
8	8 180110M3_9	Standard	100.000	6.66	48357.449	2470.003	97.889	98.5	-1.5	NO	0.998	NO	bb
9	9 180110M3_10	Standard	250.000	6.66	71018.602	3028.907	117.235	135.3	-45.9	NO	0.998	NO	bbX

Compound name: N-MeFOSE

Correlation coefficient: $r = 0.998982$, $r^2 = 0.997965$

Calibration curve: $1.173 * x + -0.745383$

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	1.250	6.24	132.978	18600.686	1.072	1.5	24.0	NO	0.998	NO	bb
2	2 180110M3_3	Standard	2.500	6.26	224.899	14371.076	2.347	2.6	5.5	NO	0.998	NO	bb
3	3 180110M3_4	Standard	5.000	6.25	520.318	17457.375	4.471	4.4	-11.1	NO	0.998	NO	bb
4	4 180110M3_5	Standard	10.000	6.25	1056.121	18372.555	8.623	8.0	-20.1	NO	0.998	NO	bb
5	5 180110M3_6	Standard	25.000	6.25	4167.101	23253.285	26.881	23.6	-5.8	NO	0.998	NO	bb
6	6 180110M3_7	Standard	50.000	6.25	7847.585	18111.193	64.995	56.0	12.1	NO	0.998	NO	bb
7	7 180110M3_8	Standard	250.000	6.25	44727.859	23087.781	290.594	248.4	-0.7	NO	0.998	NO	bb
8	8 180110M3_9	Standard	500.000	6.25	74536.172	20386.021	548.436	468.2	-6.4	NO	0.998	NO	bb
9	9 180110M3_10	Standard	1250.000	6.25	281086.719	28074.316	1501.836	1281.0	2.5	NO	0.998	NO	bd

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Compound name: N-EtFOSE

Correlation coefficient: $r = 0.999540$, $r^2 = 0.999080$

Calibration curve: $1.40177 * x + -0.207477$

Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	1.250	6.40	179.573	16885.416	1.595	1.3	2.9	NO	0.999	NO	bb
2	2 180110M3_3	Standard	2.500	6.41	310.656	13110.849	3.554	2.7	7.3	NO	0.999	NO	bb
3	3 180110M3_4	Standard	5.000	6.40	739.963	16446.465	6.749	5.0	-0.7	NO	0.999	NO	bb
4	4 180110M3_5	Standard	10.000	6.41	1344.736	16689.393	12.086	8.8	-12.3	NO	0.999	NO	bb
5	5 180110M3_6	Standard	25.000	6.41	5119.930	22391.037	34.299	24.6	-1.5	NO	0.999	NO	bb
6	6 180110M3_7	Standard	50.000	6.41	9741.974	19962.660	73.201	52.4	4.7	NO	0.999	NO	bb
7	7 180110M3_8	Standard	250.000	6.40	52164.645	22425.359	348.922	249.1	-0.4	NO	0.999	NO	bd
8	8 180110M3_9	Standard	500.000	6.40	98149.102	16106.103	914.086	652.2	30.4	NO	0.999	NO	bbX
9	9 180110M3_10	Standard	1250.000	6.40	346314.875	28984.094	1792.267	1278.7	2.3	NO	0.999	NO	bbX

Compound name: 13C3-PFBA

Response Factor: 0.763512

RRF SD: 0.0350184, Relative SD: 4.58648

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	1.33	5445.118	7508.845	9.065	11.9	-5.0	NO		NO	bb
2	2 180110M3_3	Standard	12.500	1.34	5531.277	7057.356	9.797	12.8	2.7	NO		NO	bd
3	3 180110M3_4	Standard	12.500	1.34	6197.237	8001.987	9.681	12.7	1.4	NO		NO	bb
4	4 180110M3_5	Standard	12.500	1.34	6682.359	8507.537	9.818	12.9	2.9	NO		NO	bb
5	5 180110M3_6	Standard	12.500	1.33	8645.433	11925.119	9.062	11.9	-5.0	NO		NO	bb
6	6 180110M3_7	Standard	12.500	1.34	7475.106	10276.120	9.093	11.9	-4.7	NO		NO	bb
7	7 180110M3_8	Standard	12.500	1.33	8574.918	10906.643	9.828	12.9	3.0	NO		NO	bb
8	8 180110M3_9	Standard	12.500	1.34	8087.149	9827.420	10.286	13.5	7.8	NO		NO	bb
9	9 180110M3_10	Standard	12.500	1.34	10724.149	14467.951	9.265	12.1	-2.9	NO		NO	bb

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Compound name: 13C3-PFPeA

Response Factor: 0.730064

RRF SD: 0.0283912, Relative SD: 3.88886

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	2.31	6191.314	8819.409	8.775	12.0	-3.8	NO		NO	bb
2	2 180110M3_3	Standard	12.500	2.32	6388.503	8657.168	9.224	12.6	1.1	NO		NO	bb
3	3 180110M3_4	Standard	12.500	2.31	7240.874	10153.727	8.914	12.2	-2.3	NO		NO	bb
4	4 180110M3_5	Standard	12.500	2.31	7656.253	10362.211	9.236	12.7	1.2	NO		NO	bb
5	5 180110M3_6	Standard	12.500	2.31	10067.521	14579.612	8.632	11.8	-5.4	NO		NO	bb
6	6 180110M3_7	Standard	12.500	2.32	9432.145	12281.571	9.600	13.1	5.2	NO		NO	bb
7	7 180110M3_8	Standard	12.500	2.31	9361.531	12975.809	9.018	12.4	-1.2	NO		NO	bb
8	8 180110M3_9	Standard	12.500	2.31	8984.164	11578.389	9.699	13.3	6.3	NO		NO	bb
9	9 180110M3_10	Standard	12.500	2.32	11738.701	16242.380	9.034	12.4	-1.0	NO		NO	bb

Compound name: 13C3-PFBS

Response Factor: 0.0953602

RRF SD: 0.0060334, Relative SD: 6.32696

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	2.59	843.391	8819.409	1.195	12.5	0.3	NO		NO	bb
2	2 180110M3_3	Standard	12.500	2.60	875.797	8657.168	1.265	13.3	6.1	NO		NO	bb
3	3 180110M3_4	Standard	12.500	2.59	894.616	10153.727	1.101	11.5	-7.6	NO		NO	bb
4	4 180110M3_5	Standard	12.500	2.59	1011.215	10362.211	1.220	12.8	2.3	NO		NO	bb
5	5 180110M3_6	Standard	12.500	2.59	1232.651	14579.612	1.057	11.1	-11.3	NO		NO	bb
6	6 180110M3_7	Standard	12.500	2.60	1207.154	12281.571	1.229	12.9	3.1	NO		NO	bb
7	7 180110M3_8	Standard	12.500	2.59	1285.018	12975.809	1.238	13.0	3.9	NO		NO	bb
8	8 180110M3_9	Standard	12.500	2.59	1183.646	11578.389	1.278	13.4	7.2	NO		NO	bb
9	9 180110M3_10	Standard	12.500	2.60	1488.746	16242.380	1.146	12.0	-3.9	NO		NO	bb

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Compound name: 13C2-PFHxA

Response Factor: 0.596765

RRF SD: 0.0287608, Relative SD: 4.81945

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	5.000	3.08	2081.847	8819.409	2.951	4.9	-1.1	NO		NO	bb
2	2 180110M3_3	Standard	5.000	3.09	2064.240	8657.168	2.981	5.0	-0.1	NO		NO	bb
3	3 180110M3_4	Standard	5.000	3.08	2293.726	10153.727	2.824	4.7	-5.4	NO		NO	bb
4	4 180110M3_5	Standard	5.000	3.09	2353.448	10362.211	2.839	4.8	-4.9	NO		NO	bb
5	5 180110M3_6	Standard	5.000	3.09	3551.324	14579.612	3.045	5.1	2.0	NO		NO	bb
6	6 180110M3_7	Standard	5.000	3.09	2750.103	12281.571	2.799	4.7	-6.2	NO		NO	bb
7	7 180110M3_8	Standard	5.000	3.09	3223.589	12975.809	3.105	5.2	4.1	NO		NO	bb
8	8 180110M3_9	Standard	5.000	3.09	2973.789	11578.389	3.210	5.4	7.6	NO		NO	bb
9	9 180110M3_10	Standard	5.000	3.09	4029.222	16242.380	3.101	5.2	3.9	NO		NO	bb

Compound name: 13C4-PFHpA

Response Factor: 0.604292

RRF SD: 0.0220638, Relative SD: 3.65118

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	3.70	5439.776	8819.409	7.710	12.8	2.1	NO		NO	bb
2	2 180110M3_3	Standard	12.500	3.71	5317.372	8657.168	7.678	12.7	1.6	NO		NO	bb
3	3 180110M3_4	Standard	12.500	3.70	6029.103	10153.727	7.422	12.3	-1.7	NO		NO	bb
4	4 180110M3_5	Standard	12.500	3.71	6373.487	10362.211	7.688	12.7	1.8	NO		NO	bb
5	5 180110M3_6	Standard	12.500	3.70	8559.692	14579.612	7.339	12.1	-2.8	NO		NO	bb
6	6 180110M3_7	Standard	12.500	3.71	7383.596	12281.571	7.515	12.4	-0.5	NO		NO	bb
7	7 180110M3_8	Standard	12.500	3.71	7430.805	12975.809	7.158	11.8	-5.2	NO		NO	bb
8	8 180110M3_9	Standard	12.500	3.70	7501.529	11578.389	8.099	13.4	7.2	NO		NO	bb
9	9 180110M3_10	Standard	12.500	3.71	9581.552	16242.380	7.374	12.2	-2.4	NO		NO	bb

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Printed: Thursday, January 11, 2018 14:26:56 Pacific Standard Time

Compound name: 18O2-PFHxS

Response Factor: 0.293143

RRF SD: 0.02198, Relative SD: 7.49804

Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	3.85	607.107	2278.692	3.330	11.4	-9.1	NO		NO	bb
2	2 180110M3_3	Standard	12.500	3.85	587.859	2027.751	3.624	12.4	-1.1	NO		NO	bb
3	3 180110M3_4	Standard	12.500	3.85	721.191	2588.349	3.483	11.9	-5.0	NO		NO	MM
4	4 180110M3_5	Standard	12.500	3.85	841.432	2638.712	3.986	13.6	8.8	NO		NO	bb
5	5 180110M3_6	Standard	12.500	3.86	928.808	3243.043	3.580	12.2	-2.3	NO		NO	bb
6	6 180110M3_7	Standard	12.500	3.86	837.404	2945.932	3.553	12.1	-3.0	NO		NO	bb
7	7 180110M3_8	Standard	12.500	3.85	881.507	3128.825	3.522	12.0	-3.9	NO		NO	bb
8	8 180110M3_9	Standard	12.500	3.85	947.682	3222.897	3.676	12.5	0.3	NO		NO	bb
9	9 180110M3_10	Standard	12.500	3.85	1189.369	3518.808	4.225	14.4	15.3	NO		NO	bb

Compound name: 13C2-6:2 FTS

Response Factor: 0.215203

RRF SD: 0.0808496, Relative SD: 37.5689

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	4.17	1482.806	7716.699	2.402	11.2	-10.7	NO		NO	bb
2	2 180110M3_3	Standard	12.500	4.17	1155.556	8022.848	1.800	8.4	-33.1	NO		NO	bb
3	3 180110M3_4	Standard	12.500	4.17	1397.855	9839.251	1.776	8.3	-34.0	NO		NO	bb
4	4 180110M3_5	Standard	12.500	4.17	1987.587	9158.829	2.713	12.6	0.8	NO		NO	bb
5	5 180110M3_6	Standard	12.500	4.17	2364.256	13168.367	2.244	10.4	-16.6	NO		NO	bb
6	6 180110M3_7	Standard	12.500	4.17	2119.823	12177.514	2.176	10.1	-19.1	NO		NO	bb
7	7 180110M3_8	Standard	12.500	4.17	2466.705	11624.087	2.653	12.3	-1.4	NO		NO	bb
8	8 180110M3_9	Standard	12.500	4.17	2650.556	9690.272	3.419	15.9	27.1	NO		NO	bb
9	9 180110M3_10	Standard	12.500	4.17	5642.398	14028.530	5.028	23.4	86.9	NO		NO	bb

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Printed: Thursday, January 11, 2018 14:26:56 Pacific Standard Time

Compound name: 13C2-PFOA

Response Factor: 0.915764

RRF SD: 0.0680605, Relative SD: 7.4321

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	4.22	6843.800	7716.699	11.086	12.1	-3.2	NO		NO	bb
2	2 180110M3_3	Standard	12.500	4.23	7076.908	8022.848	11.026	12.0	-3.7	NO		NO	bb
3	3 180110M3_4	Standard	12.500	4.22	9304.335	9839.251	11.820	12.9	3.3	NO		NO	bb
4	4 180110M3_5	Standard	12.500	4.23	8455.973	9158.829	11.541	12.6	0.8	NO		NO	bb
5	5 180110M3_6	Standard	12.500	4.22	11446.934	13168.367	10.866	11.9	-5.1	NO		NO	bb
6	6 180110M3_7	Standard	12.500	4.23	10524.176	12177.514	10.803	11.8	-5.6	NO		NO	bb
7	7 180110M3_8	Standard	12.500	4.22	9660.232	11624.087	10.388	11.3	-9.3	NO		NO	bb
8	8 180110M3_9	Standard	12.500	4.23	10039.607	9690.272	12.951	14.1	13.1	NO		NO	bb
9	9 180110M3_10	Standard	12.500	4.23	14076.219	14028.530	12.542	13.7	9.6	NO		NO	bb

Compound name: 13C5-PFNA

Response Factor: 0.817427

RRF SD: 0.0843622, Relative SD: 10.3205

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	4.66	6595.252	8419.302	9.792	12.0	-4.2	NO		NO	bb
2	2 180110M3_3	Standard	12.500	4.66	7834.280	7958.151	12.305	15.1	20.4	NO		NO	bb
3	3 180110M3_4	Standard	12.500	4.65	7113.500	8439.292	10.536	12.9	3.1	NO		NO	bb
4	4 180110M3_5	Standard	12.500	4.66	7757.888	9727.010	9.970	12.2	-2.4	NO		NO	bb
5	5 180110M3_6	Standard	12.500	4.66	10243.467	13224.706	9.682	11.8	-5.2	NO		NO	bb
6	6 180110M3_7	Standard	12.500	4.66	8076.588	11503.174	8.776	10.7	-14.1	NO		NO	bb
7	7 180110M3_8	Standard	12.500	4.66	10747.179	11865.055	11.322	13.9	10.8	NO		NO	bb
8	8 180110M3_9	Standard	12.500	4.66	8749.379	11583.457	9.442	11.6	-7.6	NO		NO	bb
9	9 180110M3_10	Standard	12.500	4.66	11695.055	14424.272	10.135	12.4	-0.8	NO		NO	bb

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Compound name: 13C8-PFOSA

Response Factor: 0.222952

RRF SD: 0.0226253, Relative SD: 10.148

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	4.72	1564.524	7146.186	2.737	12.3	-1.8	NO		NO	bb
2	2 180110M3_3	Standard	12.500	4.72	1375.187	6976.103	2.464	11.1	-11.6	NO		NO	bb
3	3 180110M3_4	Standard	12.500	4.72	1766.893	8730.687	2.530	11.3	-9.2	NO		NO	bb
4	4 180110M3_5	Standard	12.500	4.72	1897.929	8502.860	2.790	12.5	0.1	NO		NO	bb
5	5 180110M3_6	Standard	12.500	4.72	2478.382	9392.645	3.298	14.8	18.4	NO		NO	bb
6	6 180110M3_7	Standard	12.500	4.72	2100.719	10144.617	2.588	11.6	-7.1	NO		NO	bb
7	7 180110M3_8	Standard	12.500	4.72	2311.924	10475.976	2.759	12.4	-1.0	NO		NO	bb
8	8 180110M3_9	Standard	12.500	4.72	2220.110	10176.034	2.727	12.2	-2.1	NO		NO	bb
9	9 180110M3_10	Standard	12.500	4.71	2993.427	11733.247	3.189	14.3	14.4	NO		NO	bb

Compound name: 13C8-PFOS

Response Factor: 0.874623

RRF SD: 0.125135, Relative SD: 14.3074

Response type: Internal Std (Ref 59), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	4.74	1618.655	2105.094	9.612	11.0	-12.1	NO		NO	bb
2	2 180110M3_3	Standard	12.500	4.74	1941.504	2275.136	10.667	12.2	-2.4	NO		NO	bb
3	3 180110M3_4	Standard	12.500	4.74	1895.721	2164.789	10.946	12.5	0.1	NO		NO	bb
4	4 180110M3_5	Standard	12.500	4.74	2275.169	1933.818	14.706	16.8	34.5	NO		NO	bb
5	5 180110M3_6	Standard	12.500	4.74	3237.610	3714.762	10.894	12.5	-0.4	NO		NO	bb
6	6 180110M3_7	Standard	12.500	4.74	2589.350	2811.424	11.513	13.2	5.3	NO		NO	bb
7	7 180110M3_8	Standard	12.500	4.74	2649.839	3528.814	9.386	10.7	-14.1	NO		NO	bb
8	8 180110M3_9	Standard	12.500	4.74	2652.518	3149.809	10.527	12.0	-3.7	NO		NO	bb
9	9 180110M3_10	Standard	12.500	4.74	2938.436	3620.976	10.144	11.6	-7.2	NO		NO	bb

Vista Analytical Laboratory

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Compound name: 13C2-PFDA

Response Factor: 1.10533

RRF SD: 0.141708, Relative SD: 12.8204

Response type: Internal Std (Ref 60), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	5.03	6621.417	6709.350	12.336	11.2	-10.7	NO		NO	bb
2	2 180110M3_3	Standard	12.500	5.04	7011.031	6275.866	13.964	12.6	1.1	NO		NO	bb
3	3 180110M3_4	Standard	12.500	5.03	7865.675	5735.000	17.144	15.5	24.1	NO		NO	bb
4	4 180110M3_5	Standard	12.500	5.03	7909.186	7379.163	13.398	12.1	-3.0	NO		NO	bb
5	5 180110M3_6	Standard	12.500	5.03	8990.281	8404.810	13.371	12.1	-3.2	NO		NO	bb
6	6 180110M3_7	Standard	12.500	5.03	8394.882	6873.380	15.267	13.8	10.5	NO		NO	bb
7	7 180110M3_8	Standard	12.500	5.03	7178.136	7852.201	11.427	10.3	-17.3	NO		NO	bb
8	8 180110M3_9	Standard	12.500	5.03	8067.630	8147.183	12.378	11.2	-10.4	NO		NO	bb
9	9 180110M3_10	Standard	12.500	5.03	11784.516	9778.104	15.065	13.6	9.0	NO		NO	bb

Compound name: 13C2-8:2 FTS

Response Factor: 0.100865

RRF SD: 0.0423355, Relative SD: 41.9722

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	5.00	644.281	8819.409	0.913	9.1	-27.6	NO		NO	bb
2	2 180110M3_3	Standard	12.500	5.00	889.045	8657.168	1.284	12.7	1.8	NO		NO	bb
3	3 180110M3_4	Standard	12.500	5.00	654.053	10153.727	0.805	8.0	-36.1	NO		NO	bb
4	4 180110M3_5	Standard	12.500	5.01	773.072	10362.211	0.933	9.2	-26.0	NO		NO	bb
5	5 180110M3_6	Standard	12.500	5.00	975.410	14579.612	0.836	8.3	-33.7	NO		NO	bb
6	6 180110M3_7	Standard	12.500	5.00	1012.922	12281.571	1.031	10.2	-18.2	NO		NO	bb
7	7 180110M3_8	Standard	12.500	5.00	1364.890	12975.809	1.315	13.0	4.3	NO		NO	bb
8	8 180110M3_9	Standard	12.500	5.00	1744.984	11578.389	1.884	18.7	49.4	NO		NO	bb
9	9 180110M3_10	Standard	12.500	5.00	3049.447	16242.380	2.347	23.3	86.1	NO		NO	bb

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Compound name: d3-N-MeFOSAA

Response Factor: 0.34512

RRF SD: 0.0402363, Relative SD: 11.6586

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	5.18	2584.018	7146.186	4.520	13.1	4.8	NO		NO	bb
2	2 180110M3_3	Standard	12.500	5.18	2279.408	6976.103	4.084	11.8	-5.3	NO		NO	bb
3	3 180110M3_4	Standard	12.500	5.18	2474.278	8730.687	3.543	10.3	-17.9	NO		NO	bb
4	4 180110M3_5	Standard	12.500	5.18	3010.187	8502.860	4.425	12.8	2.6	NO		NO	bb
5	5 180110M3_6	Standard	12.500	5.18	4004.625	9392.645	5.329	15.4	23.5	NO		NO	bb
6	6 180110M3_7	Standard	12.500	5.18	3453.088	10144.617	4.255	12.3	-1.4	NO		NO	bb
7	7 180110M3_8	Standard	12.500	5.18	3302.028	10475.976	3.940	11.4	-8.7	NO		NO	bb
8	8 180110M3_9	Standard	12.500	5.18	3769.683	10176.034	4.631	13.4	7.3	NO		NO	bb
9	9 180110M3_10	Standard	12.500	5.18	3847.682	11733.247	4.099	11.9	-5.0	NO		NO	bb

Compound name: d5-N-EtFOSAA

Response Factor: 0.390404

RRF SD: 0.0471008, Relative SD: 12.0646

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	5.33	3050.200	7146.186	5.335	13.7	9.3	NO		NO	bb
2	2 180110M3_3	Standard	12.500	5.33	3056.172	6976.103	5.476	14.0	12.2	NO		NO	bb
3	3 180110M3_4	Standard	12.500	5.33	3257.867	8730.687	4.664	11.9	-4.4	NO		NO	bb
4	4 180110M3_5	Standard	12.500	5.33	3281.707	8502.860	4.824	12.4	-1.1	NO		NO	bb
5	5 180110M3_6	Standard	12.500	5.33	4319.860	9392.645	5.749	14.7	17.8	NO		NO	bb
6	6 180110M3_7	Standard	12.500	5.34	3499.391	10144.617	4.312	11.0	-11.6	NO		NO	bb
7	7 180110M3_8	Standard	12.500	5.33	3318.419	10475.976	3.960	10.1	-18.9	NO		NO	bb
8	8 180110M3_9	Standard	12.500	5.33	3635.765	10176.034	4.466	11.4	-8.5	NO		NO	bb
9	9 180110M3_10	Standard	12.500	5.33	4818.760	11733.247	5.134	13.1	5.2	NO		NO	bb

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Compound name: 13C2-PFUdA

Response Factor: 0.957991

RRF SD: 0.119129, Relative SD: 12.4353

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	5.35	7775.131	7146.186	13.600	14.2	13.6	NO		NO	bb
2	2 180110M3_3	Standard	12.500	5.35	5841.358	6976.103	10.467	10.9	-12.6	NO		NO	bb
3	3 180110M3_4	Standard	12.500	5.35	6821.692	8730.687	9.767	10.2	-18.4	NO		NO	bb
4	4 180110M3_5	Standard	12.500	5.36	7907.348	8502.860	11.625	12.1	-2.9	NO		NO	bb
5	5 180110M3_6	Standard	12.500	5.35	9228.782	9392.645	12.282	12.8	2.6	NO		NO	bb
6	6 180110M3_7	Standard	12.500	5.35	10040.164	10144.617	12.371	12.9	3.3	NO		NO	bb
7	7 180110M3_8	Standard	12.500	5.35	9539.813	10475.976	11.383	11.9	-4.9	NO		NO	bb
8	8 180110M3_9	Standard	12.500	5.35	9474.396	10176.034	11.638	12.1	-2.8	NO		NO	bb
9	9 180110M3_10	Standard	12.500	5.35	13743.283	11733.247	14.641	15.3	22.3	NO		NO	bb

Compound name: 13C2-PFDoA

Response Factor: 0.599156

RRF SD: 0.0521603, Relative SD: 8.70563

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	5.63	4189.487	7146.186	7.328	12.2	-2.2	NO		NO	bb
2	2 180110M3_3	Standard	12.500	5.64	3969.021	6976.103	7.112	11.9	-5.0	NO		NO	bb
3	3 180110M3_4	Standard	12.500	5.63	4869.713	8730.687	6.972	11.6	-6.9	NO		NO	bb
4	4 180110M3_5	Standard	12.500	5.64	4575.956	8502.860	6.727	11.2	-10.2	NO		NO	bb
5	5 180110M3_6	Standard	12.500	5.63	6385.208	9392.645	8.498	14.2	13.5	NO		NO	bb
6	6 180110M3_7	Standard	12.500	5.64	5791.910	10144.617	7.137	11.9	-4.7	NO		NO	bb
7	7 180110M3_8	Standard	12.500	5.63	7164.268	10475.976	8.548	14.3	14.1	NO		NO	bb
8	8 180110M3_9	Standard	12.500	5.63	5943.687	10176.034	7.301	12.2	-2.5	NO		NO	bb
9	9 180110M3_10	Standard	12.500	5.64	7304.709	11733.247	7.782	13.0	3.9	NO		NO	bb

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Printed: Thursday, January 11, 2018 14:26:56 Pacific Standard Time

Compound name: d3-N-MeFOSA

Response Factor: 0.124177

RRF SD: 0.00905884, Relative SD: 7.29512

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	150.000	5.73	10743.257	7146.186	18.792	151.3	0.9	NO		NO	bb
2	2 180110M3_3	Standard	150.000	5.73	9835.262	6976.103	17.623	141.9	-5.4	NO		NO	bb
3	3 180110M3_4	Standard	150.000	5.73	12097.896	8730.687	17.321	139.5	-7.0	NO		NO	bb
4	4 180110M3_5	Standard	150.000	5.73	12431.512	8502.860	18.275	147.2	-1.9	NO		NO	bb
5	5 180110M3_6	Standard	150.000	5.73	16115.154	9392.645	21.447	172.7	15.1	NO		NO	bb
6	6 180110M3_7	Standard	150.000	5.73	14402.728	10144.617	17.747	142.9	-4.7	NO		NO	bb
7	7 180110M3_8	Standard	150.000	5.73	15466.819	10475.976	18.455	148.6	-0.9	NO		NO	bb
8	8 180110M3_9	Standard	150.000	5.73	14480.274	10176.034	17.787	143.2	-4.5	NO		NO	bb
9	9 180110M3_10	Standard	150.000	5.73	18952.975	11733.247	20.192	162.6	8.4	NO		NO	bb

Compound name: 13C2-PFTeDA

Response Factor: 0.281715

RRF SD: 0.0301772, Relative SD: 10.712

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	6.10	1955.129	7146.186	3.420	12.1	-2.9	NO		NO	bb
2	2 180110M3_3	Standard	12.500	6.10	1829.135	6976.103	3.278	11.6	-6.9	NO		NO	bb
3	3 180110M3_4	Standard	12.500	6.10	2327.717	8730.687	3.333	11.8	-5.4	NO		NO	bb
4	4 180110M3_5	Standard	12.500	6.10	2174.831	8502.860	3.197	11.3	-9.2	NO		NO	bb
5	5 180110M3_6	Standard	12.500	6.10	3158.222	9392.645	4.203	14.9	19.4	NO		NO	bb
6	6 180110M3_7	Standard	12.500	6.10	2821.178	10144.617	3.476	12.3	-1.3	NO		NO	bb
7	7 180110M3_8	Standard	12.500	6.10	2885.126	10475.976	3.443	12.2	-2.2	NO		NO	bb
8	8 180110M3_9	Standard	12.500	6.10	2620.882	10176.034	3.219	11.4	-8.6	NO		NO	bb
9	9 180110M3_10	Standard	12.500	6.10	3871.496	11733.247	4.124	14.6	17.1	NO		NO	bb

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Printed: Thursday, January 11, 2018 14:26:56 Pacific Standard Time

Compound name: d5-N-ETFOSA

Response Factor: 0.184306

RRF SD: 0.0154361, Relative SD: 8.37525

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	150.000	6.12	16238.895	7146.186	28.405	154.1	2.7	NO		NO	bb
2	2 180110M3_3	Standard	150.000	6.12	15620.249	6976.103	27.989	151.9	1.2	NO		NO	bb
3	3 180110M3_4	Standard	150.000	6.12	17774.992	8730.687	25.449	138.1	-7.9	NO		NO	bb
4	4 180110M3_5	Standard	150.000	6.12	18942.303	8502.860	27.847	151.1	0.7	NO		NO	bb
5	5 180110M3_6	Standard	150.000	6.12	24990.723	9392.645	33.258	180.5	20.3	NO		NO	bb
6	6 180110M3_7	Standard	150.000	6.12	21510.641	10144.617	26.505	143.8	-4.1	NO		NO	bb
7	7 180110M3_8	Standard	150.000	6.11	22103.201	10475.976	26.374	143.1	-4.6	NO		NO	bb
8	8 180110M3_9	Standard	150.000	6.12	21279.357	10176.034	26.139	141.8	-5.5	NO		NO	bb
9	9 180110M3_10	Standard	150.000	6.12	25200.256	11733.247	26.847	145.7	-2.9	NO		NO	bb

Compound name: 13C2-PFHxDA

Response Factor: 0.539833

RRF SD: 0.0687366, Relative SD: 12.7329

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	5.000	6.43	1428.470	7146.186	2.499	4.6	-7.4	NO		NO	bb
2	2 180110M3_3	Standard	5.000	6.43	1602.730	6976.103	2.872	5.3	6.4	NO		NO	bb
3	3 180110M3_4	Standard	5.000	6.43	1624.887	8730.687	2.326	4.3	-13.8	NO		NO	bb
4	4 180110M3_5	Standard	5.000	6.43	1502.644	8502.860	2.209	4.1	-18.2	NO		NO	bb
5	5 180110M3_6	Standard	5.000	6.43	2226.881	9392.645	2.964	5.5	9.8	NO		NO	bb
6	6 180110M3_7	Standard	5.000	6.43	2045.703	10144.617	2.521	4.7	-6.6	NO		NO	bb
7	7 180110M3_8	Standard	5.000	6.43	2213.677	10475.976	2.641	4.9	-2.1	NO		NO	bb
8	8 180110M3_9	Standard	5.000	6.43	2470.003	10176.034	3.034	5.6	12.4	NO		NO	bb
9	9 180110M3_10	Standard	5.000	6.43	3028.907	11733.247	3.227	6.0	19.5	NO		NO	bb

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Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Compound name: d7-N-MeFOSE

Response Factor: 0.182261

RRF SD: 0.0217695, Relative SD: 11.9442

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	150.000	6.24	18600.686	7146.186	32.536	178.5	19.0	NO		NO	bb
2	2 180110M3_3	Standard	150.000	6.24	14371.076	6976.103	25.751	141.3	-5.8	NO		NO	bb
3	3 180110M3_4	Standard	150.000	6.24	17457.375	8730.687	24.994	137.1	-8.6	NO		NO	bb
4	4 180110M3_5	Standard	150.000	6.24	18372.555	8502.860	27.009	148.2	-1.2	NO		NO	bb
5	5 180110M3_6	Standard	150.000	6.24	23253.285	9392.645	30.946	169.8	13.2	NO		NO	bb
6	6 180110M3_7	Standard	150.000	6.24	18111.193	10144.617	22.316	122.4	-18.4	NO		NO	bb
7	7 180110M3_8	Standard	150.000	6.24	23087.781	10475.976	27.548	151.1	0.8	NO		NO	bb
8	8 180110M3_9	Standard	150.000	6.24	20386.021	10176.034	25.042	137.4	-8.4	NO		NO	bb
9	9 180110M3_10	Standard	150.000	6.24	28074.316	11733.247	29.909	164.1	9.4	NO		NO	bb

Compound name: d9-N-EtFOSE

Response Factor: 0.172538

RRF SD: 0.024293, Relative SD: 14.0798

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	150.000	6.40	16885.416	7146.186	29.536	171.2	14.1	NO		NO	bb
2	2 180110M3_3	Standard	150.000	6.40	13110.849	6976.103	23.492	136.2	-9.2	NO		NO	bb
3	3 180110M3_4	Standard	150.000	6.39	16446.465	8730.687	23.547	136.5	-9.0	NO		NO	bb
4	4 180110M3_5	Standard	150.000	6.39	16689.393	8502.860	24.535	142.2	-5.2	NO		NO	bb
5	5 180110M3_6	Standard	150.000	6.40	22391.037	9392.645	29.799	172.7	15.1	NO		NO	bb
6	6 180110M3_7	Standard	150.000	6.40	19962.660	10144.617	24.598	142.6	-5.0	NO		NO	bb
7	7 180110M3_8	Standard	150.000	6.39	22425.359	10475.976	26.758	155.1	3.4	NO		NO	bb
8	8 180110M3_9	Standard	150.000	6.39	16106.103	10176.034	19.784	114.7	-23.6	NO		NO	bb
9	9 180110M3_10	Standard	150.000	6.39	28984.094	11733.247	30.878	179.0	19.3	NO		NO	bb

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Compound name: 13C4-PFBA

Response Factor: 1

RRF SD: 3.92523e-017, Relative SD: 3.92523e-015

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	1.33	7508.845	7508.845	12.500	12.5	0.0	NO		NO	bb
2	2 180110M3_3	Standard	12.500	1.34	7057.356	7057.356	12.500	12.5	0.0	NO		NO	bb
3	3 180110M3_4	Standard	12.500	1.33	8001.987	8001.987	12.500	12.5	0.0	NO		NO	bb
4	4 180110M3_5	Standard	12.500	1.33	8507.537	8507.537	12.500	12.5	0.0	NO		NO	bb
5	5 180110M3_6	Standard	12.500	1.33	11925.119	11925.119	12.500	12.5	0.0	NO		NO	bb
6	6 180110M3_7	Standard	12.500	1.34	10276.120	10276.120	12.500	12.5	0.0	NO		NO	bb
7	7 180110M3_8	Standard	12.500	1.33	10906.643	10906.643	12.500	12.5	0.0	NO		NO	bb
8	8 180110M3_9	Standard	12.500	1.34	9827.420	9827.420	12.500	12.5	0.0	NO		NO	bb
9	9 180110M3_10	Standard	12.500	1.34	14467.951	14467.951	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C5-PFHxA

Response Factor: 1

RRF SD: 7.85046e-017, Relative SD: 7.85046e-015

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	3.08	8819.409	8819.409	12.500	12.5	0.0	NO		NO	bb
2	2 180110M3_3	Standard	12.500	3.09	8657.168	8657.168	12.500	12.5	0.0	NO		NO	bb
3	3 180110M3_4	Standard	12.500	3.08	10153.727	10153.727	12.500	12.5	0.0	NO		NO	bb
4	4 180110M3_5	Standard	12.500	3.08	10362.211	10362.211	12.500	12.5	0.0	NO		NO	bb
5	5 180110M3_6	Standard	12.500	3.08	14579.612	14579.612	12.500	12.5	0.0	NO		NO	bb
6	6 180110M3_7	Standard	12.500	3.09	12281.571	12281.571	12.500	12.5	0.0	NO		NO	bb
7	7 180110M3_8	Standard	12.500	3.09	12975.809	12975.809	12.500	12.5	0.0	NO		NO	bb
8	8 180110M3_9	Standard	12.500	3.08	11578.389	11578.389	12.500	12.5	0.0	NO		NO	bb
9	9 180110M3_10	Standard	12.500	3.09	16242.380	16242.380	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Compound name: 13C3-PFHxS

Response Factor: 1

RRF SD: 7.85046e-017, Relative SD: 7.85046e-015

Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	180110M3_2	Standard	12.500	3.85	2278.692	2278.692	12.500	12.5	0.0	NO		NO	bb
2	2	180110M3_3	Standard	12.500	3.86	2027.751	2027.751	12.500	12.5	0.0	NO		NO	bb
3	3	180110M3_4	Standard	12.500	3.85	2588.349	2588.349	12.500	12.5	0.0	NO		NO	bb
4	4	180110M3_5	Standard	12.500	3.86	2638.712	2638.712	12.500	12.5	0.0	NO		NO	bb
5	5	180110M3_6	Standard	12.500	3.85	3243.043	3243.043	12.500	12.5	0.0	NO		NO	bb
6	6	180110M3_7	Standard	12.500	3.86	2945.932	2945.932	12.500	12.5	0.0	NO		NO	bb
7	7	180110M3_8	Standard	12.500	3.85	3128.825	3128.825	12.500	12.5	0.0	NO		NO	bb
8	8	180110M3_9	Standard	12.500	3.85	3222.897	3222.897	12.500	12.5	0.0	NO		NO	bb
9	9	180110M3_10	Standard	12.500	3.85	3518.808	3518.808	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C8-PFOA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	180110M3_2	Standard	12.500	4.22	7716.699	7716.699	12.500	12.5	0.0	NO		NO	bb
2	2	180110M3_3	Standard	12.500	4.22	8022.848	8022.848	12.500	12.5	0.0	NO		NO	bb
3	3	180110M3_4	Standard	12.500	4.22	9839.251	9839.251	12.500	12.5	0.0	NO		NO	bb
4	4	180110M3_5	Standard	12.500	4.22	9158.829	9158.829	12.500	12.5	0.0	NO		NO	bb
5	5	180110M3_6	Standard	12.500	4.22	13168.367	13168.367	12.500	12.5	0.0	NO		NO	bb
6	6	180110M3_7	Standard	12.500	4.23	12177.514	12177.514	12.500	12.5	0.0	NO		NO	bb
7	7	180110M3_8	Standard	12.500	4.23	11624.087	11624.087	12.500	12.5	0.0	NO		NO	bb
8	8	180110M3_9	Standard	12.500	4.22	9690.272	9690.272	12.500	12.5	0.0	NO		NO	bb
9	9	180110M3_10	Standard	12.500	4.23	14028.530	14028.530	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Compound name: 13C9-PFNA

Response Factor: 1

RRF SD: 8.77708e-017, Relative SD: 8.77708e-015

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	4.65	8419.302	8419.302	12.500	12.5	0.0	NO		NO	bb
2	2 180110M3_3	Standard	12.500	4.66	7958.151	7958.151	12.500	12.5	0.0	NO		NO	bb
3	3 180110M3_4	Standard	12.500	4.65	8439.292	8439.292	12.500	12.5	0.0	NO		NO	bb
4	4 180110M3_5	Standard	12.500	4.66	9727.010	9727.010	12.500	12.5	0.0	NO		NO	bb
5	5 180110M3_6	Standard	12.500	4.66	13224.706	13224.706	12.500	12.5	0.0	NO		NO	bb
6	6 180110M3_7	Standard	12.500	4.66	11503.174	11503.174	12.500	12.5	0.0	NO		NO	bb
7	7 180110M3_8	Standard	12.500	4.66	11865.055	11865.055	12.500	12.5	0.0	NO		NO	bb
8	8 180110M3_9	Standard	12.500	4.66	11583.457	11583.457	12.500	12.5	0.0	NO		NO	bb
9	9 180110M3_10	Standard	12.500	4.66	14424.272	14424.272	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C4-PFOS

Response Factor: 1

RRF SD: 5.55112e-017, Relative SD: 5.55112e-015

Response type: Internal Std (Ref 59), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	4.74	2105.094	2105.094	12.500	12.5	0.0	NO		NO	bb
2	2 180110M3_3	Standard	12.500	4.74	2275.136	2275.136	12.500	12.5	0.0	NO		NO	bb
3	3 180110M3_4	Standard	12.500	4.74	2164.789	2164.789	12.500	12.5	0.0	NO		NO	bb
4	4 180110M3_5	Standard	12.500	4.74	1933.818	1933.818	12.500	12.5	0.0	NO		NO	bb
5	5 180110M3_6	Standard	12.500	4.74	3714.762	3714.762	12.500	12.5	0.0	NO		NO	bb
6	6 180110M3_7	Standard	12.500	4.74	2811.424	2811.424	12.500	12.5	0.0	NO		NO	bb
7	7 180110M3_8	Standard	12.500	4.74	3528.814	3528.814	12.500	12.5	0.0	NO		NO	bb
8	8 180110M3_9	Standard	12.500	4.74	3149.809	3149.809	12.500	12.5	0.0	NO		NO	bb
9	9 180110M3_10	Standard	12.500	4.74	3620.976	3620.976	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Compound name: 13C6-PFDA

Response Factor: 1

RRF SD: 7.85046e-017, Relative SD: 7.85046e-015

Response type: Internal Std (Ref 60), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	5.03	6709.350	6709.350	12.500	12.5	0.0	NO		NO	bb
2	2 180110M3_3	Standard	12.500	5.03	6275.866	6275.866	12.500	12.5	0.0	NO		NO	bb
3	3 180110M3_4	Standard	12.500	5.03	5735.000	5735.000	12.500	12.5	0.0	NO		NO	bb
4	4 180110M3_5	Standard	12.500	5.03	7379.163	7379.163	12.500	12.5	0.0	NO		NO	bb
5	5 180110M3_6	Standard	12.500	5.03	8404.810	8404.810	12.500	12.5	0.0	NO		NO	bb
6	6 180110M3_7	Standard	12.500	5.03	6873.380	6873.380	12.500	12.5	0.0	NO		NO	bb
7	7 180110M3_8	Standard	12.500	5.03	7852.201	7852.201	12.500	12.5	0.0	NO		NO	bb
8	8 180110M3_9	Standard	12.500	5.03	8147.183	8147.183	12.500	12.5	0.0	NO		NO	bb
9	9 180110M3_10	Standard	12.500	5.03	9778.104	9778.104	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C7-PFUDa

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180110M3_2	Standard	12.500	5.35	7146.186	7146.186	12.500	12.5	0.0	NO		NO	bb
2	2 180110M3_3	Standard	12.500	5.35	6976.103	6976.103	12.500	12.5	0.0	NO		NO	bb
3	3 180110M3_4	Standard	12.500	5.35	8730.687	8730.687	12.500	12.5	0.0	NO		NO	bb
4	4 180110M3_5	Standard	12.500	5.36	8502.860	8502.860	12.500	12.5	0.0	NO		NO	bb
5	5 180110M3_6	Standard	12.500	5.35	9392.645	9392.645	12.500	12.5	0.0	NO		NO	bb
6	6 180110M3_7	Standard	12.500	5.36	10144.617	10144.617	12.500	12.5	0.0	NO		NO	bb
7	7 180110M3_8	Standard	12.500	5.35	10475.976	10475.976	12.500	12.5	0.0	NO		NO	bb
8	8 180110M3_9	Standard	12.500	5.35	10176.034	10176.034	12.500	12.5	0.0	NO		NO	bb
9	9 180110M3_10	Standard	12.500	5.35	11733.247	11733.247	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

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Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818.mdb 09 Jan 2018 10:39:49

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180110M3_2, Date: 11-Jan-2018, Time: 09:34:02, ID: ST180110M3-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

	# Name	CoD	CoD Flag	%RSD
1	1 PFBA	0.9991	NO	
2	2 PFPeA	0.9994	NO	
3	3 PFBS	0.9996	NO	
4	4 PFHxA	0.9981	NO	
5	5 PFHpA	0.9997	NO	
6	6 L-PFHxS	0.9982	NO	
7	8 6:2 FTS	0.9952	NO	
8	9 L-PFOA	0.9985	NO	
9	11 PFHpS	0.9994	NO	
10	12 PFNA	0.9981	NO	
11	13 PFOSA	0.9987	NO	
12	14 L-PFOS	0.9974	NO	
13	16 PFDA	0.9999	NO	
14	17 8:2 FTS	0.9977	NO	
15	18 N-MeFOSAA	0.9914	NO	
16	19 N-EtFOSAA	0.9991	NO	
17	20 PFUdA	0.9979	NO	
18	21 PFDS	0.9973	NO	
19	22 PFDoA	0.9987	NO	
20	23 N-MeFOSA	0.9991	NO	
21	24 PFTrDA	0.9995	NO	
22	25 PFTeDA	0.9995	NO	
23	26 N-EtFOSA	0.9999	NO	
24	27 PFHxDA	0.9977	NO	
25	28 PFODA	0.9980	NO	
26	29 N-MeFOSE	0.9980	NO	
27	30 N-EtFOSE	0.9991	NO	
28	31 13C3-PFBA		NO	4.586
29	32 13C3-PFPeA		NO	3.889
30	33 13C3-PFBS		NO	6.327
31	34 13C2-PFHxA		NO	4.819

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

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Name: 180110M3_2, Date: 11-Jan-2018, Time: 09:34:02, ID: ST180110M3-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

#	Name	CoD	CoD Flag	%RSD
32	35 13C4-PFHpA		NO	3.651
33	36 18O2-PFHxS		NO	7.498
34	37 13C2-6:2 FTS		NO	37.569
35	38 13C2-PFOA		NO	7.432
36	39 13C5-PFNA		NO	10.320
37	40 13C8-PFOA		NO	10.148
38	41 13C8-PFOS		NO	14.307
39	42 13C2-PFDA		NO	12.820
40	43 13C2-8:2 FTS		NO	41.972
41	44 d3-N-MeFOSAA		NO	11.659
42	45 d5-N-ElFOSAA		NO	12.065
43	46 13C2-PFUDa		NO	12.435
44	47 13C2-PFDoA		NO	8.706
45	48 d3-N-MeFOSA		NO	7.295
46	49 13C2-PFTeDA		NO	10.712
47	50 d5-N-ETFOSA		NO	8.375
48	51 13C2-PFHxDA		NO	12.733
49	52 d7-N-MeFOSE		NO	11.944
50	53 d9-N-ElFOSE		NO	14.080
51	54 13C4-PFBA		NO	0.000
52	55 13C5-PFHxA		NO	0.000
53	56 13C3-PFHxS		NO	0.000
54	57 13C8-PFOA		NO	0.000
55	58 13C9-PFNA		NO	0.000
56	59 13C4-PFOS		NO	0.000
57	60 13C6-PFDA		NO	0.000
58	61 13C7-PFUDa		NO	0.000

not used

not used

Dataset: Untitled

Last Altered: Thursday, January 11, 2018 15:27:52 Pacific Standard Time

Printed: Thursday, January 11, 2018 15:28:19 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 11 Jan 2018 15:26:25

Calibration: 11 Jan 2018 15:27:52

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	180110M3_1	IPA	11-Jan-18	09:22:51
2	180110M3_2	ST180110M3-1 PFC CS-2 17L2606	11-Jan-18	09:34:02
3	180110M3_3	ST180110M3-2 PFC CS-1 17L2607	11-Jan-18	09:45:13
4	180110M3_4	ST180110M3-3 PFC CS0 17L2608	11-Jan-18	09:56:23
5	180110M3_5	ST180110M3-4 PFC CS1 17L2609	11-Jan-18	10:07:34
6	180110M3_6	ST180110M3-5 PFC CS2 17L2610	11-Jan-18	10:18:46
7	180110M3_7	ST180110M3-6 PFC CS3 17L2611	11-Jan-18	10:29:56
8	180110M3_8	ST180110M3-7 PFC CS4 17L2612	11-Jan-18	10:41:06
9	180110M3_9	ST180110M3-8 PFC CS5 17L2613	11-Jan-18	10:52:18
10	180110M3_10	ST180110M3-9 PFC CS6 17L2710	11-Jan-18	11:03:28
11	180110M3_11	IPA	11-Jan-18	11:14:39
12	180110M3_12	ICV180110M3-1 PFC ICV 17L1201	11-Jan-18	11:25:49

Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818.mdb 09 Jan 2018 10:39:49

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

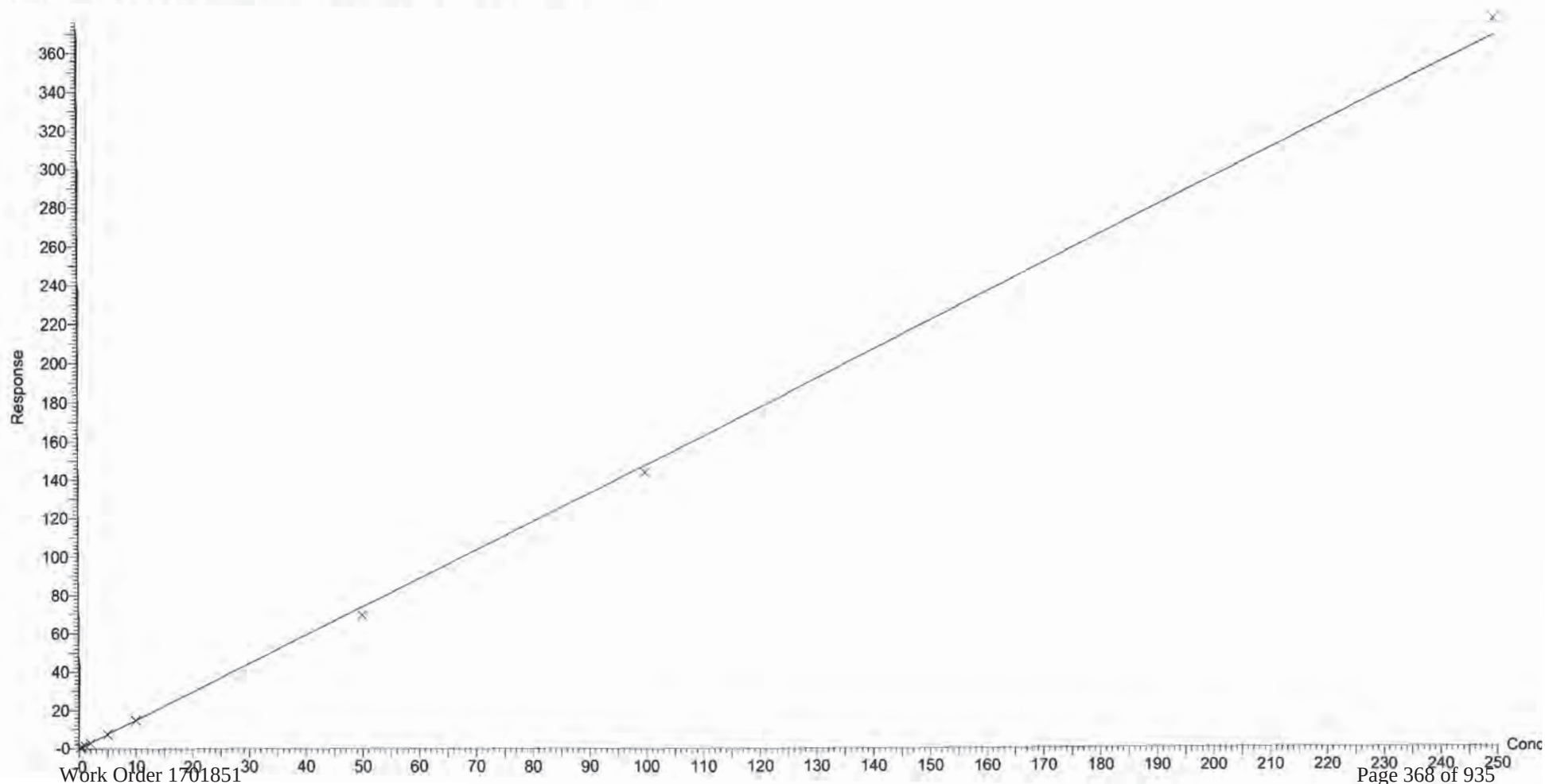
Compound name: PFBA

Correlation coefficient: $r = 0.999526$, $r^2 = 0.999051$

Calibration curve: $1.47179 * x + -0.0484807$

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

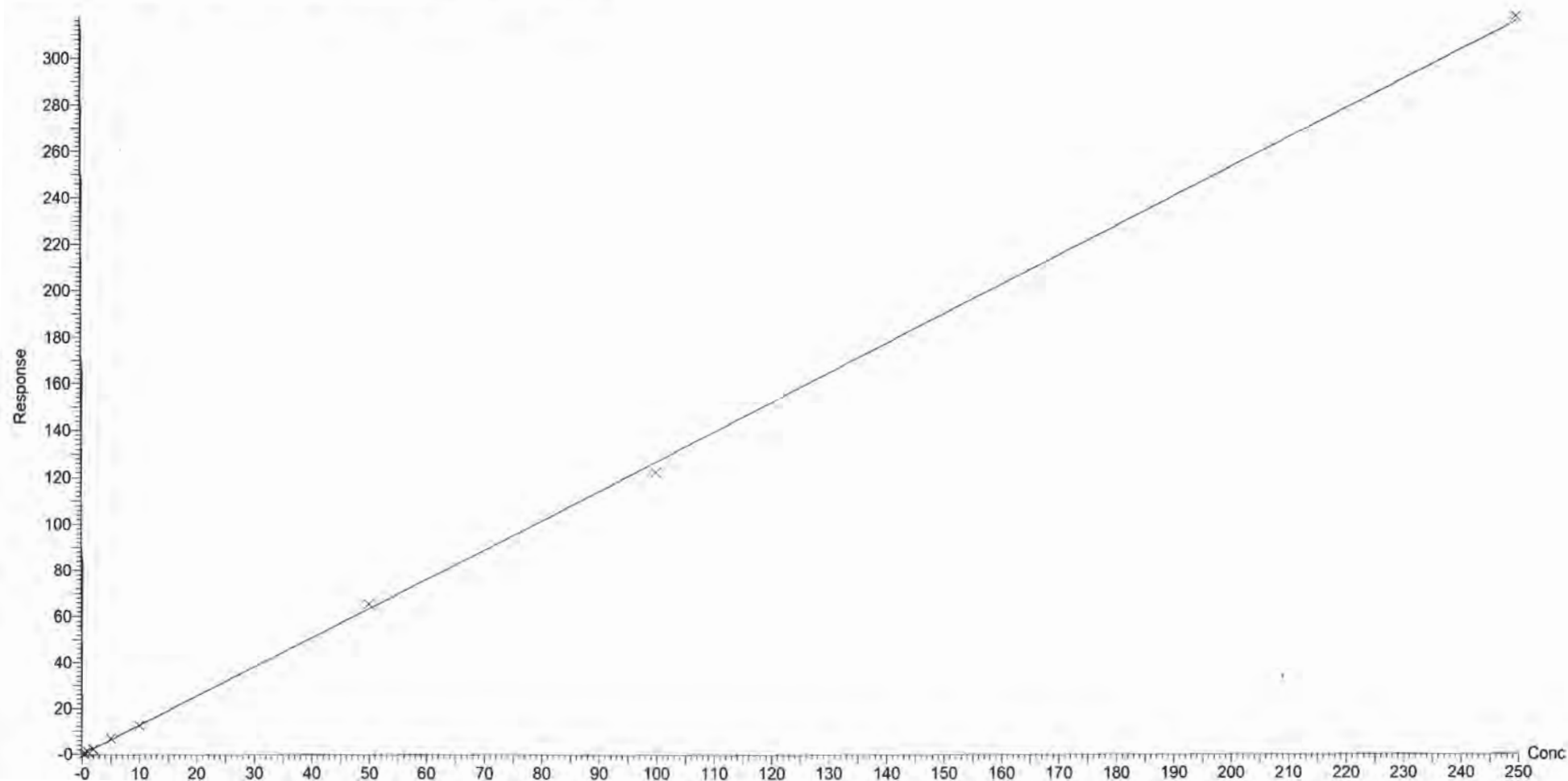
Compound name: PFPeA

Correlation coefficient: $r = 0.999692$, $r^2 = 0.999384$

Calibration curve: $1.26321 * x + -0.0617763$

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\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

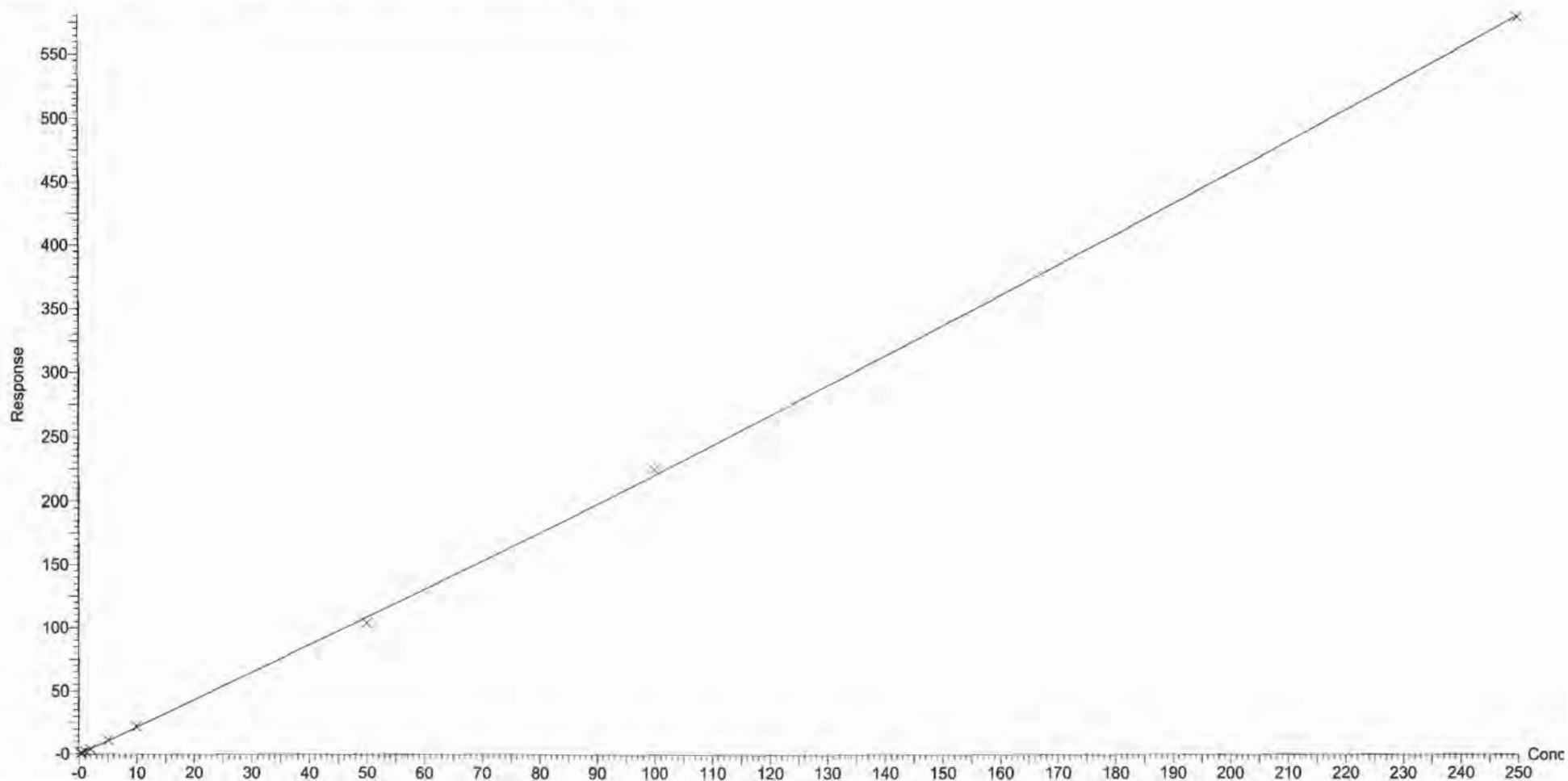
Compound name: PFBS

Coefficient of Determination: $R^2 = 0.999640$

Calibration curve: $0.00081362 * x^2 + 2.12043 * x + 0.00999409$

Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

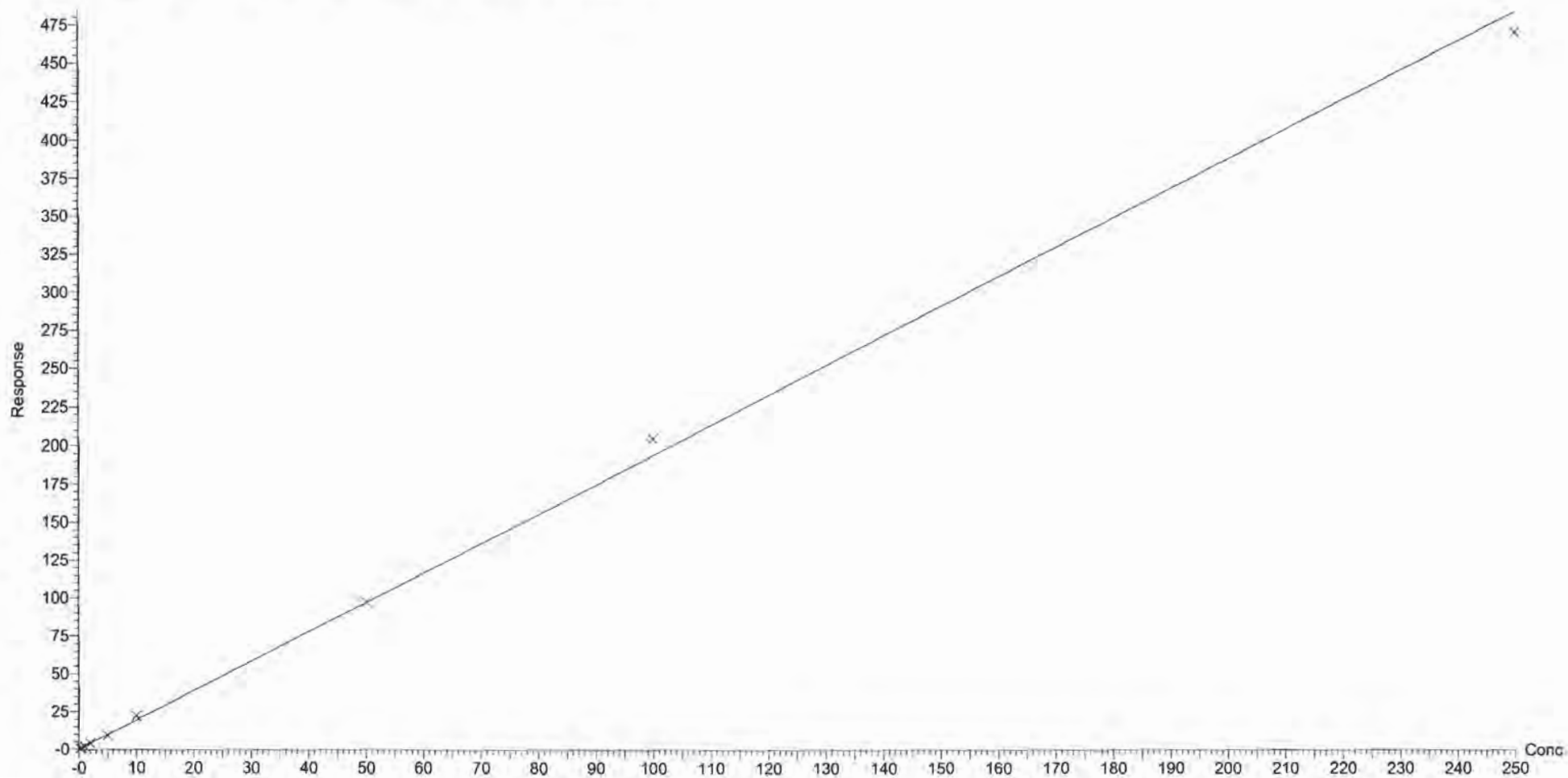
Compound name: PFHxA

Correlation coefficient: $r = 0.999048$, $r^2 = 0.998098$

Calibration curve: $1.9385 * x + -0.0246659$

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\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

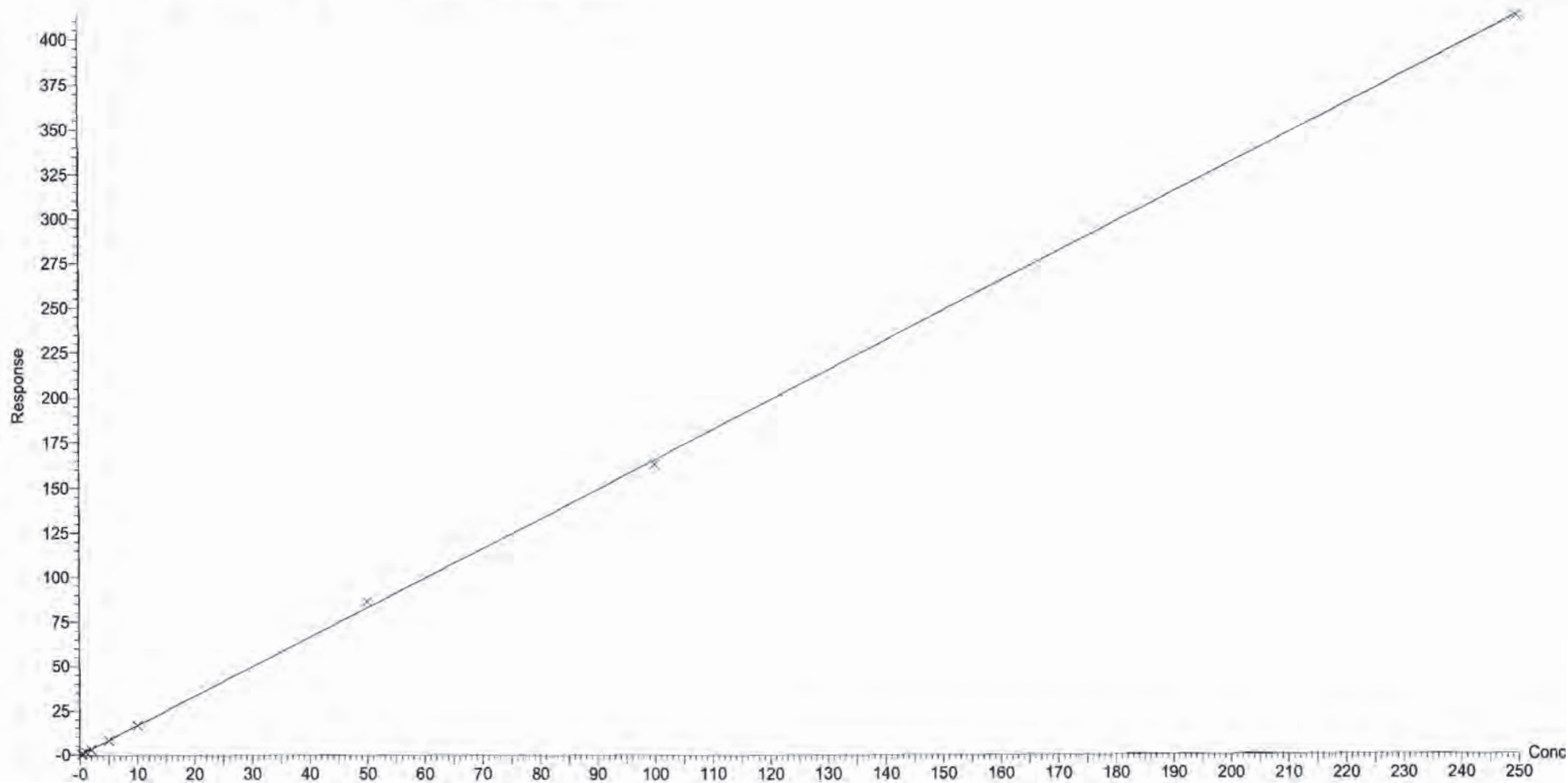
Compound name: PFHpA

Correlation coefficient: $r = 0.999839$, $r^2 = 0.999677$

Calibration curve: $1.65421 * x + -0.120464$

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\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

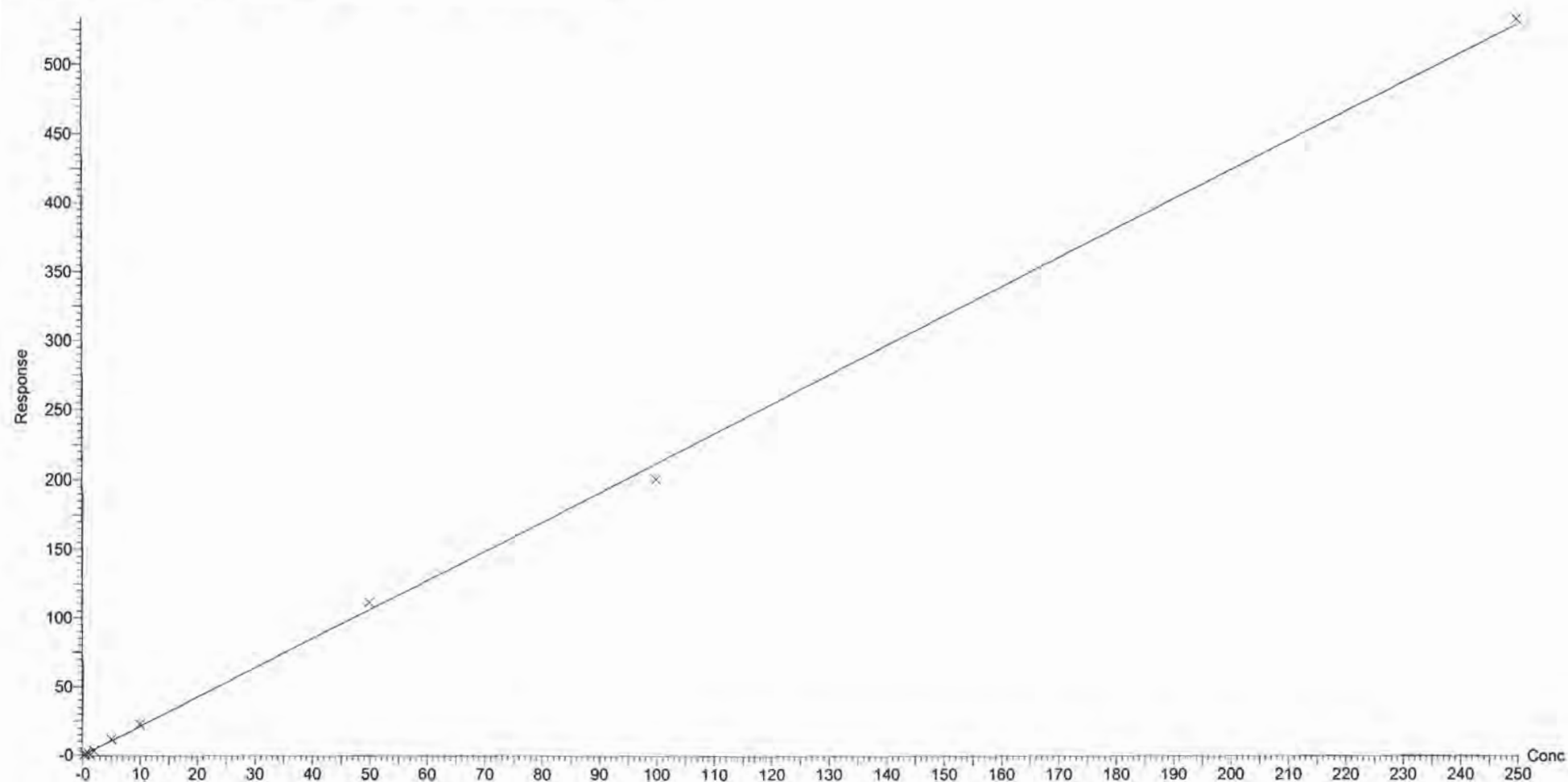
Compound name: L-PFHxS

Correlation coefficient: $r = 0.999101$, $r^2 = 0.998203$

Calibration curve: $2.11856 * x + -0.208942$

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

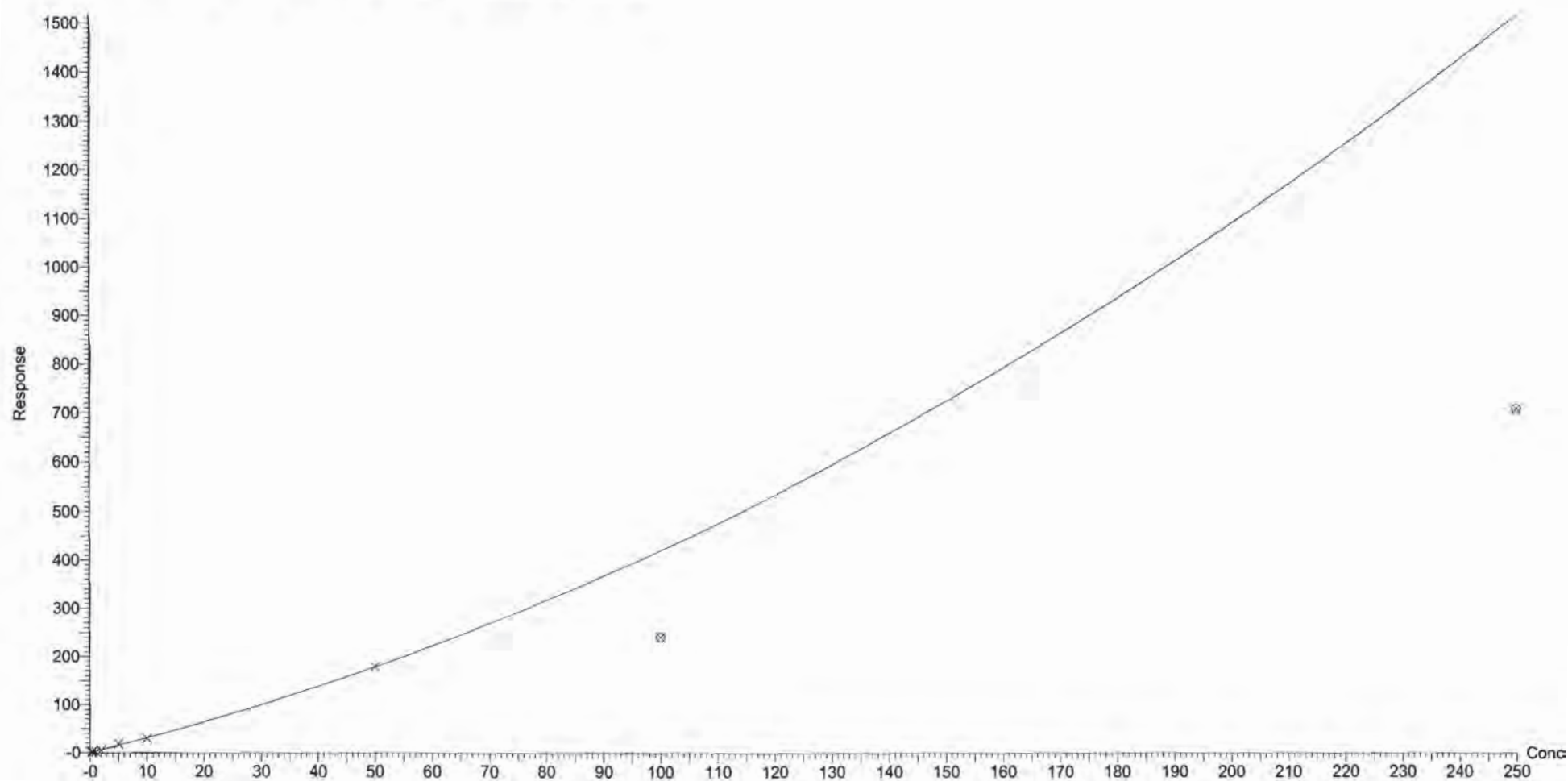
Compound name: 6:2 FTS

Coefficient of Determination: $R^2 = 0.995180$

Calibration curve: $0.0125368 * x^2 + 2.94435 * x + -0.110501$

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

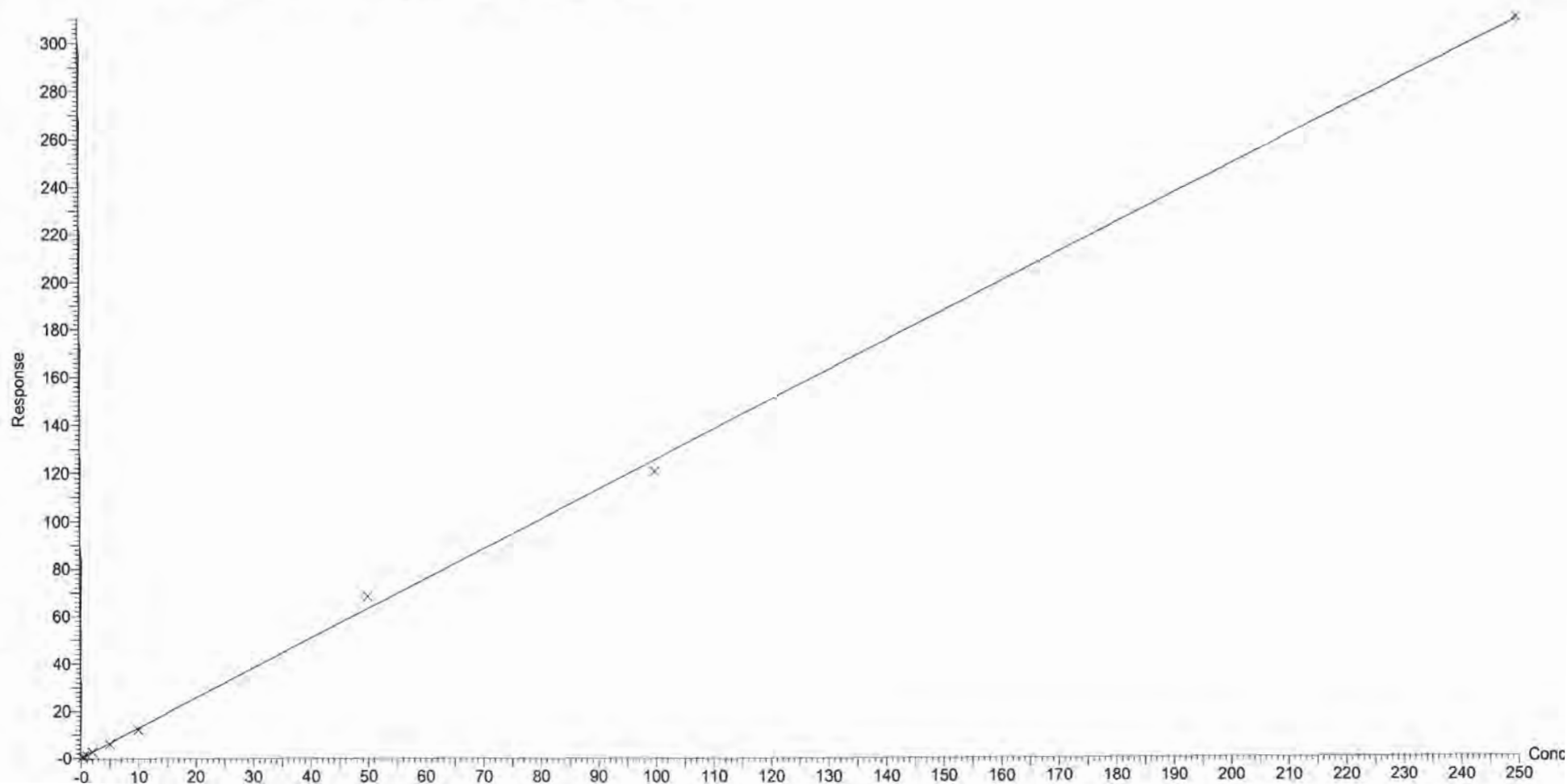
Compound name: L-PFOA

Coefficient of Determination: $R^2 = 0.998464$

Calibration curve: $-9.7055e-005 * x^2 + 1.26022 * x + 0.185633$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

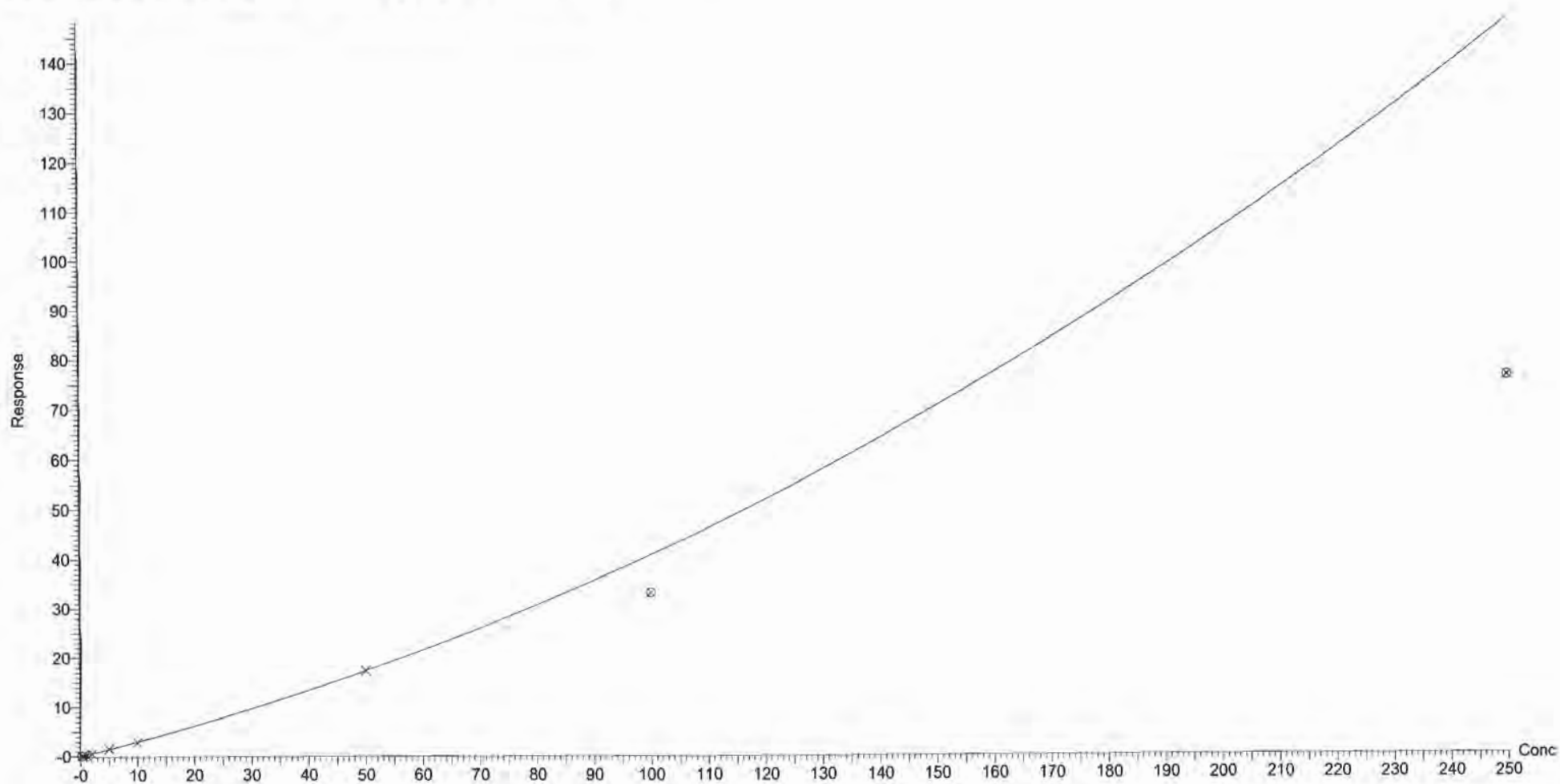
Compound name: PFHpS

Coefficient of Determination: $R^2 = 0.999403$

Calibration curve: $0.00123665 * x^2 + 0.283611 * x + -0.0187761$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

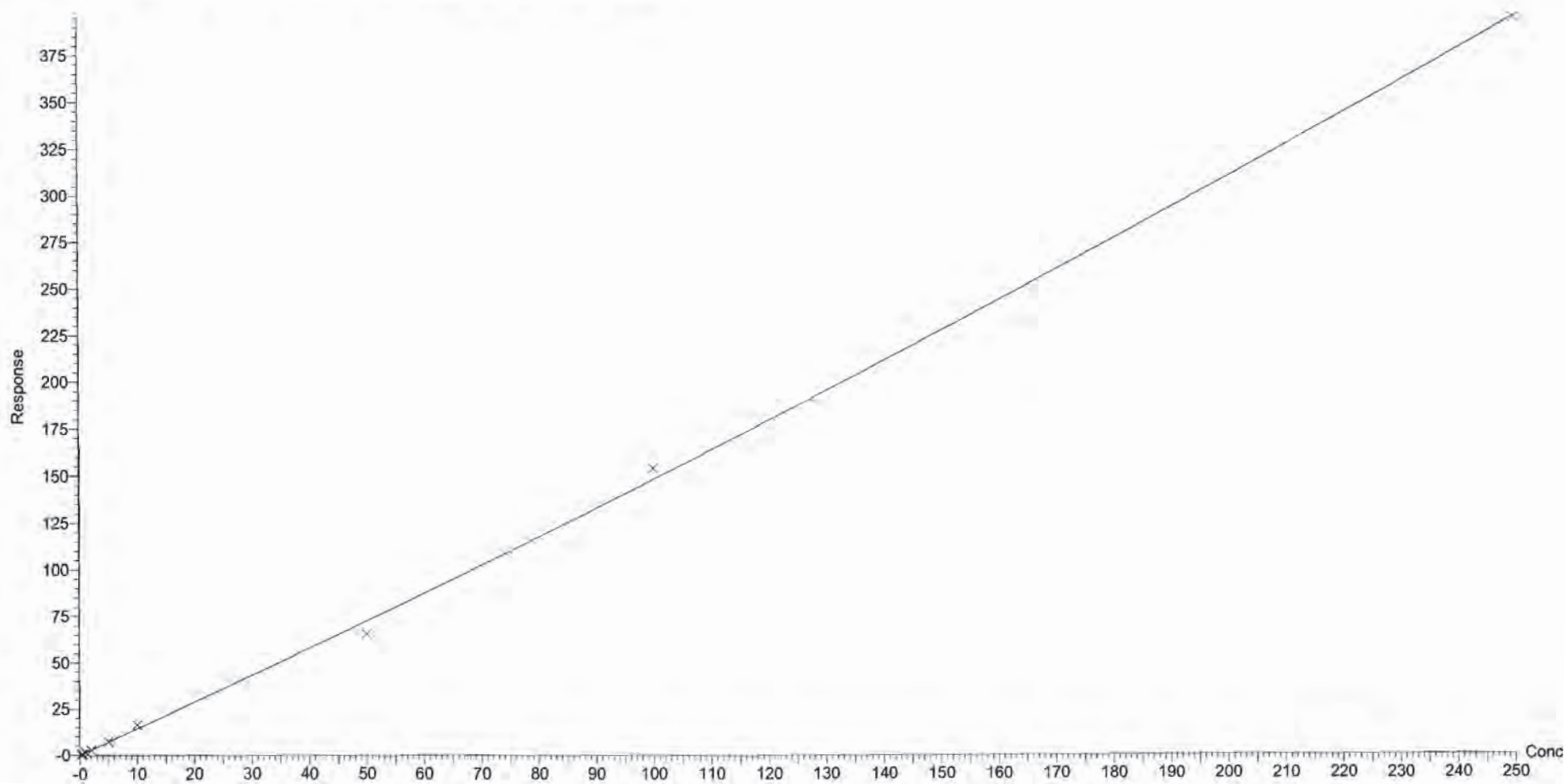
Compound name: PFNA

Coefficient of Determination: $R^2 = 0.998092$

Calibration curve: $0.000693223 * x^2 + 1.40868 * x + 0.0082777$

Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

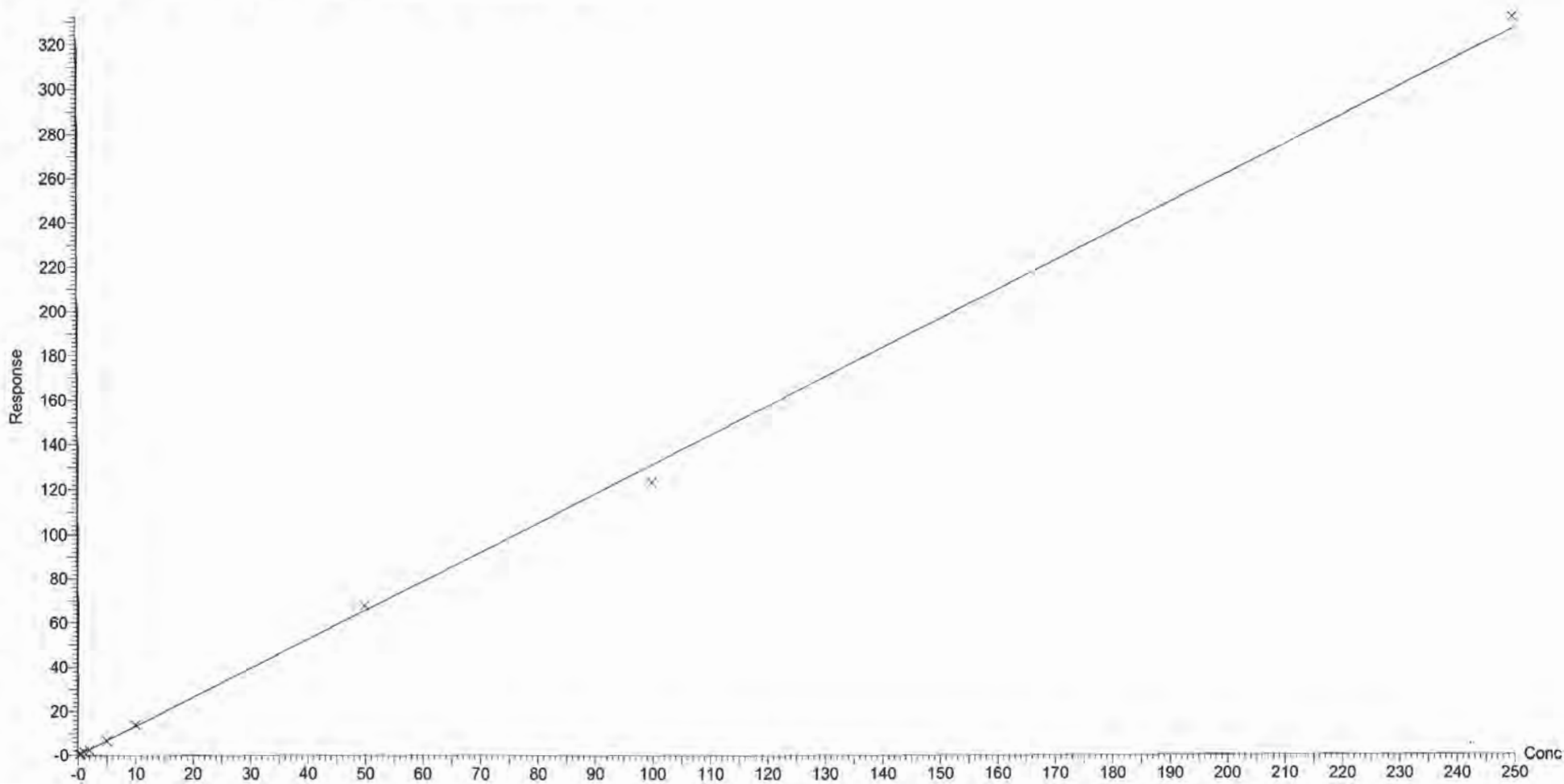
Compound name: PFOSA

Correlation coefficient: $r = 0.999329$, $r^2 = 0.998658$

Calibration curve: $1.30775 * x + 0.0347805$

Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

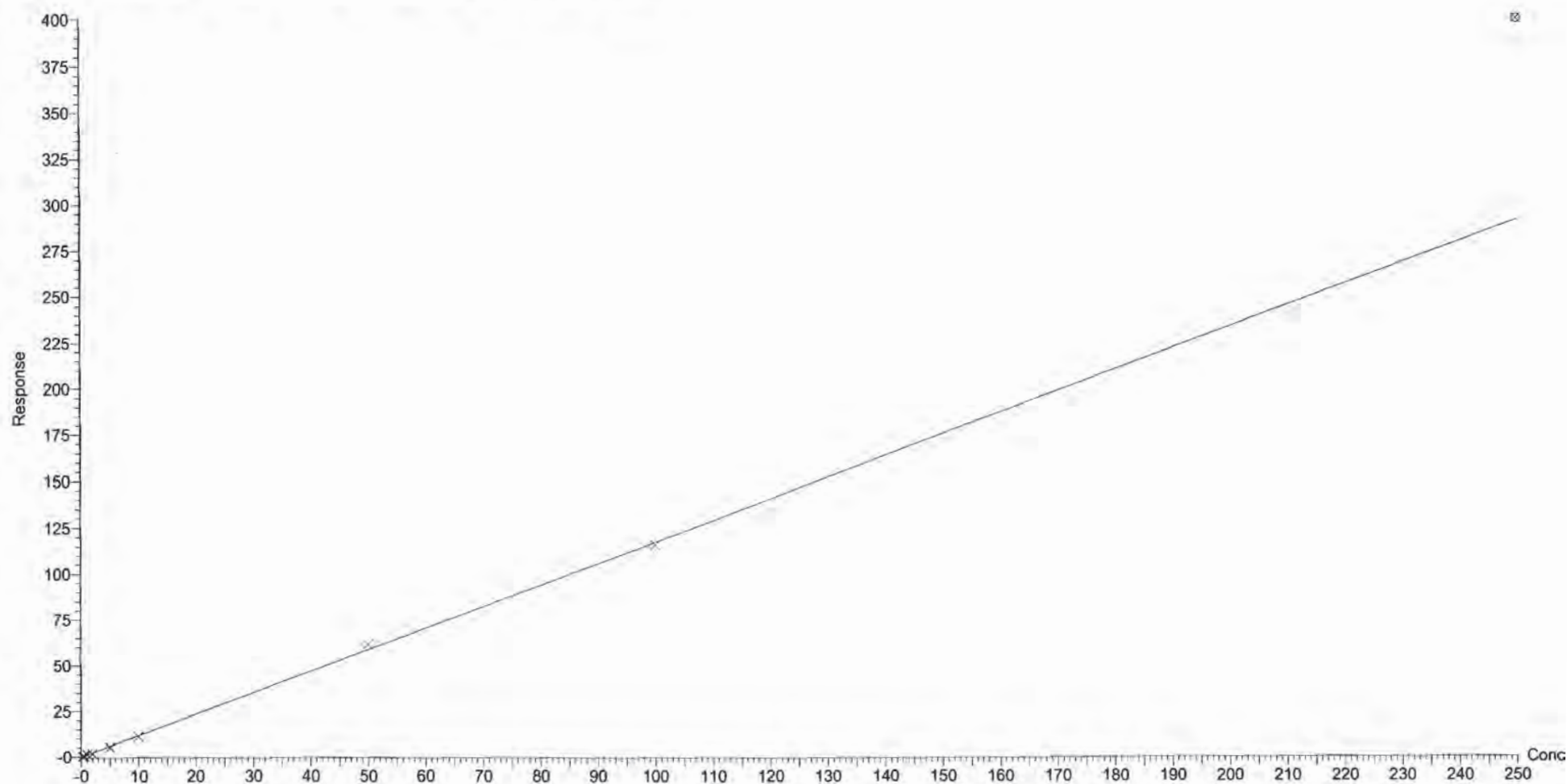
Compound name: L-PFOS

Coefficient of Determination: $R^2 = 0.997444$

Calibration curve: $-3.62431e-005 * x^2 + 1.17583 * x + 0.0311451$

Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

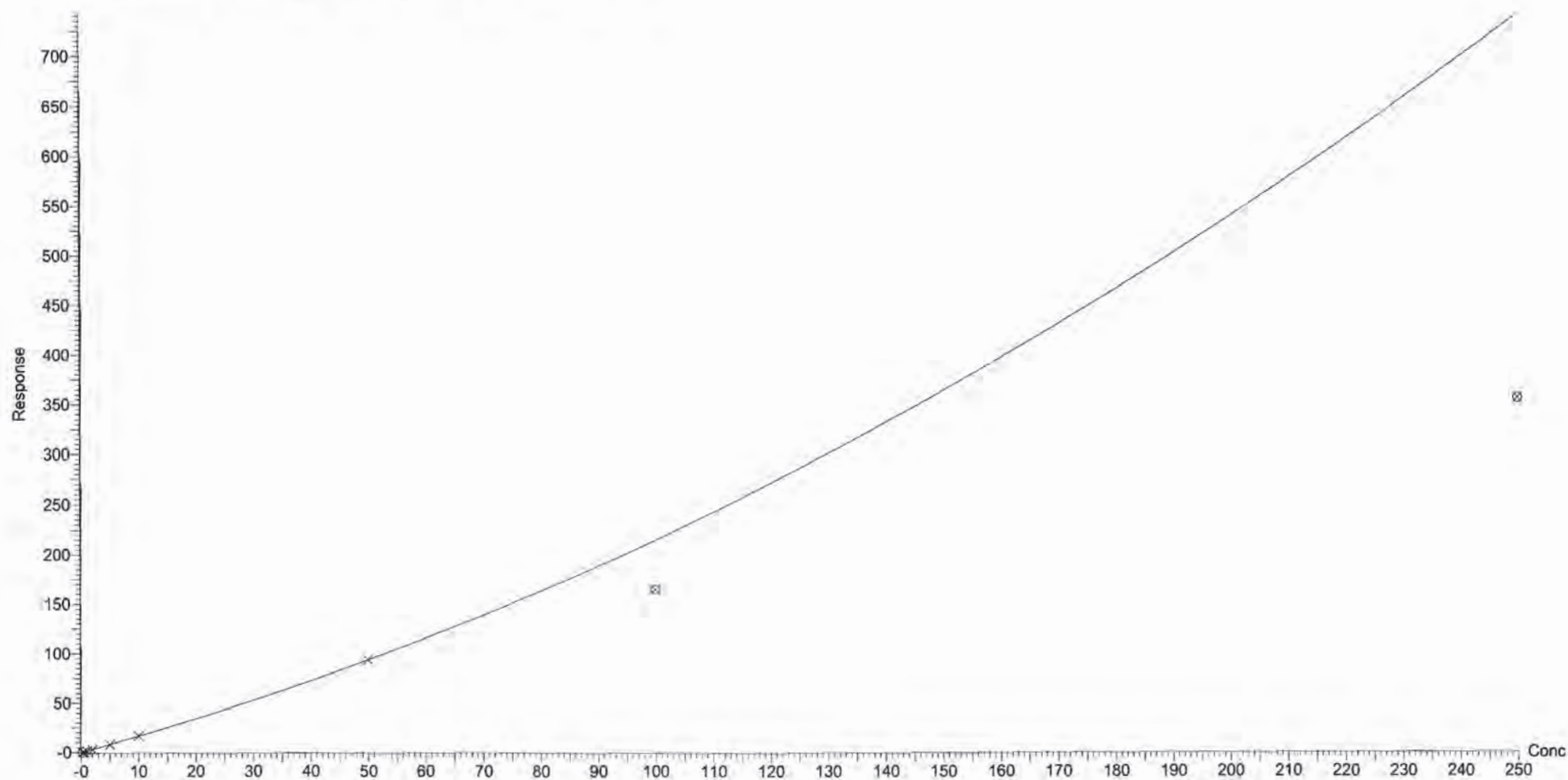
Compound name: PFDA

Coefficient of Determination: $R^2 = 0.999932$

Calibration curve: $0.00546964 * x^2 + 1.60165 * x + -0.235203$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

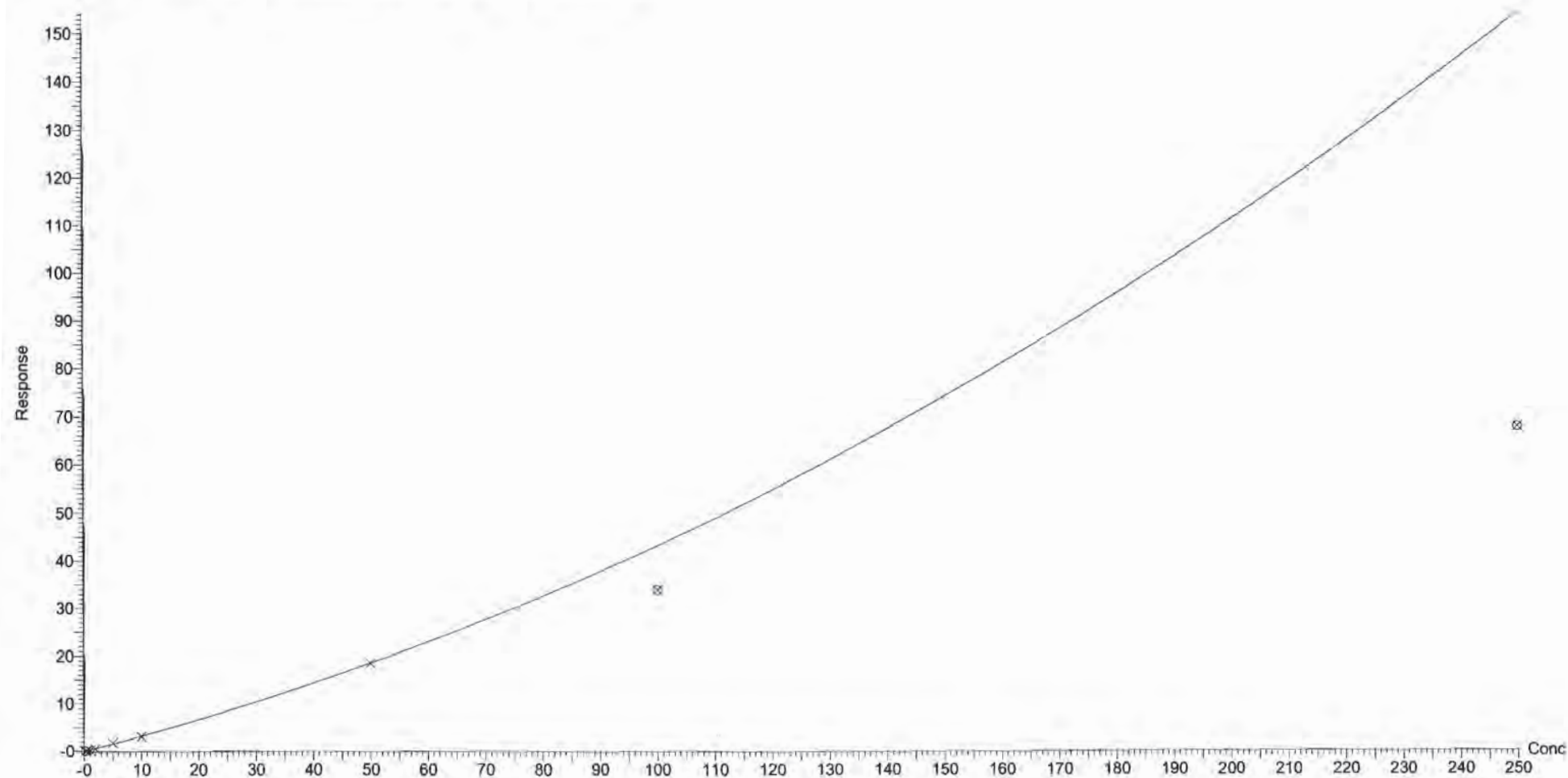
Compound name: 8:2 FTS

Coefficient of Determination: $R^2 = 0.997732$

Calibration curve: $0.00123859 * x^2 + 0.307368 * x + -0.0309813$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

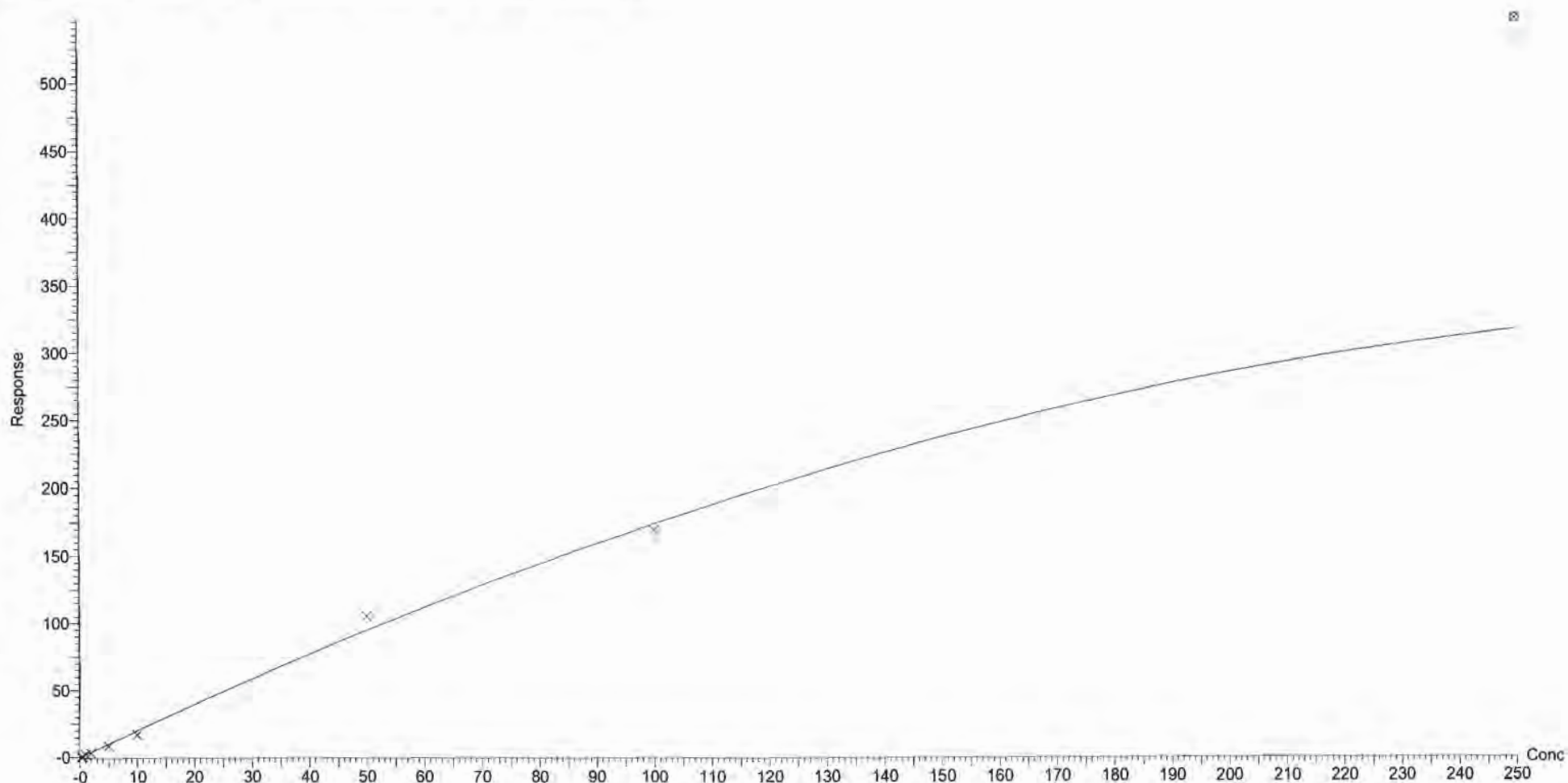
Compound name: N-MeFOSAA

Coefficient of Determination: $R^2 = 0.991446$

Calibration curve: $-0.00315911 * x^2 + 2.0555 * x + -0.320574$

Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

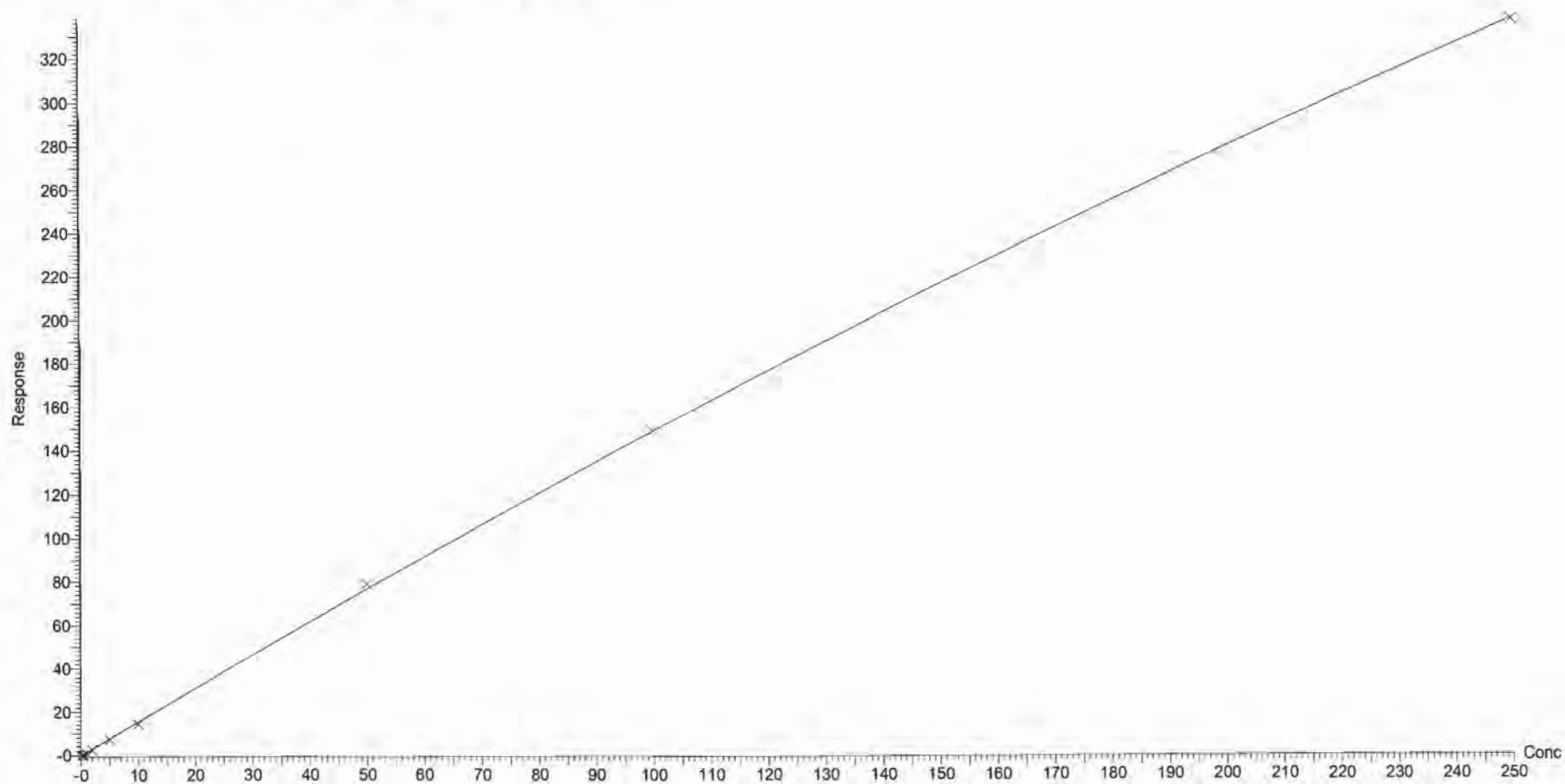
Compound name: N-EtFOSAA

Coefficient of Determination: $R^2 = 0.999097$

Calibration curve: $-0.000915461 * x^2 + 1.58258 * x + -0.401153$

Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

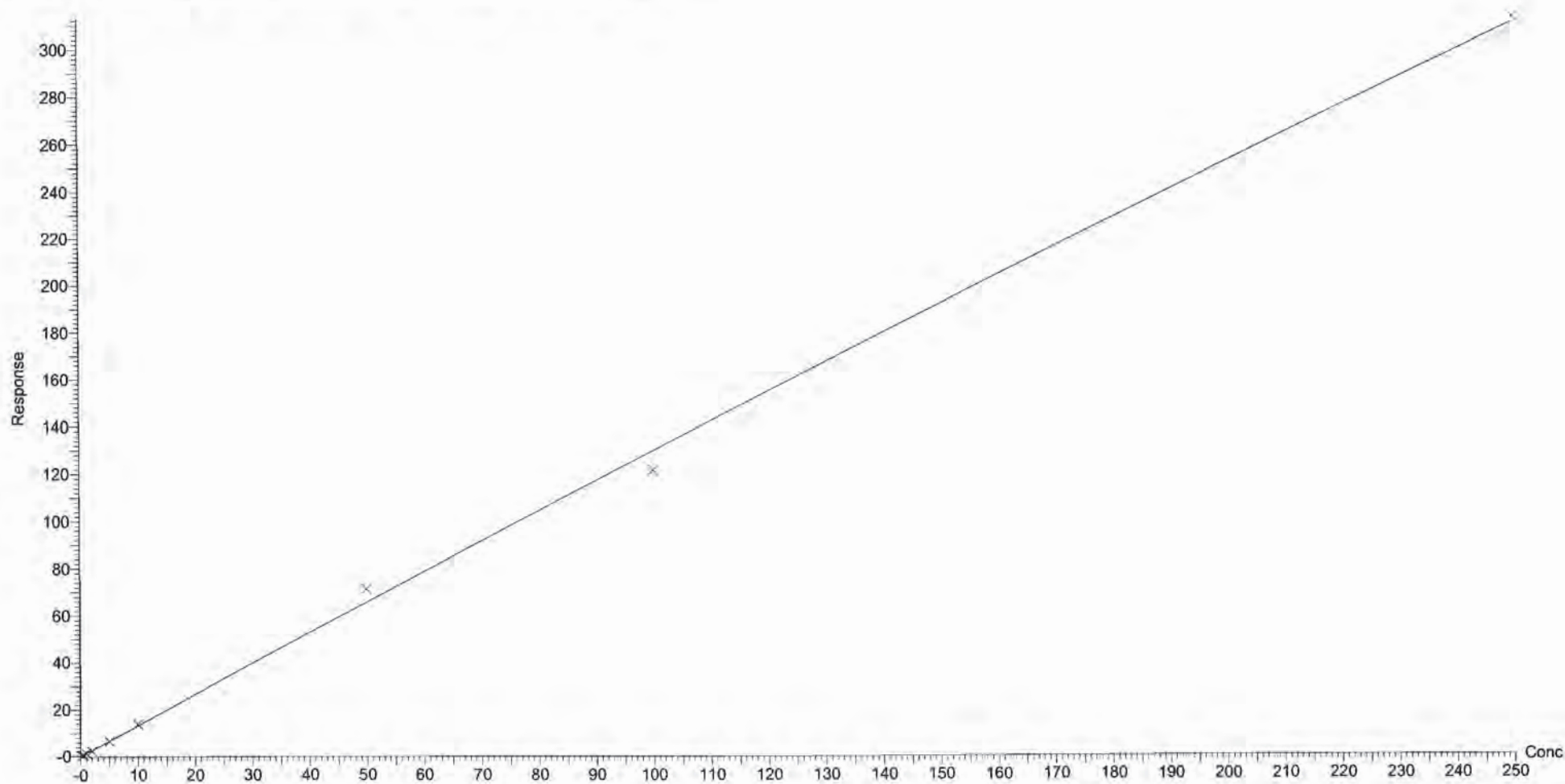
Compound name: PFUDa

Coefficient of Determination: $R^2 = 0.997858$

Calibration curve: $-0.000355567 * x^2 + 1.33241 * x + -0.0949136$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

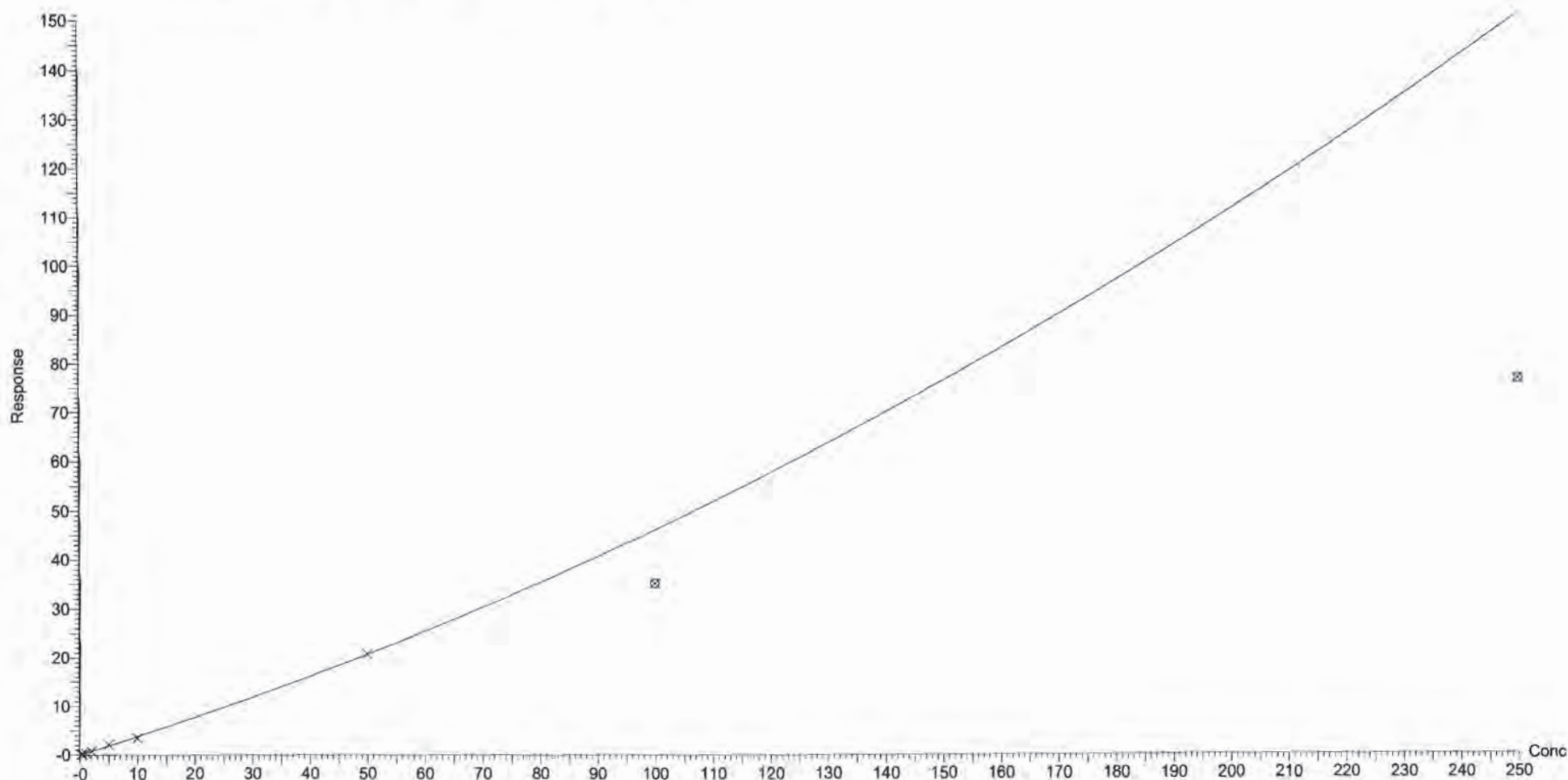
Compound name: PFDS

Coefficient of Determination: $R^2 = 0.997344$

Calibration curve: $0.000962848 * x^2 + 0.363602 * x + -0.00209133$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

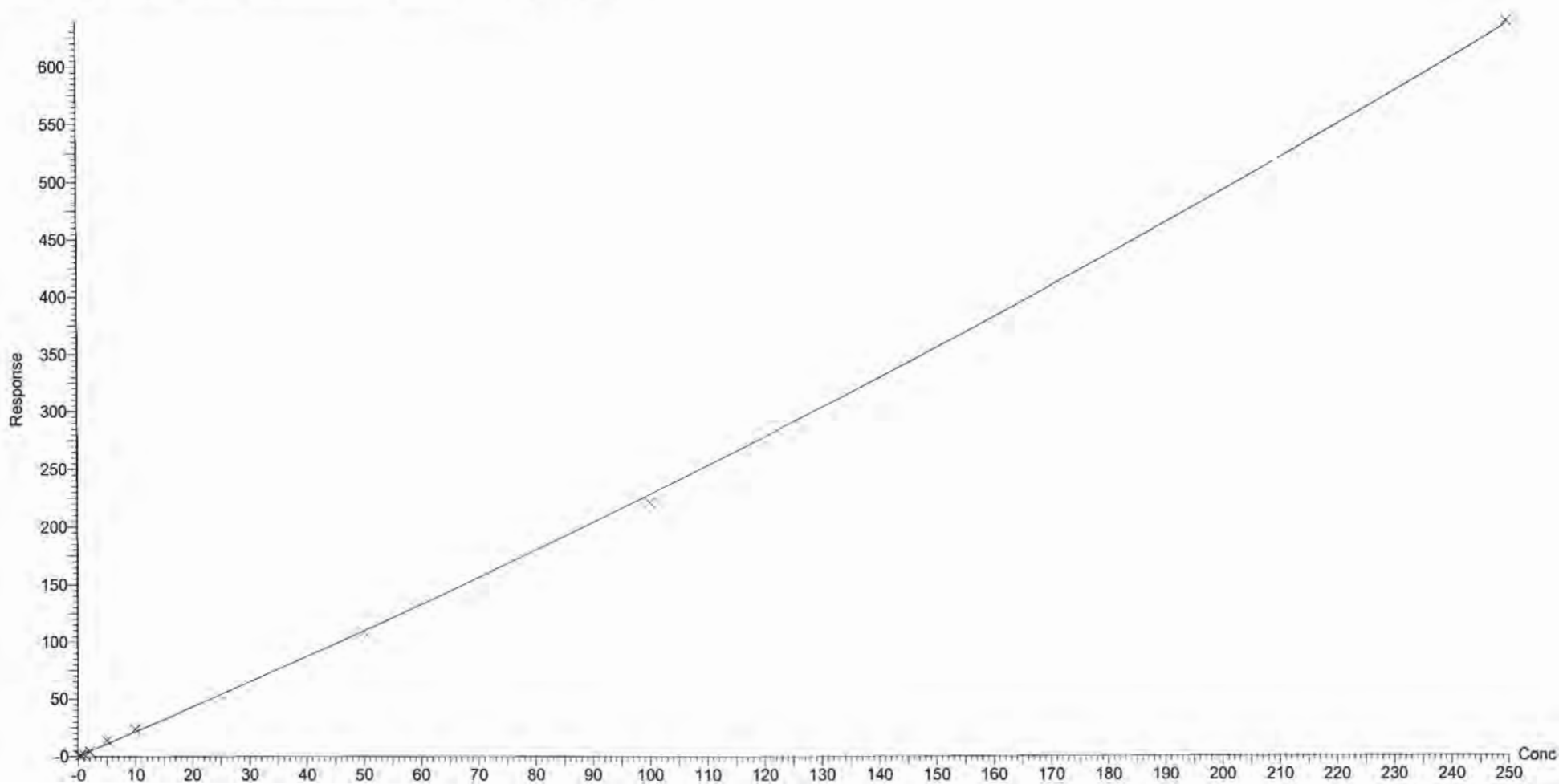
Compound name: PFDoA

Coefficient of Determination: $R^2 = 0.998683$

Calibration curve: $0.00180407 * x^2 + 2.09493 * x + 0.150658$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

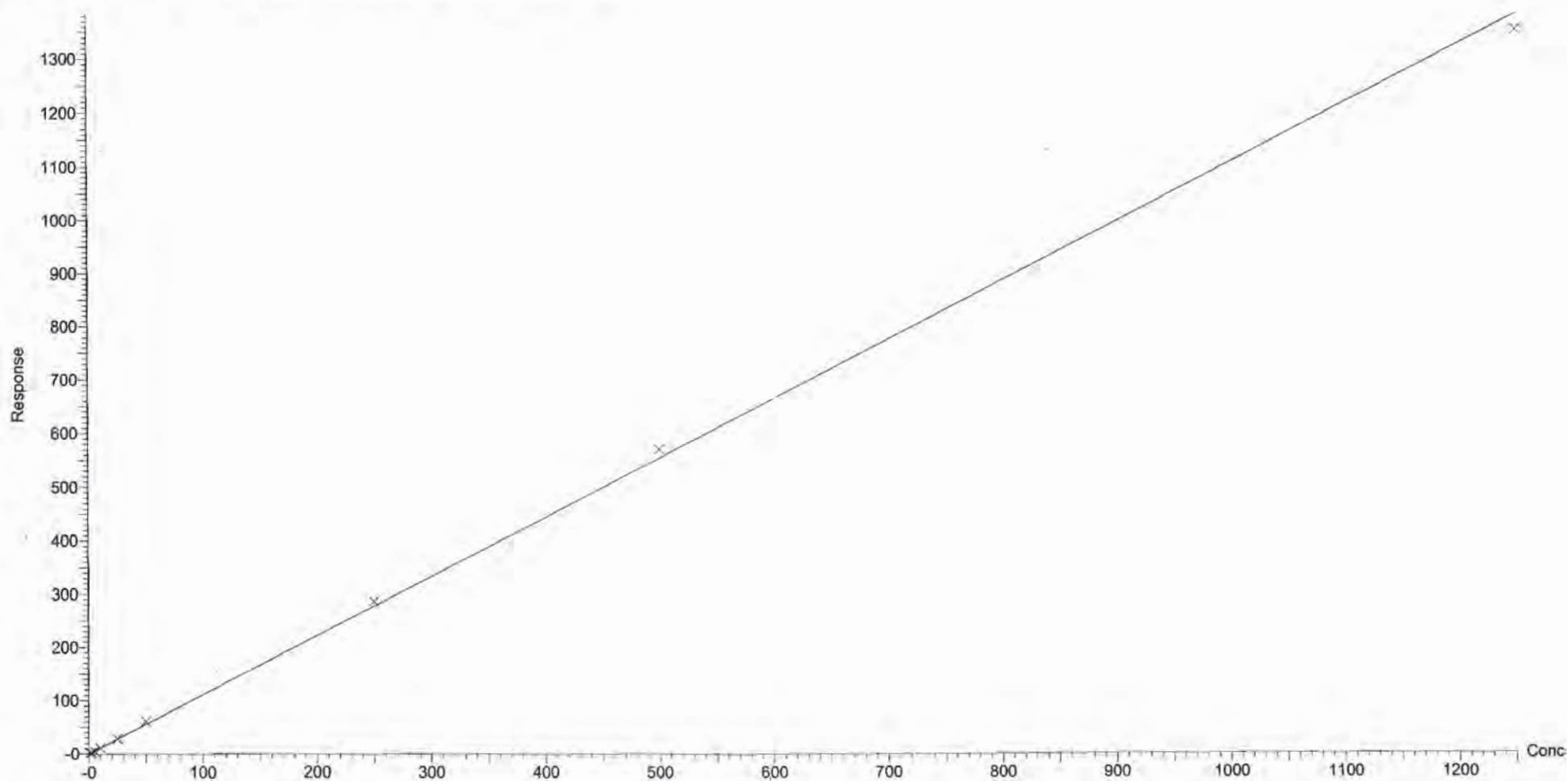
Compound name: N-MeFOSA

Correlation coefficient: $r = 0.999537$, $r^2 = 0.999075$

Calibration curve: $1.10666 * x + -0.170034$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

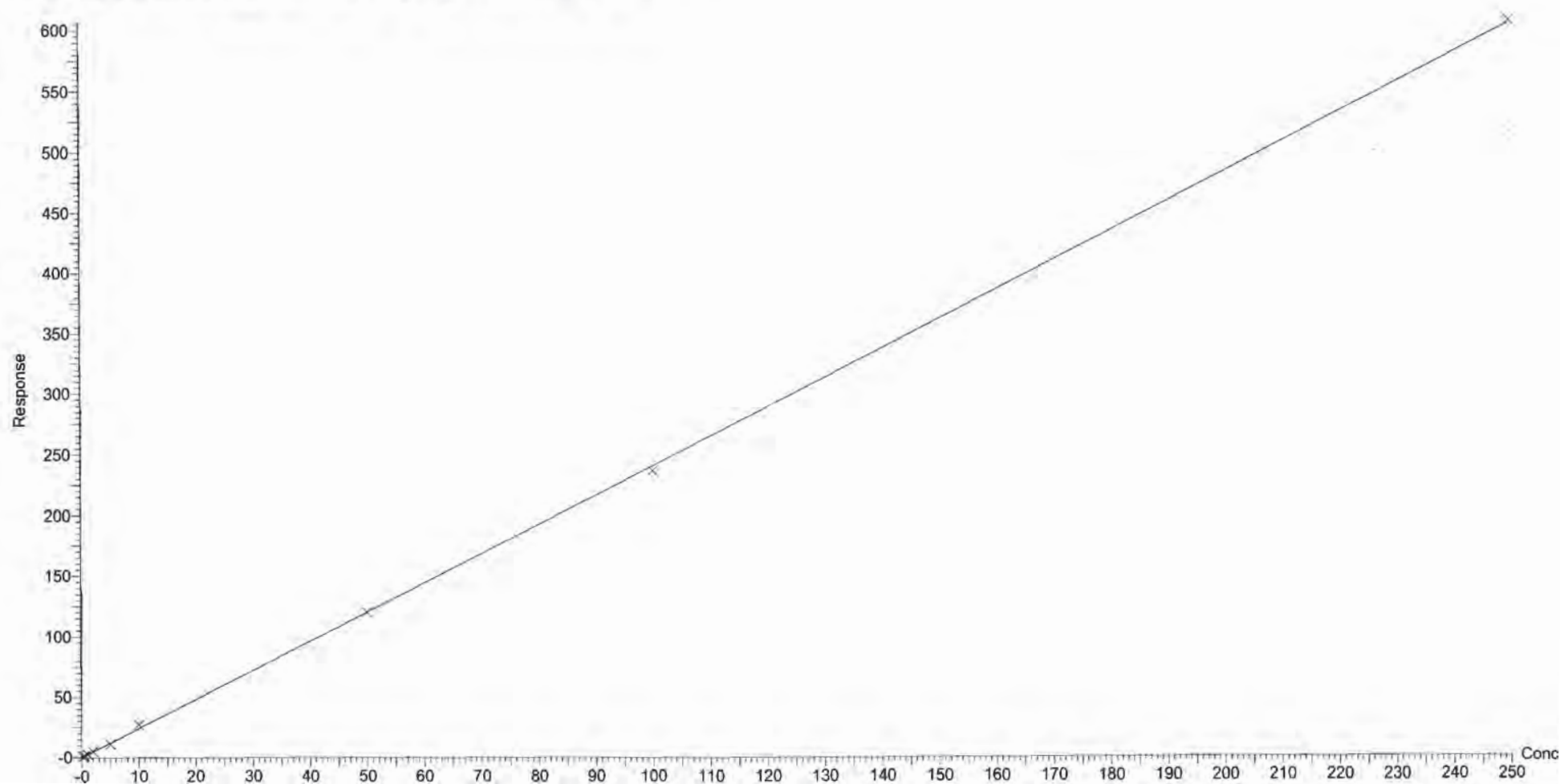
Compound name: PFTrDA

Coefficient of Determination: $R^2 = 0.999460$

Calibration curve: $0.000122781 * x^2 + 2.39065 * x + 0.000840038$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

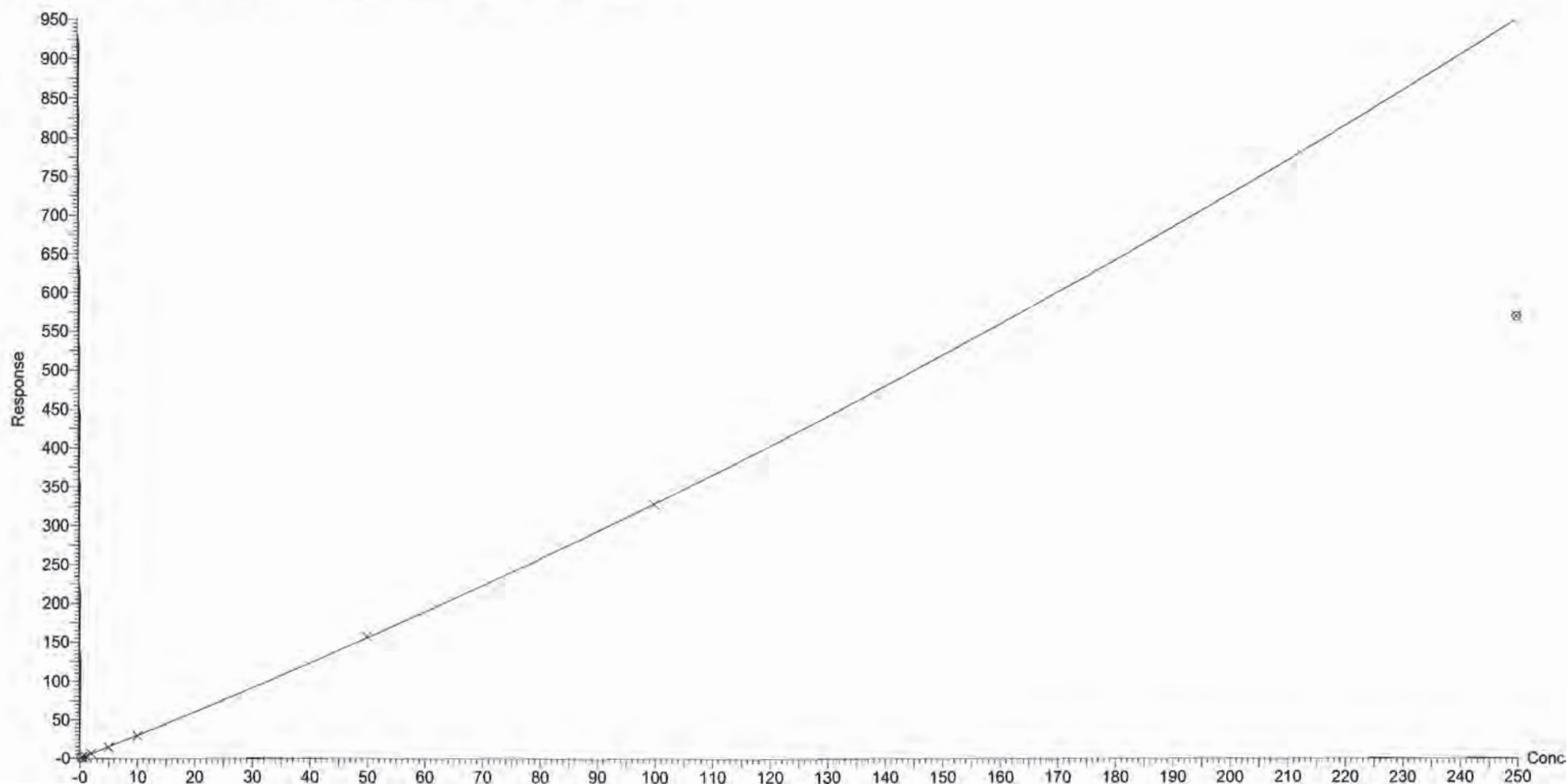
Compound name: PFTeDA

Coefficient of Determination: $R^2 = 0.999533$

Calibration curve: $0.00349062 * x^2 + 2.93229 * x + -0.154941$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

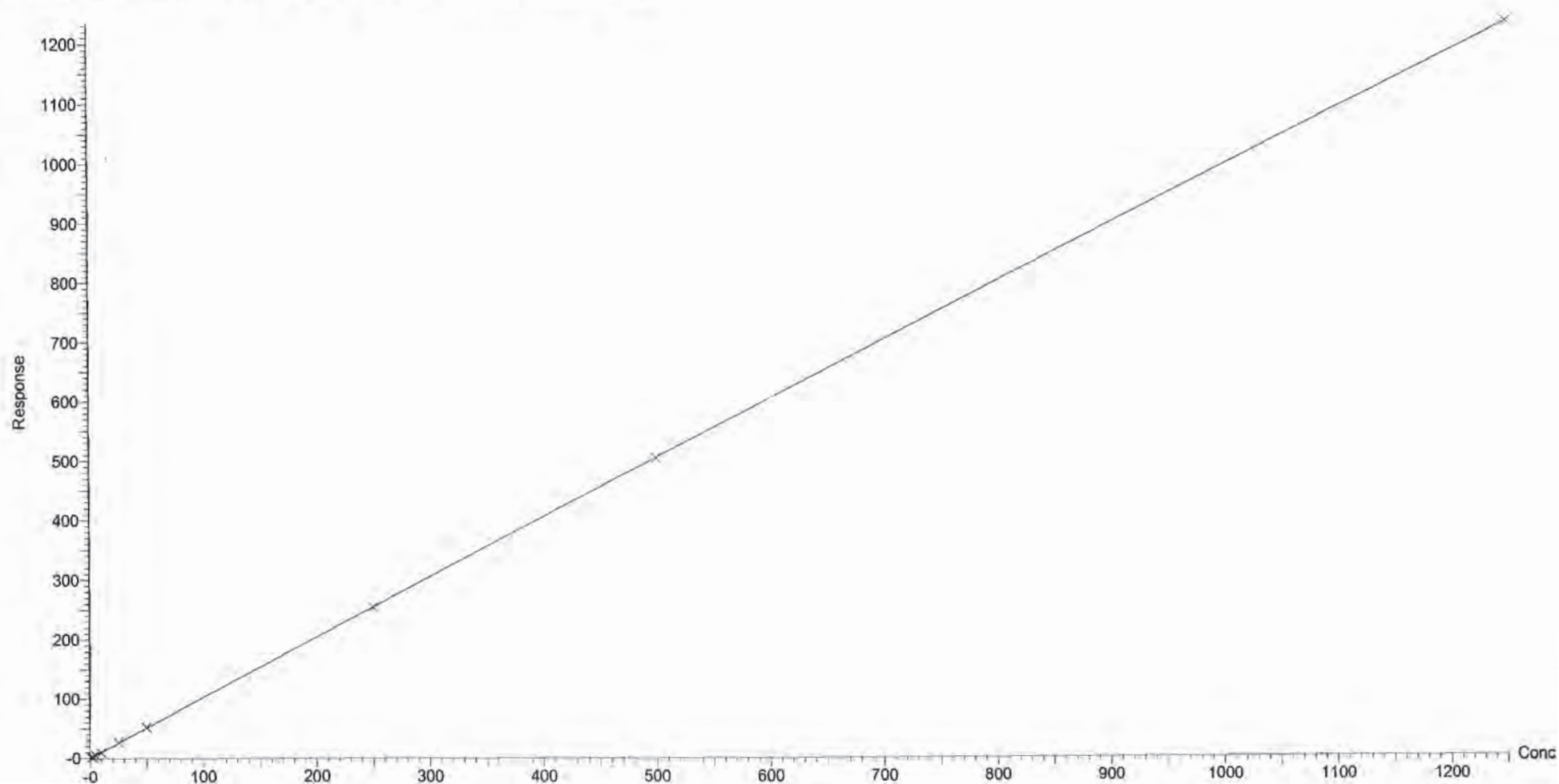
Compound name: N-EtFOSA

Coefficient of Determination: $R^2 = 0.999897$

Calibration curve: $-3.00904e-005 * x^2 + 1.02444 * x + -0.199244$

Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

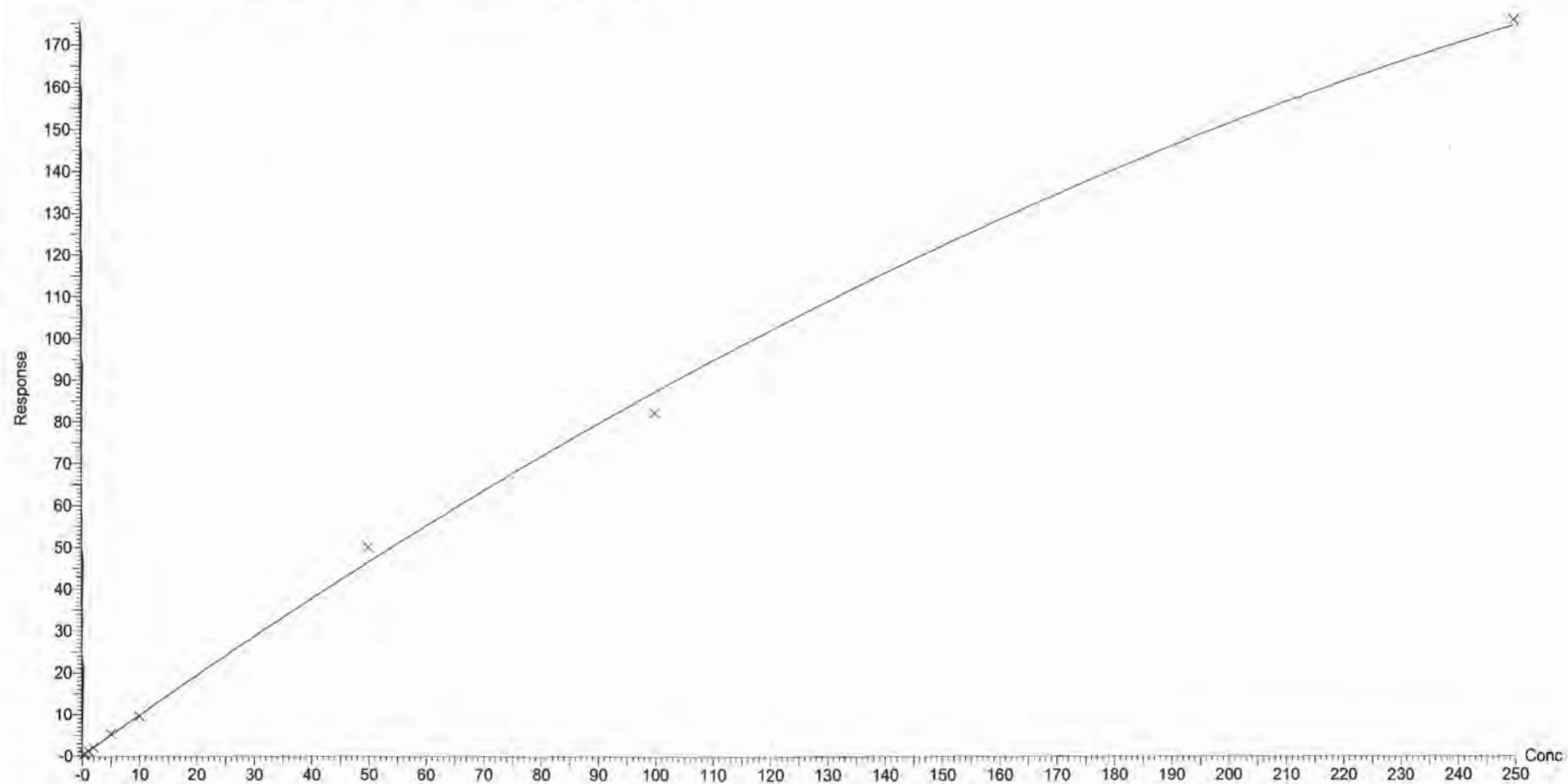
Compound name: PFHxDA

Coefficient of Determination: $R^2 = 0.997686$

Calibration curve: $-0.00114258 * x^2 + 0.984182 * x + 0.0683094$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

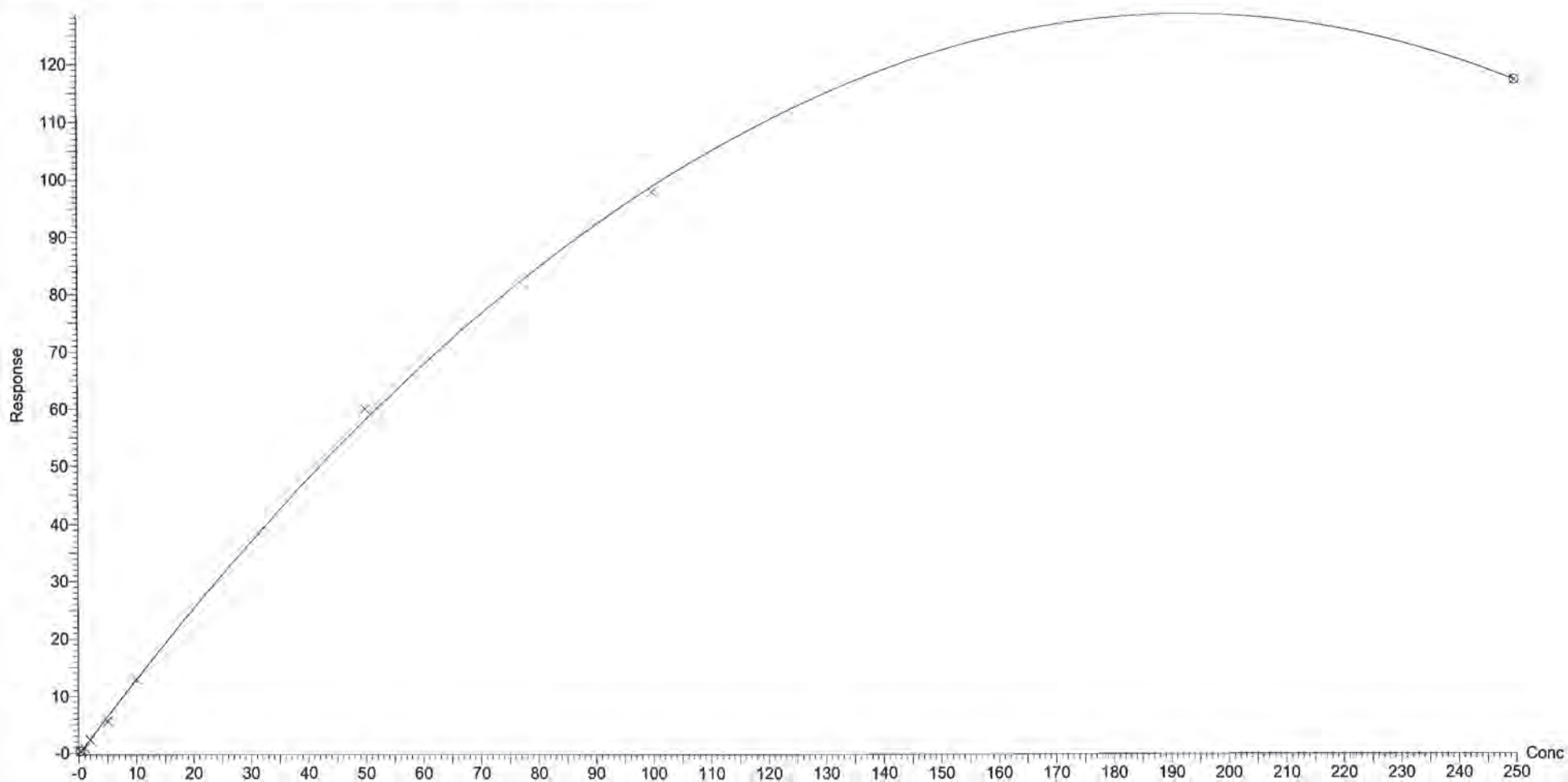
Compound name: PFODA

Coefficient of Determination: $R^2 = 0.997999$

Calibration curve: $-0.00347318 * x^2 + 1.33796 * x + -0.219409$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

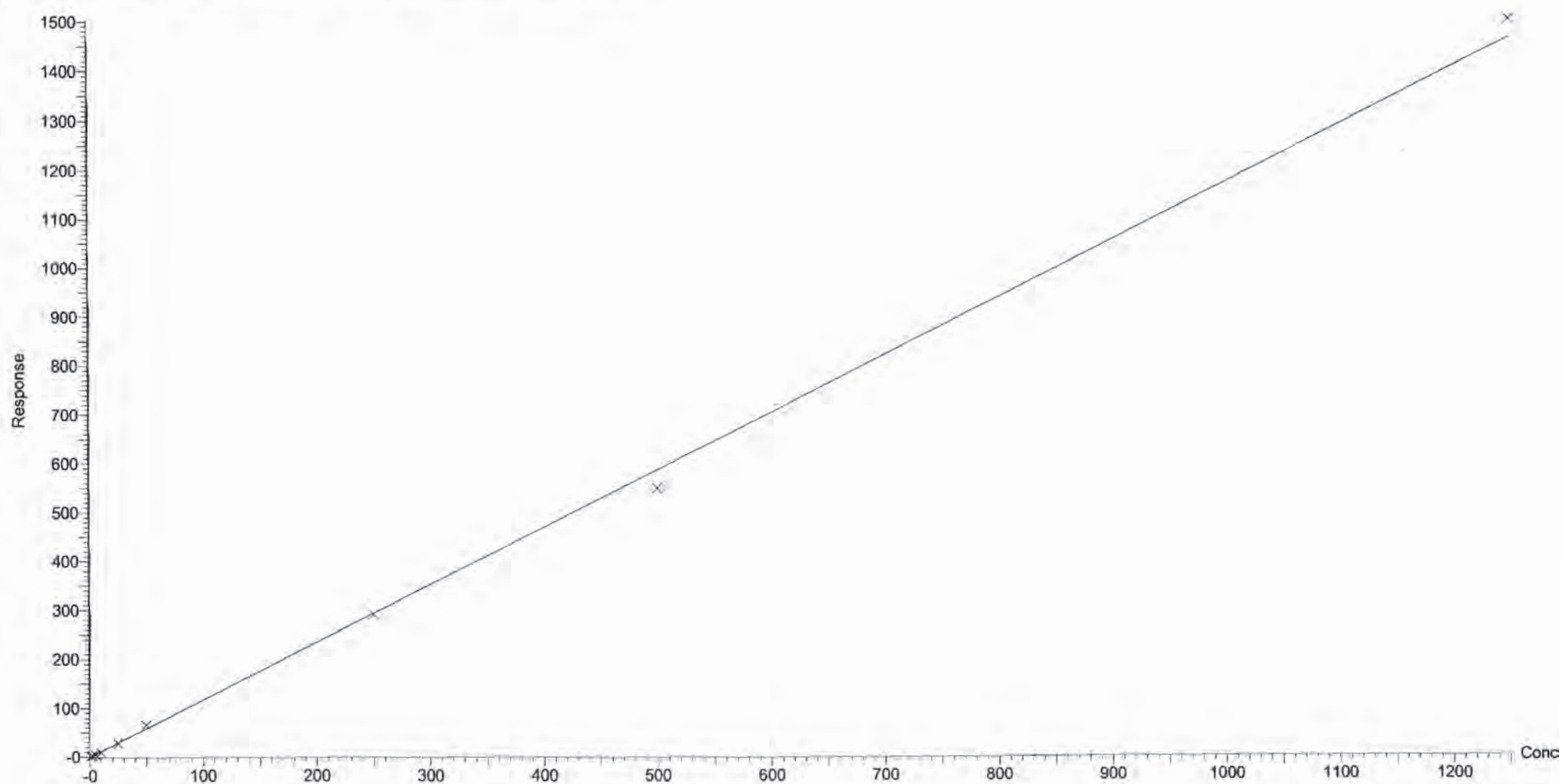
Compound name: N-MeFOSE

Correlation coefficient: $r = 0.998982$, $r^2 = 0.997965$

Calibration curve: $1.173 * x + -0.745383$

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:27:36 Pacific Standard Time

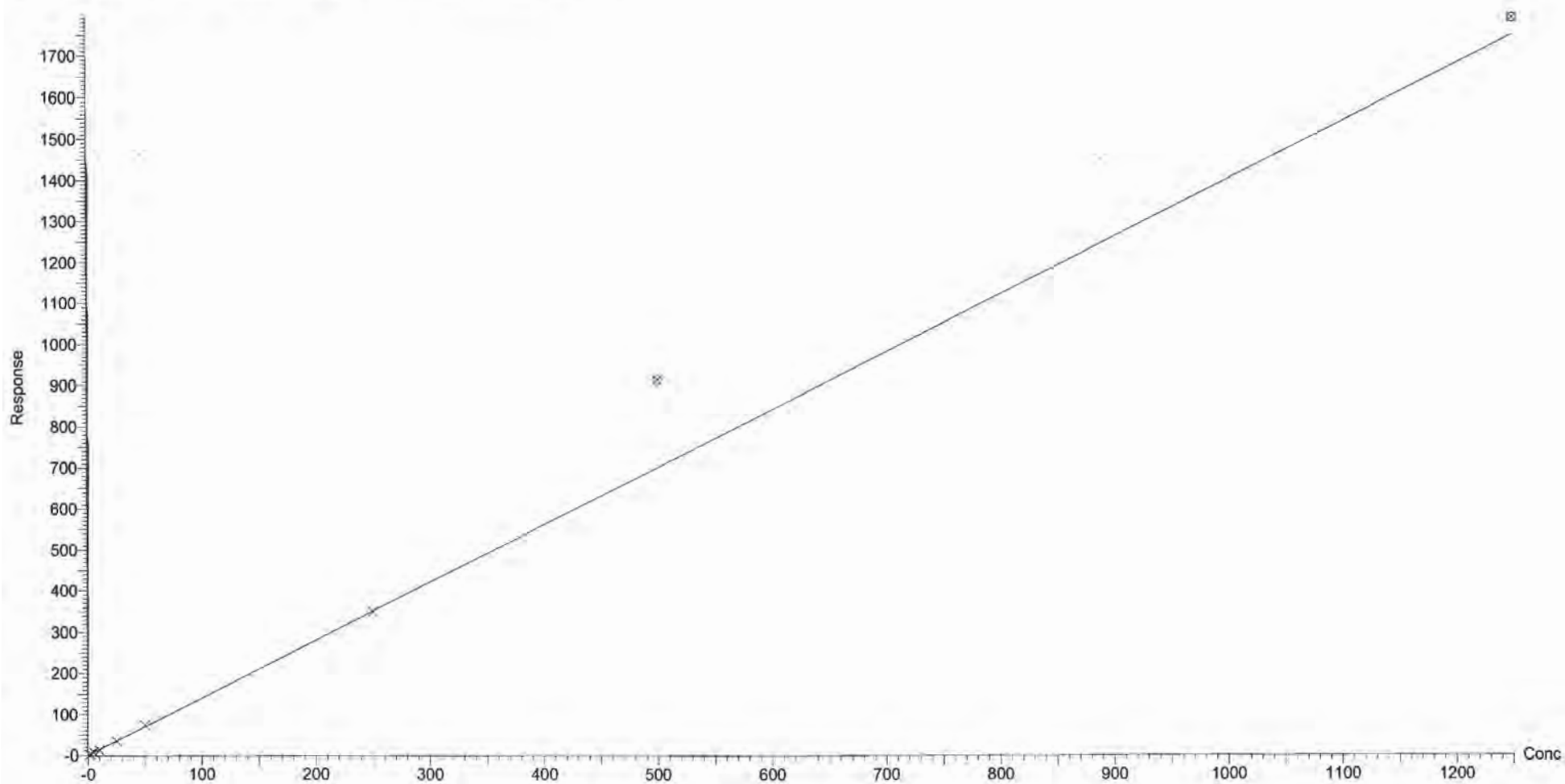
Compound name: N-EtFOSE

Correlation coefficient: $r = 0.999540$, $r^2 = 0.999080$

Calibration curve: $1.40177 * x + -0.207477$

Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

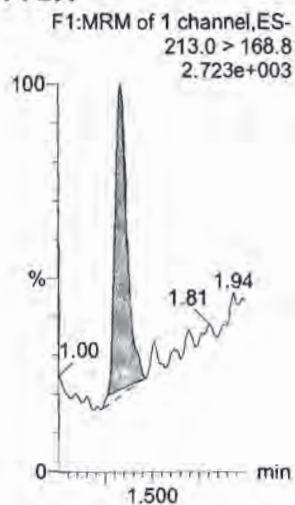
Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818.mdb 09 Jan 2018 10:39:49

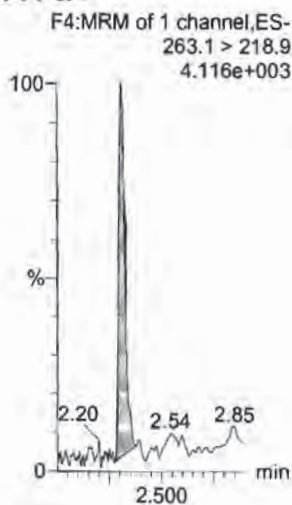
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180110M3_2, Date: 11-Jan-2018, Time: 09:34:02, ID: ST180110M3-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

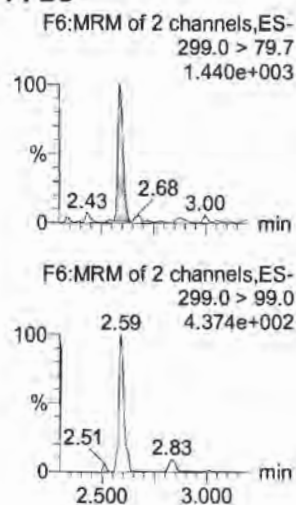
PFBA



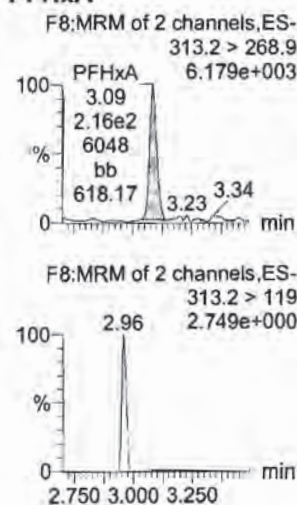
PFPeA



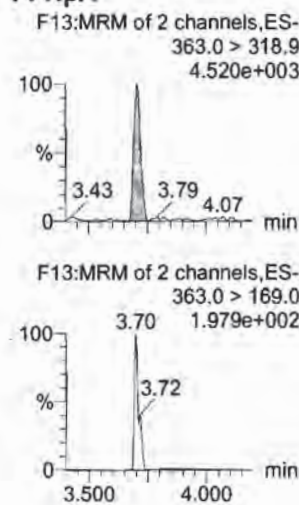
PFBS



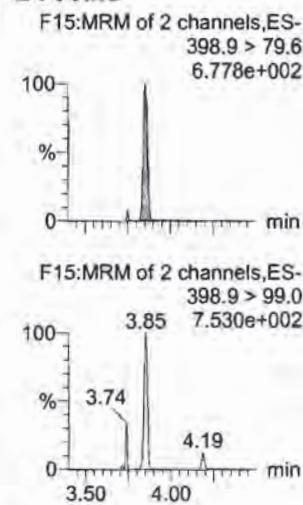
PFHxA



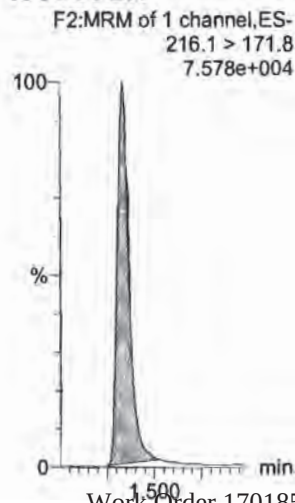
PFHpA



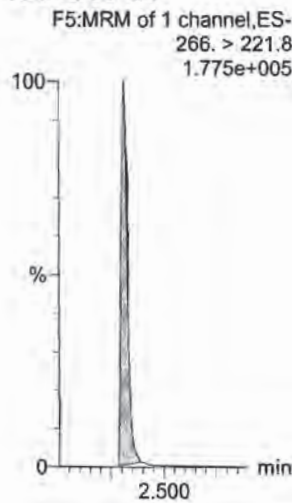
L-PFHxS



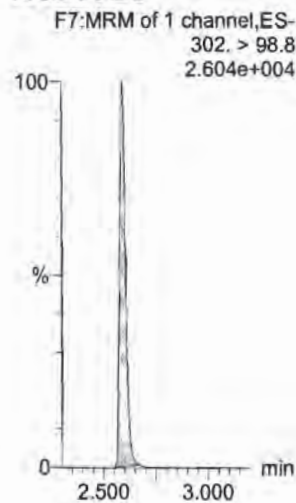
13C3-PFBA



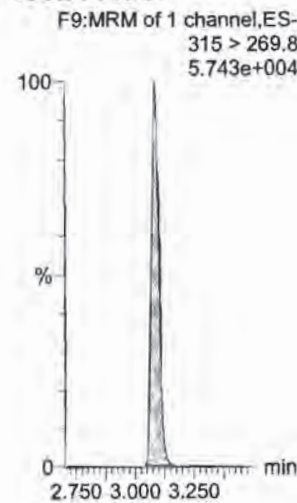
13C3-PFPeA



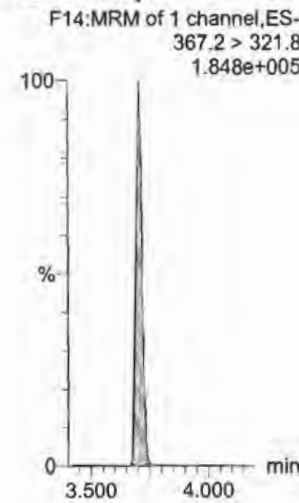
13C3-PFBS



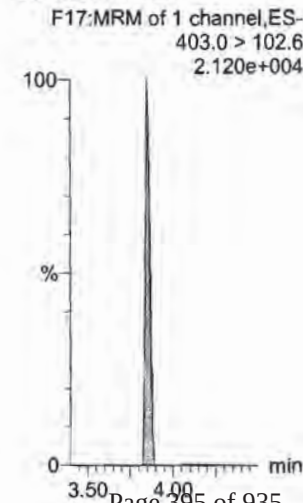
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

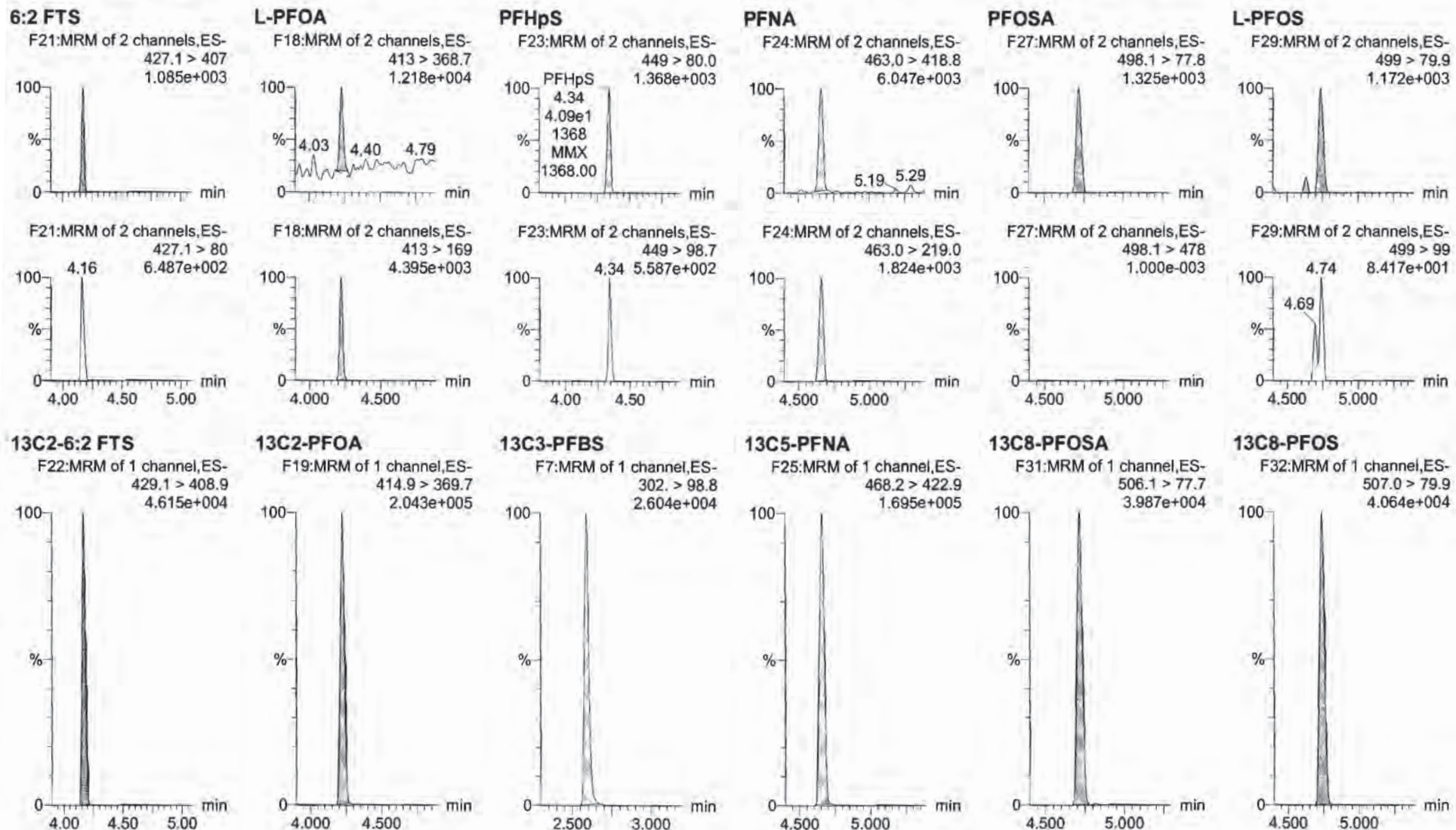


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Name: 180110M3_2, Date: 11-Jan-2018, Time: 09:34:02, ID: ST180110M3-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606



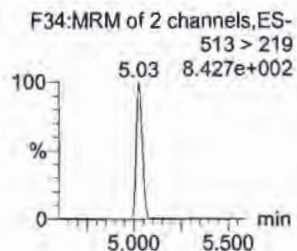
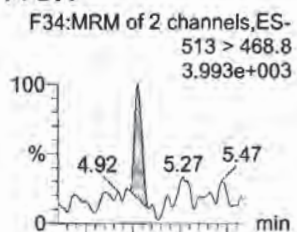
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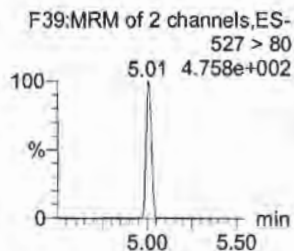
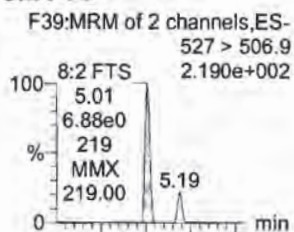
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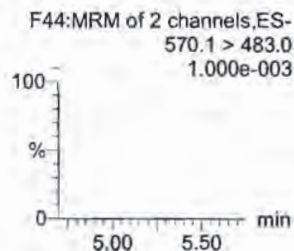
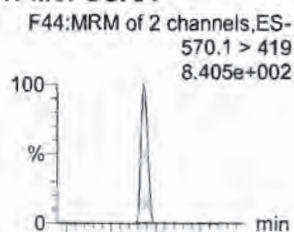
PFDA



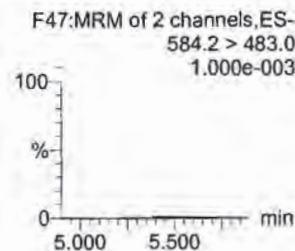
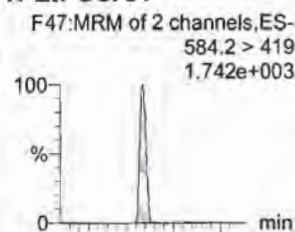
8:2 FTS



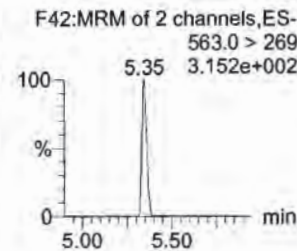
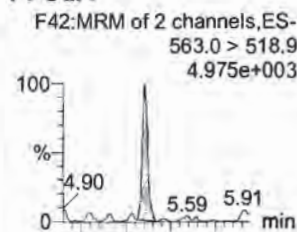
N-MeFOSAA



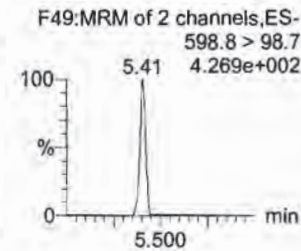
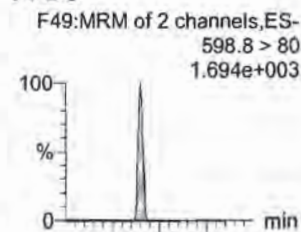
N-EtFOSAA



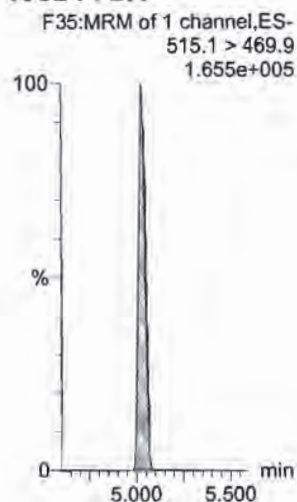
PFUdA



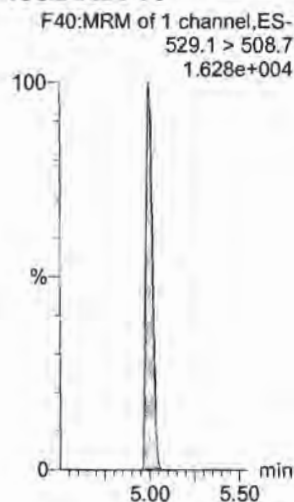
PFDS



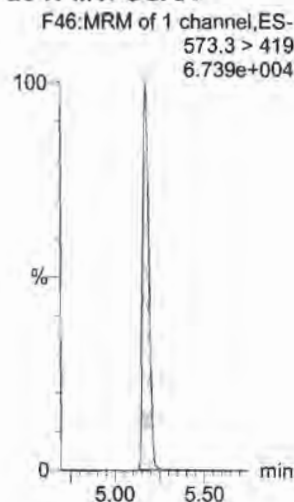
13C2-PFDA



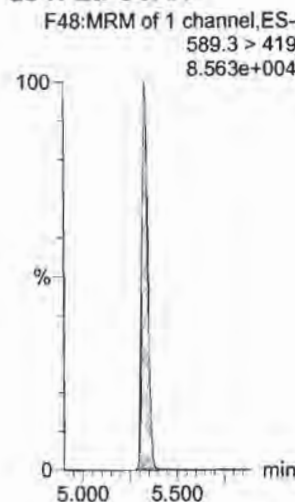
13C2-8:2 FTS



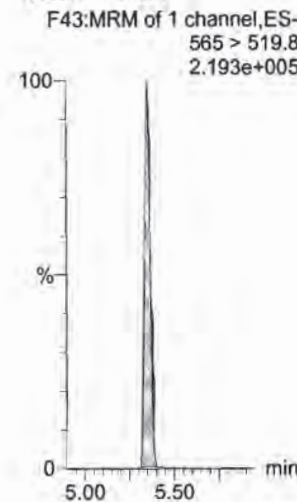
d3-N-MeFOSAA



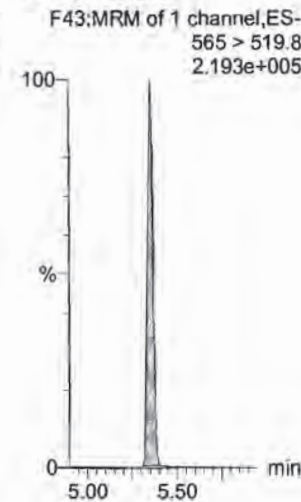
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



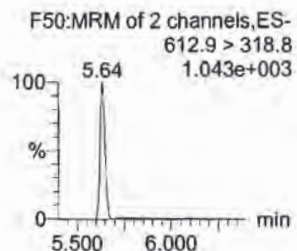
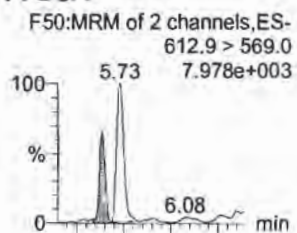
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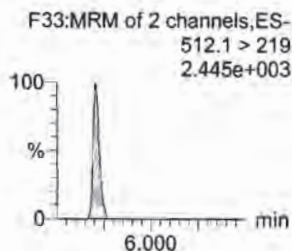
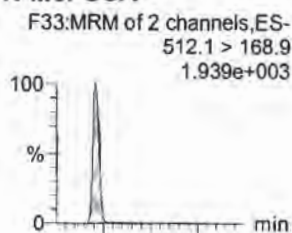
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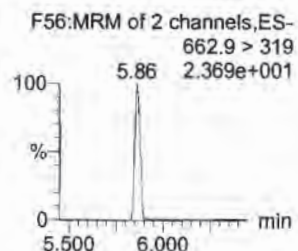
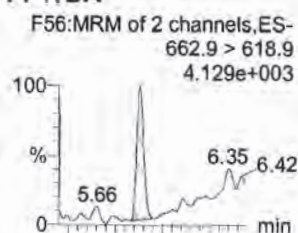
PFD_oA



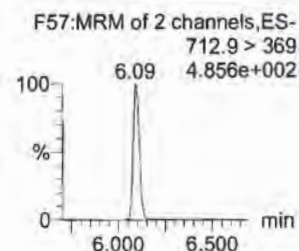
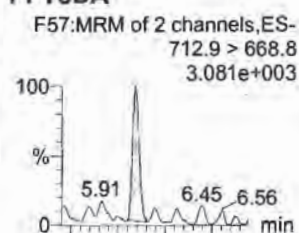
N-MeFOSA



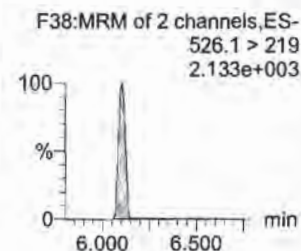
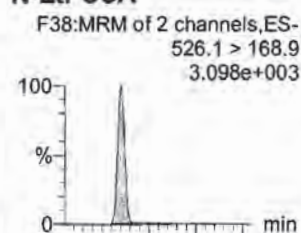
PFT_rDA



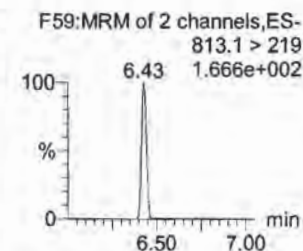
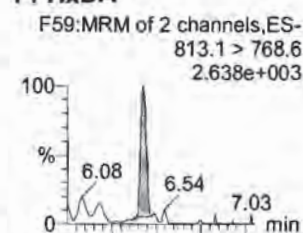
PFT_eDA



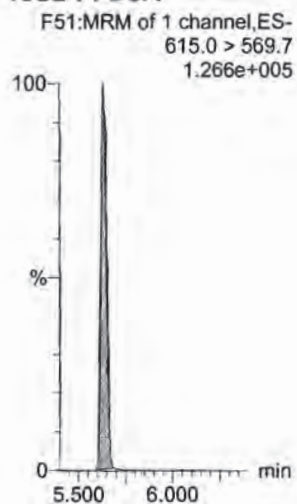
N-EtFOSA



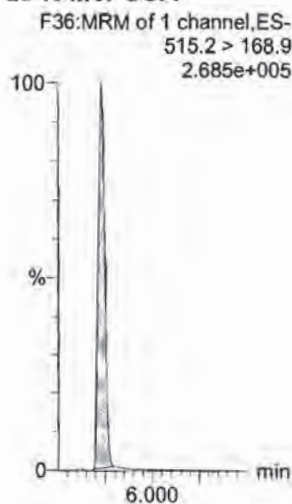
PFH_xDA



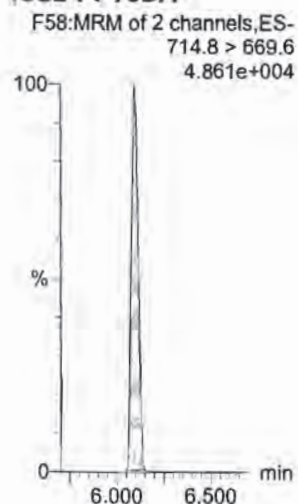
¹³C₂-PFD_oA



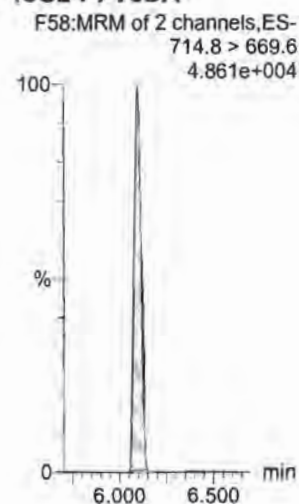
d₃-N-MeFOSA



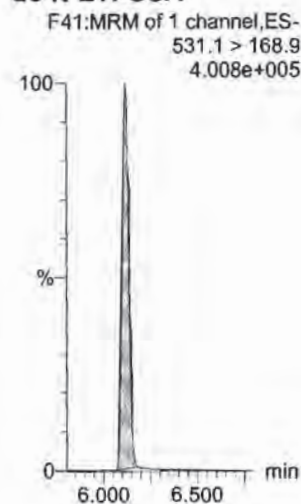
¹³C₂-PFT_rDA



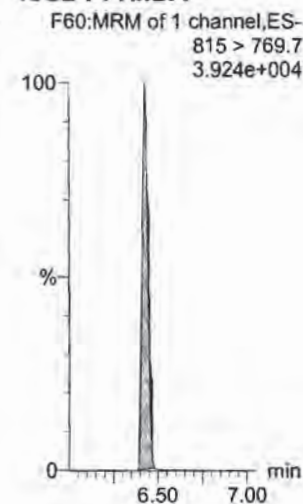
¹³C₂-PFT_eDA



d₅-N-ETFOSA



¹³C₂-PFH_xDA



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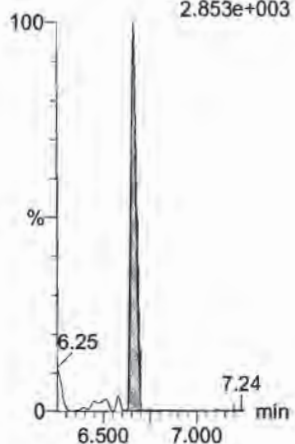
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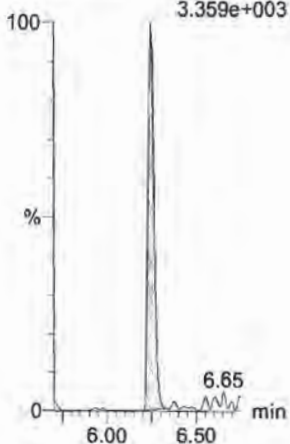
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
2.853e+003



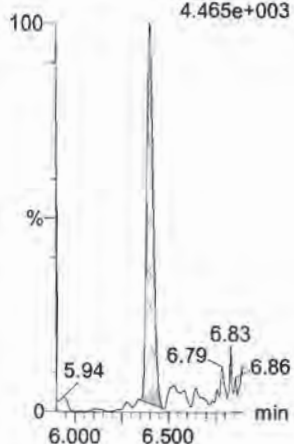
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
3.359e+003



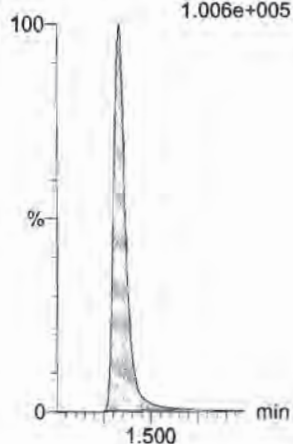
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
4.465e+003



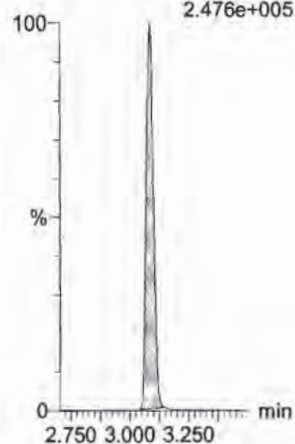
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.006e+005



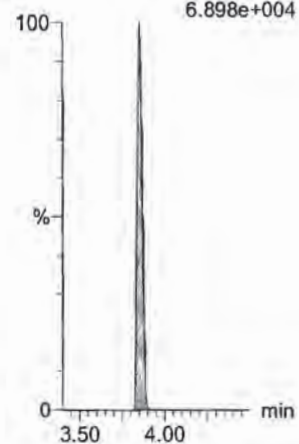
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
2.476e+005



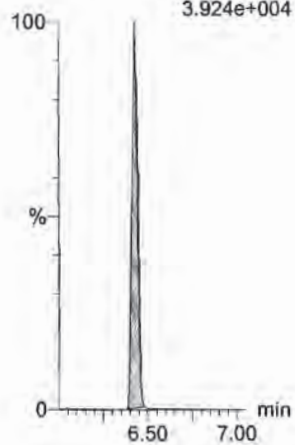
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
6.898e+004



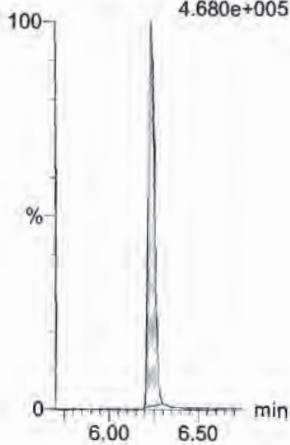
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
3.924e+004



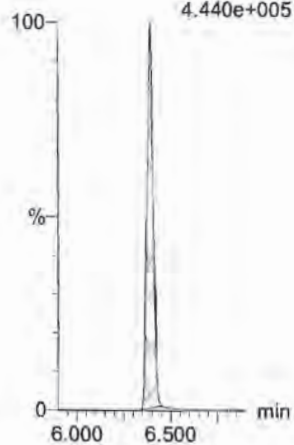
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
4.680e+005



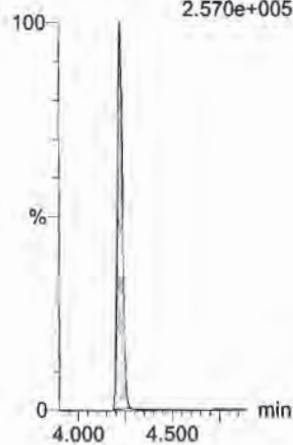
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
4.440e+005



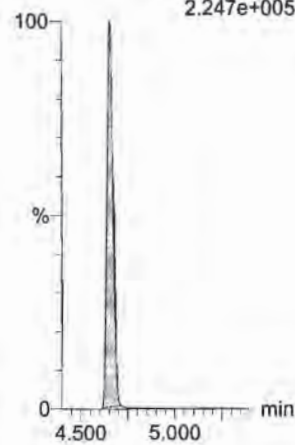
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
2.570e+005



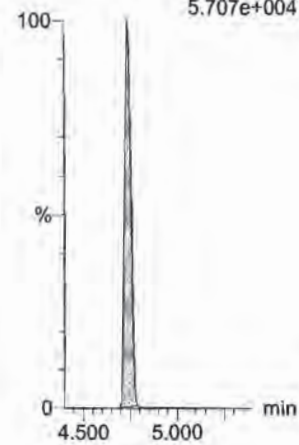
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
2.247e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
5.707e+004



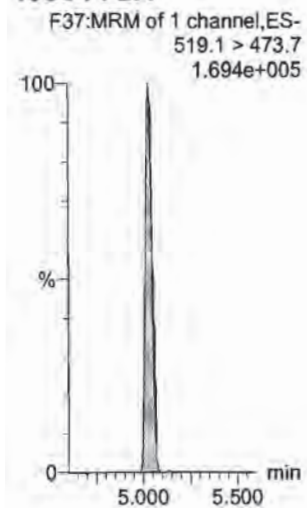
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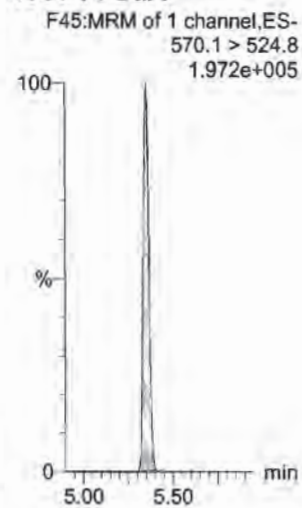
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Name: 180110M3_2, Date: 11-Jan-2018, Time: 09:34:02, ID: ST180110M3-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

13C6-PFDA



13C7-PFUdA

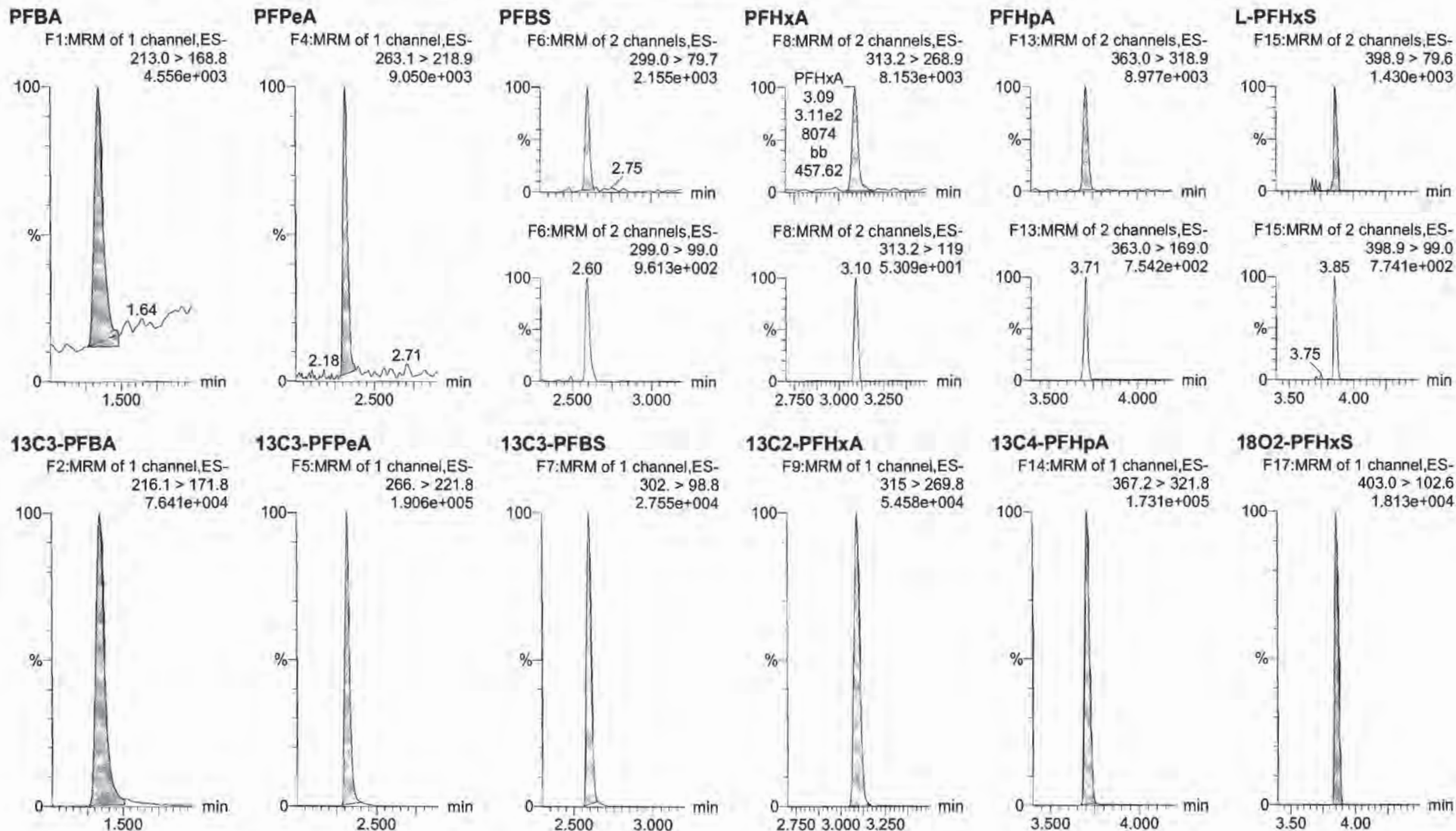


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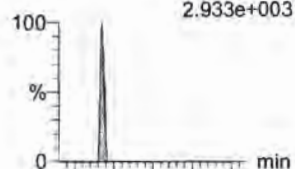
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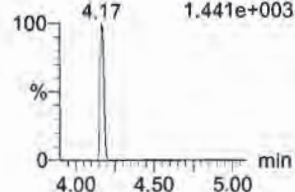
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6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
2.933e+003

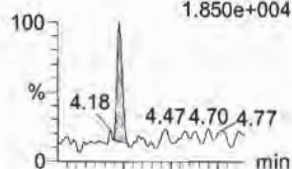


F21:MRM of 2 channels,ES-
427.1 > 80
1.441e+003

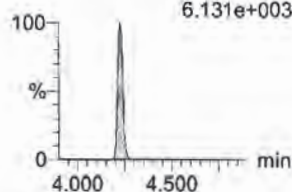


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
1.850e+004



F18:MRM of 2 channels,ES-
413 > 169
6.131e+003

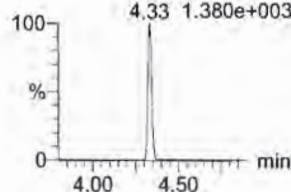


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
2.216e+003

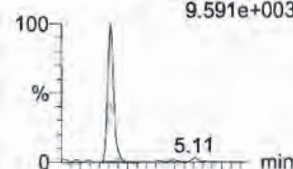


F23:MRM of 2 channels,ES-
449 > 98.7
1.380e+003

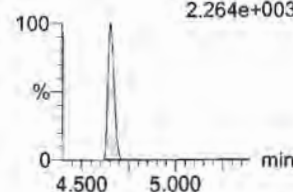


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
9.591e+003

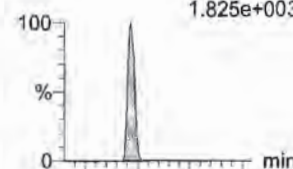


F24:MRM of 2 channels,ES-
463.0 > 219.0
2.264e+003

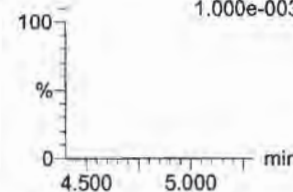


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
1.825e+003

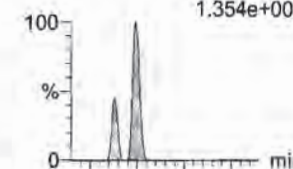


F27:MRM of 2 channels,ES-
498.1 > 478
1.000e-003

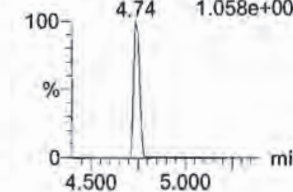


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
1.354e+003

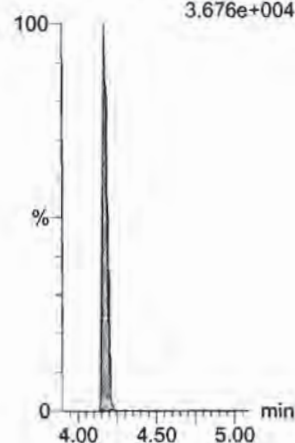


F29:MRM of 2 channels,ES-
499 > 99
1.058e+003



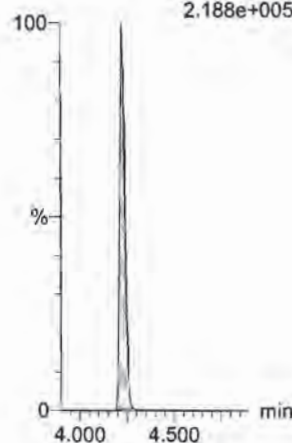
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
3.676e+004



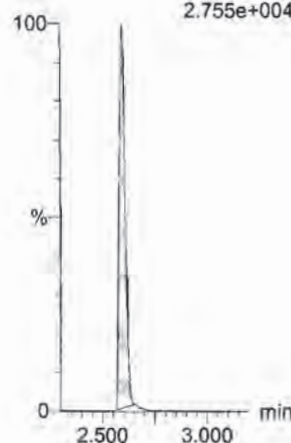
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
2.188e+005



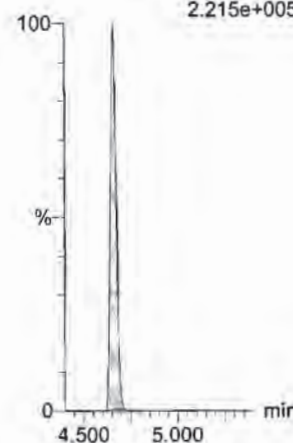
13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
2.755e+004



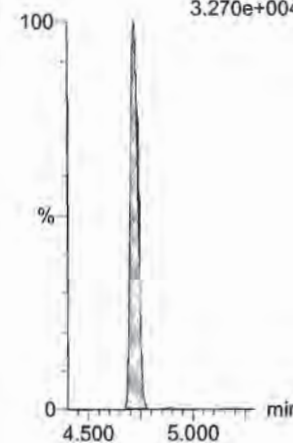
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
2.215e+005



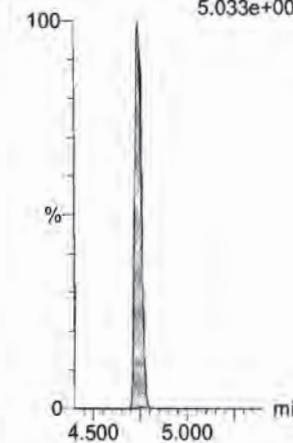
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
3.270e+004



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
5.033e+004



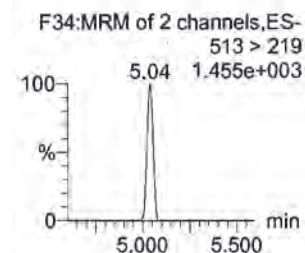
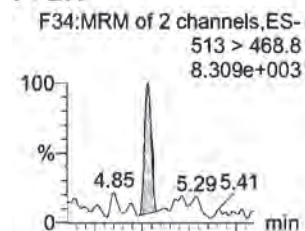
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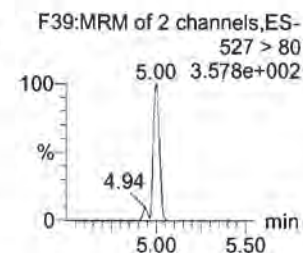
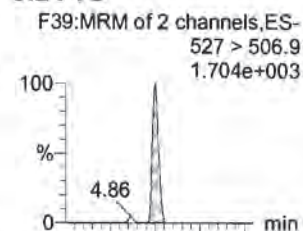
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Name: 180110M3_3, Date: 11-Jan-2018, Time: 09:45:13, ID: ST180110M3-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607

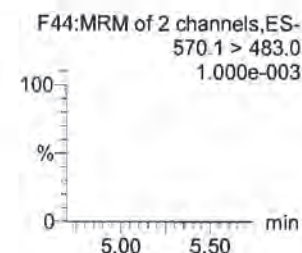
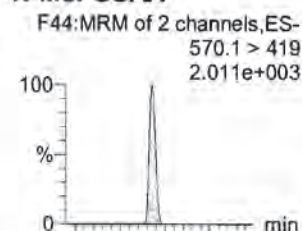
PFDA



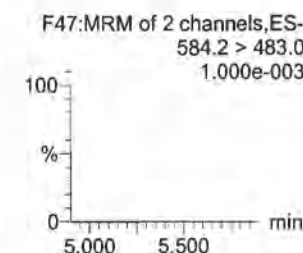
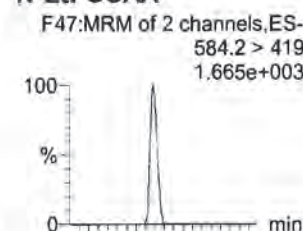
8:2 FTS



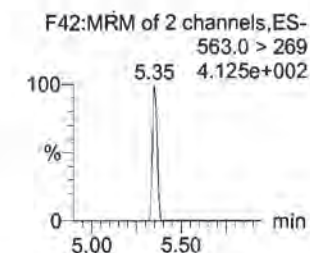
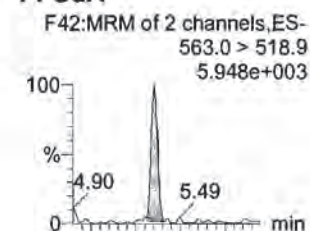
N-MeFOSAA



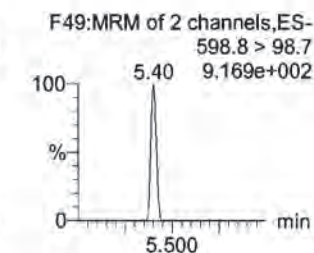
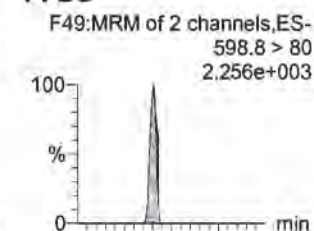
N-EtFOSAA



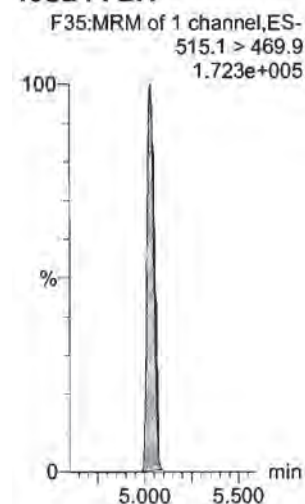
PFUdA



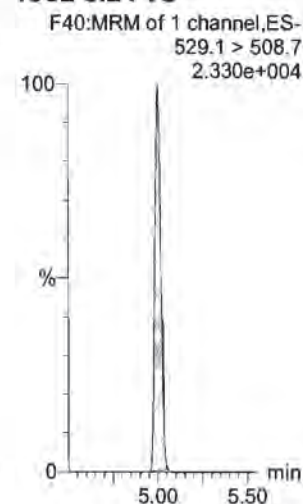
PFDS



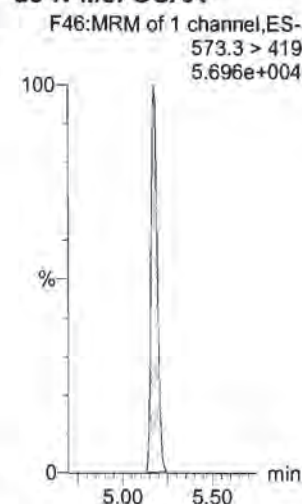
13C2-PFDA



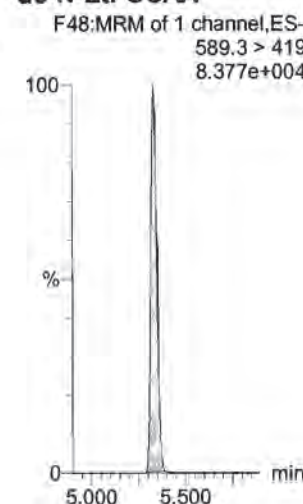
13C2-8:2 FTS



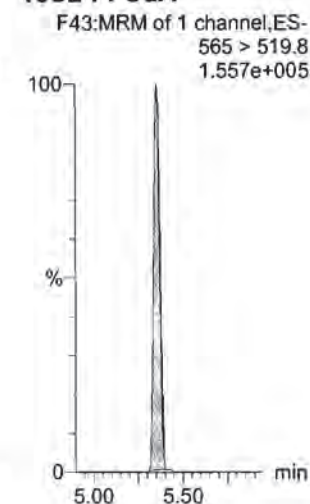
d3-N-MeFOSAA



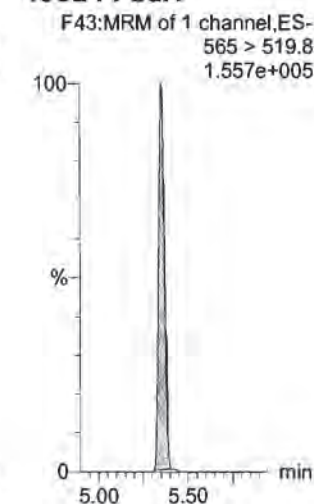
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



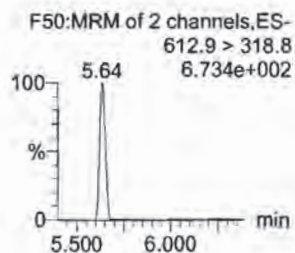
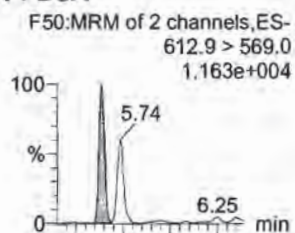
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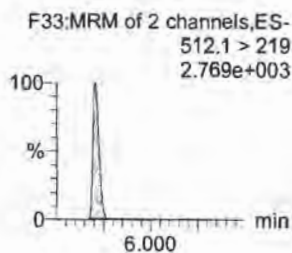
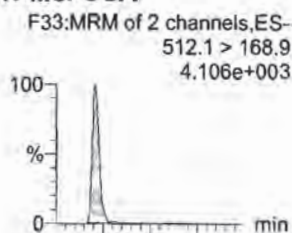
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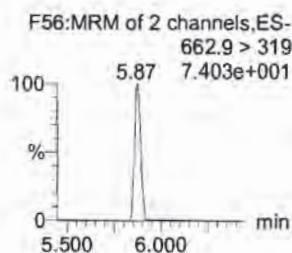
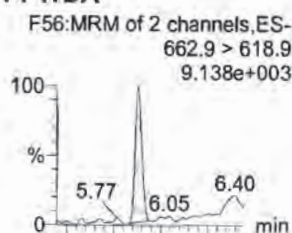
PFDaA



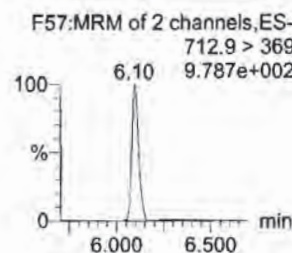
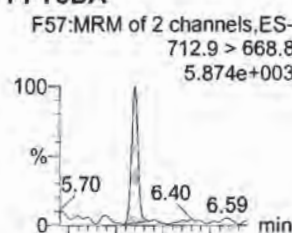
N-MeFOSA



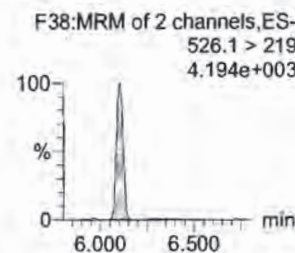
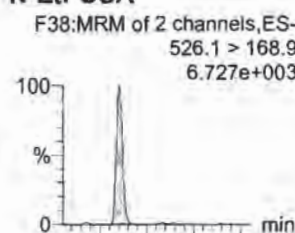
PFTrDA



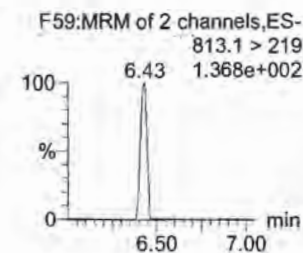
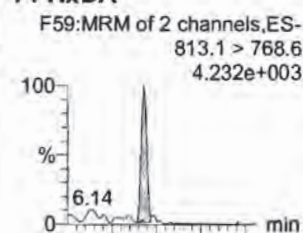
PFTeDA



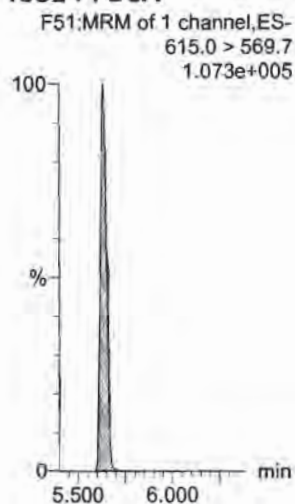
N-EtFOSA



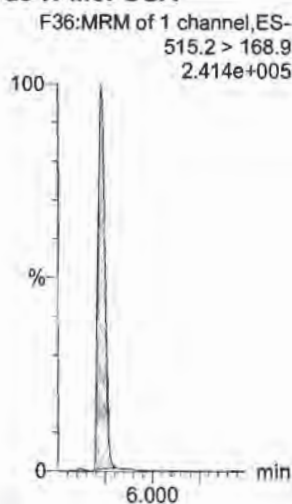
PFHxDA



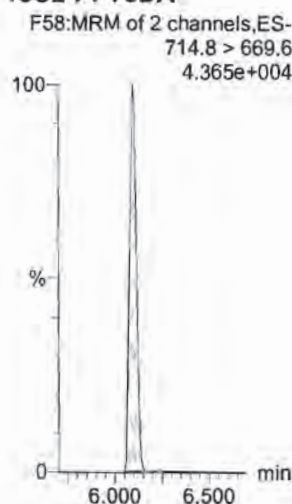
13C2-PFDaA



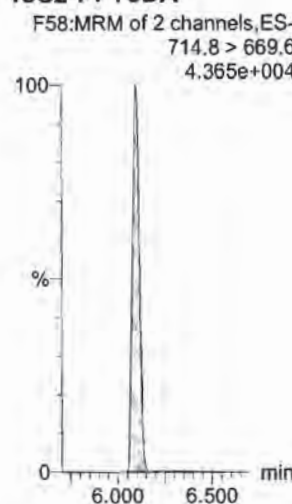
d3-N-MeFOSA



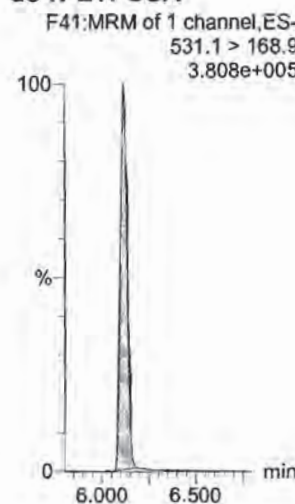
13C2-PFTeDA



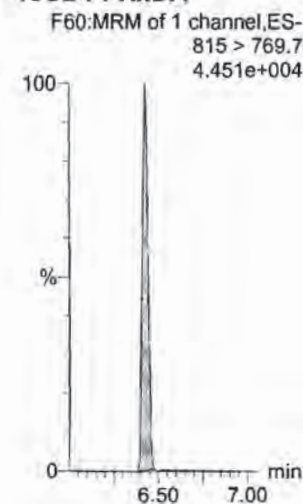
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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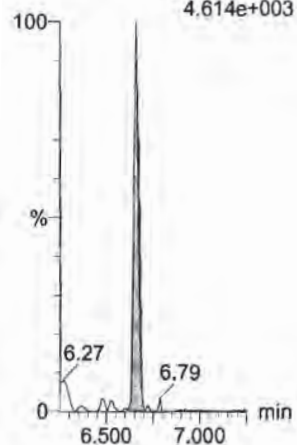
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Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_3, Date: 11-Jan-2018, Time: 09:45:13, ID: ST180110M3-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607

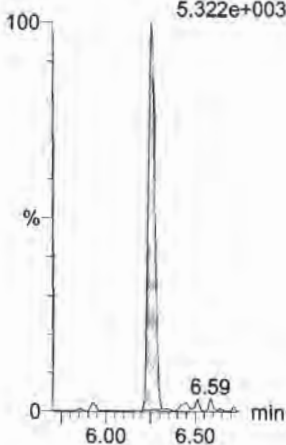
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
4.614e+003



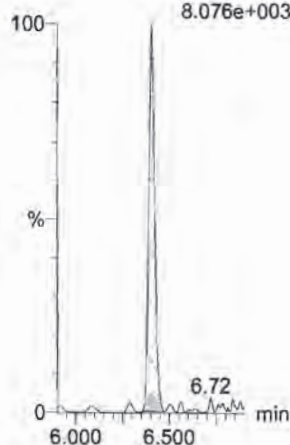
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
5.322e+003



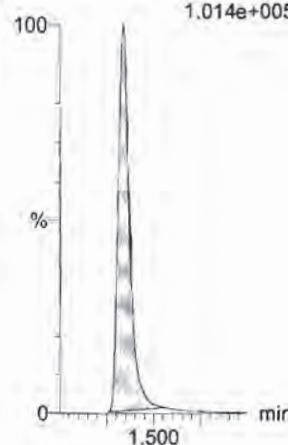
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
8.076e+003



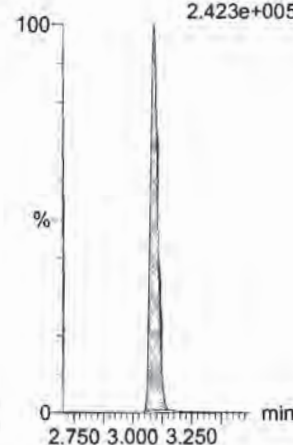
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.014e+005



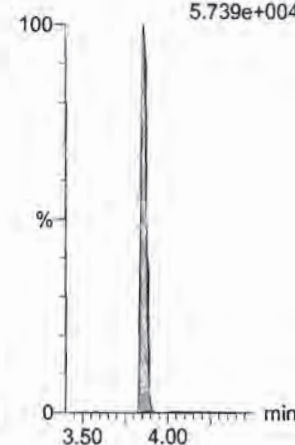
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
2.423e+005



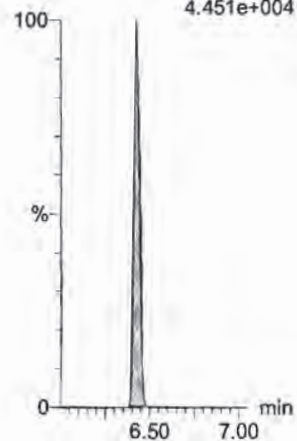
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
5.739e+004



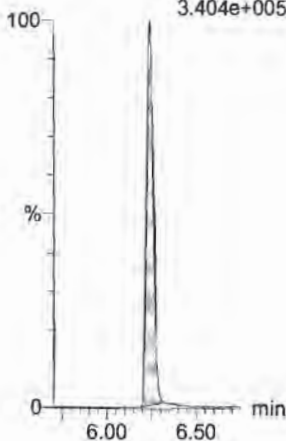
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
4.451e+004



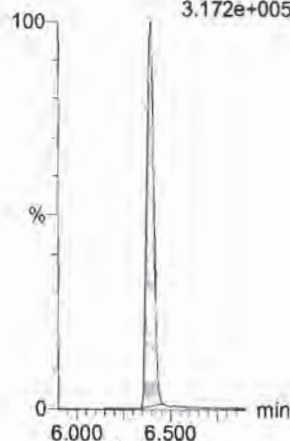
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
3.404e+005



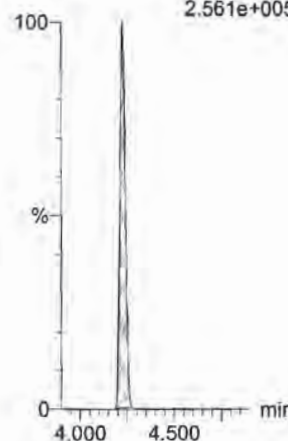
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
3.172e+005



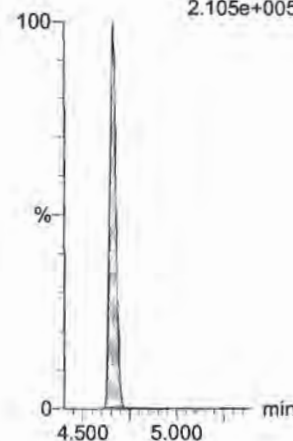
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
2.561e+005



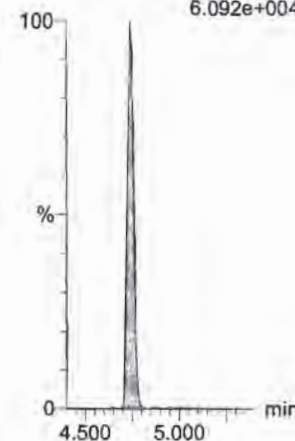
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
2.105e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
6.092e+004



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

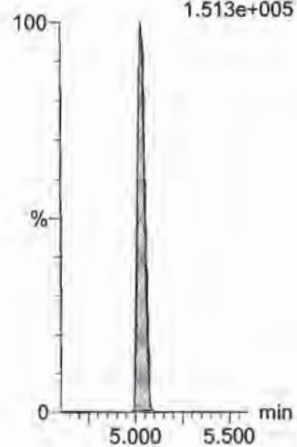
Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_3, Date: 11-Jan-2018, Time: 09:45:13, ID: ST180110M3-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607

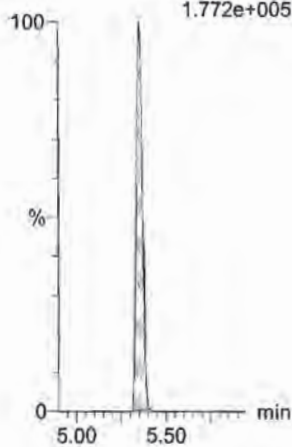
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.513e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
1.772e+005



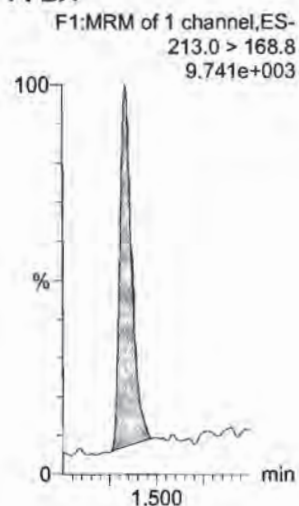
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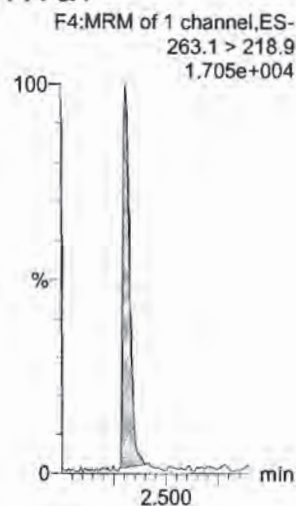
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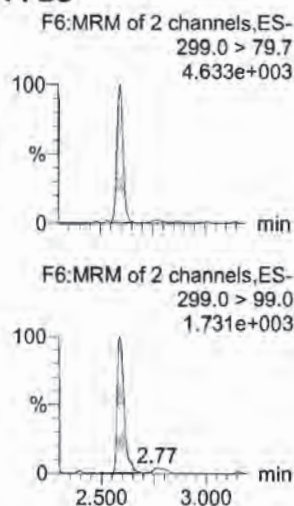
PFBA



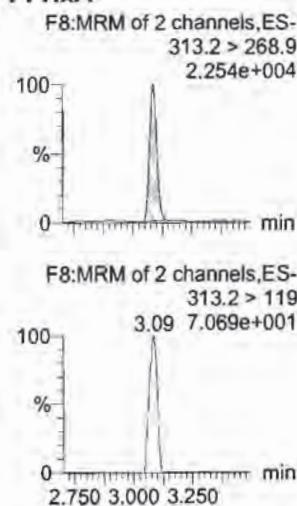
PFPeA



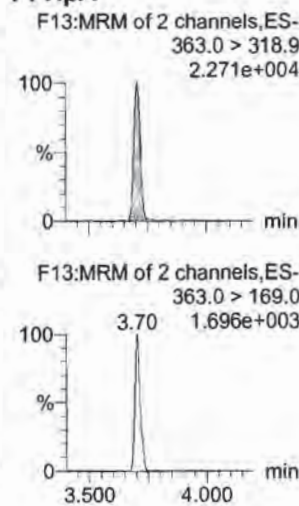
PFBS



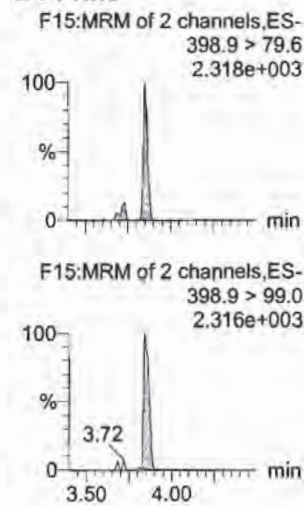
PFHxA



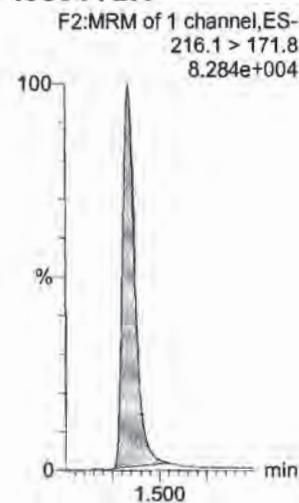
PFHpA



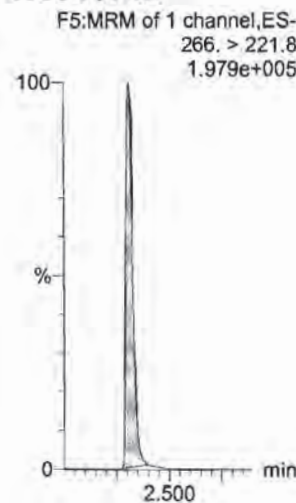
L-PFHxS



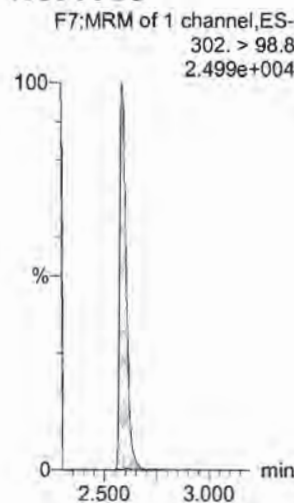
13C3-PFBA



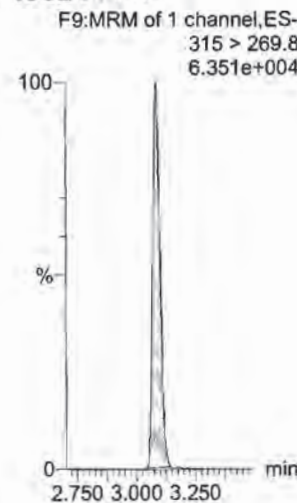
13C3-PFPeA



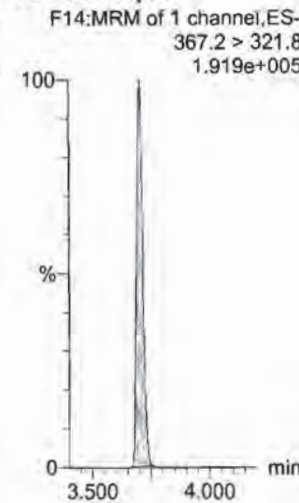
13C3-PFBS



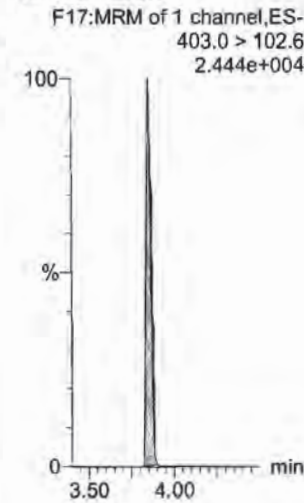
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

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Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

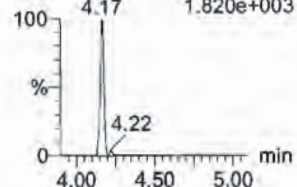
Name: 180110M3_4, Date: 11-Jan-2018, Time: 09:56:23, ID: ST180110M3-3 PFC CS0 17L2608, Description: PFC CS0 17L2608

6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
3.801e+003

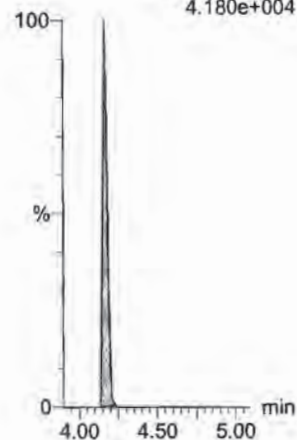


F21:MRM of 2 channels,ES-
427.1 > 80
1.820e+003



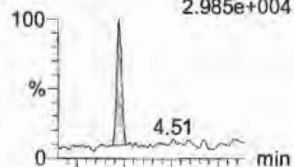
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
4.180e+004

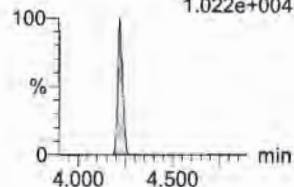


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
2.985e+004

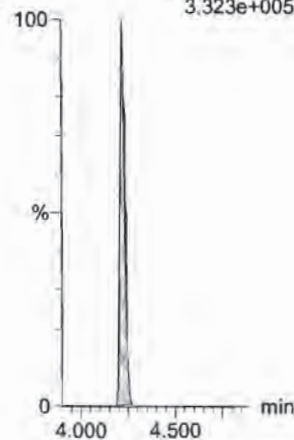


F18:MRM of 2 channels,ES-
413 > 169
1.022e+004



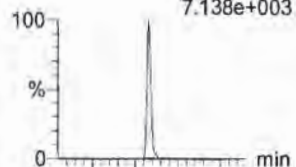
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
3.323e+005

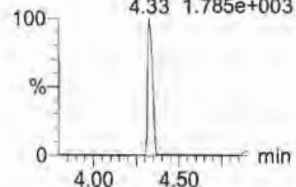


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
7.138e+003

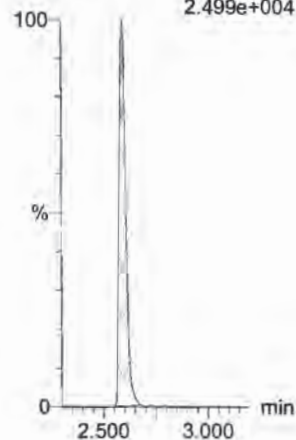


F23:MRM of 2 channels,ES-
449 > 98.7
1.785e+003



13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
2.499e+004

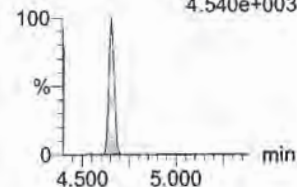


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
2.117e+004

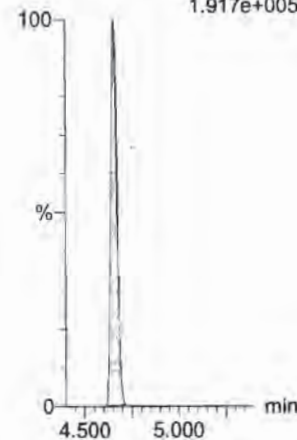


F24:MRM of 2 channels,ES-
463.0 > 219.0
4.540e+003



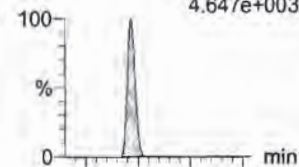
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
1.917e+005

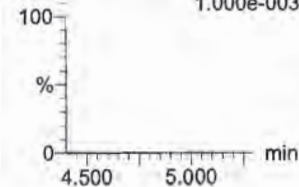


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
4.647e+003

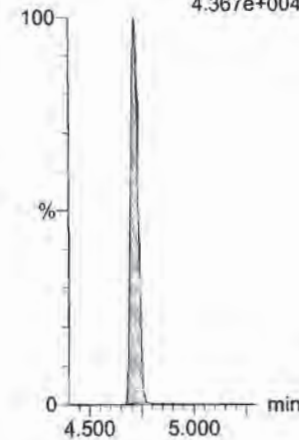


F27:MRM of 2 channels,ES-
498.1 > 478
1.000e-003



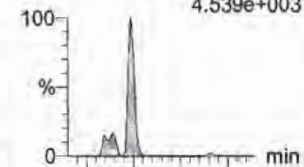
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
4.367e+004

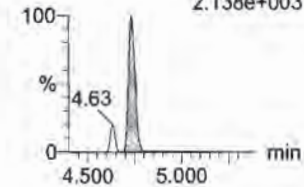


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
4.539e+003

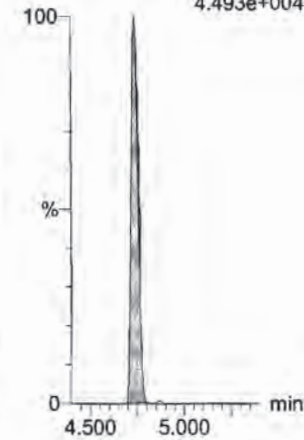


F29:MRM of 2 channels,ES-
499 > 99
2.138e+003



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
4.493e+004



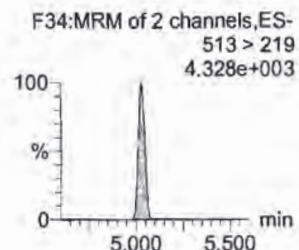
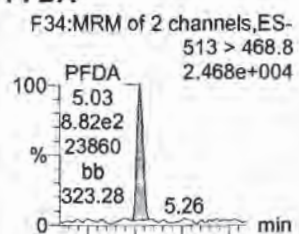
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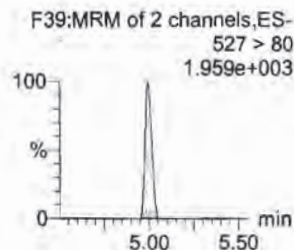
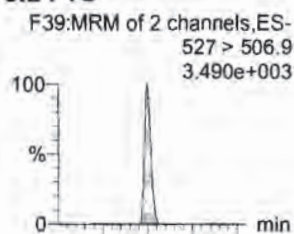
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Name: 180110M3_4, Date: 11-Jan-2018, Time: 09:56:23, ID: ST180110M3-3 PFC CS0 17L2608, Description: PFC CS0 17L2608

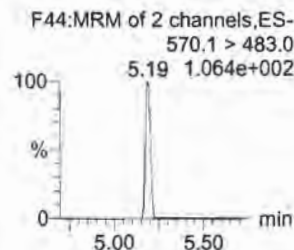
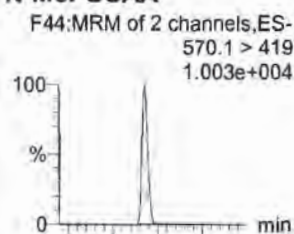
PFDA



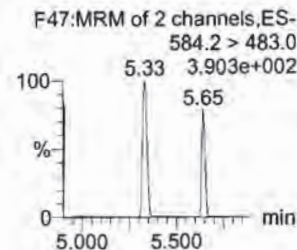
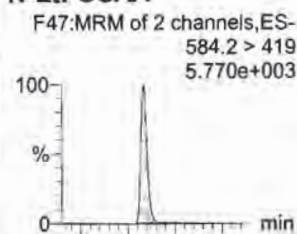
8:2 FTS



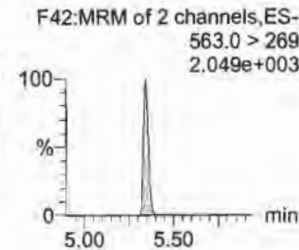
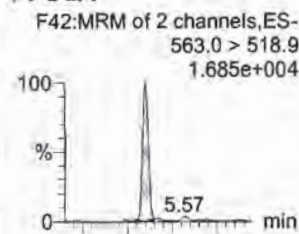
N-MeFOSAA



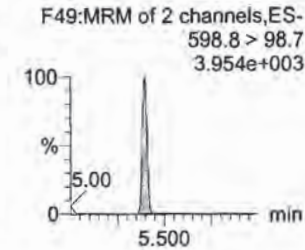
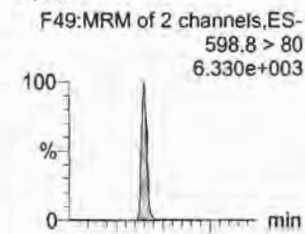
N-EtFOSAA



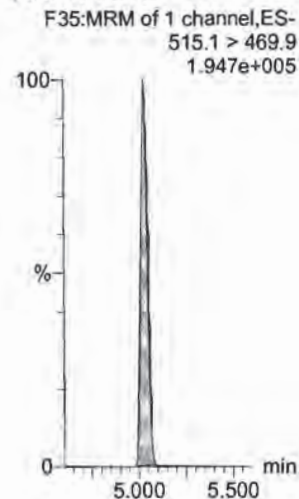
PFUdA



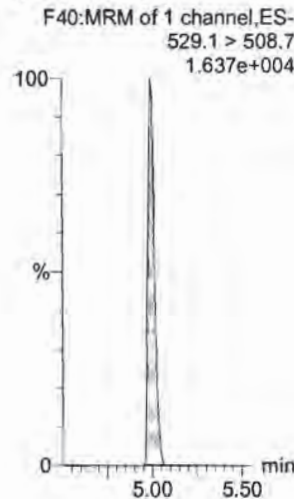
PFDS



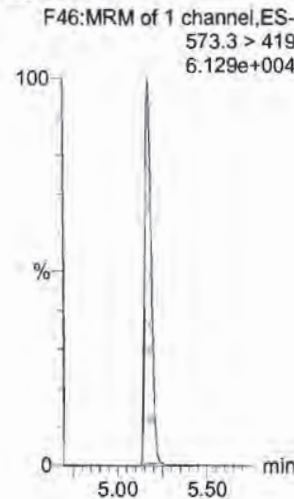
13C2-PFDA



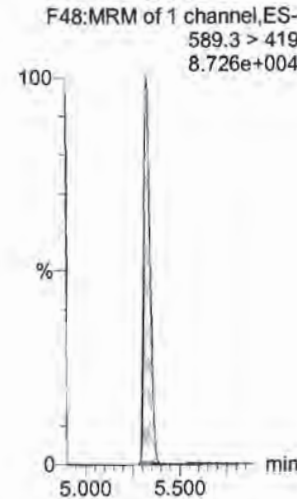
13C2-8:2 FTS



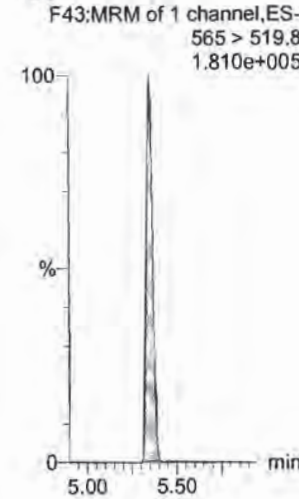
d3-N-MeFOSAA



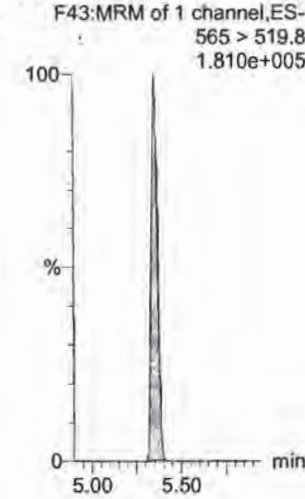
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUDa



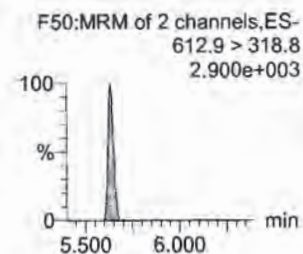
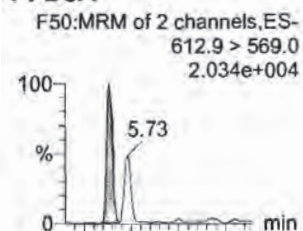
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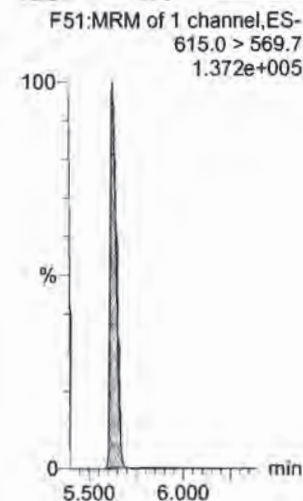
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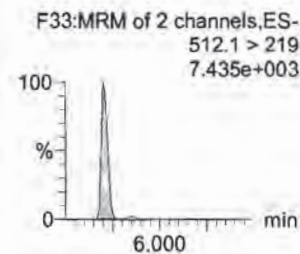
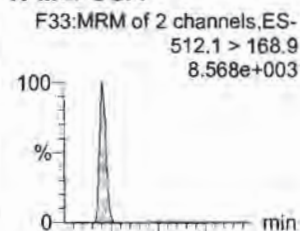
PFD_oA



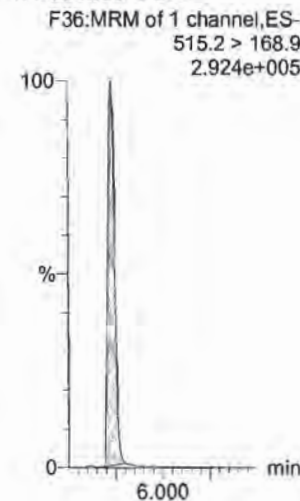
¹³C2-PFD_oA



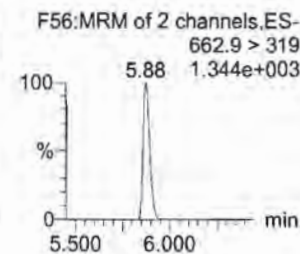
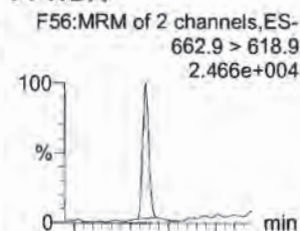
N-MeFOSA



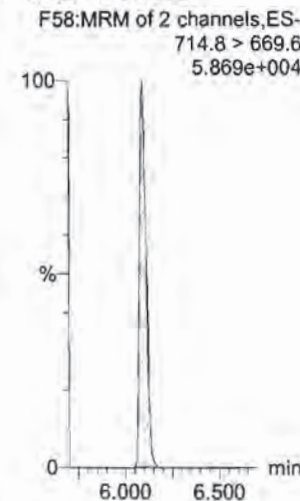
d3-N-MeFOSA



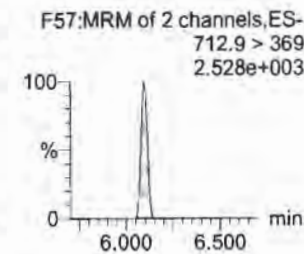
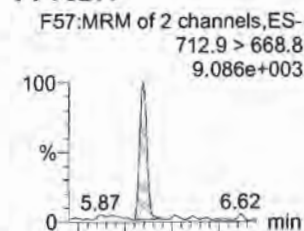
PFT_rDA



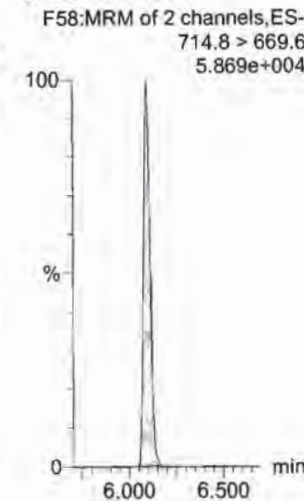
¹³C2-PFT_rDA



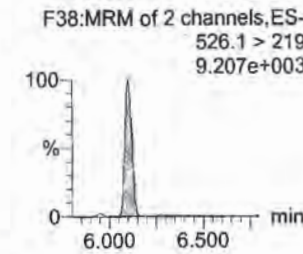
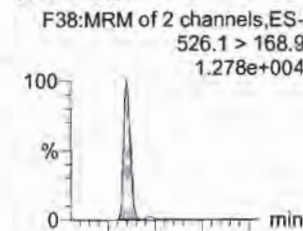
PFT_eDA



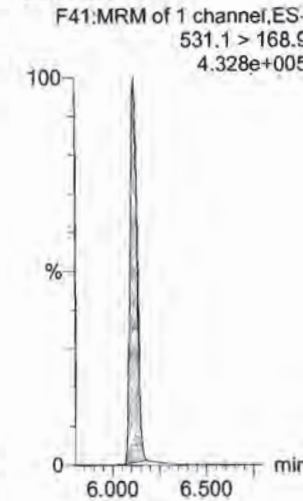
¹³C2-PFT_eDA



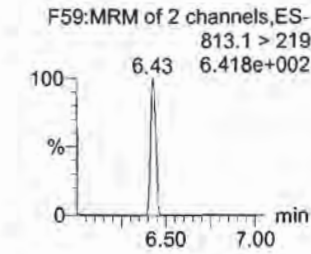
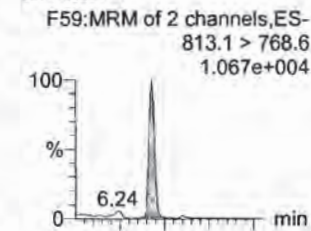
N-EtFOSA



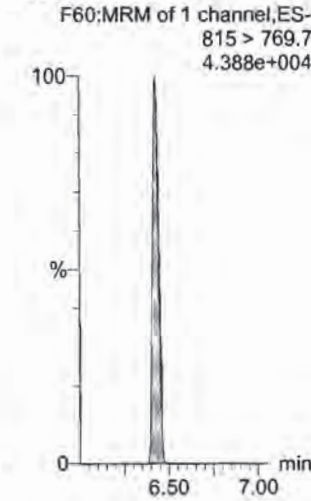
d5-N-ETFOSA



PFH_xDA



¹³C2-PFH_xDA



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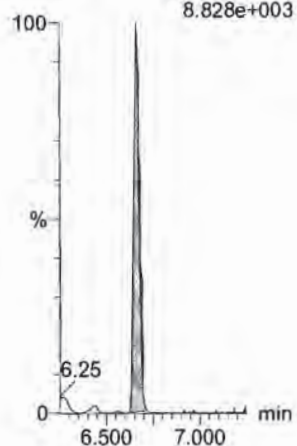
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Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

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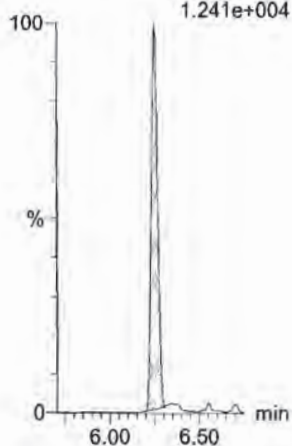
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
8.828e+003



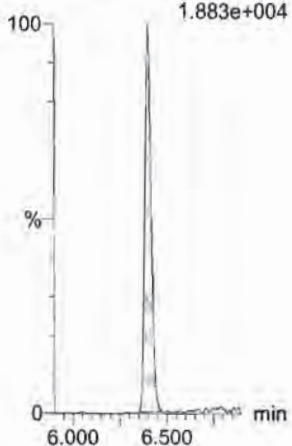
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
1.241e+004



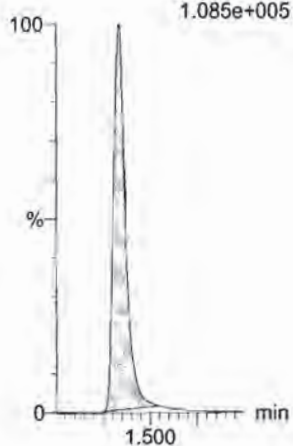
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
1.883e+004



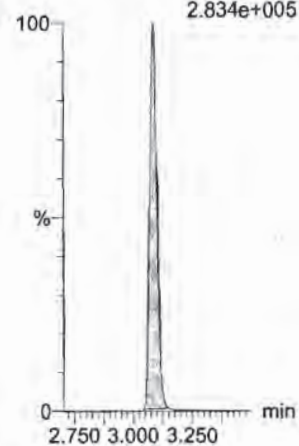
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.085e+005



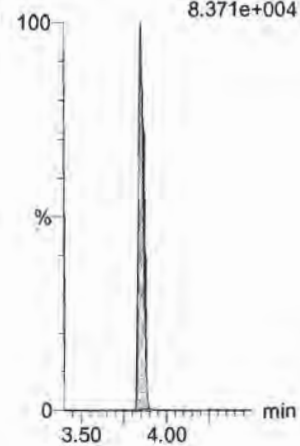
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
2.834e+005



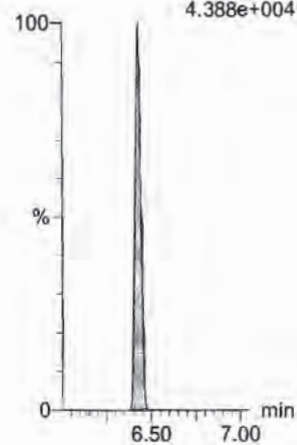
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
8.371e+004



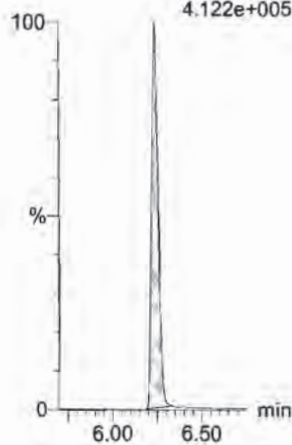
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
4.388e+004



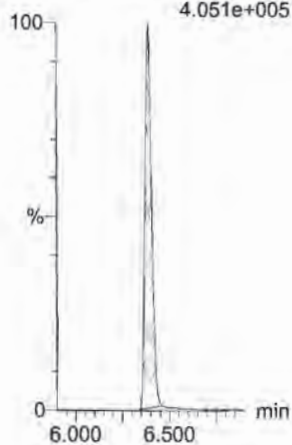
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
4.122e+005



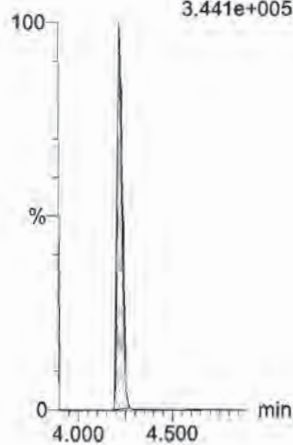
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
4.051e+005



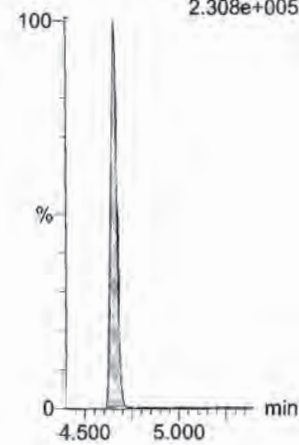
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.441e+005



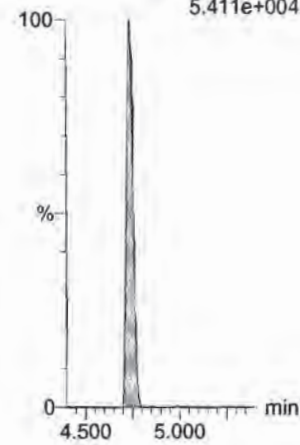
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
2.308e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
5.411e+004



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

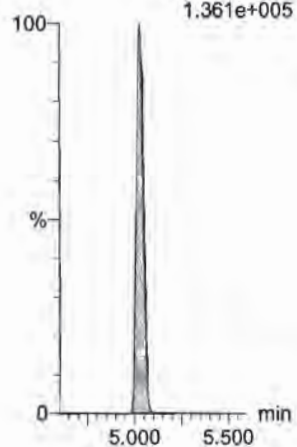
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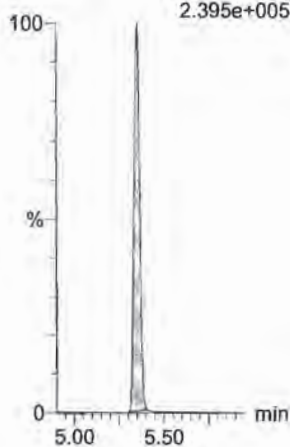
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.361e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.395e+005



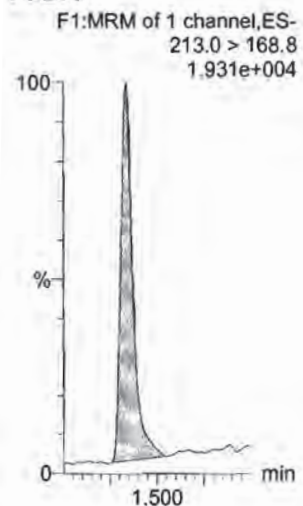
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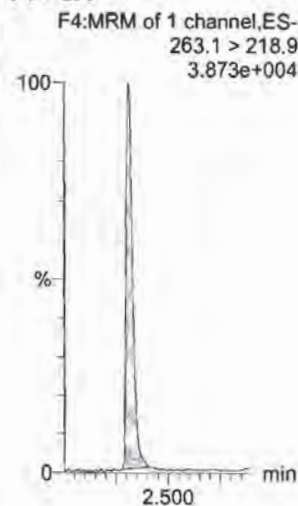
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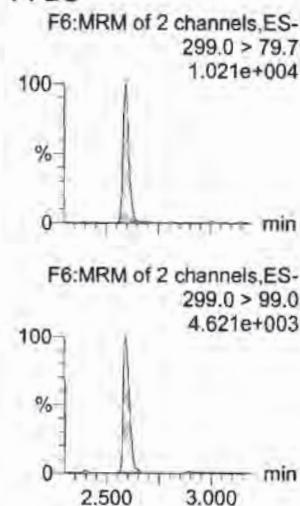
PFBA



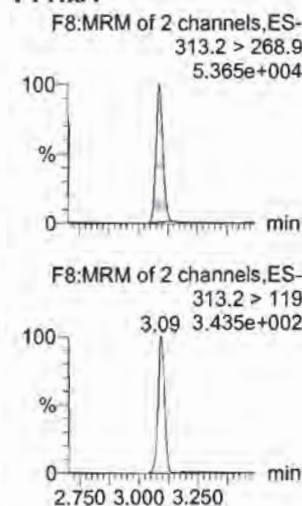
PFPeA



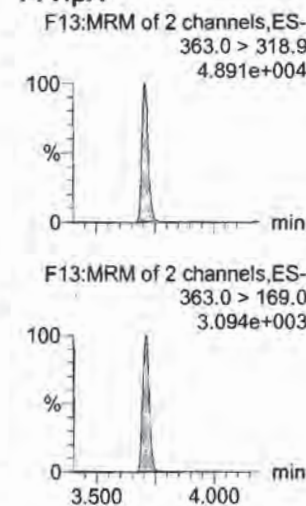
PFBS



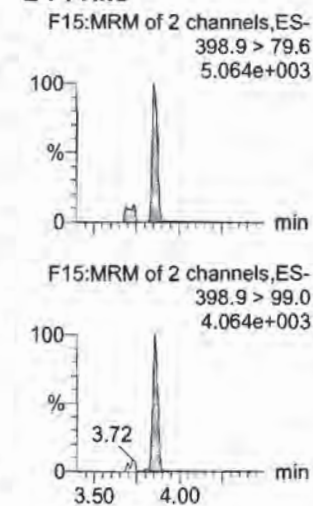
PFHxA



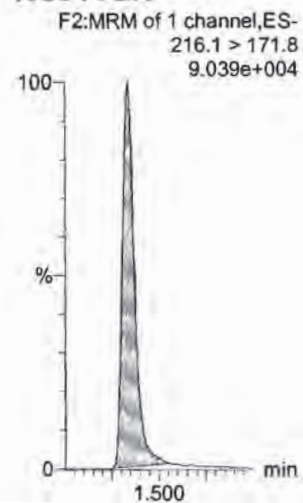
PFHpA



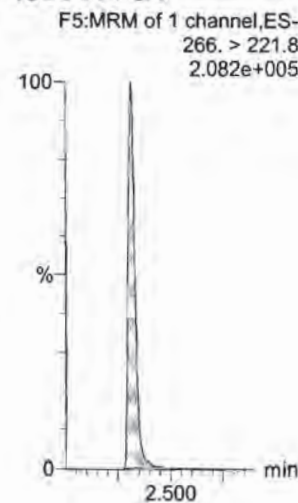
L-PFHxS



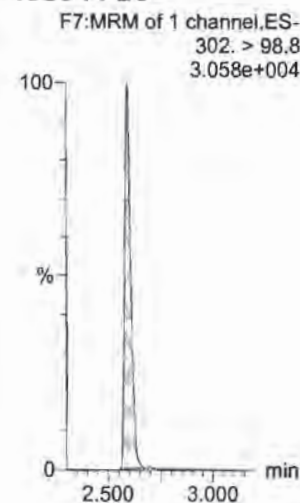
13C3-PFBA



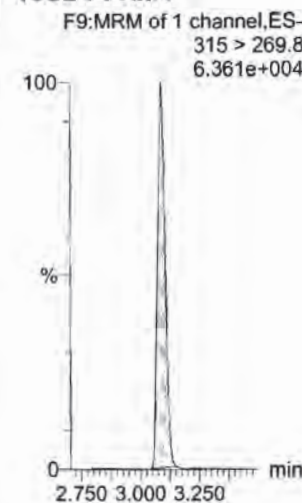
13C3-PFPeA



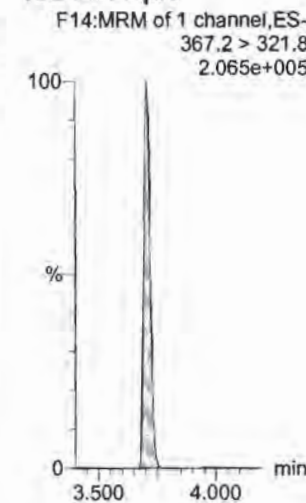
13C3-PFBS



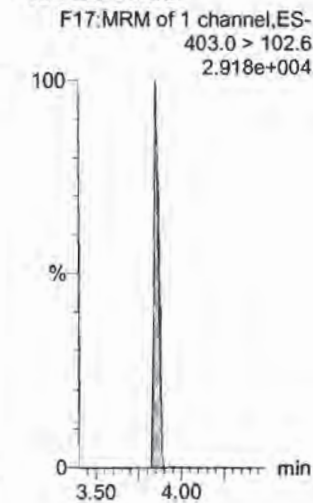
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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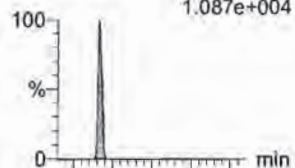
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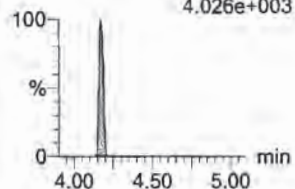
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6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
1.087e+004

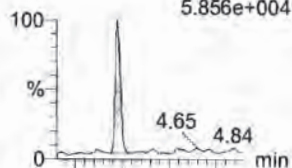


F21:MRM of 2 channels,ES-
427.1 > 80
4.026e+003

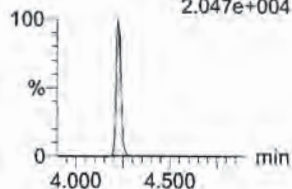


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
5.856e+004

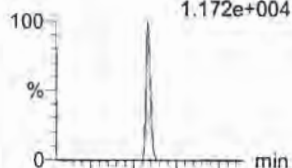


F18:MRM of 2 channels,ES-
413 > 169
2.047e+004

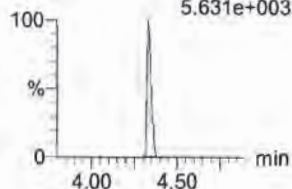


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
1.172e+004

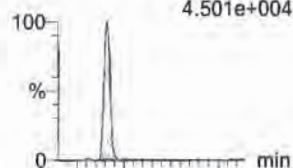


F23:MRM of 2 channels,ES-
449 > 98.7
5.631e+003

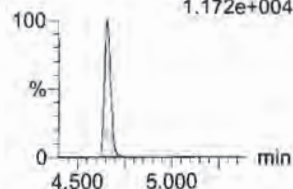


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
4.501e+004

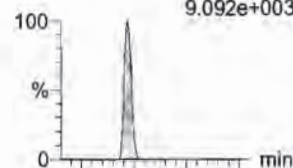


F24:MRM of 2 channels,ES-
463.0 > 219.0
1.172e+004

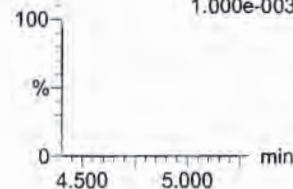


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
9.092e+003

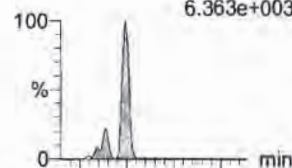


F27:MRM of 2 channels,ES-
498.1 > 478
1.000e+003

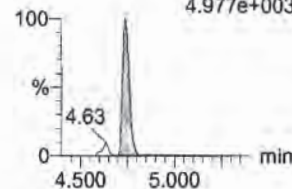


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
6.363e+003

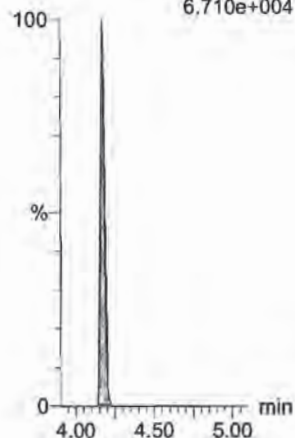


F29:MRM of 2 channels,ES-
499 > 99
4.977e+003



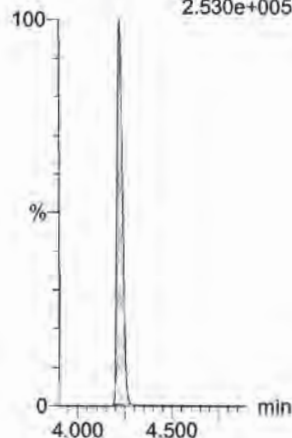
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
6.710e+004



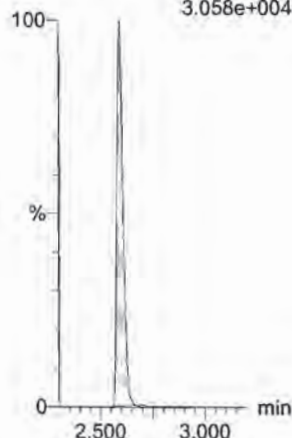
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
2.530e+005



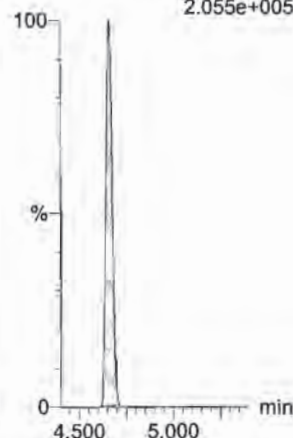
13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
3.058e+004



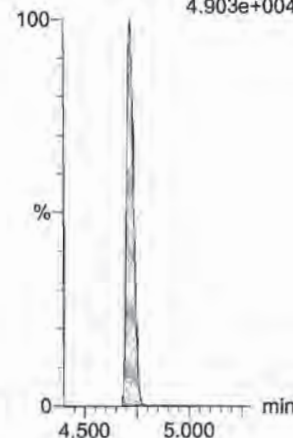
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
2.055e+005



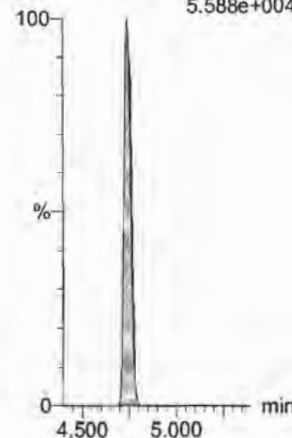
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
4.903e+004



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
5.588e+004



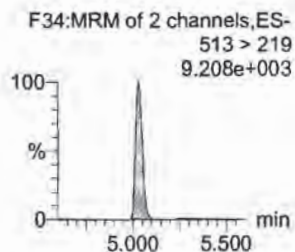
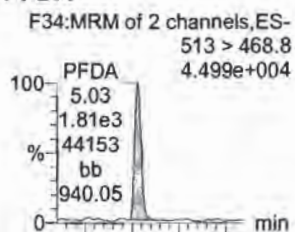
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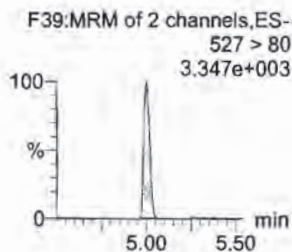
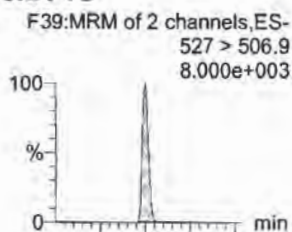
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Name: 180110M3_5, Date: 11-Jan-2018, Time: 10:07:34, ID: ST180110M3-4 PFC CS1 17L2609, Description: PFC CS1 17L2609

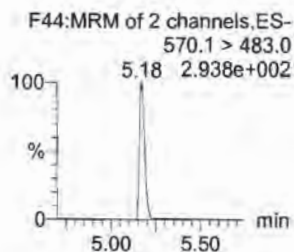
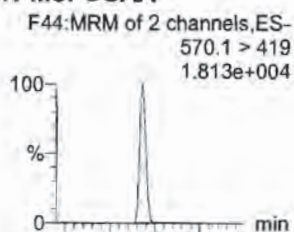
PFDA



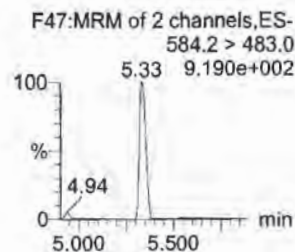
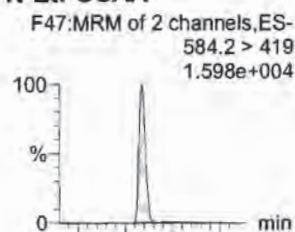
8:2 FTS



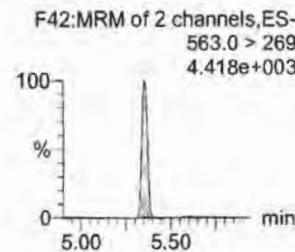
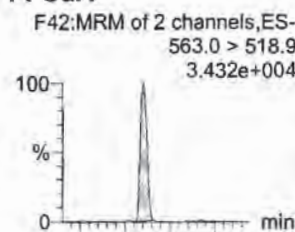
N-MeFOSAA



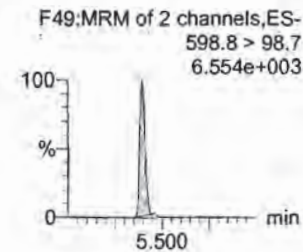
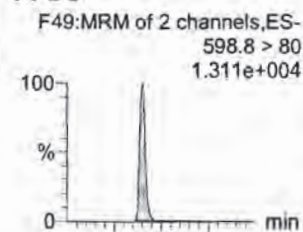
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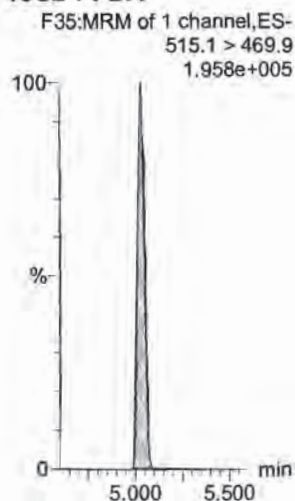
PFUdA



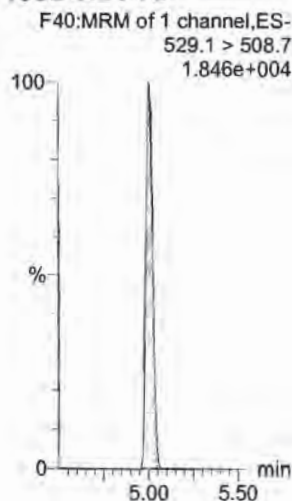
PFDS



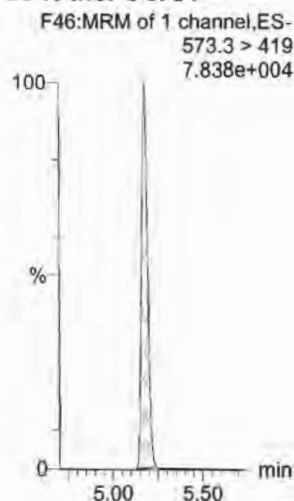
13C2-PFDA



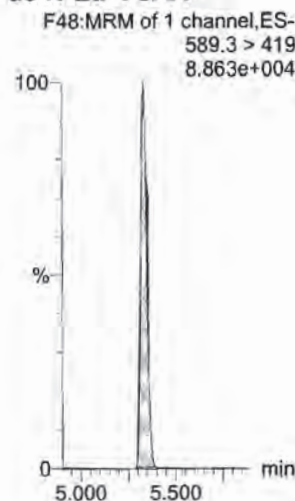
13C2-8:2 FTS



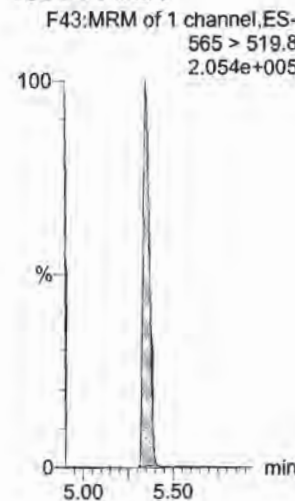
d3-N-MeFOSAA



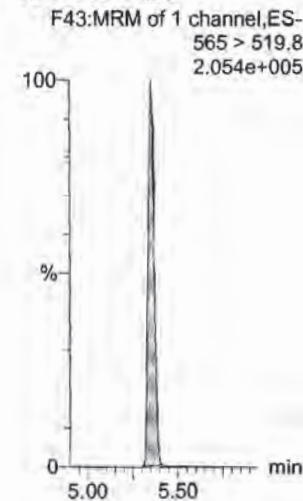
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



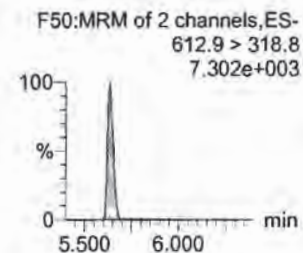
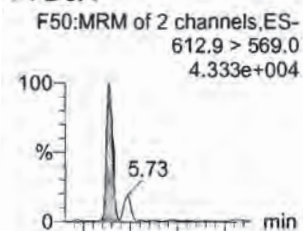
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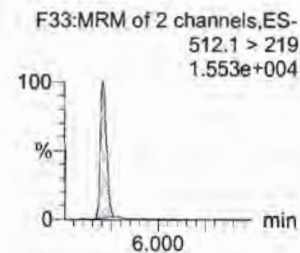
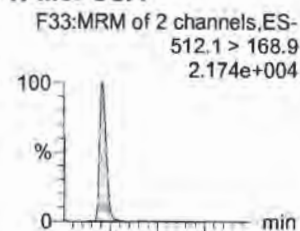
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Name: 180110M3_5, Date: 11-Jan-2018, Time: 10:07:34, ID: ST180110M3-4 PFC CS1 17L2609, Description: PFC CS1 17L2609

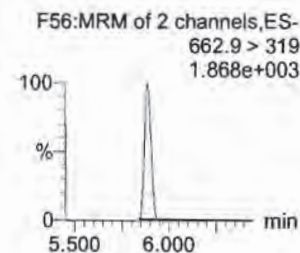
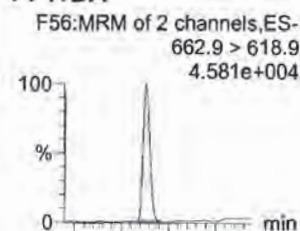
PFD_oA



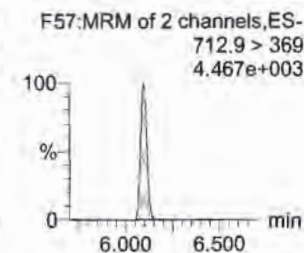
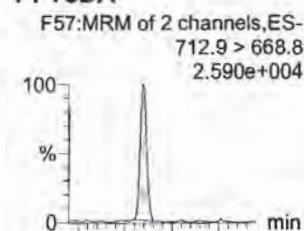
N-MeFOSA



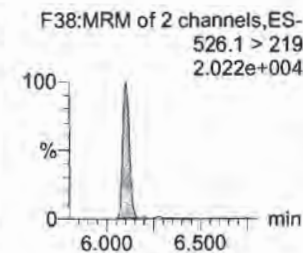
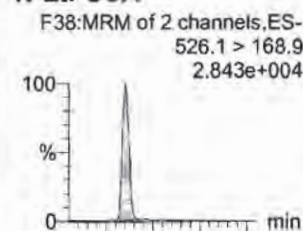
PFT_rDA



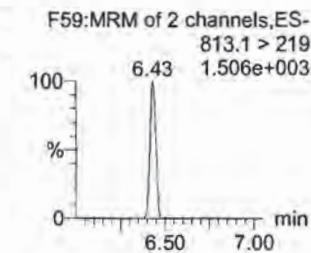
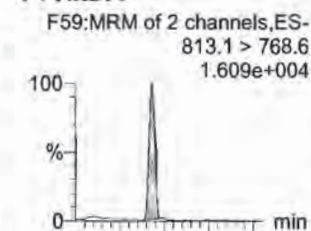
PFT_eDA



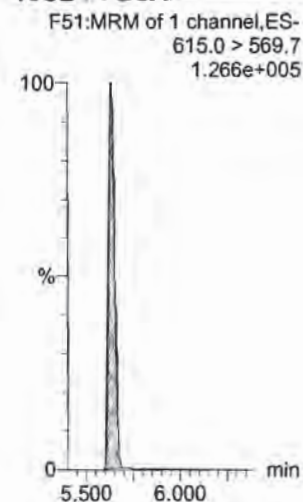
N-EtFOSA



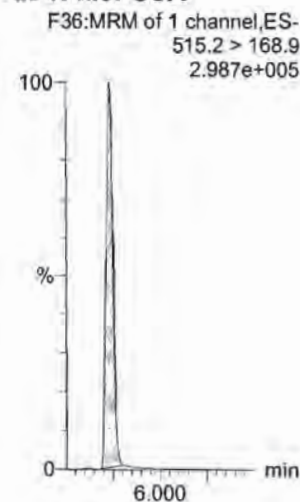
PFH_xDA



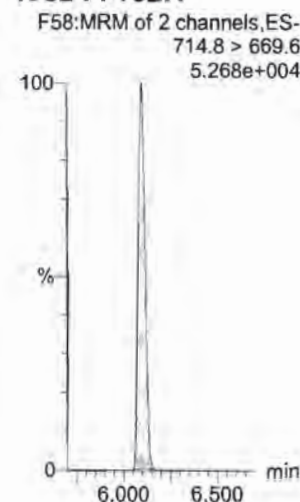
¹³C2-PFD_oA



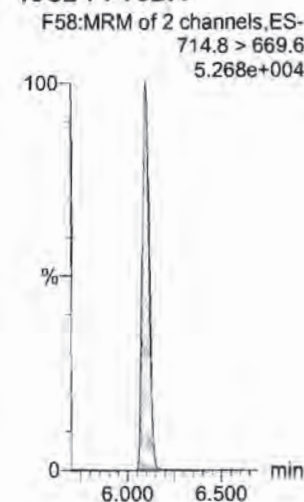
d3-N-MeFOSA



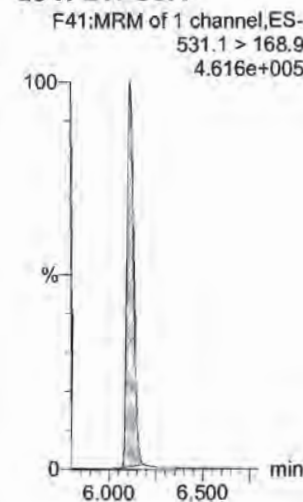
¹³C2-PFT_eDA



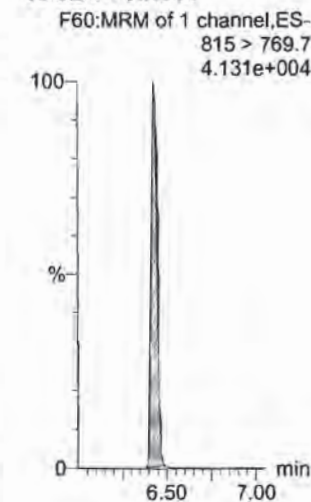
¹³C2-PFT_eDA



d5-N-ETFOSA



¹³C2-PFH_xDA

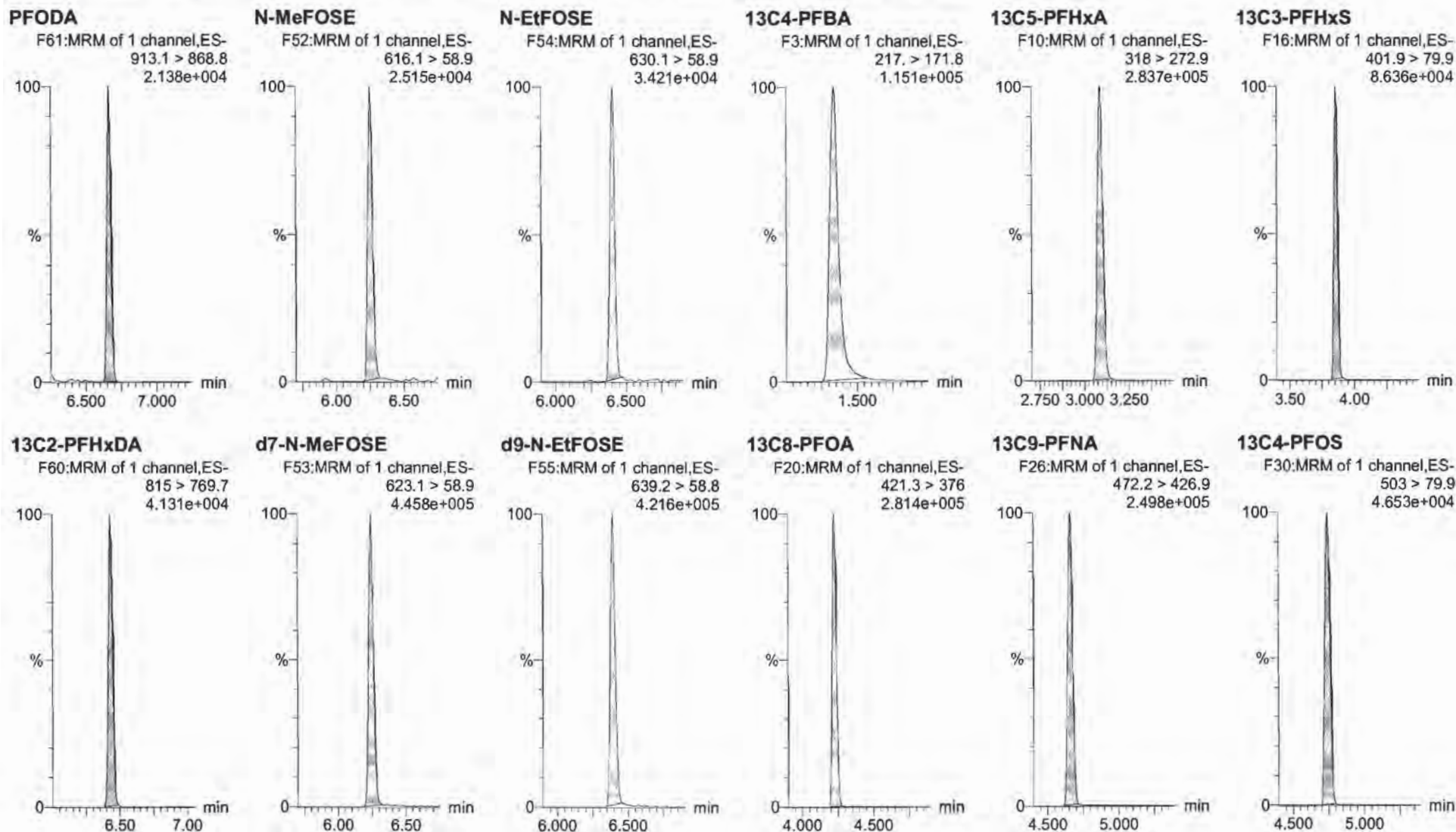


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Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_5, Date: 11-Jan-2018, Time: 10:07:34, ID: ST180110M3-4 PFC CS1 17L2609, Description: PFC CS1 17L2609



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

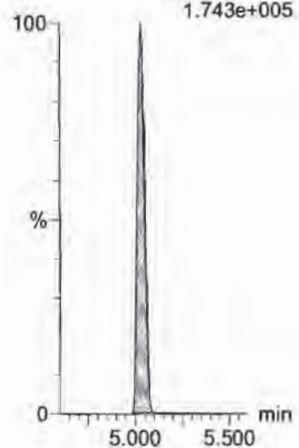
Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

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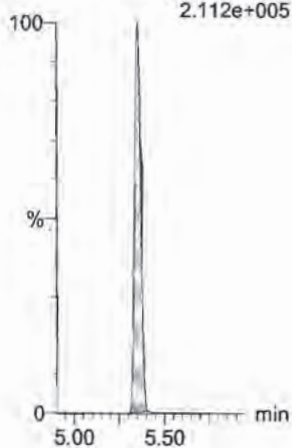
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.743e+005



13C7-PFUDA

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.112e+005

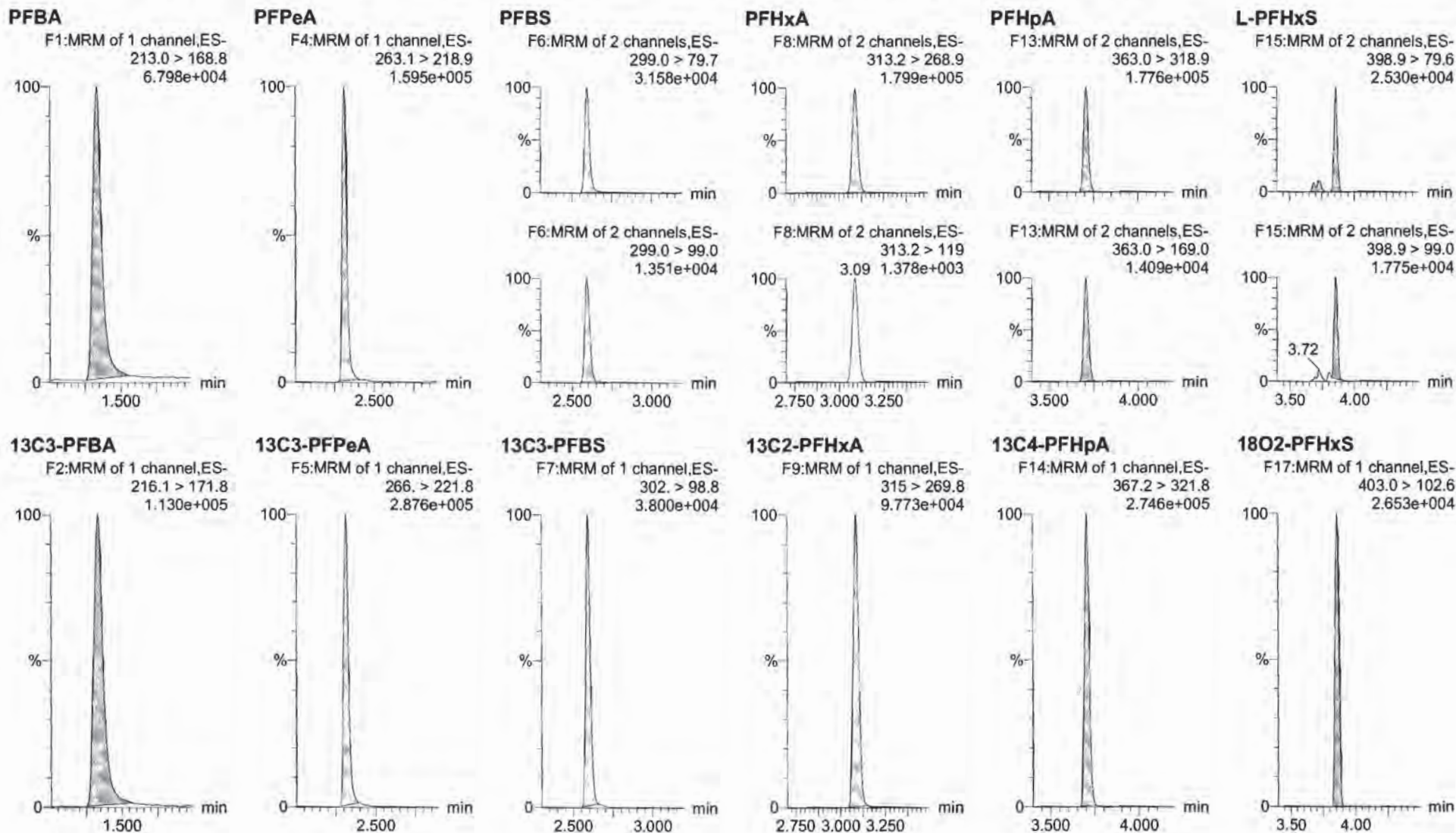


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Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_6, Date: 11-Jan-2018, Time: 10:18:46, ID: ST180110M3-5 PFC CS2 17L2610, Description: PFC CS2 17L2610



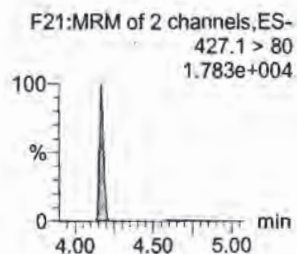
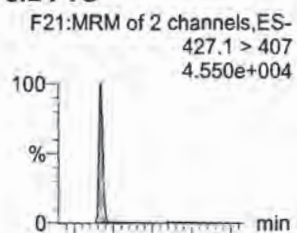
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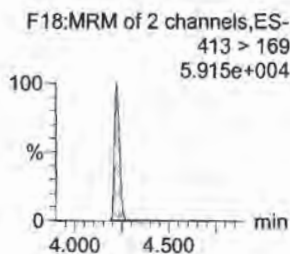
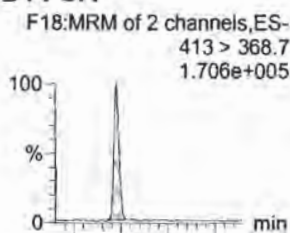
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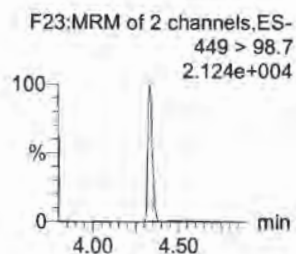
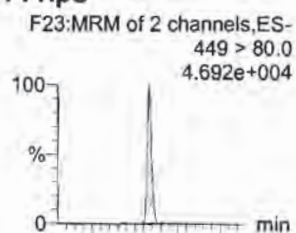
6:2 FTS



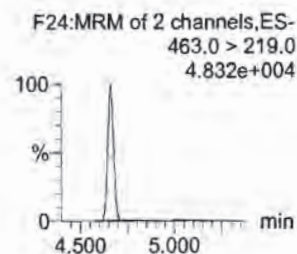
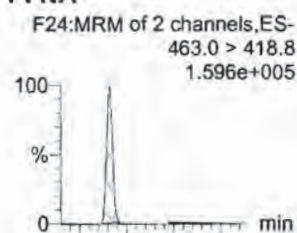
L-PFOA



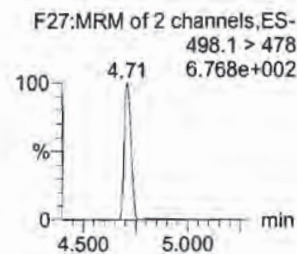
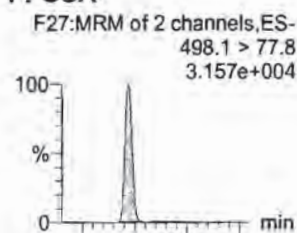
PFHpS



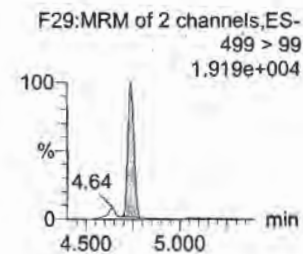
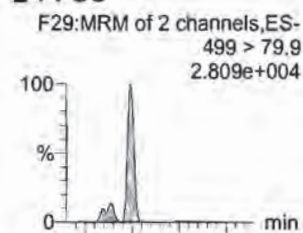
PFNA



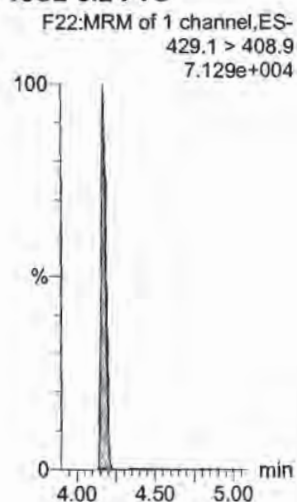
PFOSA



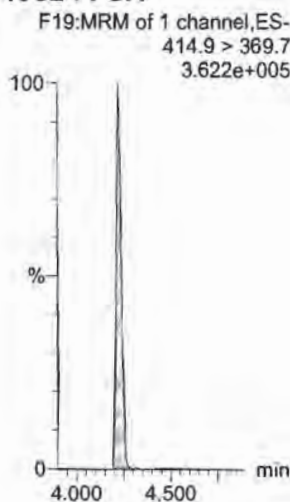
L-PFOS



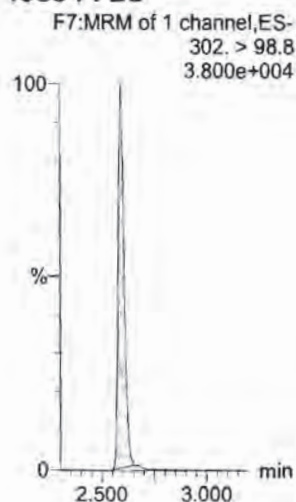
13C2-6:2 FTS



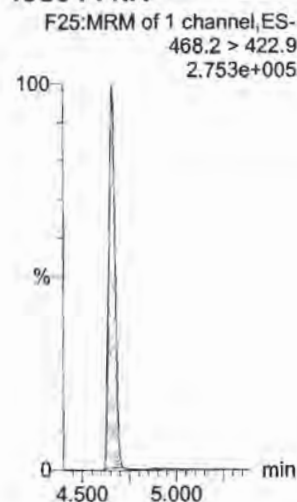
13C2-PFOA



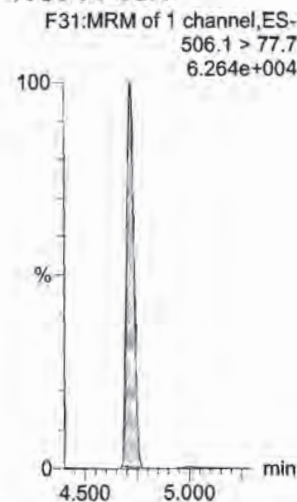
13C3-PFBS



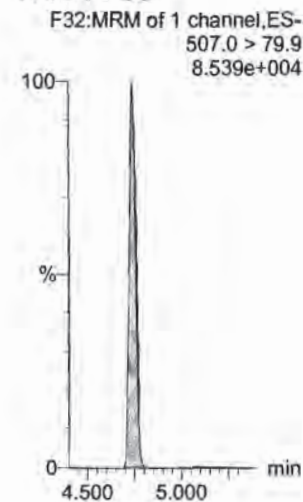
13C5-PFNA



13C8-PFOSA



13C8-PFOS



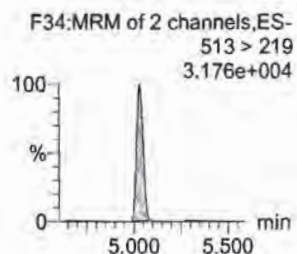
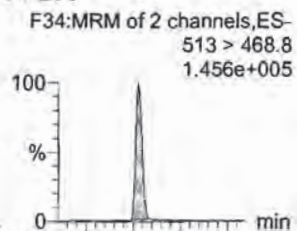
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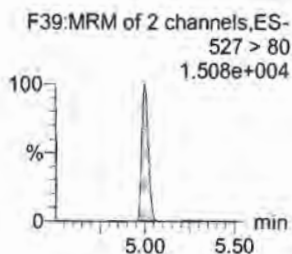
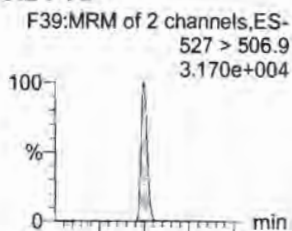
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Name: 180110M3_6, Date: 11-Jan-2018, Time: 10:18:46, ID: ST180110M3-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

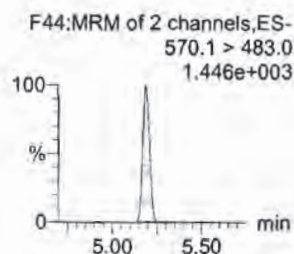
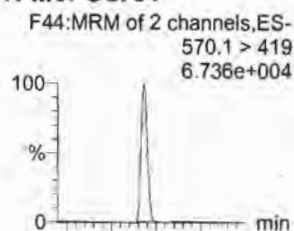
PFDA



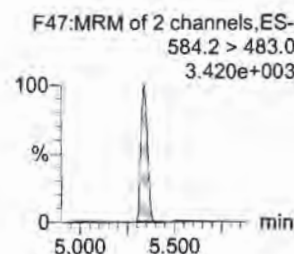
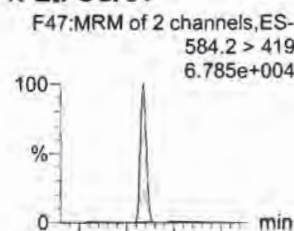
8:2 FTS



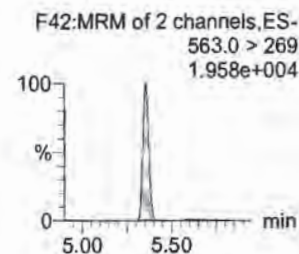
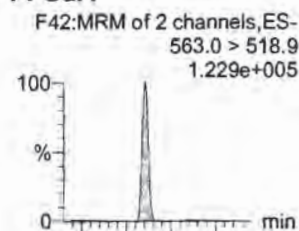
N-MeFOSAA



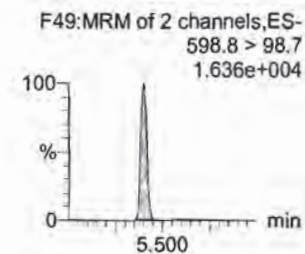
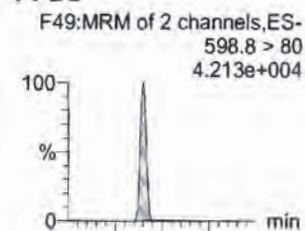
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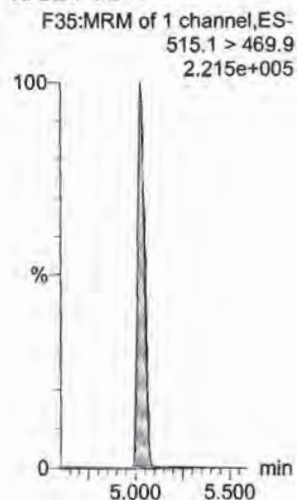
PFUdA



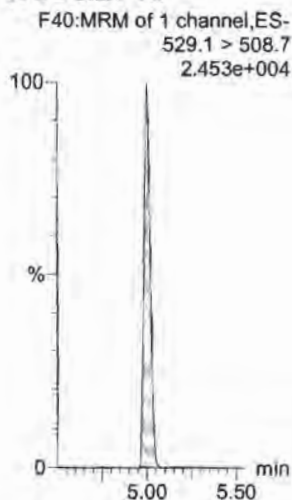
PFDS



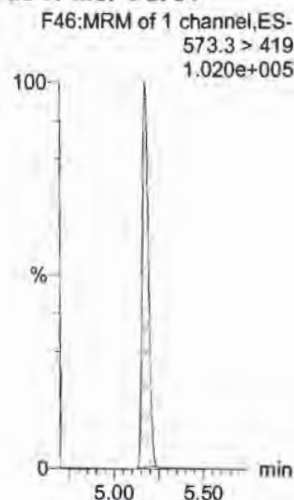
13C2-PFDA



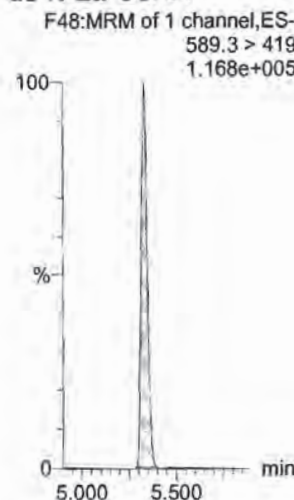
13C2-8:2 FTS



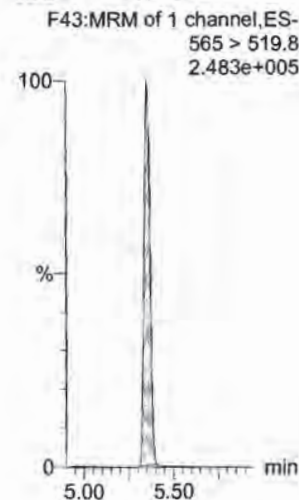
d3-N-MeFOSAA



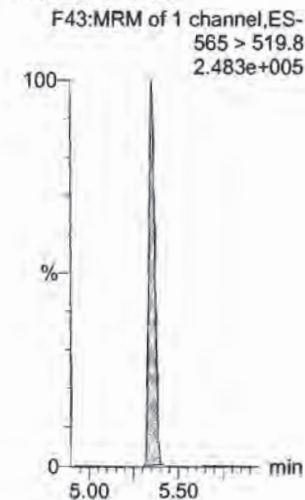
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA

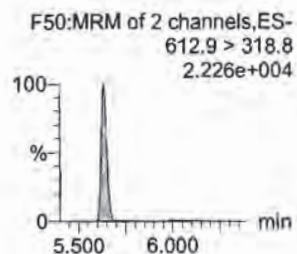
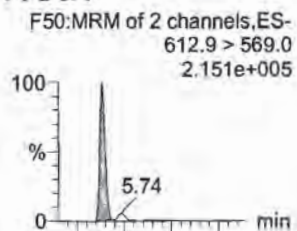


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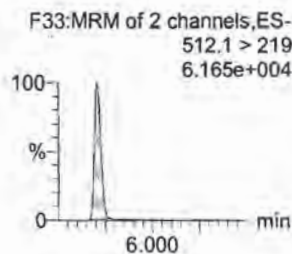
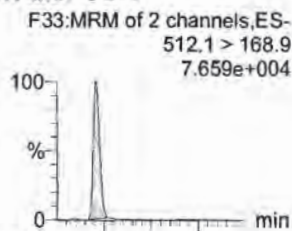
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Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_6, Date: 11-Jan-2018, Time: 10:18:46, ID: ST180110M3-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

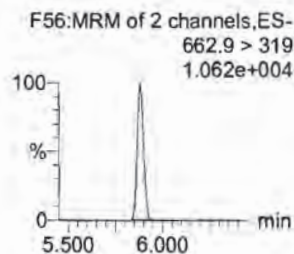
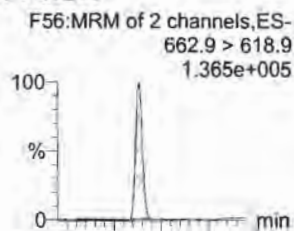
PFDaA



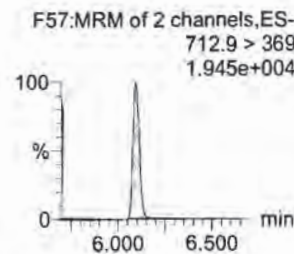
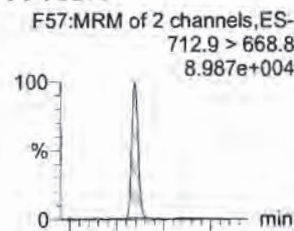
N-MeFOSA



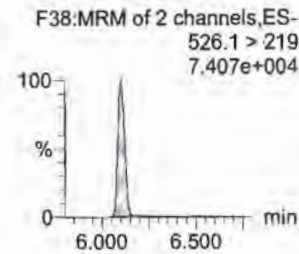
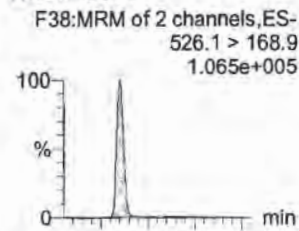
PFTrDA



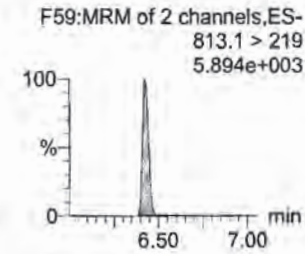
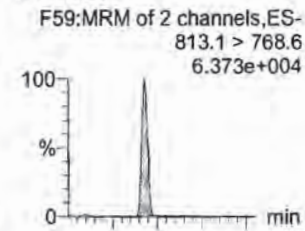
PFTeDA



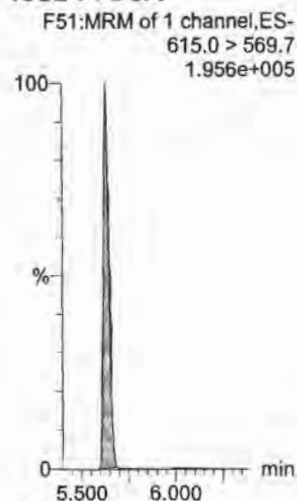
N-EtFOSA



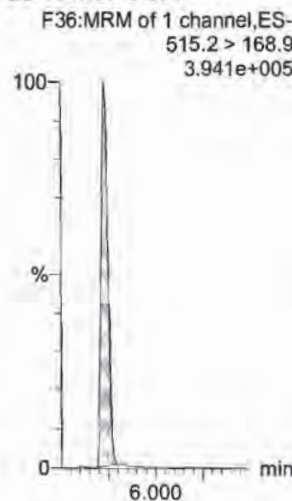
PFHxDA



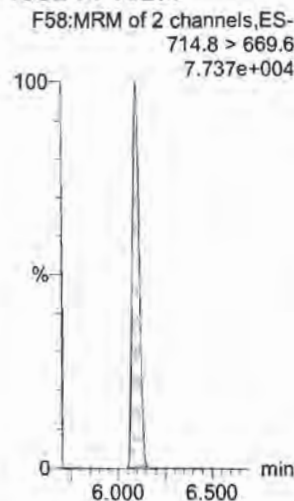
13C2-PFDaA



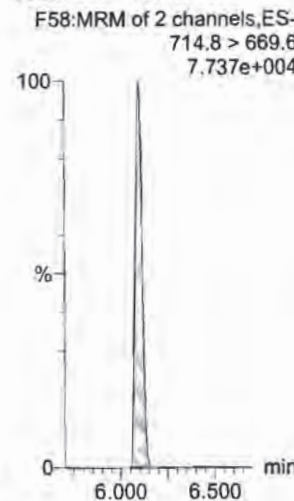
d3-N-MeFOSA



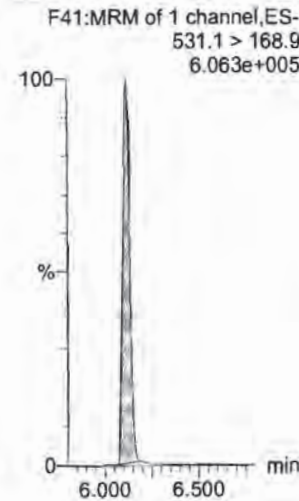
13C2-PFTeDA



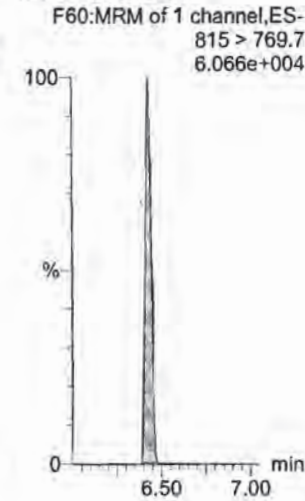
13C2-PFTeDA



d5-N-ETFOA



13C2-PFHxDA



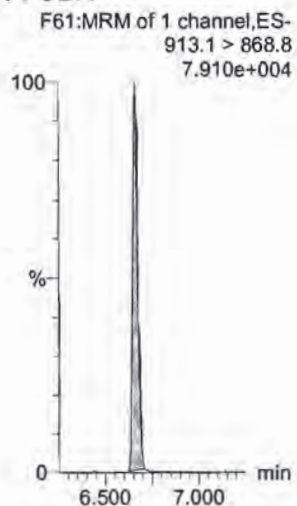
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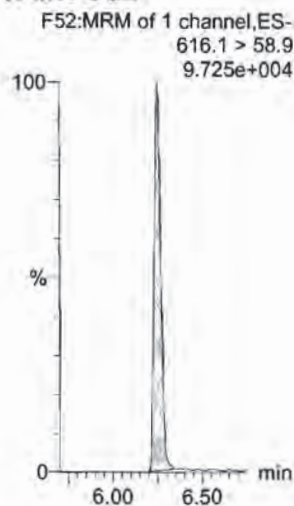
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Name: 180110M3_6, Date: 11-Jan-2018, Time: 10:18:46, ID: ST180110M3-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

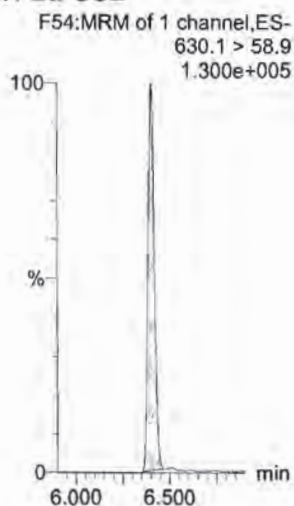
PFODA



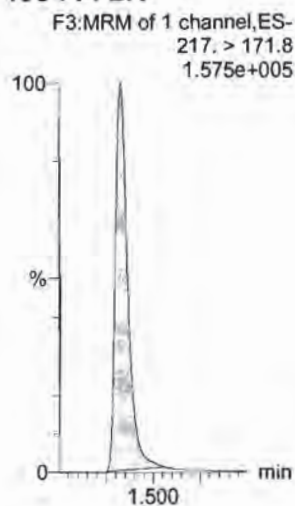
N-MeFOSE



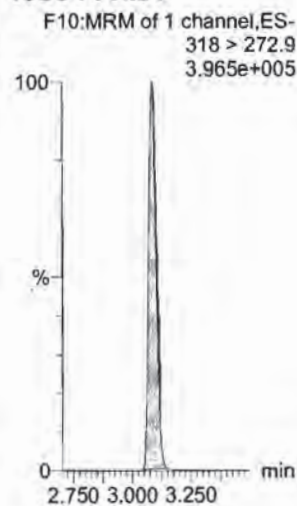
N-EtFOSE



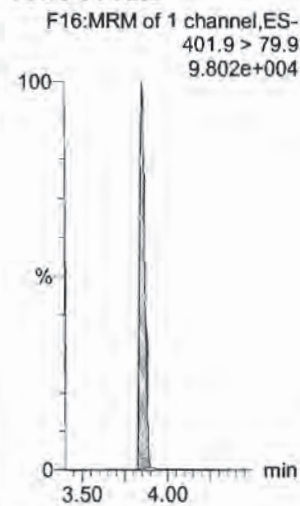
13C4-PFBA



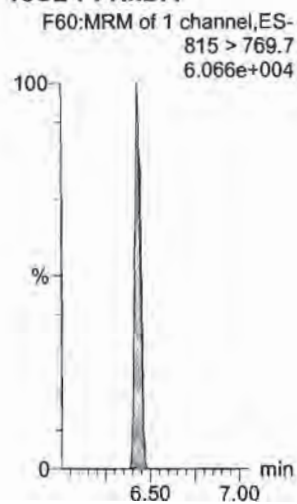
13C5-PFHxA



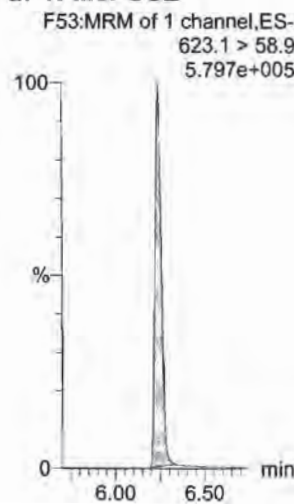
13C3-PFHxS



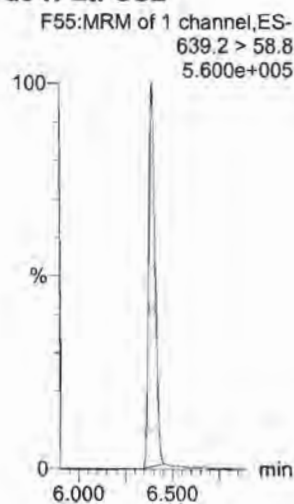
13C2-PFHxDA



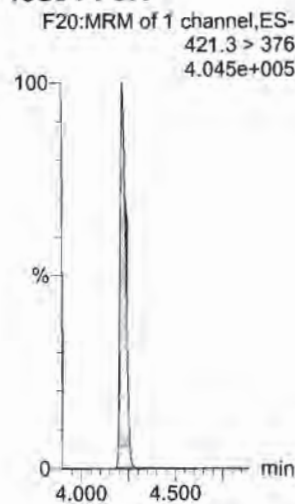
d7-N-MeFOSE



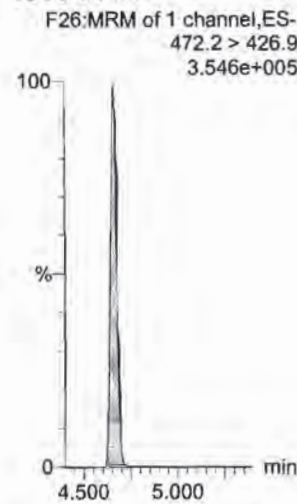
d9-N-EtFOSE



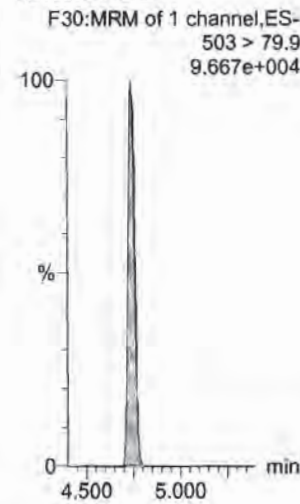
13C8-PFOA



13C9-PFNA



13C4-PFOS



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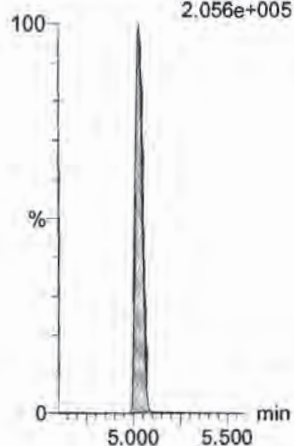
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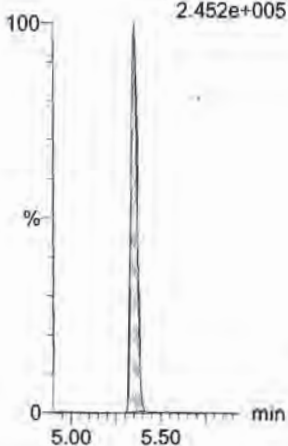
13C6-PFDA

F37:MRM of 1 channel, ES-
519.1 > 473.7
2.056e+005



13C7-PFUdA

F45:MRM of 1 channel, ES-
570.1 > 524.8
2.452e+005



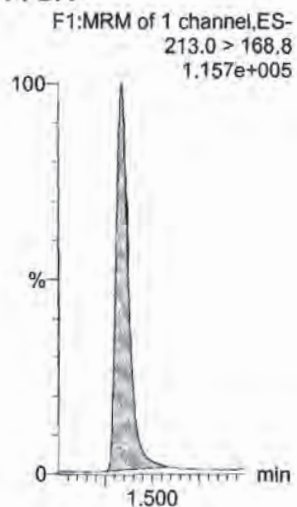
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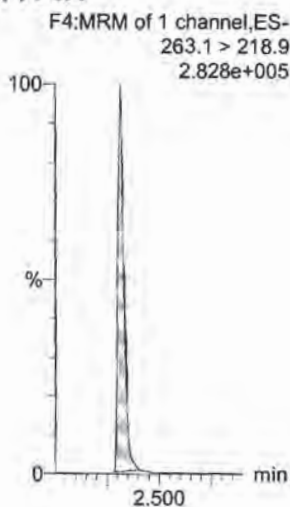
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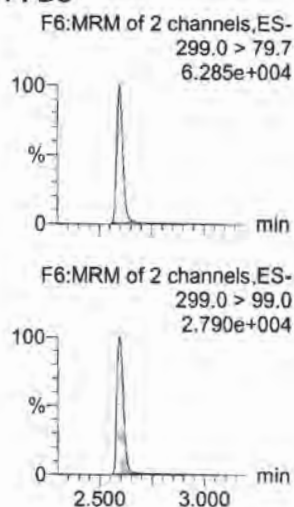
PFBA



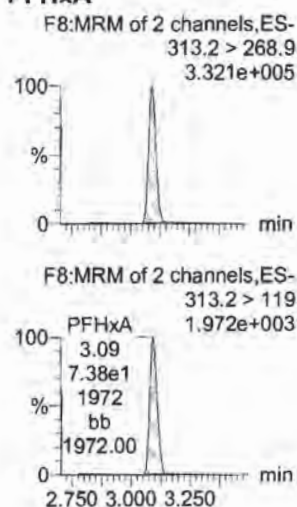
PFPeA



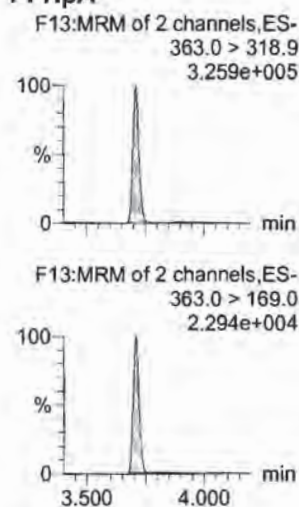
PFBS



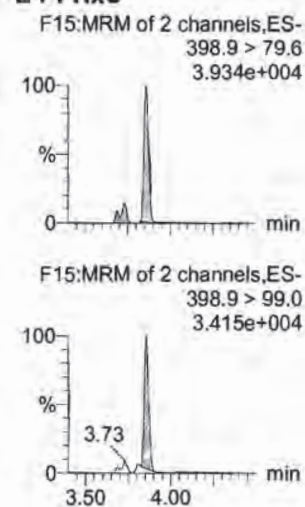
PFHxA



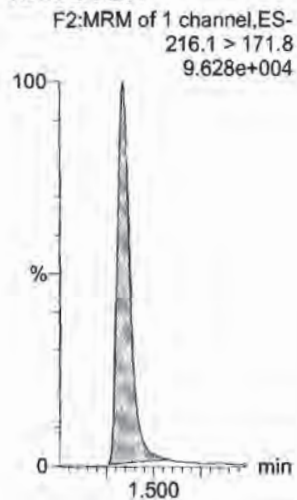
PFHpA



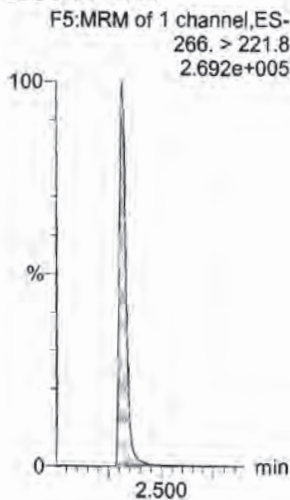
L-PFHxS



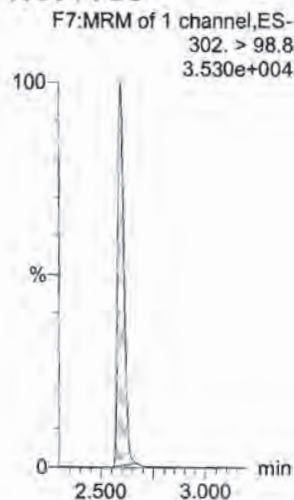
13C3-PFBA



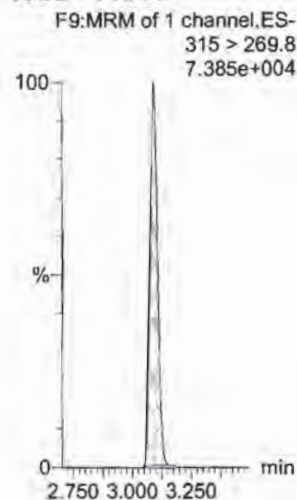
13C3-PFPeA



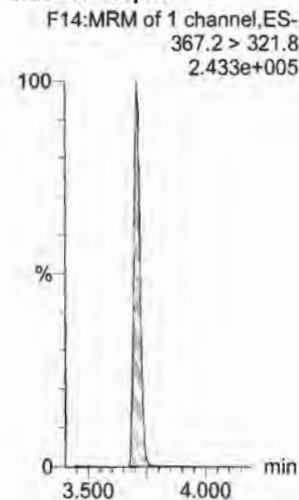
13C3-PFBS



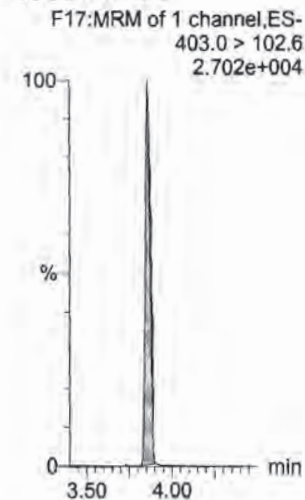
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

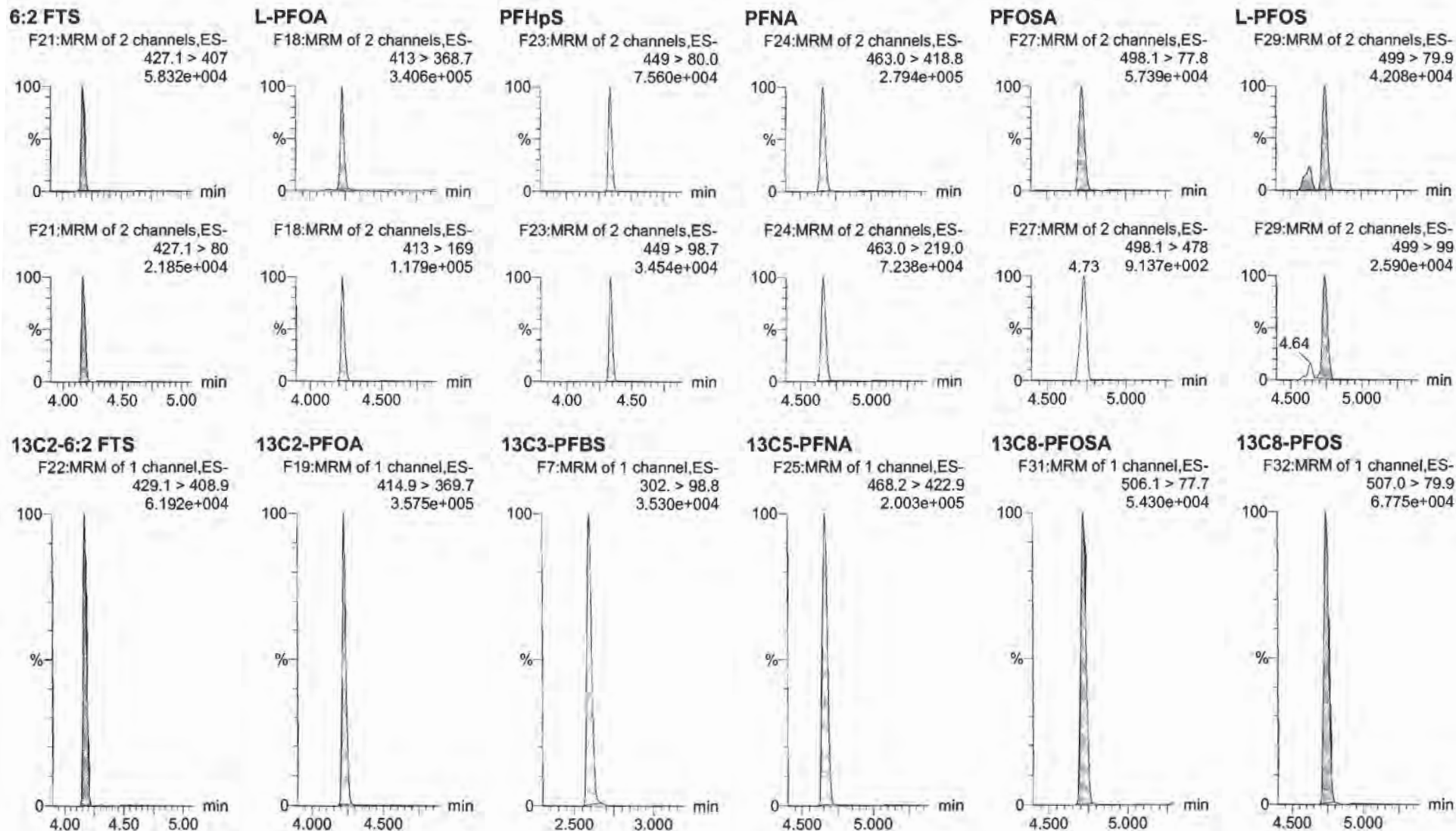


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Name: 180110M3_7, Date: 11-Jan-2018, Time: 10:29:56, ID: ST180110M3-6 PFC CS3 17L2611, Description: PFC CS3 17L2611



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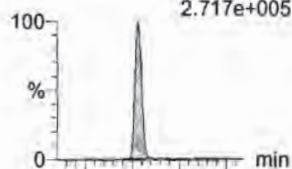
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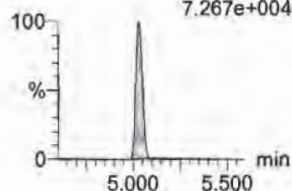
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PFDA

F34:MRM of 2 channels,ES-
513 > 468.8
2.717e+005

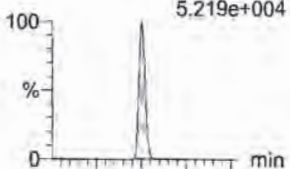


F34:MRM of 2 channels,ES-
513 > 219
7.267e+004

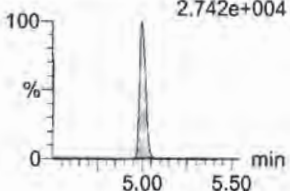


8:2 FTS

F39:MRM of 2 channels,ES-
527 > 506.9
5.219e+004

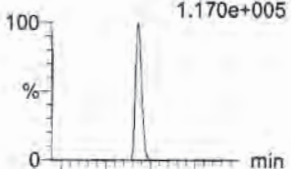


F39:MRM of 2 channels,ES-
527 > 80
2.742e+004

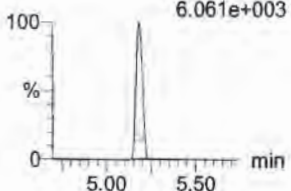


N-MeFOSAA

F44:MRM of 2 channels,ES-
570.1 > 419
1.170e+005

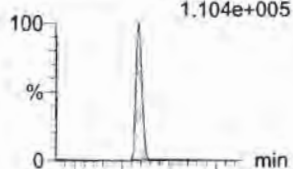


F44:MRM of 2 channels,ES-
570.1 > 483.0
6.061e+003

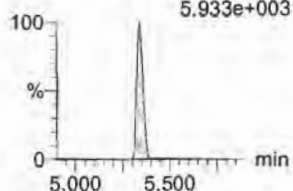


N-EtFOSAA

F47:MRM of 2 channels,ES-
584.2 > 419
1.104e+005

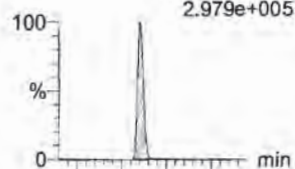


F47:MRM of 2 channels,ES-
584.2 > 483.0
5.933e+003

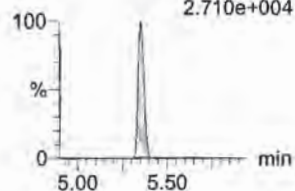


PFUdA

F42:MRM of 2 channels,ES-
563.0 > 518.9
2.979e+005

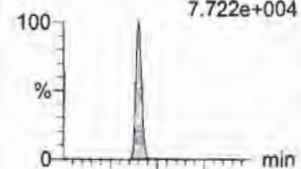


F42:MRM of 2 channels,ES-
563.0 > 269
2.710e+004

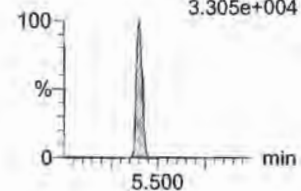


PFDS

F49:MRM of 2 channels,ES-
598.8 > 80
7.722e+004

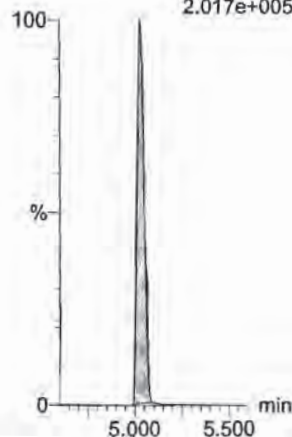


F49:MRM of 2 channels,ES-
598.8 > 98.7
3.305e+004



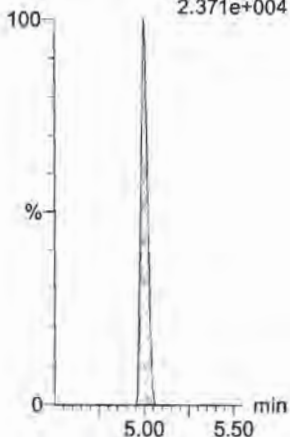
13C2-PFDA

F35:MRM of 1 channel,ES-
515.1 > 469.9
2.017e+005



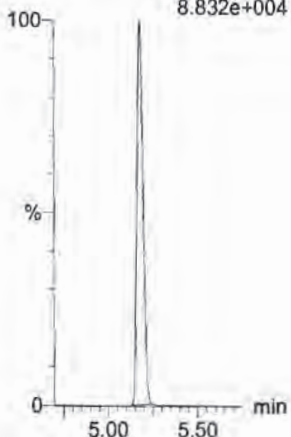
13C2-8:2 FTS

F40:MRM of 1 channel,ES-
529.1 > 508.7
2.371e+004



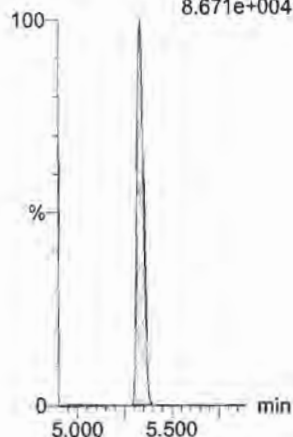
d3-N-MeFOSAA

F46:MRM of 1 channel,ES-
573.3 > 419
8.832e+004



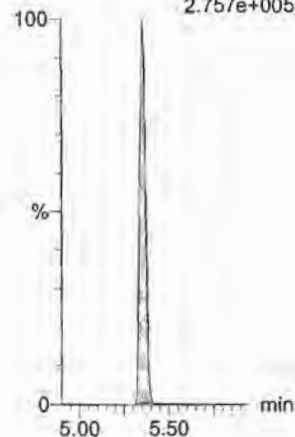
d5-N-EtFOSAA

F48:MRM of 1 channel,ES-
589.3 > 419
8.671e+004



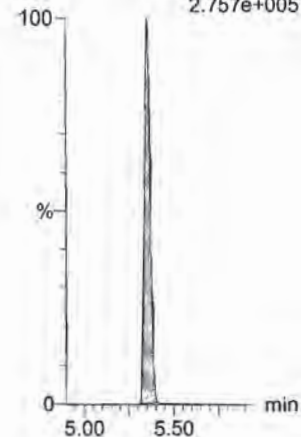
13C2-PFUdA

F43:MRM of 1 channel,ES-
565 > 519.8
2.757e+005



13C2-PFUdA

F43:MRM of 1 channel,ES-
565 > 519.8
2.757e+005



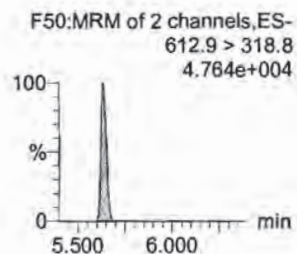
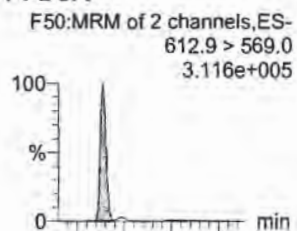
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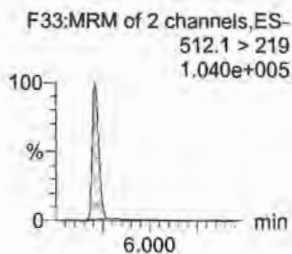
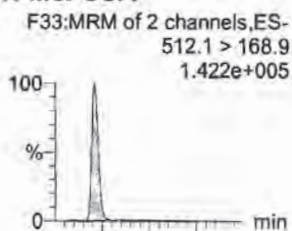
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Name: 180110M3_7, Date: 11-Jan-2018, Time: 10:29:56, ID: ST180110M3-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

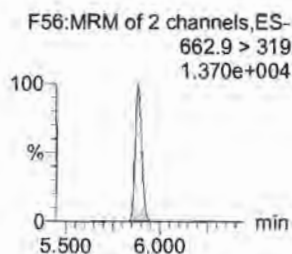
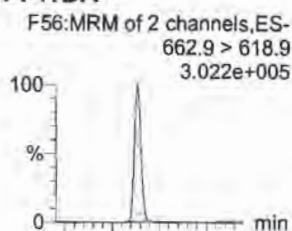
PFDaA



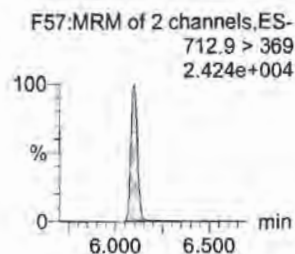
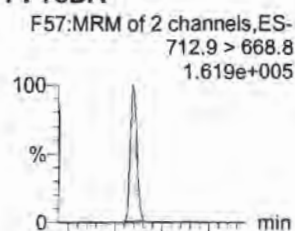
N-MeFOSA



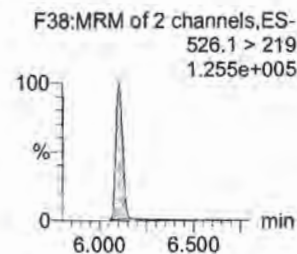
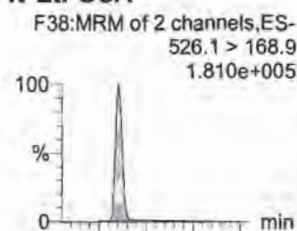
PFTeDA



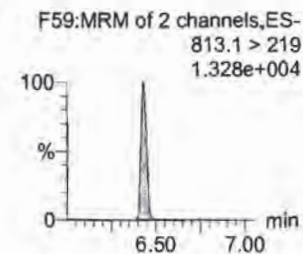
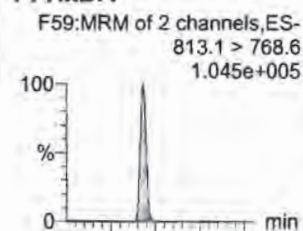
PFTeDA



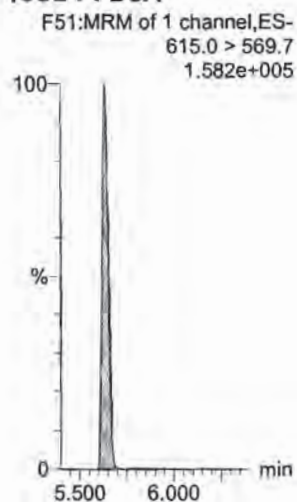
N-EtFOSA



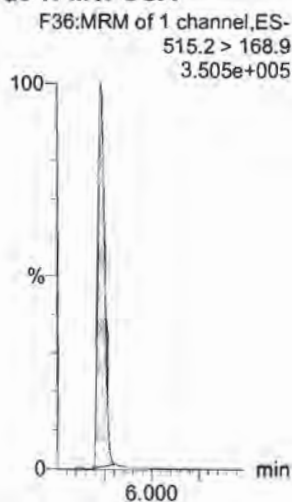
PFHxDA



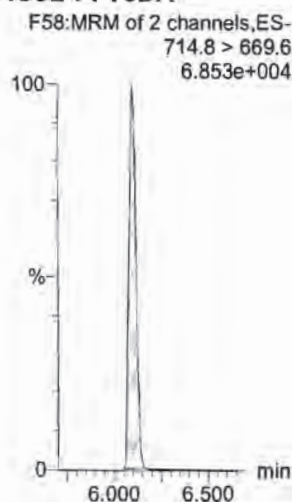
13C2-PFDaA



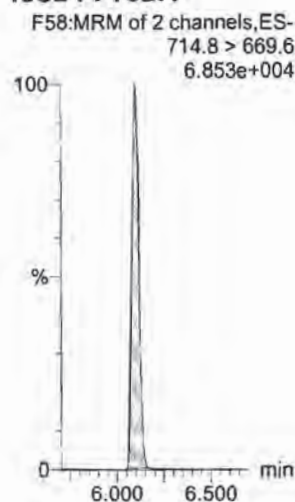
d3-N-MeFOSA



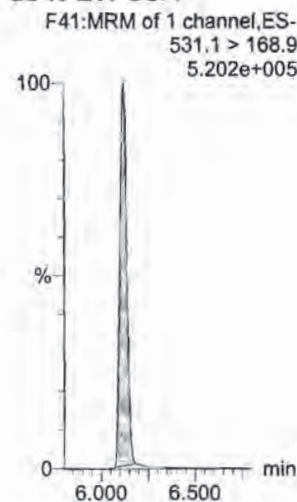
13C2-PFTeDA



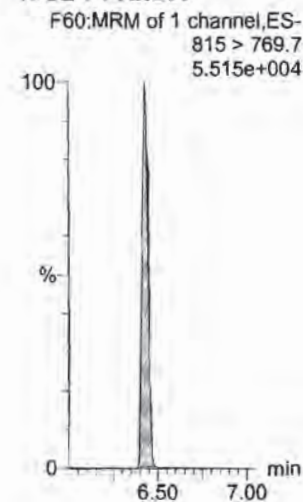
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

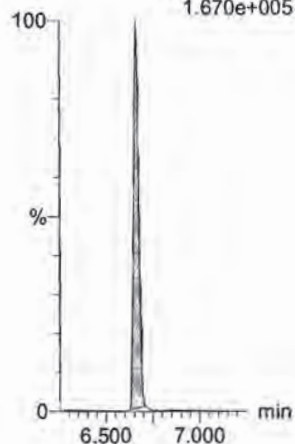
Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_7, Date: 11-Jan-2018, Time: 10:29:56, ID: ST180110M3-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

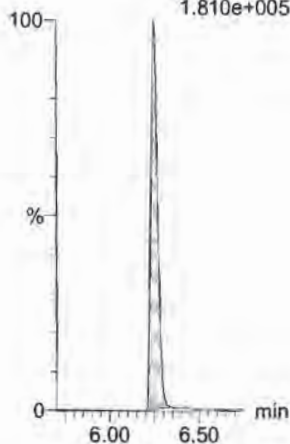
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
1.670e+005



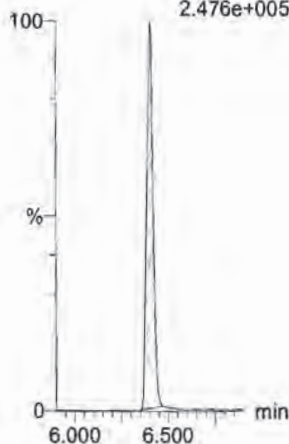
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
1.810e+005



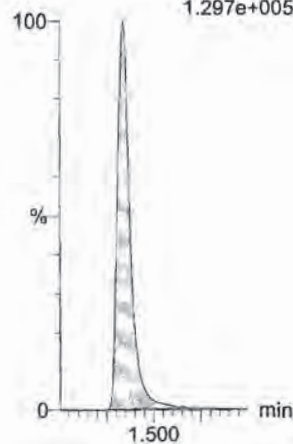
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
2.476e+005



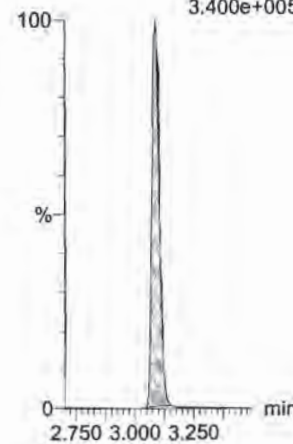
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.297e+005



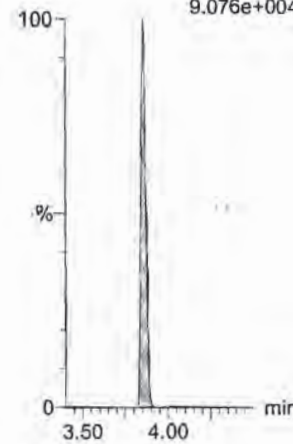
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
3.400e+005



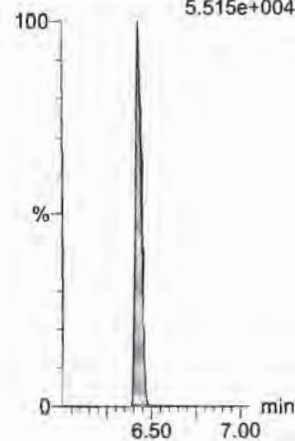
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
9.076e+004



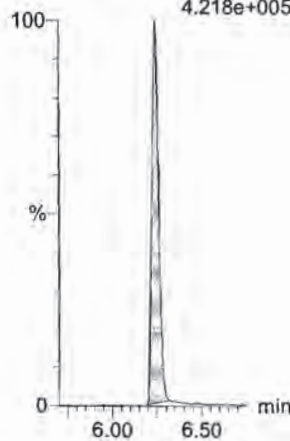
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
5.515e+004



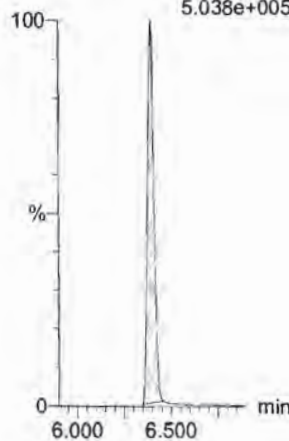
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
4.218e+005



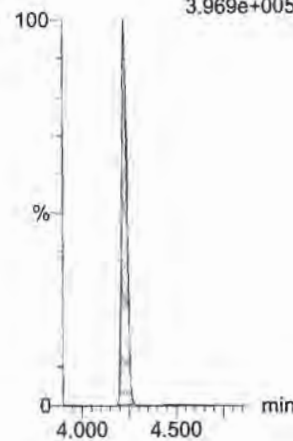
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
5.038e+005



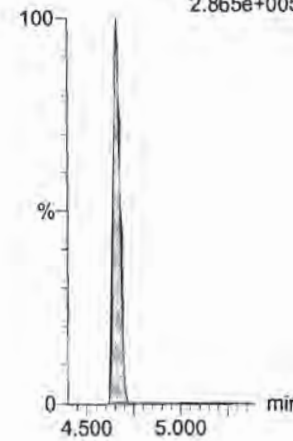
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.969e+005



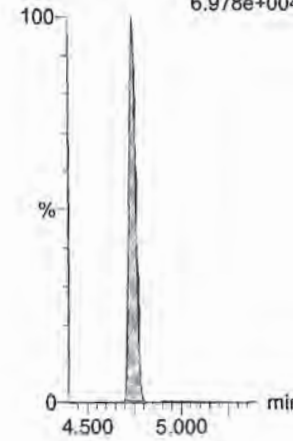
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
2.865e+005



13C4-PFOS

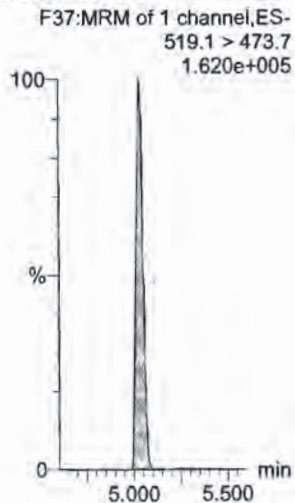
F30:MRM of 1 channel,ES-
503 > 79.9
6.978e+004



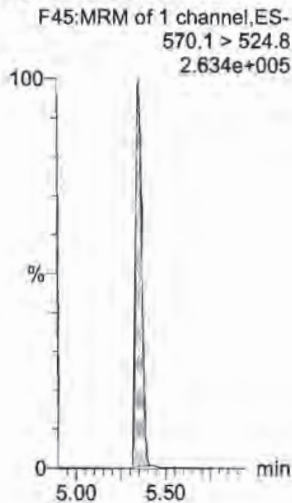
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Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time
Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_7, Date: 11-Jan-2018, Time: 10:29:56, ID: ST180110M3-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

13C6-PFDA



13C7-PFUdA



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

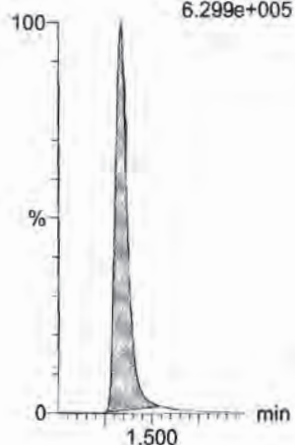
Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_8, Date: 11-Jan-2018, Time: 10:41:06, ID: ST180110M3-7 PFC CS4 17L2612, Description: PFC CS4 17L2612

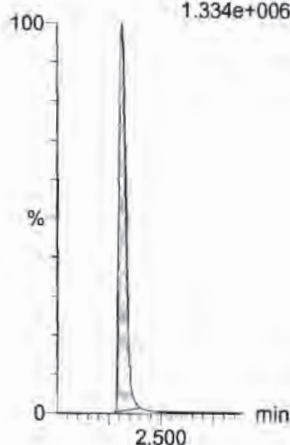
PFBA

F1:MRM of 1 channel,ES-
213.0 > 168.8
6.299e+005



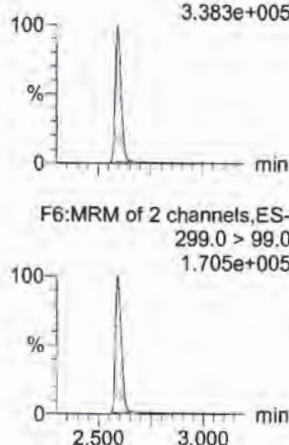
PFPeA

F4:MRM of 1 channel,ES-
263.1 > 218.9
1.334e+006



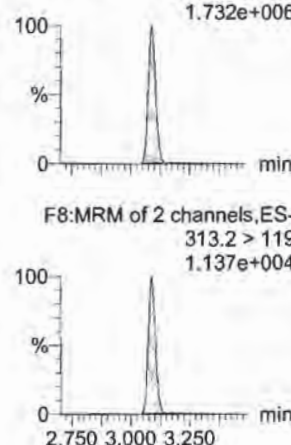
PFBS

F6:MRM of 2 channels,ES-
299.0 > 79.7
3.383e+005



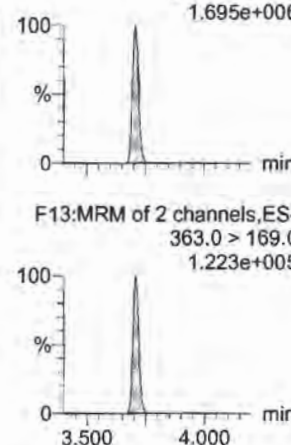
PFHxA

F8:MRM of 2 channels,ES-
313.2 > 268.9
1.732e+006



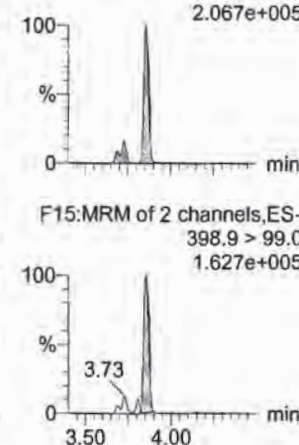
PFHpA

F13:MRM of 2 channels,ES-
363.0 > 318.9
1.695e+006



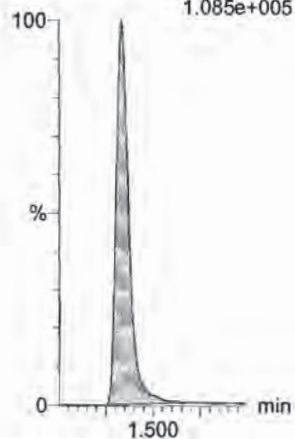
L-PFHxS

F15:MRM of 2 channels,ES-
398.9 > 79.6
2.067e+005



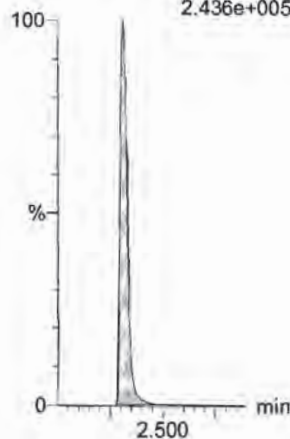
13C3-PFBA

F2:MRM of 1 channel,ES-
216.1 > 171.8
1.085e+005



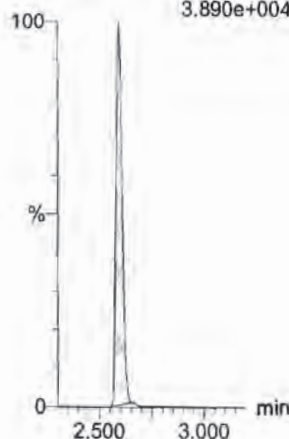
13C3-PFPeA

F5:MRM of 1 channel,ES-
266. > 221.8
2.436e+005



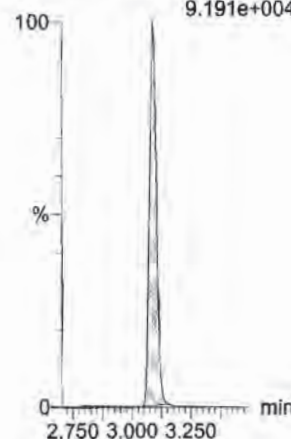
13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
3.890e+004



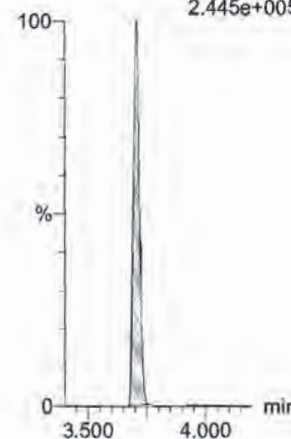
13C2-PFHxA

F9:MRM of 1 channel,ES-
315 > 269.8
9.191e+004



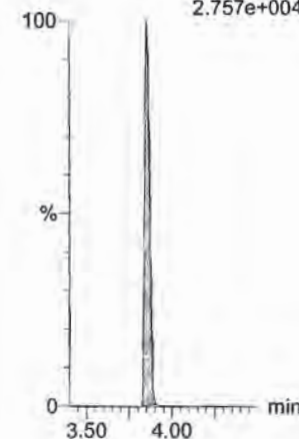
13C4-PFHpA

F14:MRM of 1 channel,ES-
367.2 > 321.8
2.445e+005



18O2-PFHxS

F17:MRM of 1 channel,ES-
403.0 > 102.6
2.757e+004

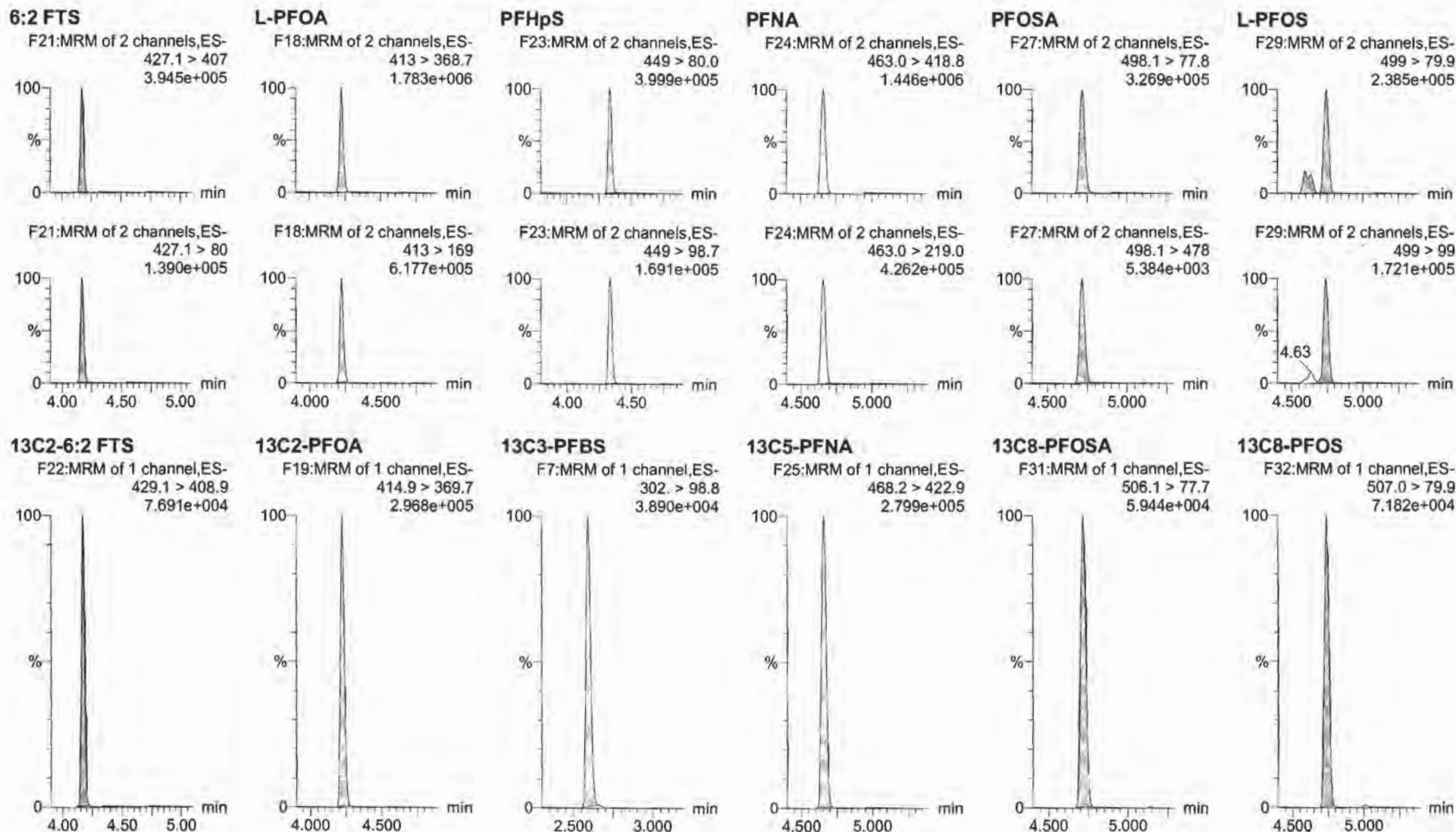


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Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

Name: 180110M3_8, Date: 11-Jan-2018, Time: 10:41:06, ID: ST180110M3-7 PFC CS4 17L2612, Description: PFC CS4 17L2612

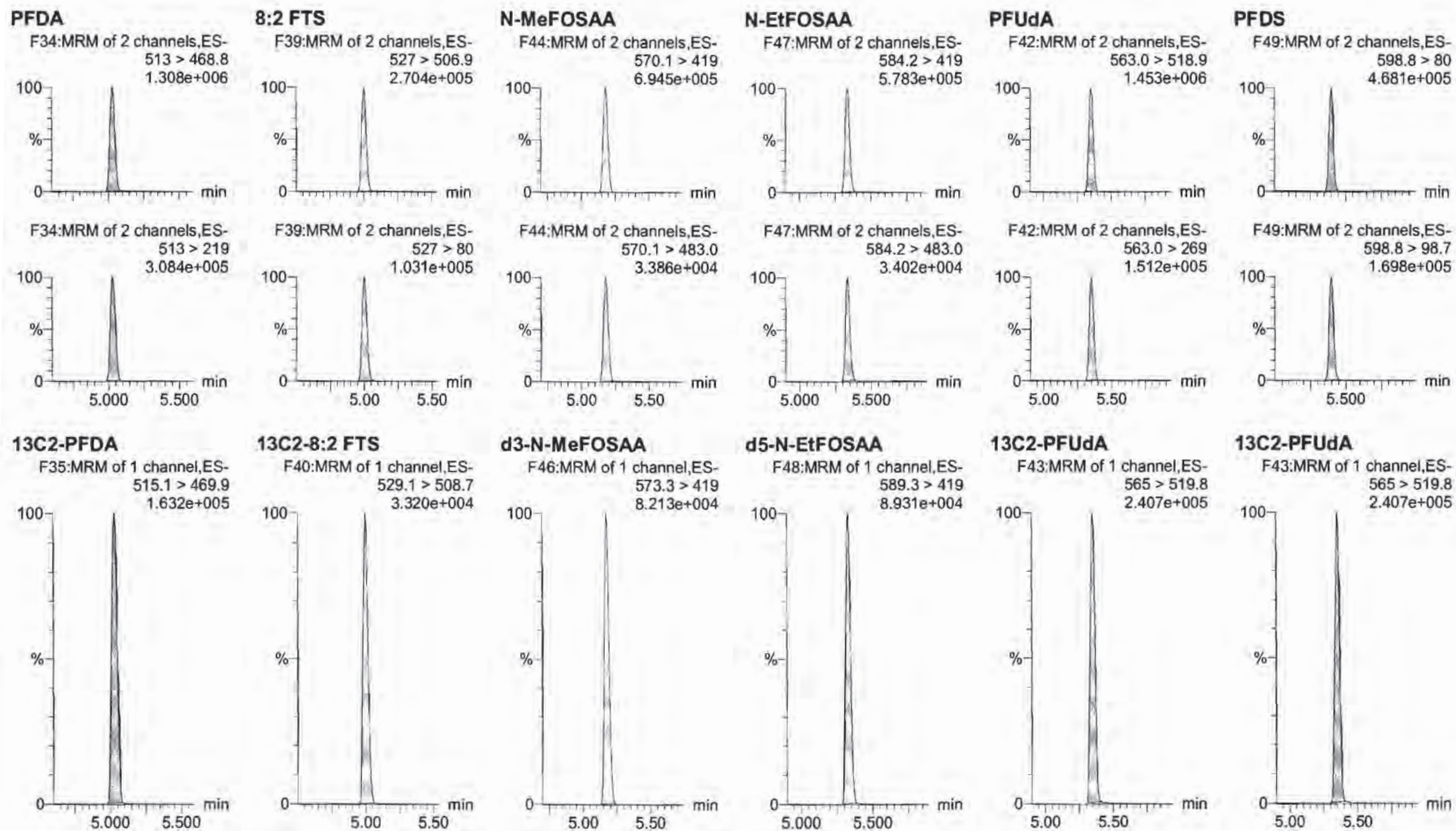


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Name: 180110M3_8, Date: 11-Jan-2018, Time: 10:41:06, ID: ST180110M3-7 PFC CS4 17L2612, Description: PFC CS4 17L2612

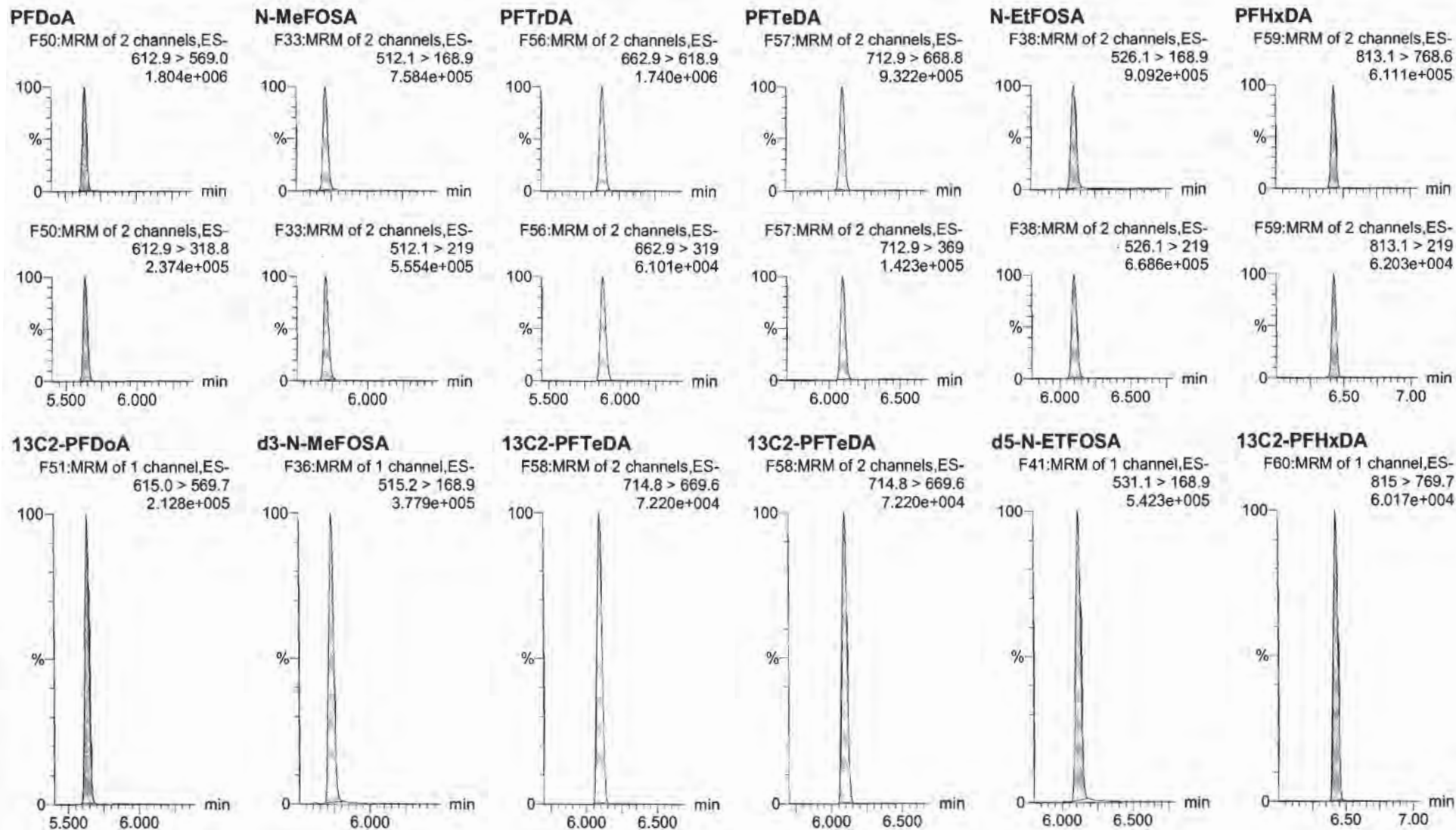


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Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

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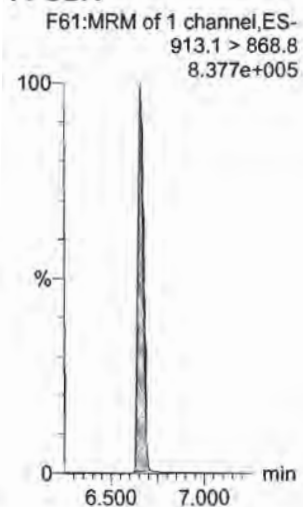
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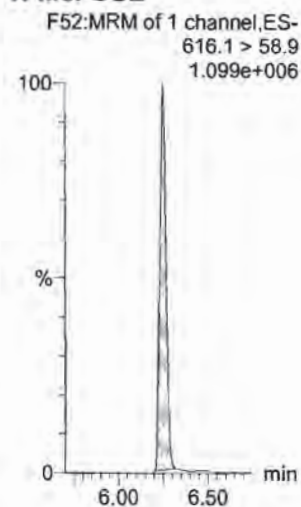
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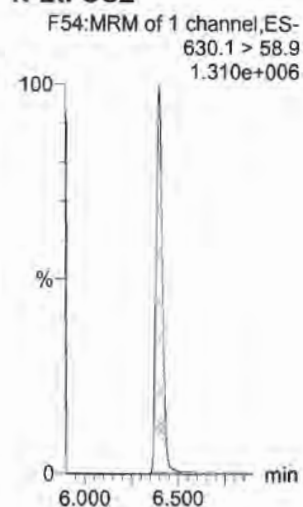
PFODA



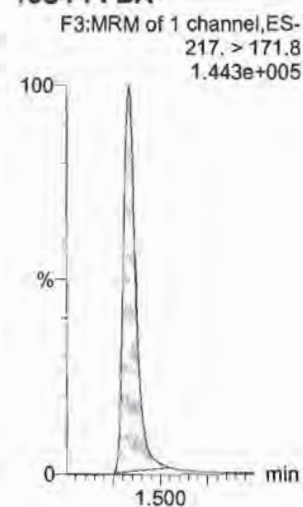
N-MeFOSE



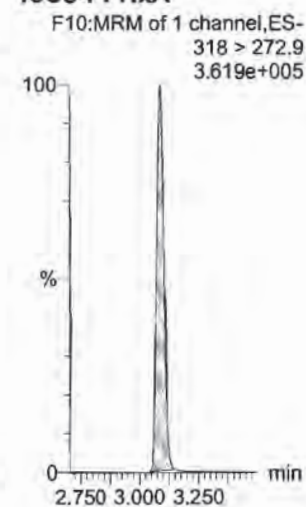
N-EtFOSE



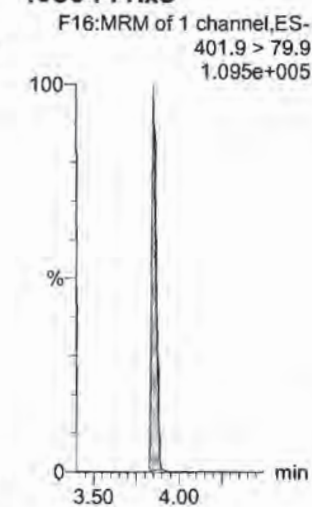
13C4-PFBA



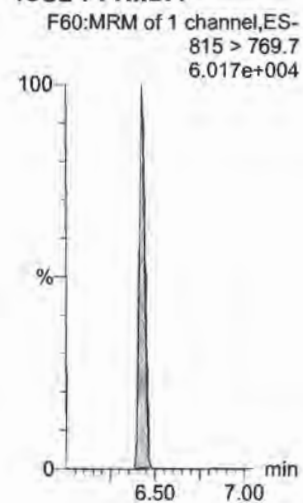
13C5-PFHxA



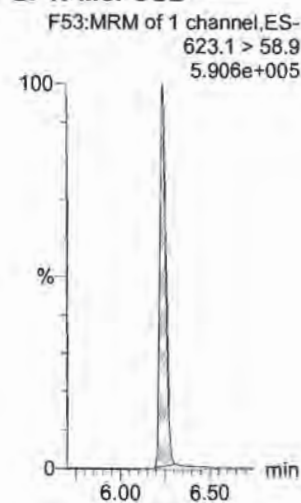
13C3-PFHxS



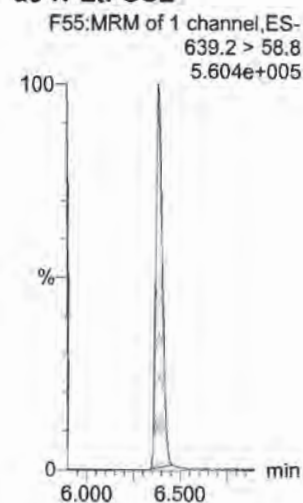
13C2-PFHxDA



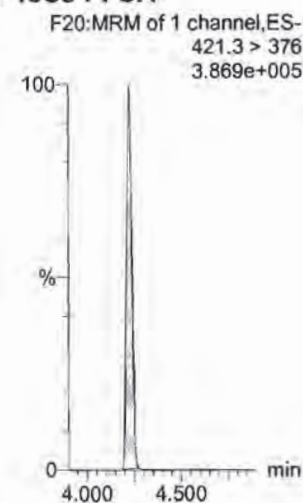
d7-N-MeFOSE



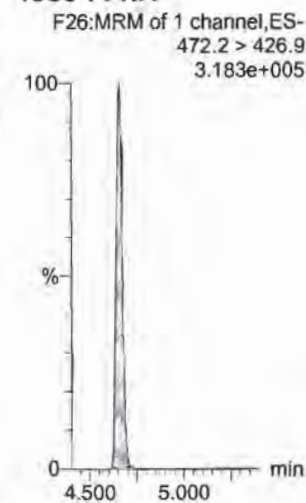
d9-N-EtFOSE



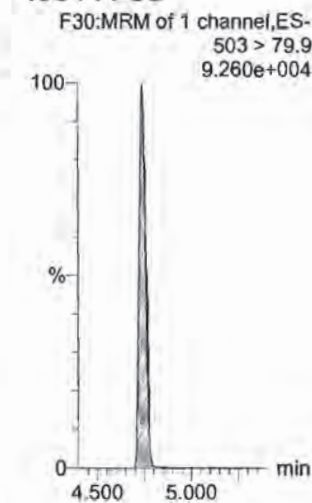
13C8-PFOA



13C9-PFNA



13C4-PFOS



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

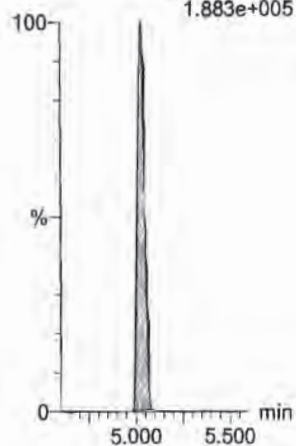
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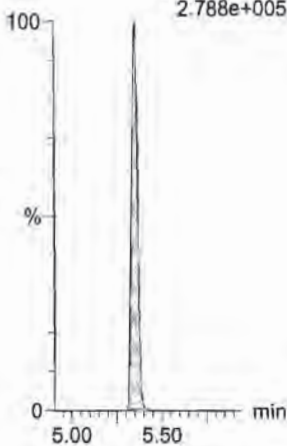
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.883e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.788e+005



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

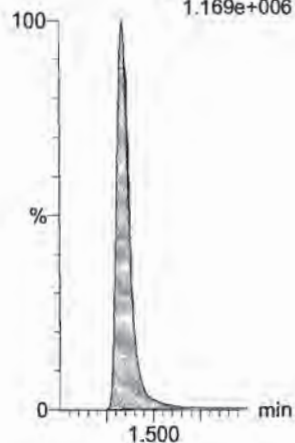
Last Altered: Thursday, January 11, 2018 14:26:31 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

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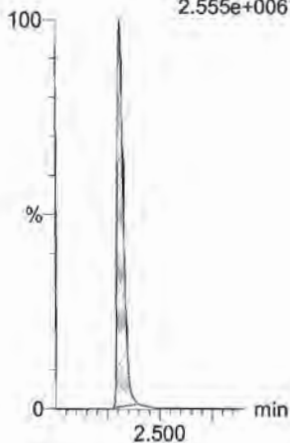
PFBA

F1:MRM of 1 channel,ES-
213.0 > 168.8
1.169e+006



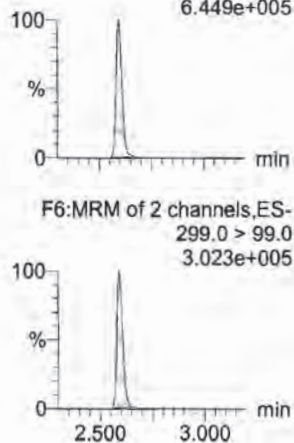
PFPeA

F4:MRM of 1 channel,ES-
263.1 > 218.9
2.555e+006



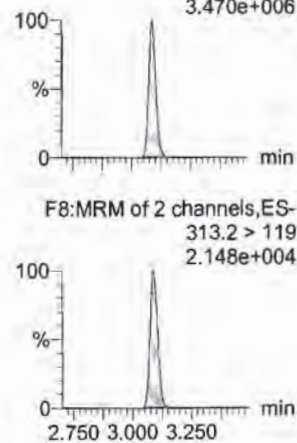
PFBS

F6:MRM of 2 channels,ES-
299.0 > 79.7
6.449e+005



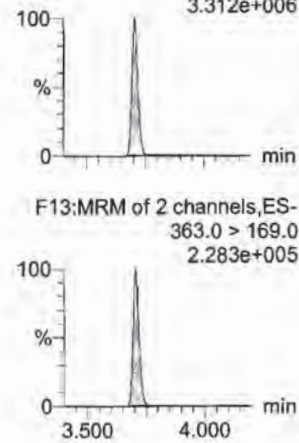
PFHxA

F8:MRM of 2 channels,ES-
313.2 > 268.9
3.470e+006



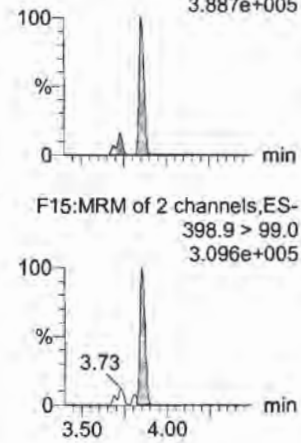
PFHpA

F13:MRM of 2 channels,ES-
363.0 > 318.9
3.312e+006



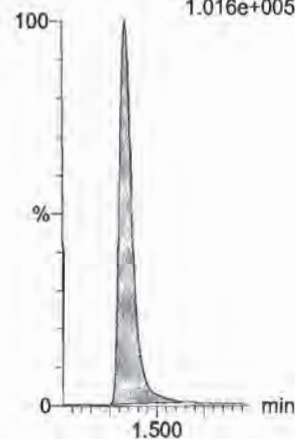
L-PFHxS

F15:MRM of 2 channels,ES-
398.9 > 79.6
3.887e+005



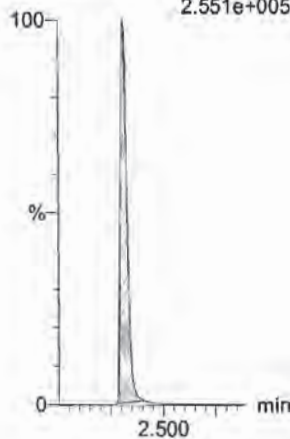
13C3-PFBA

F2:MRM of 1 channel,ES-
216.1 > 171.8
1.016e+005



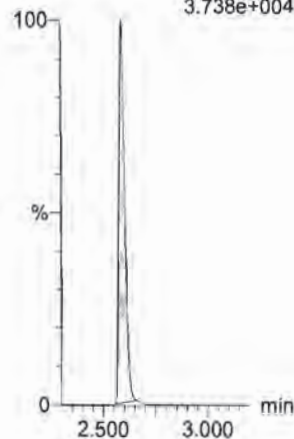
13C3-PFPeA

F5:MRM of 1 channel,ES-
266. > 221.8
2.551e+005



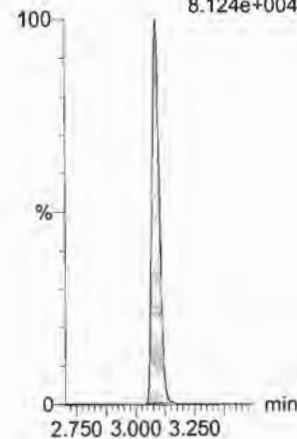
13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
3.738e+004



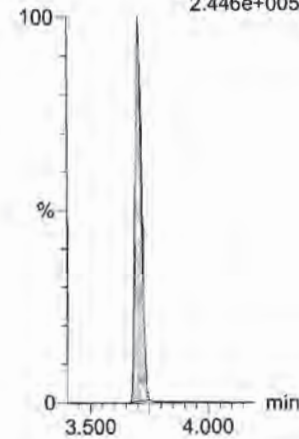
13C2-PFHxA

F9:MRM of 1 channel,ES-
315 > 269.8
8.124e+004



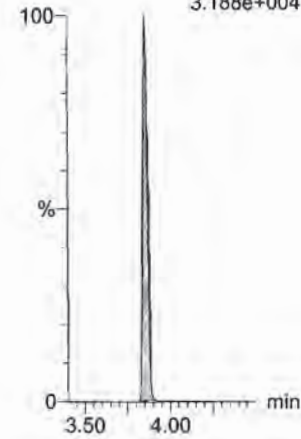
13C4-PFHpA

F14:MRM of 1 channel,ES-
367.2 > 321.8
2.446e+005



18O2-PFHxS

F17:MRM of 1 channel,ES-
403.0 > 102.6
3.188e+004



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

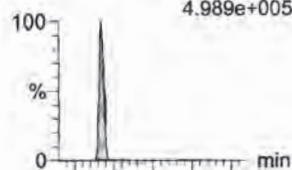
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Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

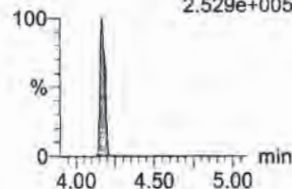
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6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
4.989e+005

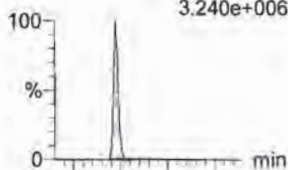


F21:MRM of 2 channels,ES-
427.1 > 80
2.529e+005

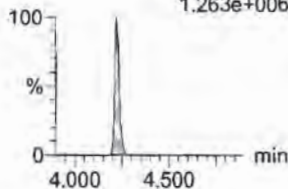


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
3.240e+006

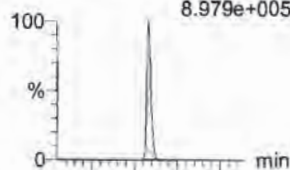


F18:MRM of 2 channels,ES-
413 > 169
1.263e+006

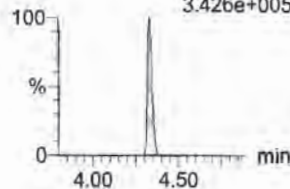


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
8.979e+005

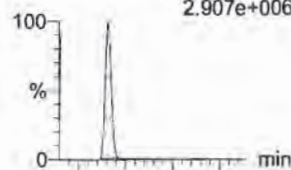


F23:MRM of 2 channels,ES-
449 > 98.7
3.426e+005

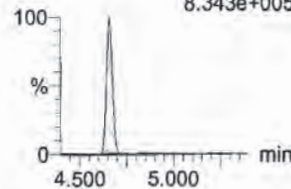


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
2.907e+006

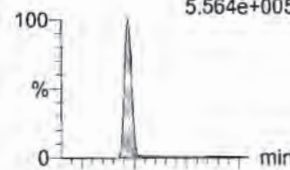


F24:MRM of 2 channels,ES-
463.0 > 219.0
8.343e+005

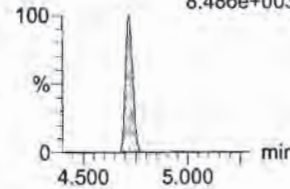


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
5.564e+005

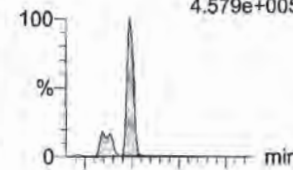


F27:MRM of 2 channels,ES-
498.1 > 478
8.486e+003

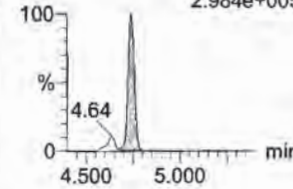


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
4.579e+005

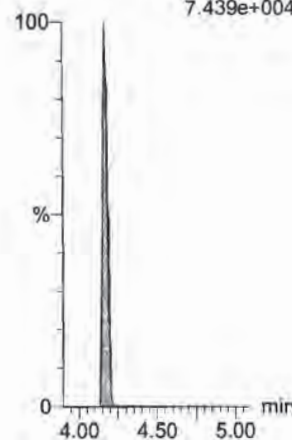


F29:MRM of 2 channels,ES-
499 > 99
2.984e+005



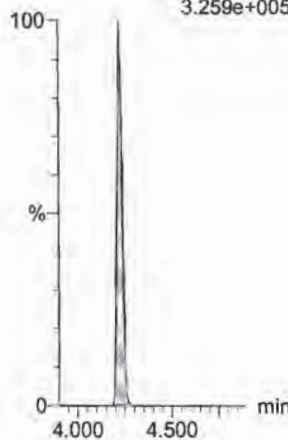
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
7.439e+004



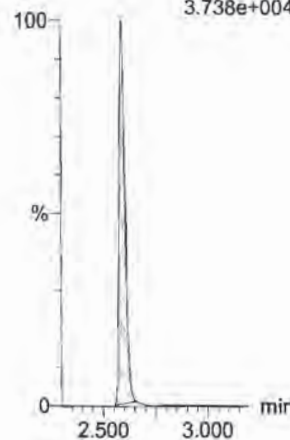
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
3.259e+005



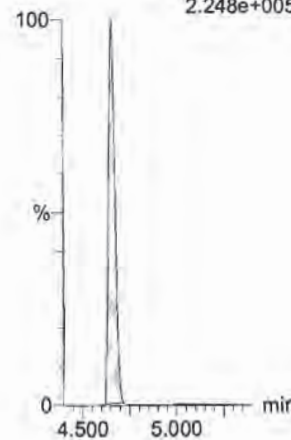
13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
3.738e+004



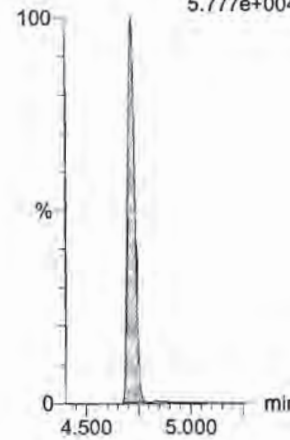
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
2.248e+005



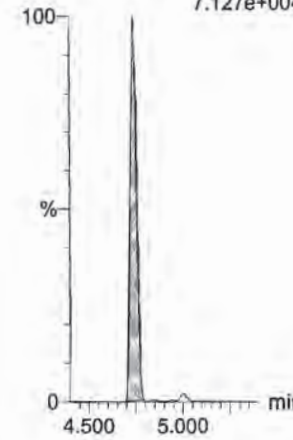
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
5.777e+004



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
7.127e+004

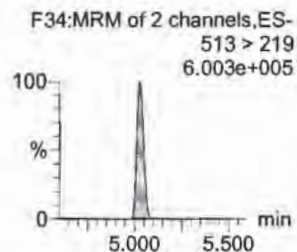
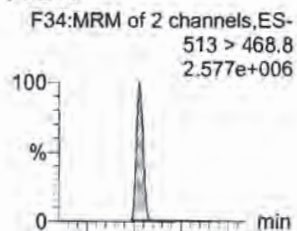


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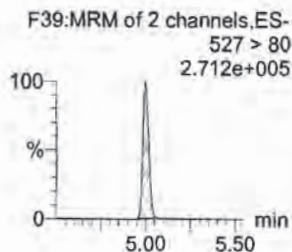
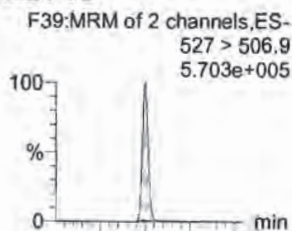
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Name: 180110M3_9, Date: 11-Jan-2018, Time: 10:52:18, ID: ST180110M3-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

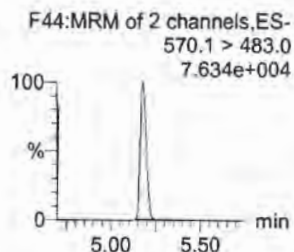
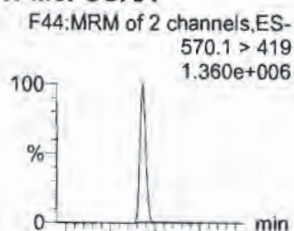
PFDA



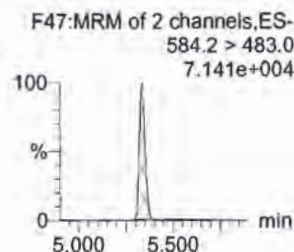
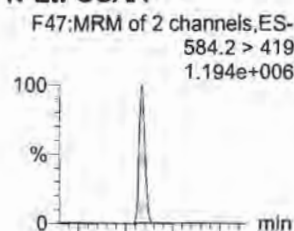
8:2 FTS



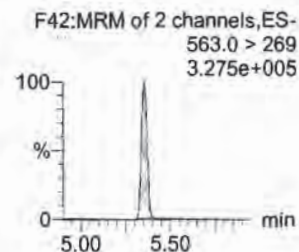
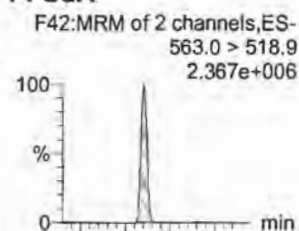
N-MeFOSAA



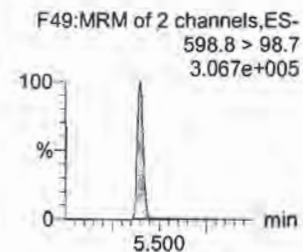
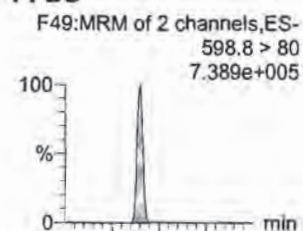
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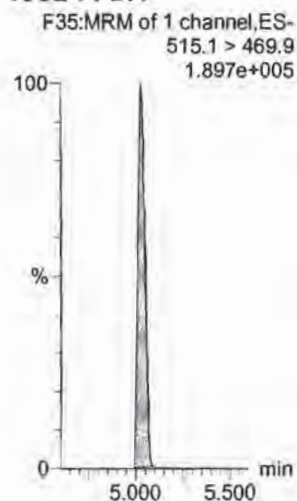
PFUdA



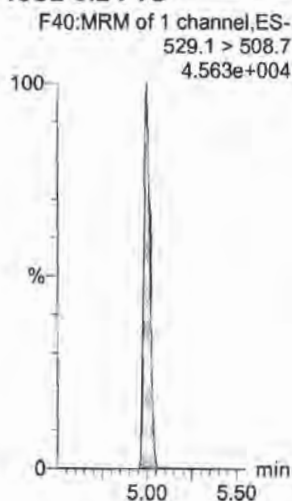
PFDS



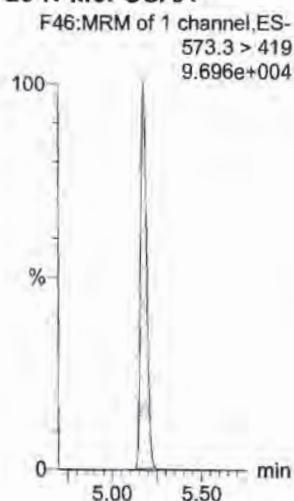
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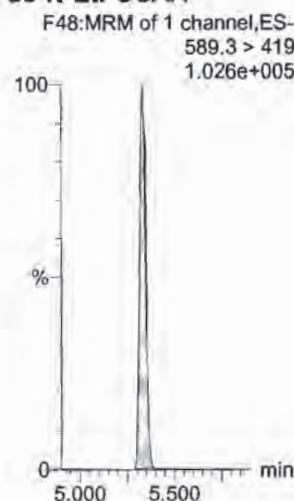
13C2-8:2 FTS



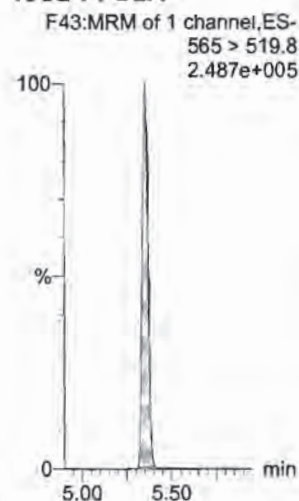
d3-N-MeFOSAA



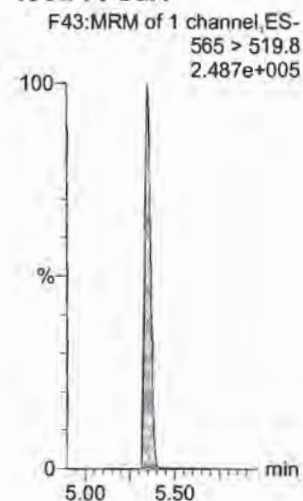
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA

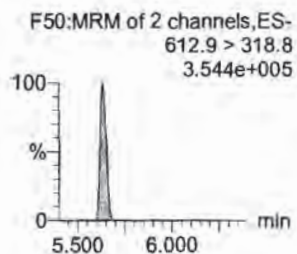
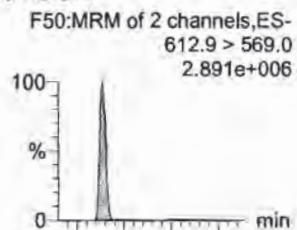


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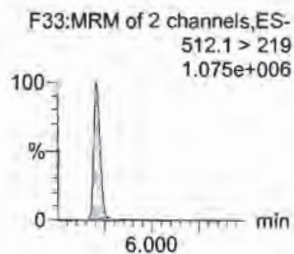
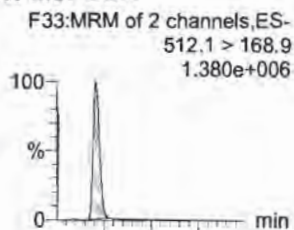
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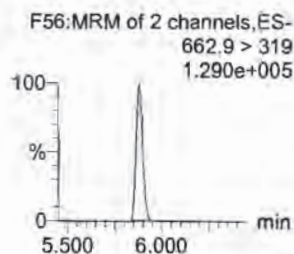
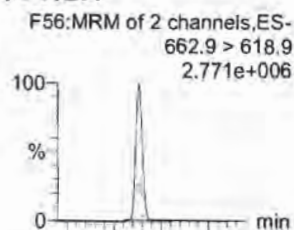
PFDaA



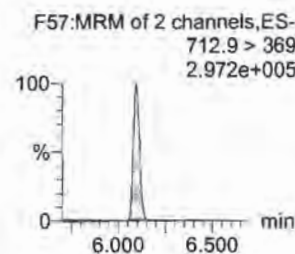
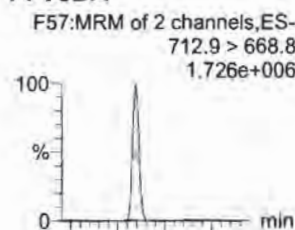
N-MeFOSA



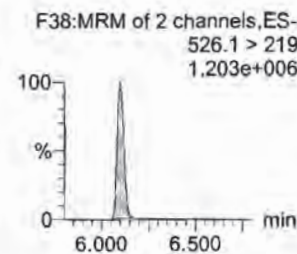
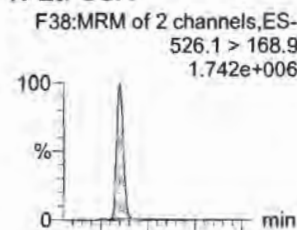
PFTeDA



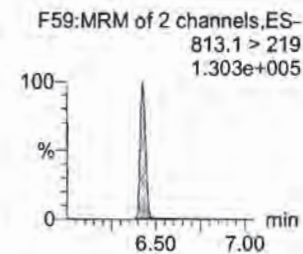
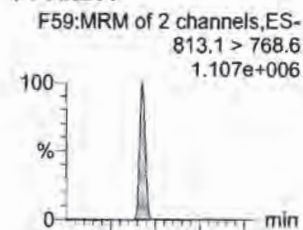
PFTeDA



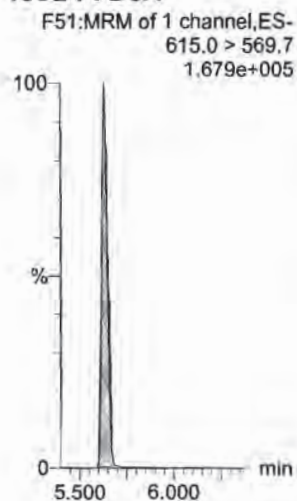
N-EtFOSA



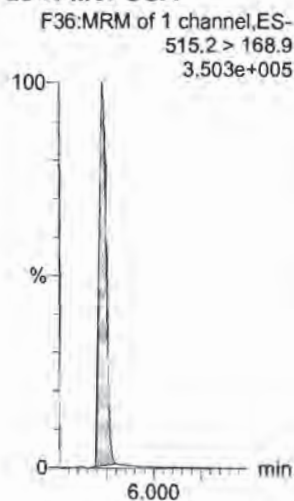
PFHxDA



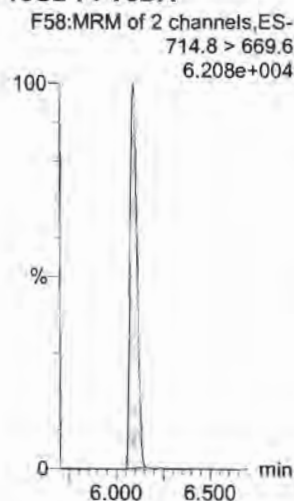
13C2-PFDaA



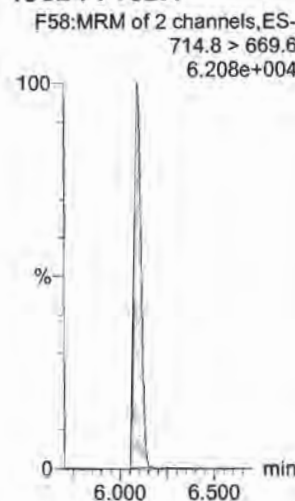
d3-N-MeFOSA



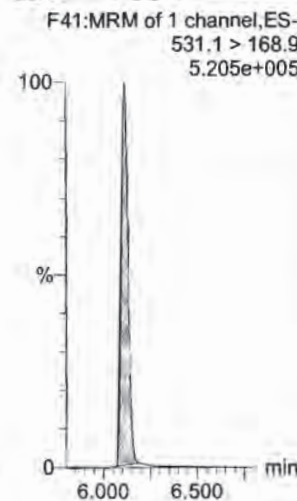
13C2-PFTeDA



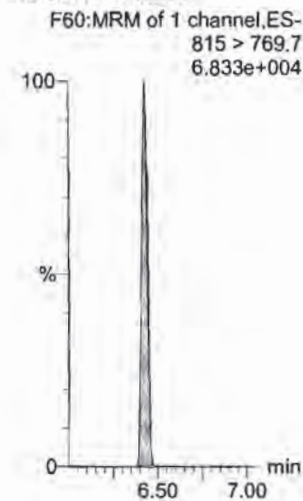
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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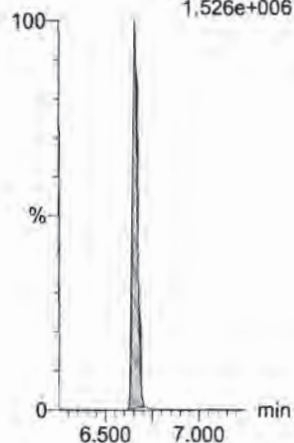
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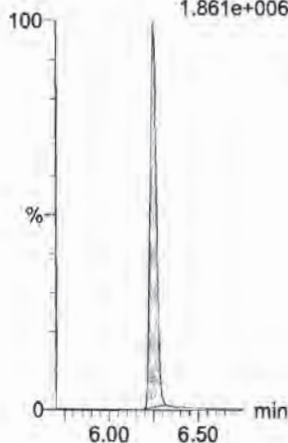
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
1.526e+006



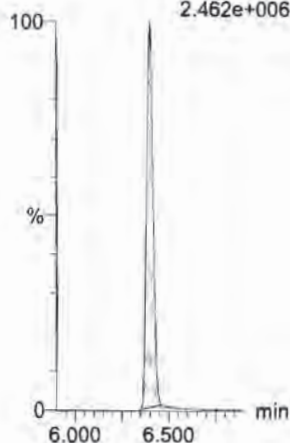
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
1.861e+006



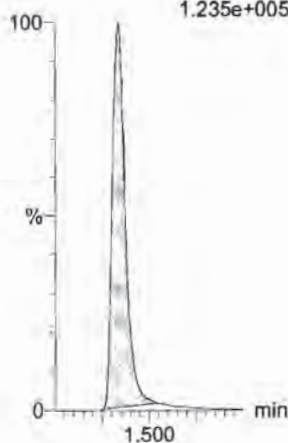
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
2.462e+006



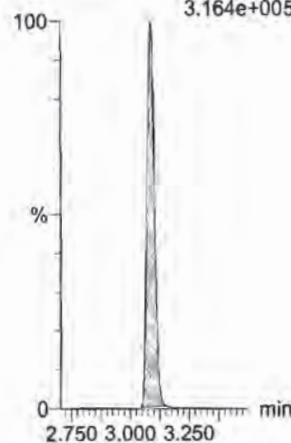
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.235e+005



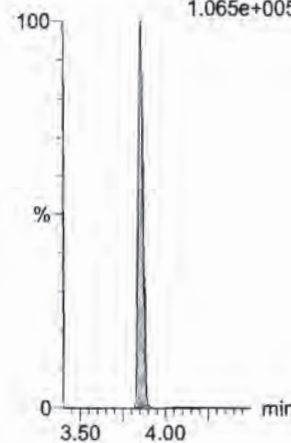
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
3.164e+005



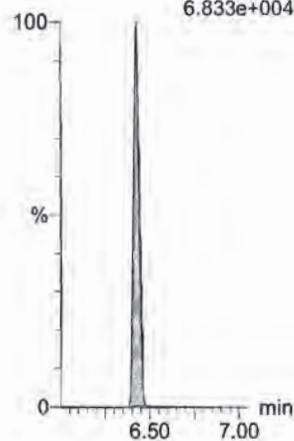
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
1.065e+005



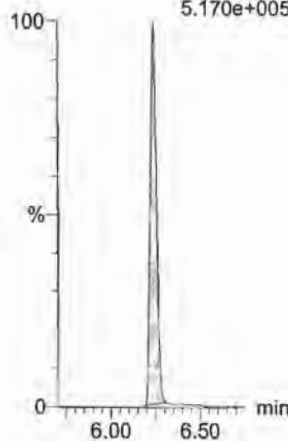
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
6.833e+004



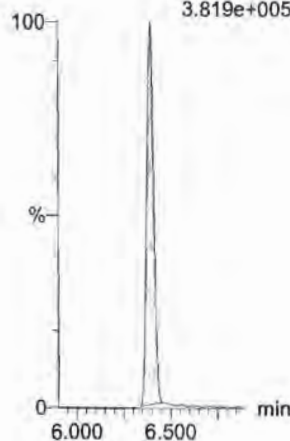
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
5.170e+005



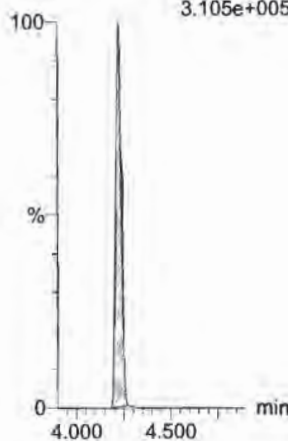
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
3.819e+005



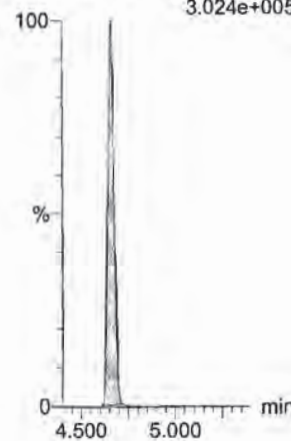
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.105e+005



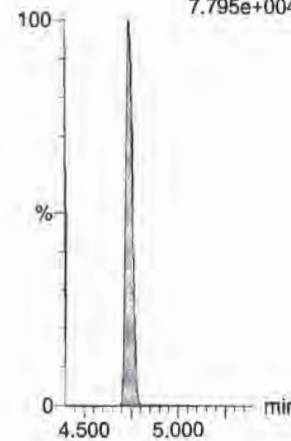
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
3.024e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
7.795e+004



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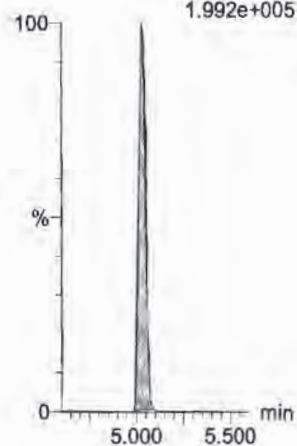
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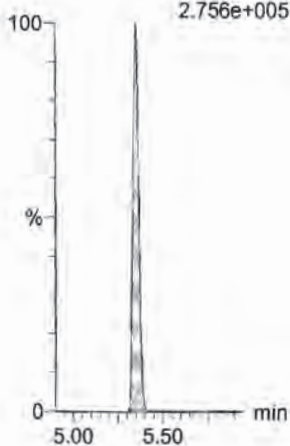
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.992e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.756e+005



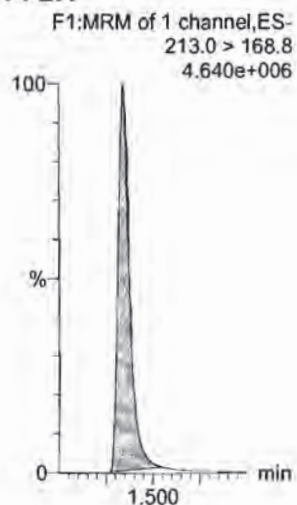
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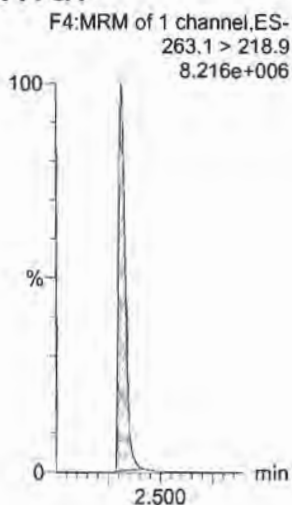
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Name: 180110M3_10, Date: 11-Jan-2018, Time: 11:03:28, ID: ST180110M3-9 PFC CS6 17L2710, Description: PFC CS6 17L2710

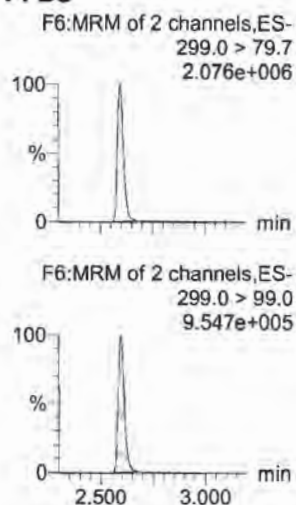
PFBA



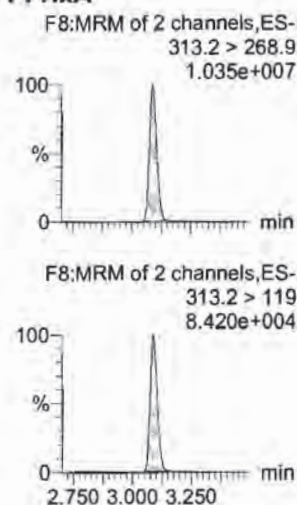
PFPeA



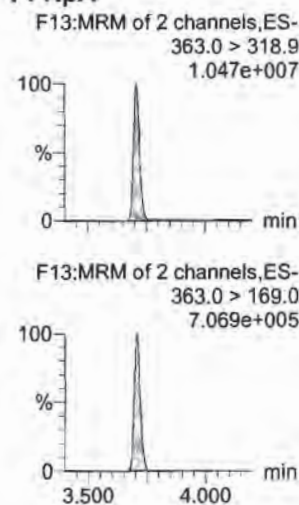
PFBS



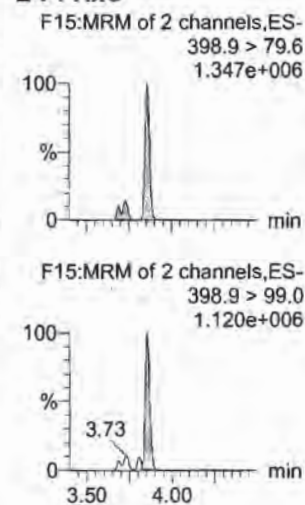
PFHxA



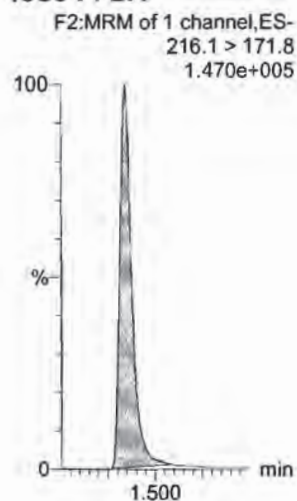
PFHpA



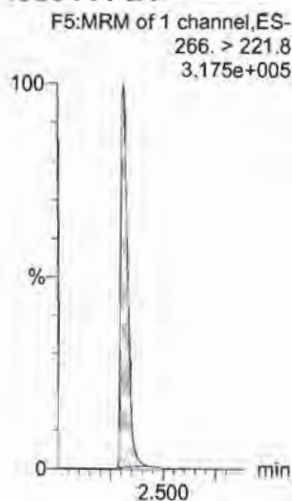
L-PFHxS



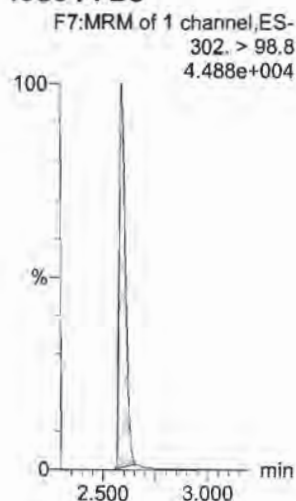
13C3-PFBA



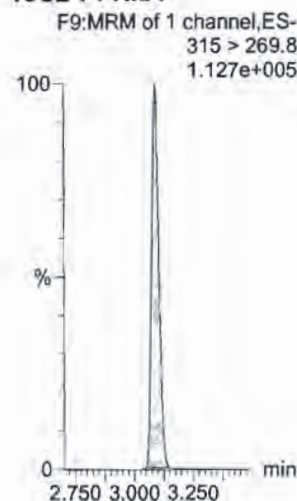
13C3-PFPeA



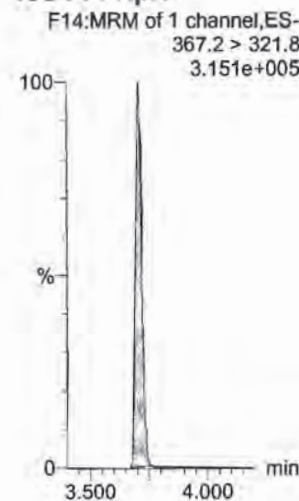
13C3-PFBS



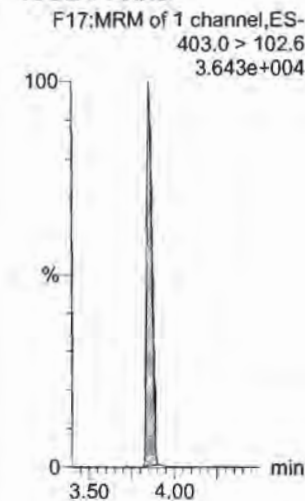
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



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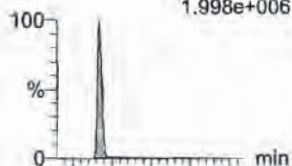
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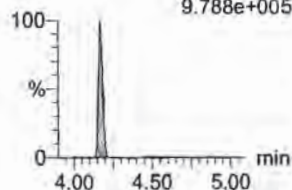
Name: 180110M3_10, Date: 11-Jan-2018, Time: 11:03:28, ID: ST180110M3-9 PFC CS6 17L2710, Description: PFC CS6 17L2710

6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
1.998e+006

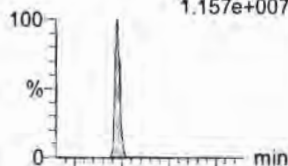


F21:MRM of 2 channels,ES-
427.1 > 80
9.788e+005

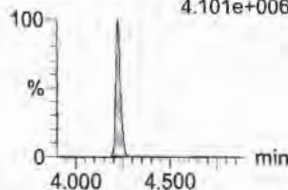


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
1.157e+007



F18:MRM of 2 channels,ES-
413 > 169
4.101e+006

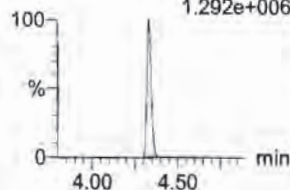


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
2.733e+006

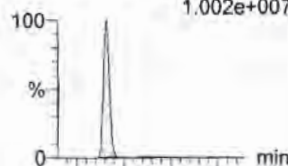


F23:MRM of 2 channels,ES-
449 > 98.7
1.292e+006

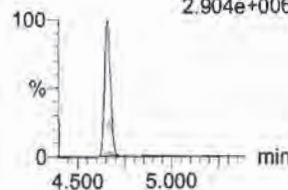


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
1.002e+007

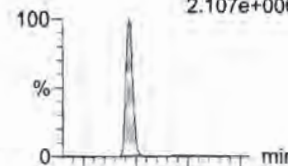


F24:MRM of 2 channels,ES-
463.0 > 219.0
2.904e+006

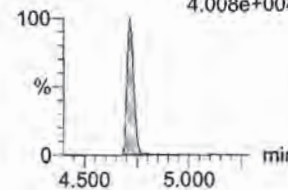


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
2.107e+006

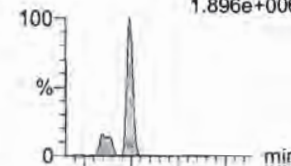


F27:MRM of 2 channels,ES-
498.1 > 478
4.008e+004

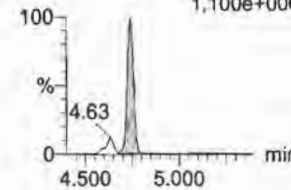


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
1.896e+006

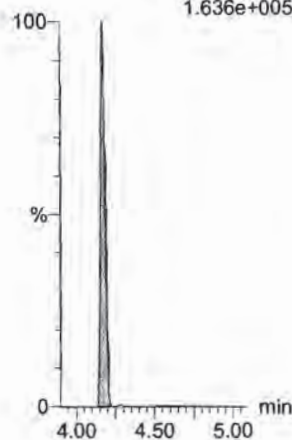


F29:MRM of 2 channels,ES-
499 > 99
1.100e+006



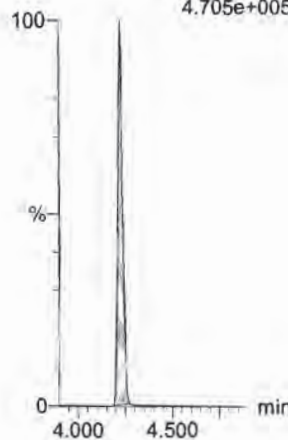
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
1.636e+005



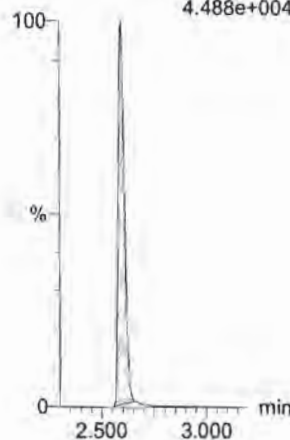
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
4.705e+005



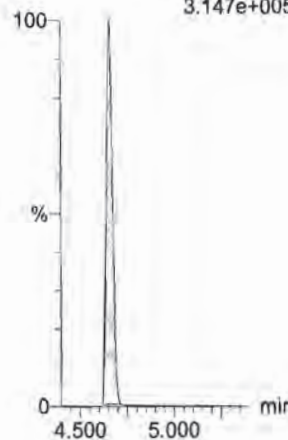
13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
4.488e+004



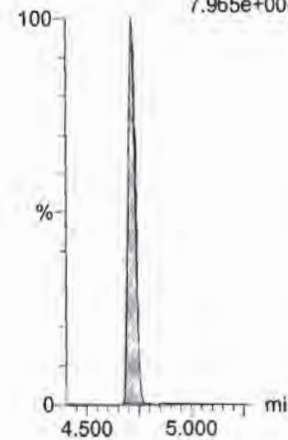
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
3.147e+005



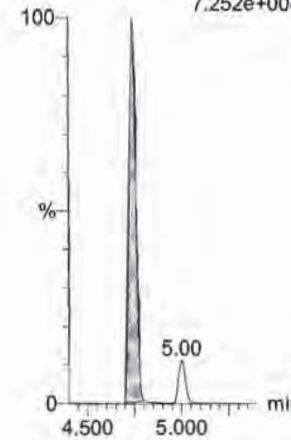
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
7.965e+004



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
7.252e+004



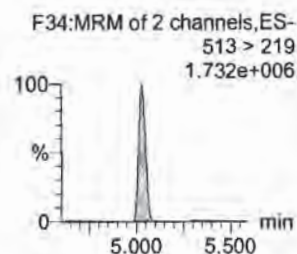
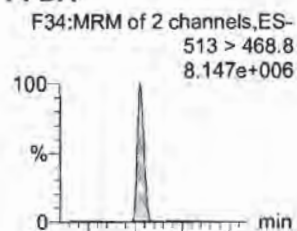
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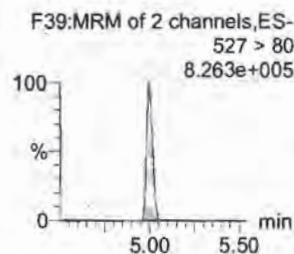
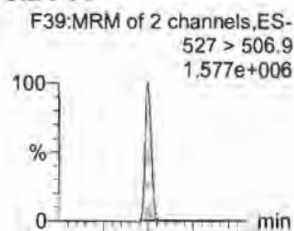
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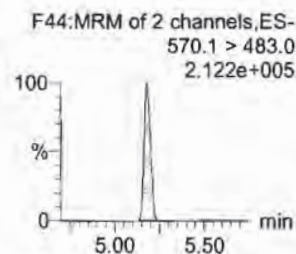
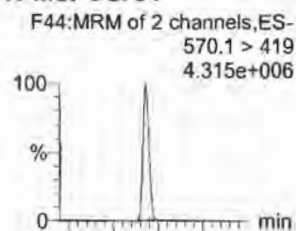
PFDA



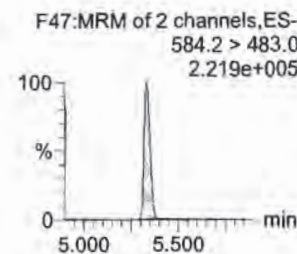
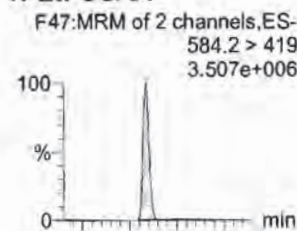
8:2 FTS



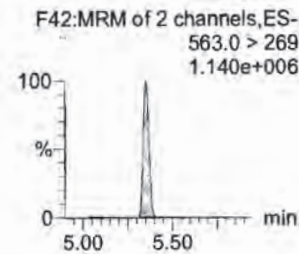
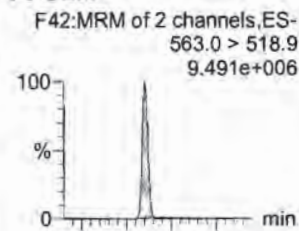
N-MeFOSAA



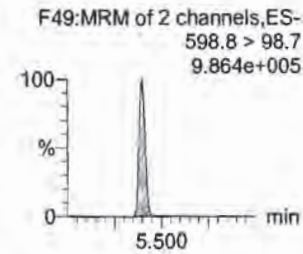
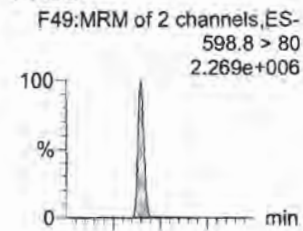
N-EtFOSAA



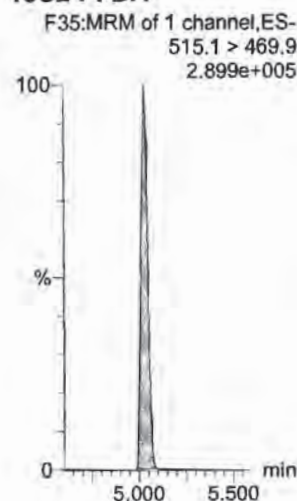
PFUdA



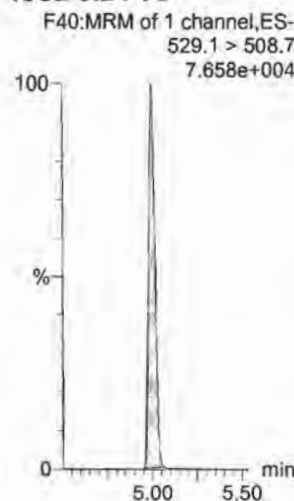
PFDS



13C2-PFDA



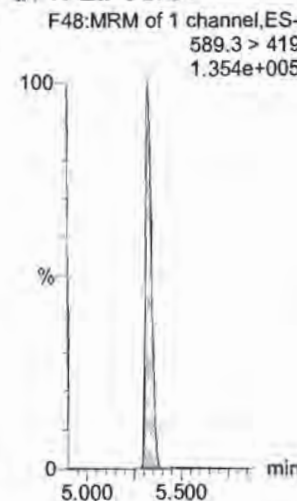
13C2-8:2 FTS



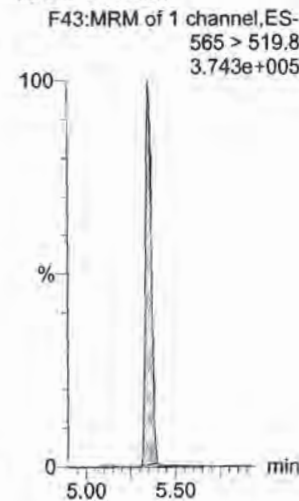
d3-N-MeFOSAA



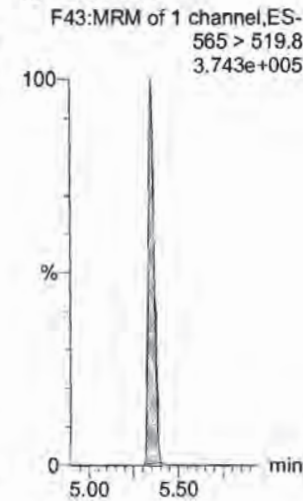
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



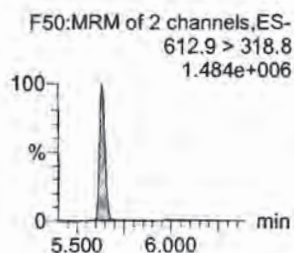
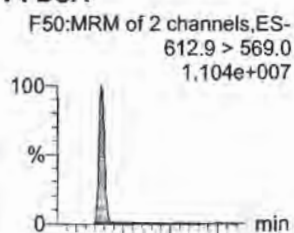
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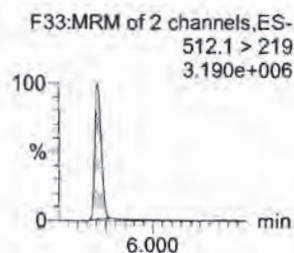
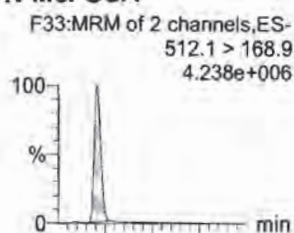
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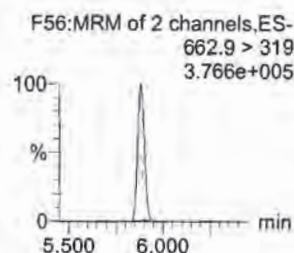
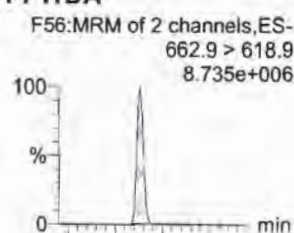
PFD_oA



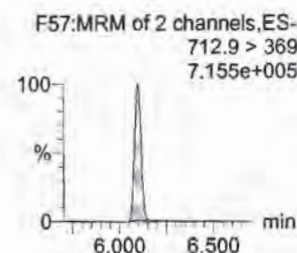
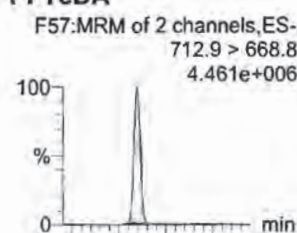
N-MeFOSA



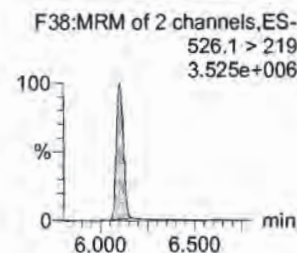
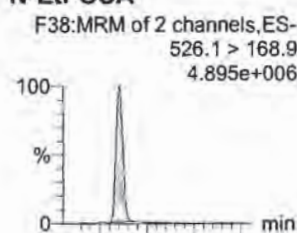
PFT_rDA



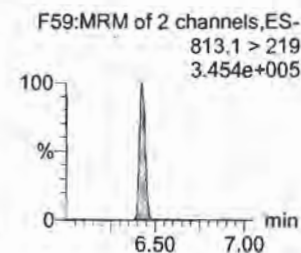
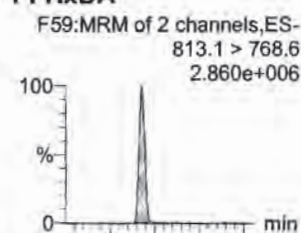
PFT_eDA



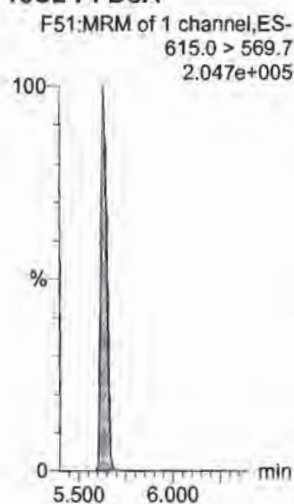
N-EtFOSA



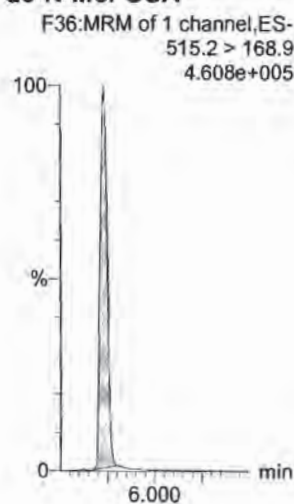
PFH_xDA



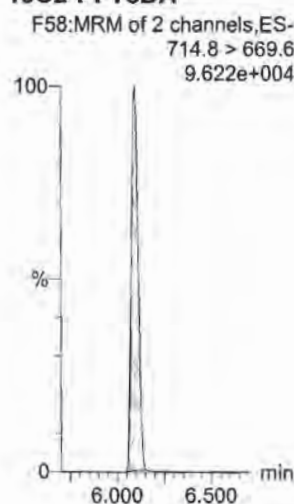
¹³C2-PFD_oA



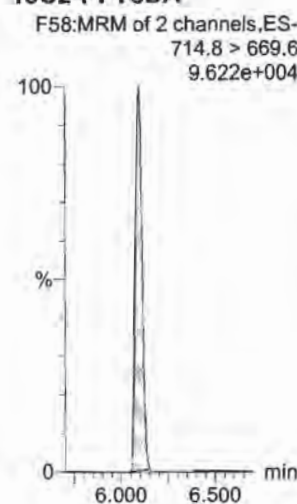
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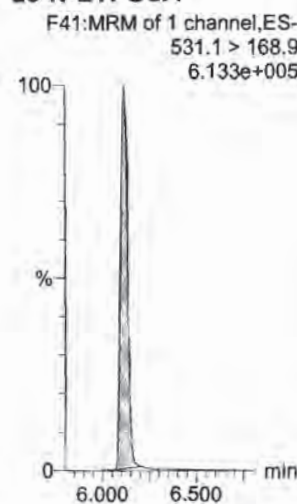
¹³C2-PFT_eDA



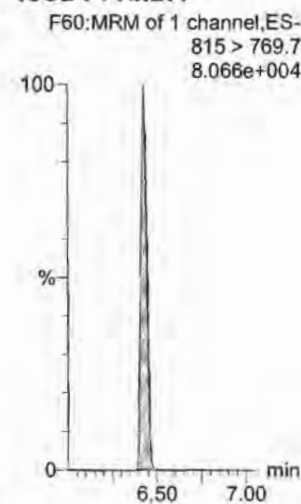
¹³C2-PFT_eDA



d5-N-ETFOSA



¹³C2-PFH_xDA



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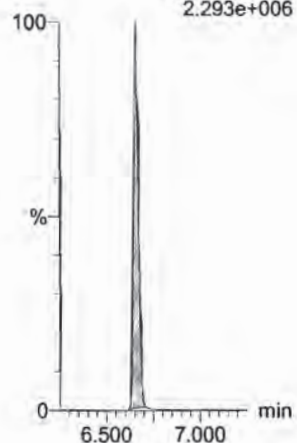
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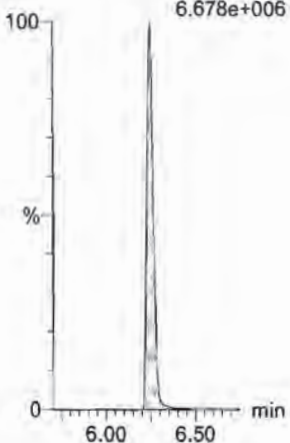
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
2.293e+006



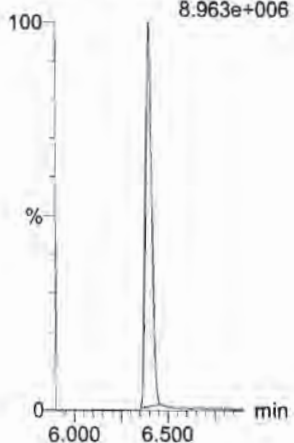
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
6.678e+006



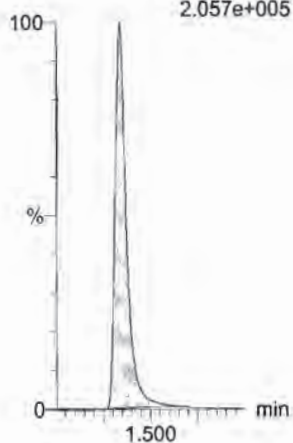
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
8.963e+006



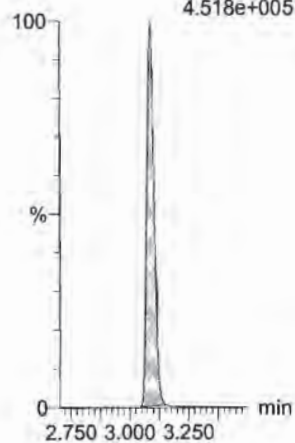
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
2.057e+005



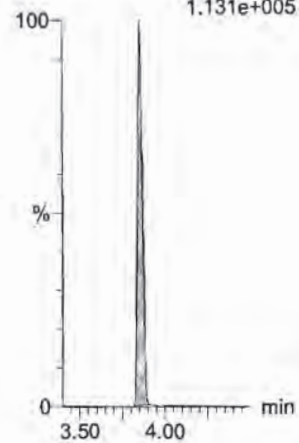
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
4.518e+005



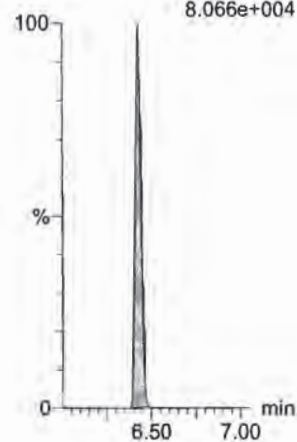
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
1.131e+005



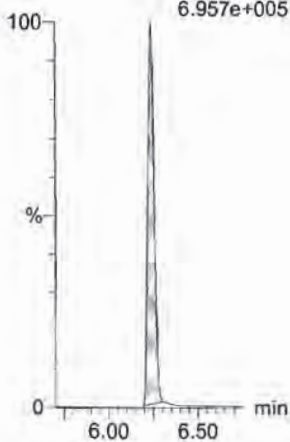
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
8.066e+004



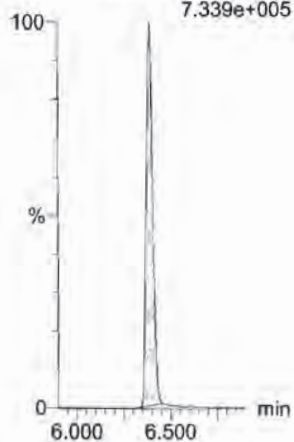
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
6.957e+005



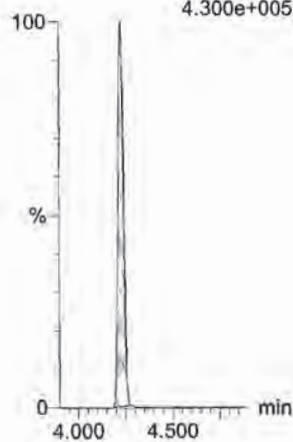
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
7.339e+005



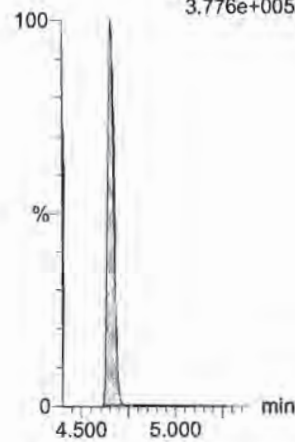
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
4.300e+005



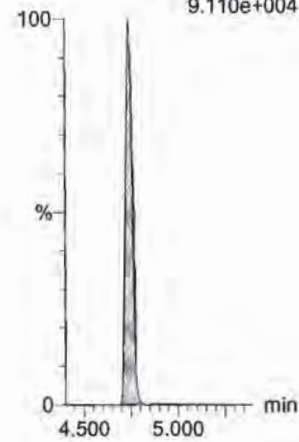
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
3.776e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
9.110e+004



Dataset: U:\Q4.PRO\results\180110M3\180110M3_crv.qld

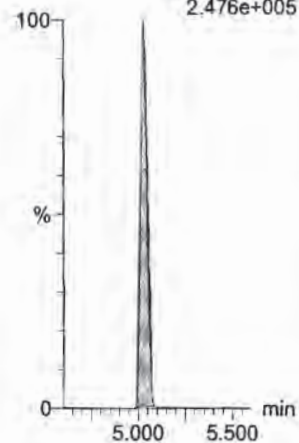
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Printed: Thursday, January 11, 2018 14:28:58 Pacific Standard Time

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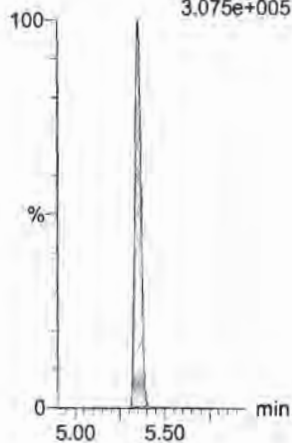
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.476e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-
570.1 > 524.8
3.075e+005



Dataset: U:\Q4.PRO\results\180110M3\180110M3_12.qld

Last Altered: Thursday, January 11, 2018 14:32:59 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:33:41 Pacific Standard Time

① Not present in SS

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818C.mdb 11 Jan 2018 11:46:18

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-10-18-FULL-M3.cdb 11 Jan 2018 14:26:30

Name: 180110M3_12, Date: 11-Jan-2018, Time: 11:25:49, ID: ICV180110M3-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

CP/11/18

✓ JIA
01/11/2018

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
1	1 PFBA	213.0 > 168.8	8.27e3	8.56e3		1.38	1.34	12.1	8.24	82.4	NO
2	2 PFPeA	263.1 > 218.9	8.08e3	9.73e3		2.37	2.32	10.4	8.26	82.6	NO
3	3 PFBS	299.0 > 79.7	1.64e3	1.22e3		2.66	2.60	16.8	7.87	78.7	NO
4	4 PFHxA	313.2 > 268.9	9.53e3	2.94e3		3.15	3.09	16.2	8.37	83.7	NO
5	5 PFHpA	363.0 > 318.9	8.72e3	8.24e3		3.78	3.71	13.2	8.07	80.7	NO
6	6 L-PFHxS	398.9 > 79.6	1.31e3	9.86e2		3.94	3.86	16.6	7.93	79.3	NO
7	8 6:2 FTS	427.1 > 407	1.82e3	9.86e2		4.25	4.17	23.0	7.61	76.1	NO
8	9 L-PFOA	413 > 368.7	9.56e3	1.21e4		4.31	4.23	9.91	7.72	77.2	NO
9	11 PFHpS	449 > 80.0	2.06e3	1.21e4		4.42	4.34	2.14	7.38	73.8	NO
10	12 PFNA	463.0 > 418.8	1.08e4	9.71e3		4.81	4.66	13.9	9.82	98.2	NO
11	13 PFOSA	498.1 > 77.8	2.37e3	2.29e3		4.87	4.72	13.0	9.88	98.8	NO
12	14 L-PFOS	499 > 79.9	2.02e3	2.64e3		4.89	4.74	9.54	8.09	80.9	NO
13	16 PFDA	513 > 468.8	8.49e3	9.21e3		5.18	5.03	11.5	7.17	71.7	NO
14	17 8:2 FTS	527 > 506.9	1.74e3	9.21e3		5.15	5.00	2.36	7.55	75.5	NO
15	18 N-MeFOSAA	570.1 > 419	5.07e3	4.15e3		5.32	5.18	15.3	7.67	76.7	NO
16	19 N-EiFOSAA	584.2 > 419	3.88e3	4.38e3		5.48	5.34	11.0	7.26	72.6	NO
17	20 PFUdA	563.0 > 518.9	9.19e3	9.66e3		5.50	5.35	11.9	9.02	90.2	NO
18	21 PFDS	598.8 > 80	2.11e3	9.66e3		5.54	5.40	2.73	7.36	73.6	NO
19	22 PFDoA	612.9 > 569.0	1.00e4	6.35e3		5.77	5.64	19.7	9.27	92.7	NO
20	23 N-MeFOSA	512.1 > 168.9		1.48e4		5.80					NO
21	24 PFTDA	662.9 > 618.9	9.41e3	6.35e3		6.00	5.88	18.5	7.74	77.4	NO
22	25 PFTeDA	712.9 > 668.8	5.49e3	2.33e3		6.22	6.10	29.5	9.98	99.8	NO
23	26 N-EiFOSA	526.1 > 168.9		2.26e4		6.17					NO
24	27 PFHxDA	813.1 > 768.6		1.99e3		6.53					NO
25	28 PFODA	913.1 > 868.8		1.99e3		6.74					NO
26	29 N-MeFOSE	616.1 > 58.9		2.11e4		6.27					NO
27	30 N-EiFOSE	630.1 > 58.9	7.11e1	1.70e4		6.43	6.40	0.629	0.596	77.2	YES
28	31 13C3-PFBA	216.1 > 171.8	8.56e3	9.86e3	0.764	1.38	1.34	10.8	14.2	113.7	NO
29	32 13C3-PFPeA	266. > 221.8	9.73e3	1.10e4	0.730	2.37	2.32	11.0	15.1	120.8	NO
30	33 13C3-PFBS	302. > 98.8	1.22e3	1.10e4	0.095	2.77	2.59	1.38	14.5	116.0	NO
31	Work Order 17011851	315 > 269.8	2.94e3	1.10e4	0.597	3.15	3.09	3.33	5.58	111.7	NO

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Dataset: U:\Q4.PRO\results\180110M3\180110M3_12.qld

Last Altered: Thursday, January 11, 2018 14:32:59 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:33:41 Pacific Standard Time

Name: 180110M3_12, Date: 11-Jan-2018, Time: 11:25:49, ID: ICV180110M3-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
32	35 13C4-PFHpA	367.2 > 321.8	8.24e3	1.10e4	0.604	3.78	3.71	9.33	15.4	123.6	NO
33	36 18O2-PFHxS	403.0 > 102.6	9.86e2	2.90e3	0.293	3.94	3.86	4.25	14.5	116.0	NO
34	37 13C2-6:2 FTS	429.1 > 408.9	2.17e3	1.06e4	0.215	4.25	4.18	2.55	11.9	94.8	NO
35	38 13C2-PFOA	414.9 > 369.7	1.21e4	1.06e4	0.916	4.31	4.23	14.1	15.5	123.6	NO
36	39 13C5-PFNA	468.2 > 422.9	9.71e3	9.76e3	0.817	4.81	4.66	12.4	15.2	121.7	NO
37	40 13C8-PFOSA	506.1 > 77.7	2.29e3	9.91e3	0.223	4.87	4.72	2.89	12.9	103.6	NO
38	41 13C8-PFOS	507.0 > 79.9	2.64e3	2.83e3	0.875	4.89	4.74	11.7	13.3	106.7	NO
39	42 13C2-PFDA	515.1 > 469.9	9.21e3	7.32e3	1.105	5.18	5.04	15.7	14.2	113.8	NO
40	43 13C2-8:2 FTS	529.1 > 508.7	1.21e3	1.10e4	0.101	5.15	5.00	1.37	13.6	108.5	NO
41	44 d3-N-MeFOSAA	573.3 > 419	4.15e3	9.91e3	0.345	5.32	5.18	5.23	15.2	121.3	NO
42	45 d5-N-EtFOSAA	589.3 > 419	4.38e3	9.91e3	0.390	5.47	5.34	5.53	14.2	113.4	NO
43	46 13C2-PFUdA	565 > 519.8	9.66e3	9.91e3	0.958	5.49	5.35	12.2	12.7	101.8	NO
44	47 13C2-PFDoA	615.0 > 569.7	6.35e3	9.91e3	0.599	5.77	5.63	8.01	13.4	107.0	NO
45	48 d3-N-MeFOSA	515.2 > 168.9	1.48e4	9.91e3	0.124	5.83	5.73	18.6	150	100.1	NO
46	49 13C2-PFTeDA	714.8 > 669.6	2.33e3	9.91e3	0.282	6.22	6.10	2.94	10.4	83.5	NO
47	50 d5-N-ETFOSA	531.1 > 168.9	2.26e4	9.91e3	0.184	6.18	6.12	28.5	155	103.2	NO
48	51 13C2-PFHxDA	815 > 769.7	1.99e3	9.91e3	0.540	6.53	6.43	2.52	4.66	93.2	NO
49	52 d7-N-MeFOSE	623.1 > 58.9	2.11e4	9.91e3	0.182	6.27	6.24	26.6	146	97.2	NO
50	53 d9-N-EtFOSE	639.2 > 58.8	1.70e4	9.91e3	0.173	6.42	6.39	21.4	124	82.8	NO
51	54 13C4-PFBA	217. > 171.8	9.86e3	9.86e3	1.000	1.38	1.33	12.5	12.5	100.0	NO
52	55 13C5-PFHxA	318 > 272.9	1.10e4	1.10e4	1.000	3.15	3.09	12.5	12.5	100.0	NO
53	56 13C3-PFHxS	401.9 > 79.9	2.90e3	2.90e3	1.000	4.02	3.86	12.5	12.5	100.0	NO
54	57 13C8-PFOA	421.3 > 376	1.06e4	1.06e4	1.000	4.38	4.22	12.5	12.5	100.0	NO
55	58 13C9-PFNA	472.2 > 426.9	9.76e3	9.76e3	1.000	4.81	4.66	12.5	12.5	100.0	NO
56	59 13C4-PFOS	503 > 79.9	2.83e3	2.83e3	1.000	4.89	4.74	12.5	12.5	100.0	NO
57	60 13C6-PFDA	519.1 > 473.7	7.32e3	7.32e3	1.000	5.18	5.03	12.5	12.5	100.0	NO
58	61 13C7-PFUdA	570.1 > 524.8	9.91e3	9.91e3	1.000	5.49	5.35	12.5	12.5	100.0	NO

Dataset: U:\Q4.PRO\results\180110M3\180110M3_12.qld

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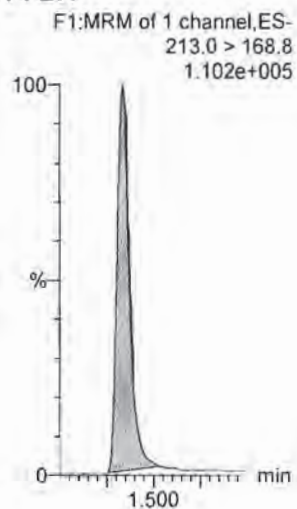
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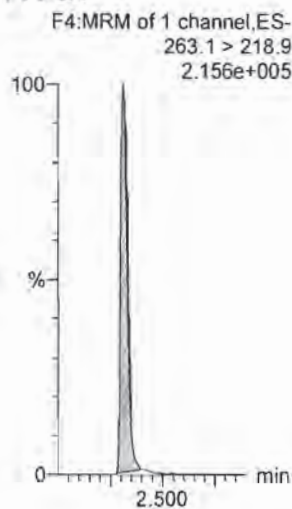
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Name: 180110M3_12, Date: 11-Jan-2018, Time: 11:25:49, ID: ICV180110M3-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

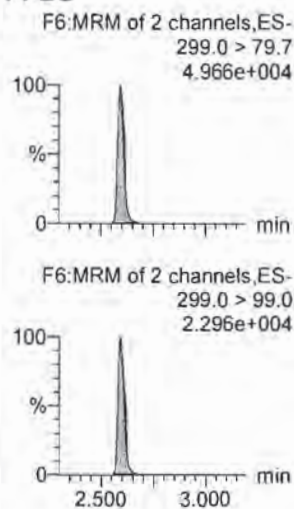
PFBA



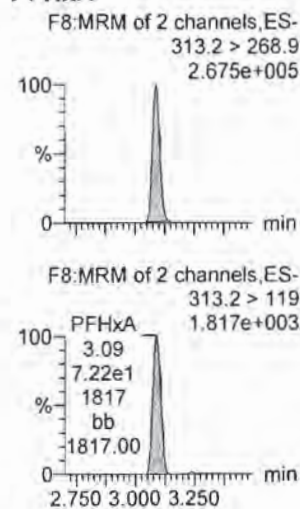
PFPeA



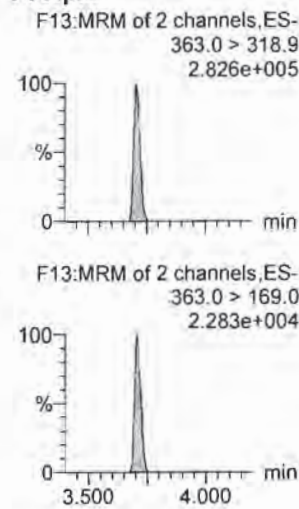
PFBS



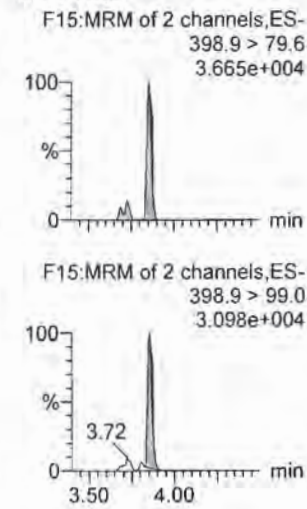
PFHxA



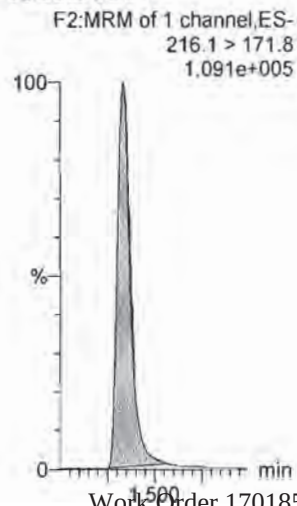
PFHpA



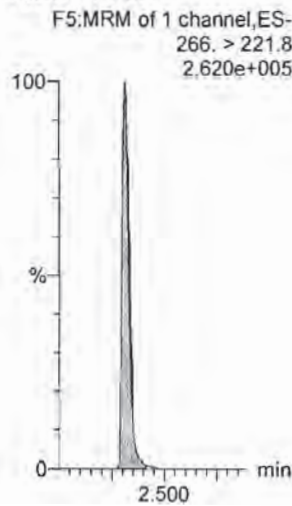
L-PFHxS



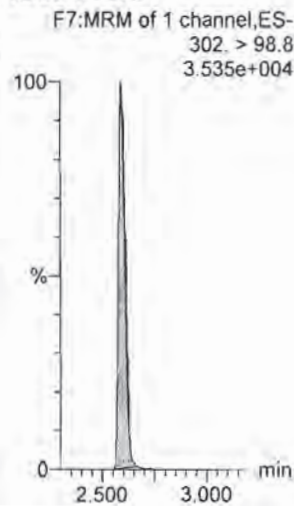
13C3-PFBA



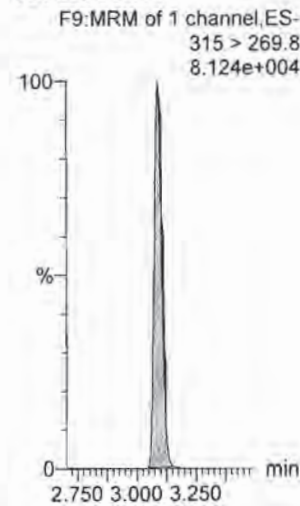
13C3-PFPeA



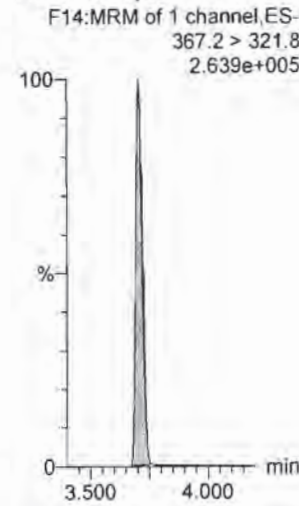
13C3-PFBS



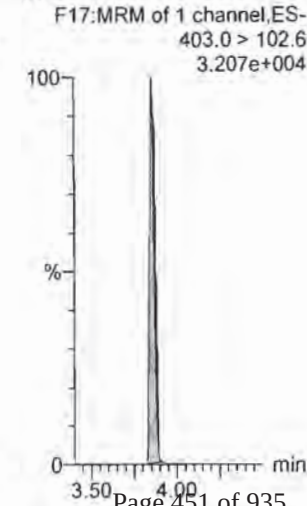
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



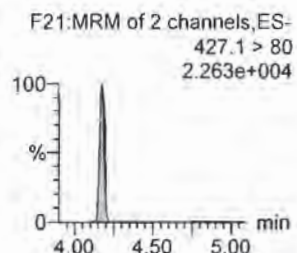
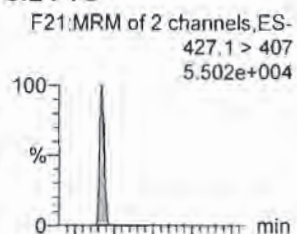
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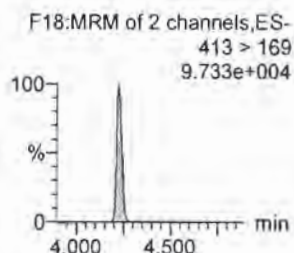
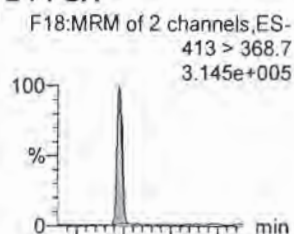
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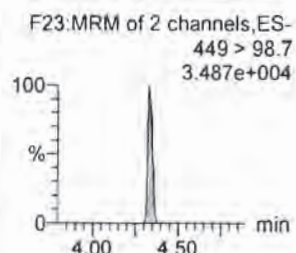
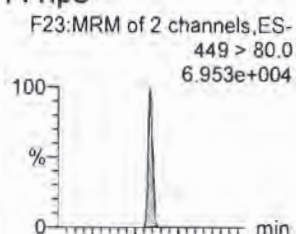
6:2 FTS



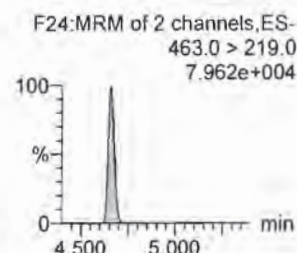
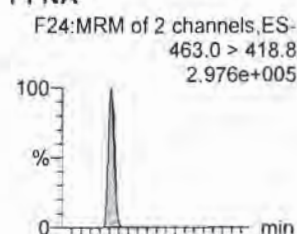
L-PFOA



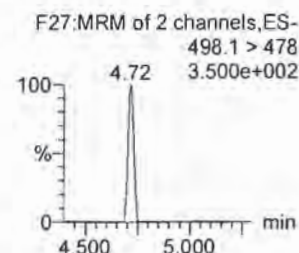
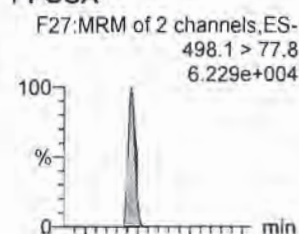
PFHpS



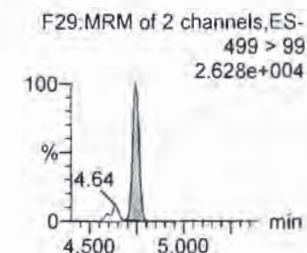
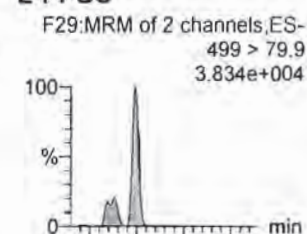
PFNA



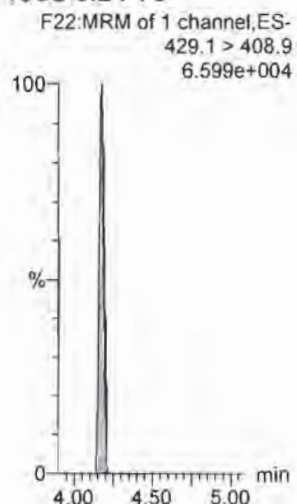
PFOSA



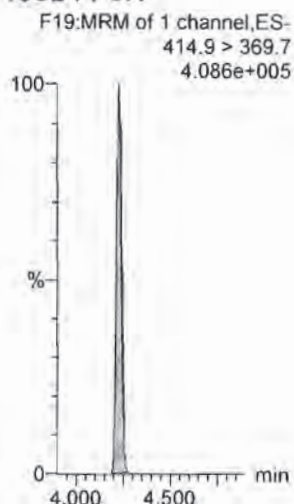
L-PFOS



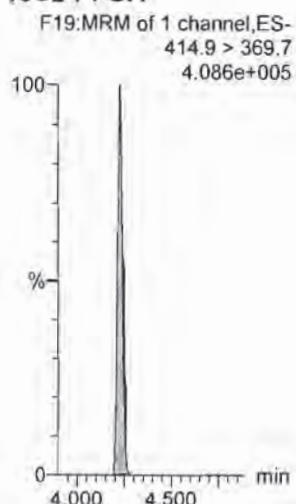
13C2-6:2 FTS



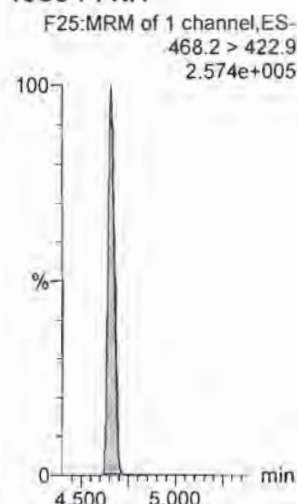
13C2-PFOA



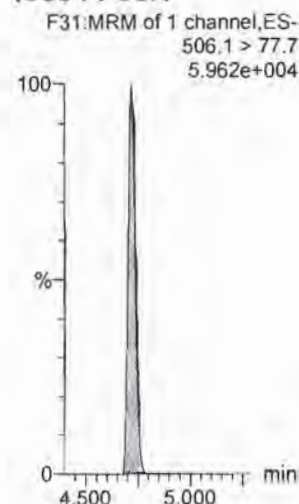
13C2-PFOA



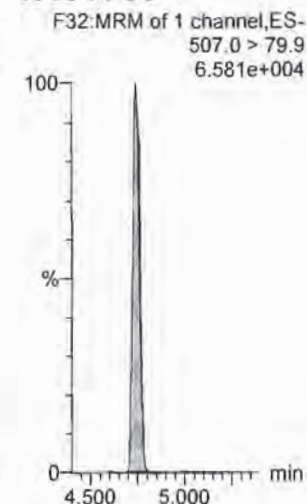
13C5-PFNA



13C8-PFOSA



13C8-PFOS



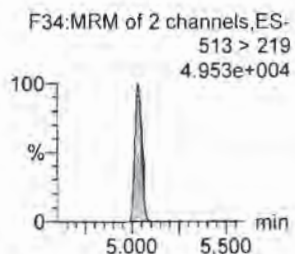
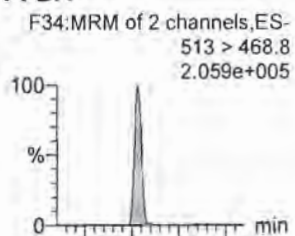
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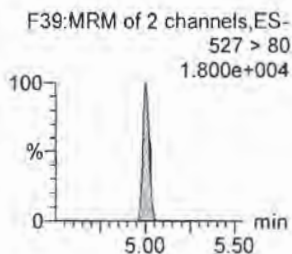
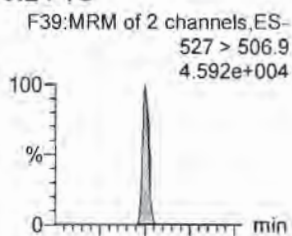
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Name: 180110M3_12, Date: 11-Jan-2018, Time: 11:25:49, ID: ICV180110M3-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

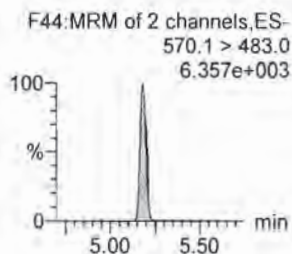
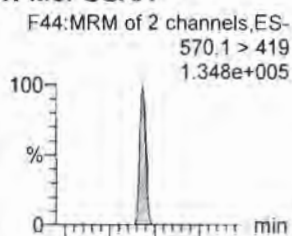
PFDA



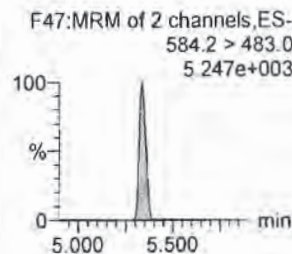
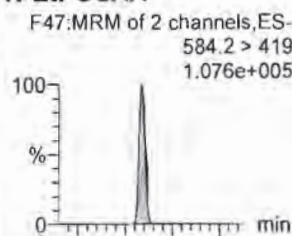
8:2 FTS



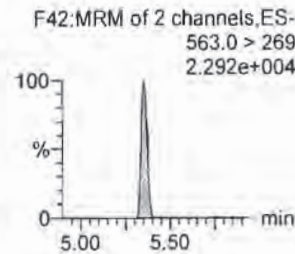
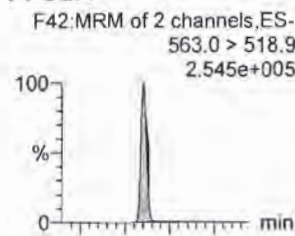
N-MeFOSAA



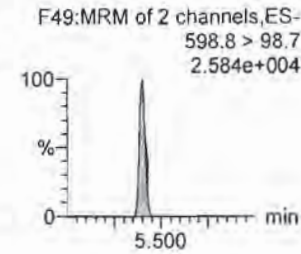
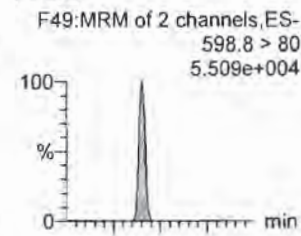
N-EtFOSAA



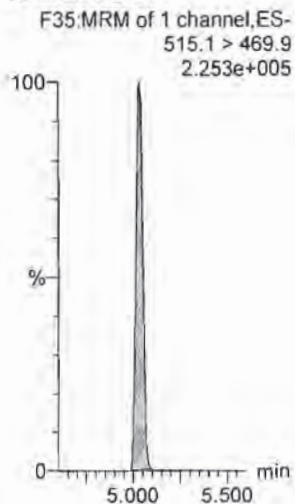
PFUdA



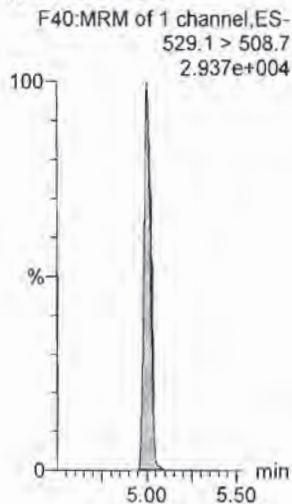
PFDS



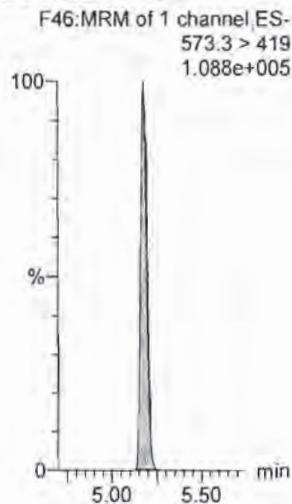
13C2-PFDA



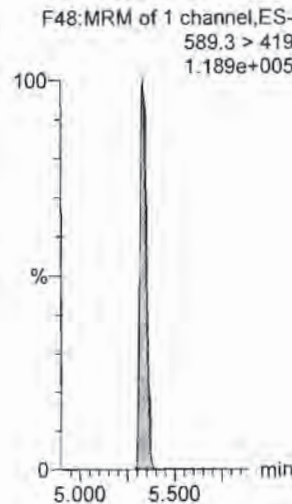
13C2-8:2 FTS



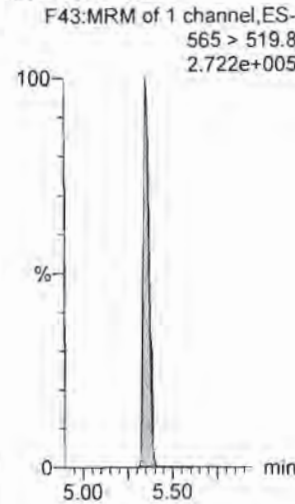
d3-N-MeFOSAA



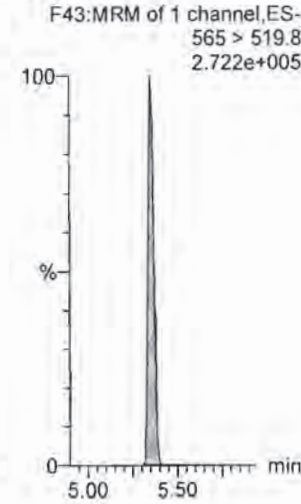
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



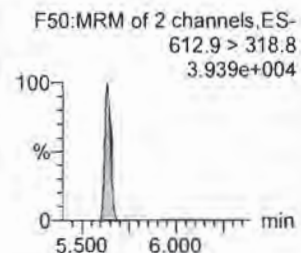
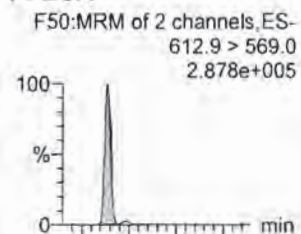
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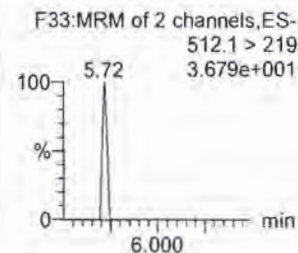
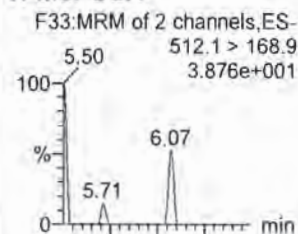
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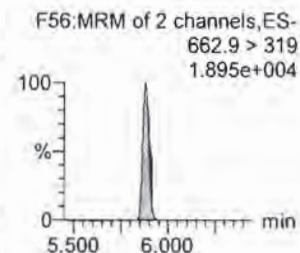
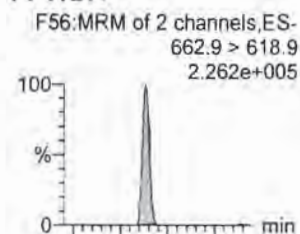
PFD_oA



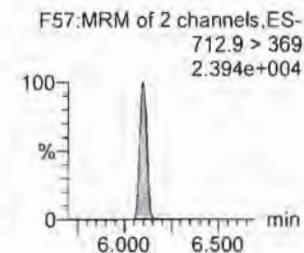
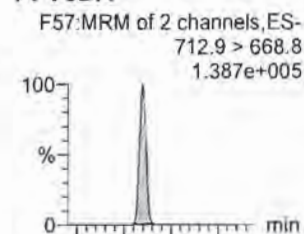
N-MeFOSA



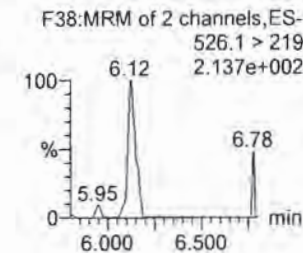
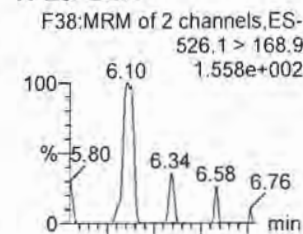
PFT_rDA



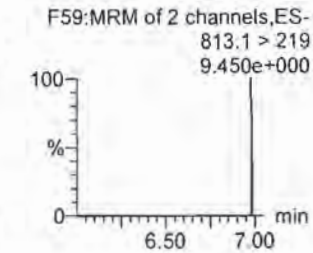
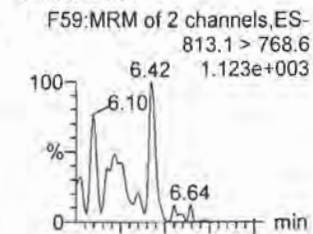
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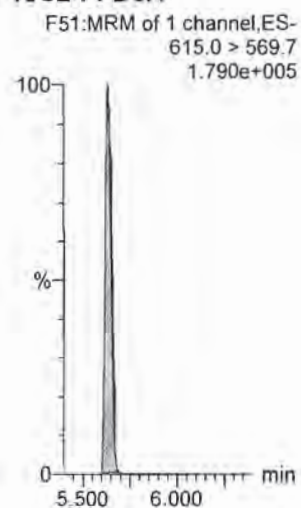
N-EtFOSA



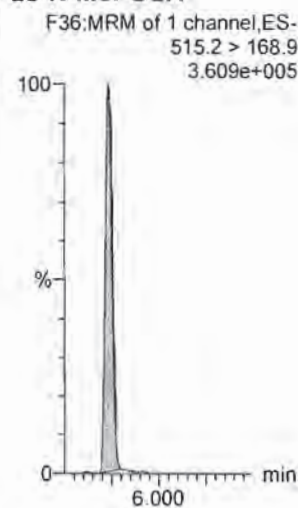
PFH_xDA



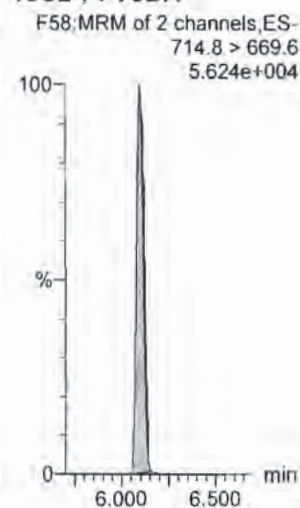
¹³C2-PFD_oA



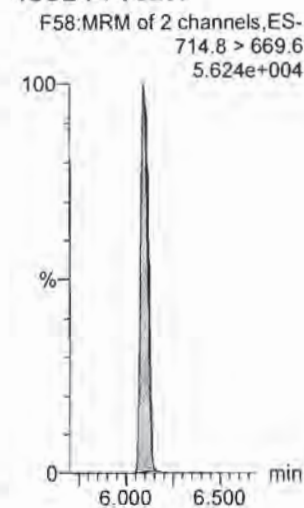
d₃-N-MeFOSA



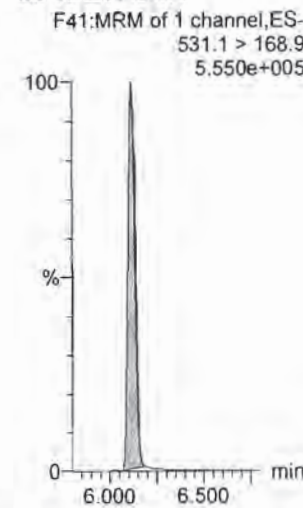
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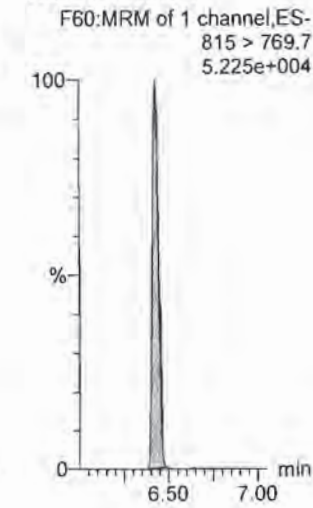
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d₅-N-ETFOSA



¹³C2-PFH_xDA



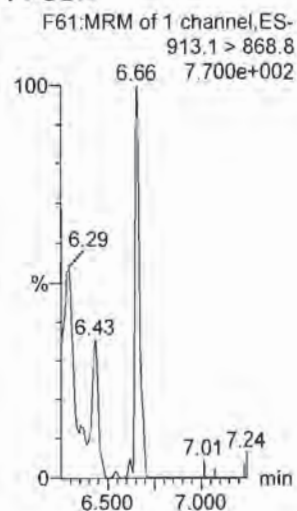
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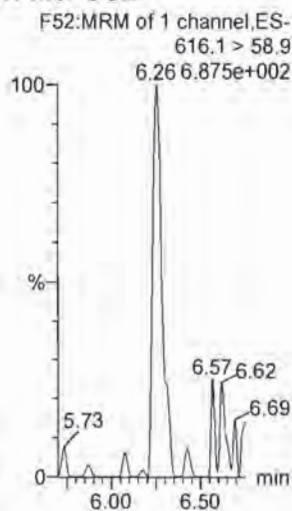
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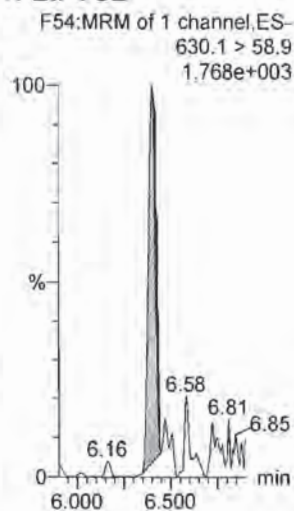
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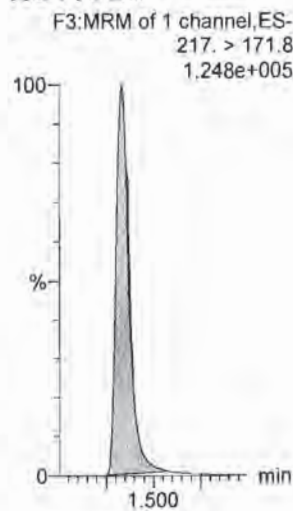
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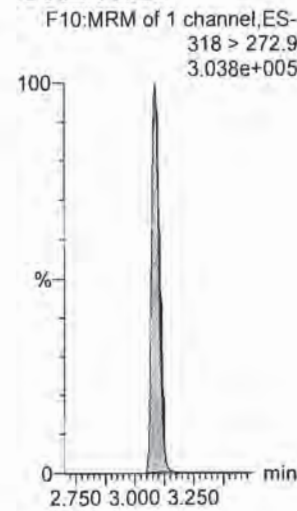
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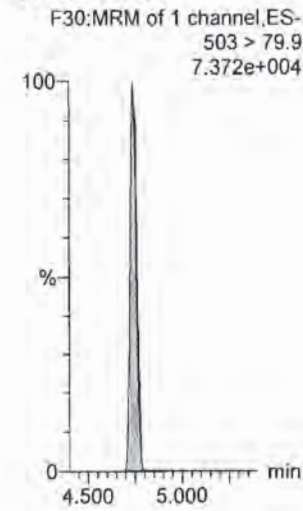
13C4-PFBA



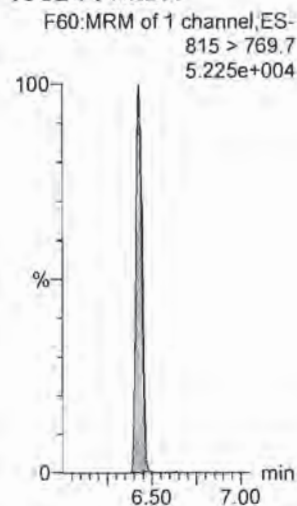
13C5-PFHxA



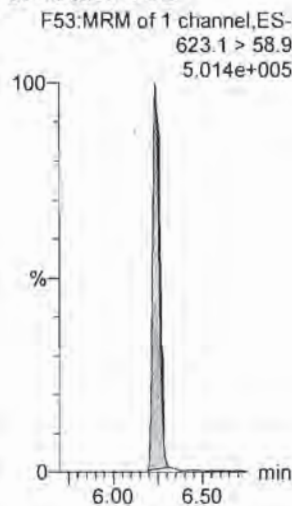
13C4-PFOS



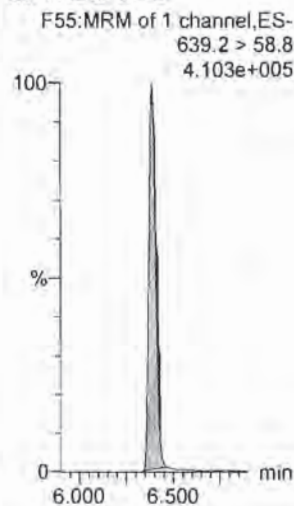
13C2-PFHxDA



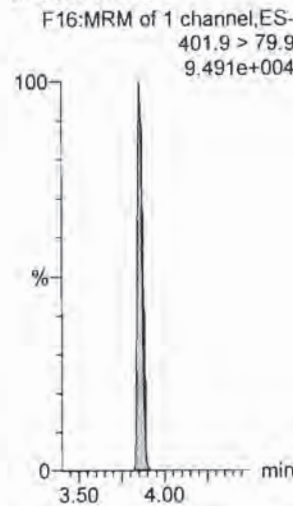
d7-N-MeFOSE



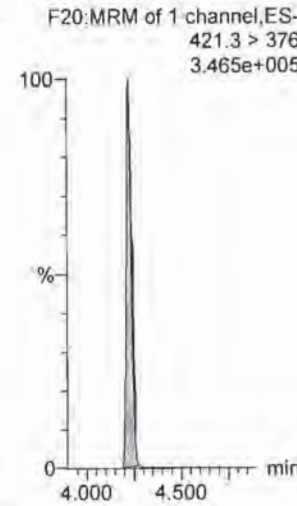
d9-N-EtFOSE



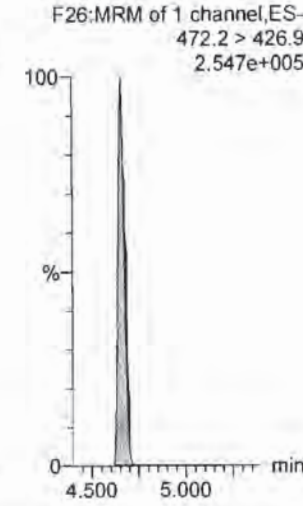
13C3-PFHxS



13C8-PFOA



13C9-PFNA



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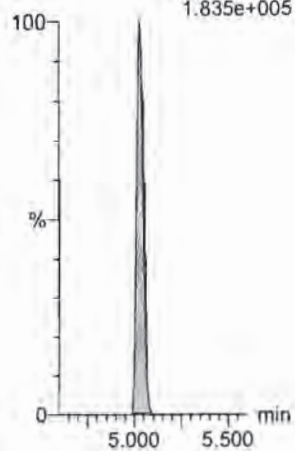
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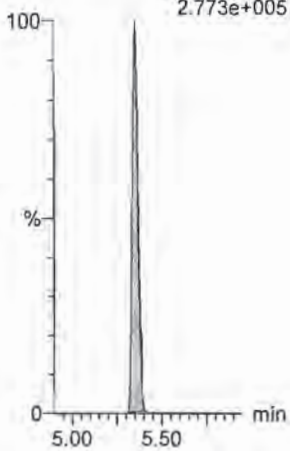
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.835e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.773e+005



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Dataset: U:\Q4.PRO\results\180110M3\180110M3_11.qld

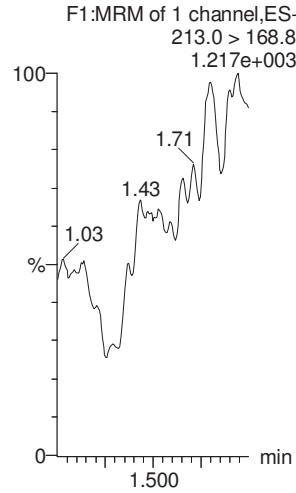
Last Altered: Thursday, January 11, 2018 14:12:26 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:13:30 Pacific Standard Time

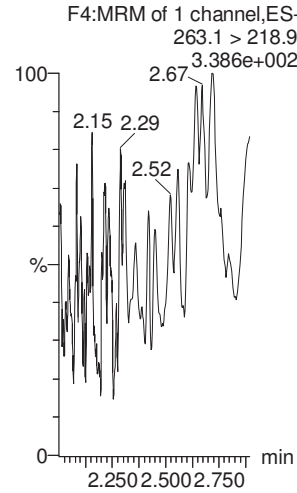
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Calibration: 11 Jan 2018 14:12:25

Name: 180110M3_11, Date: 11-Jan-2018, Time: 11:14:39, ID: IPA, Description: IPA

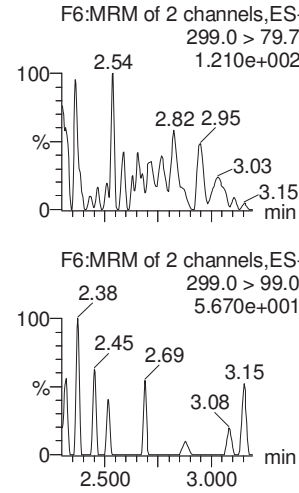
PFBA



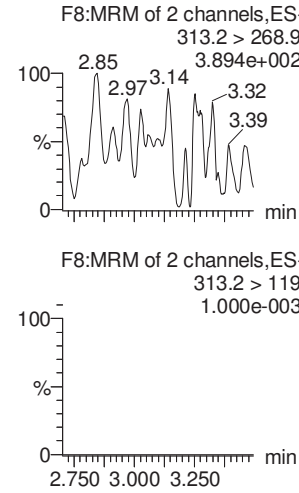
PFPeA



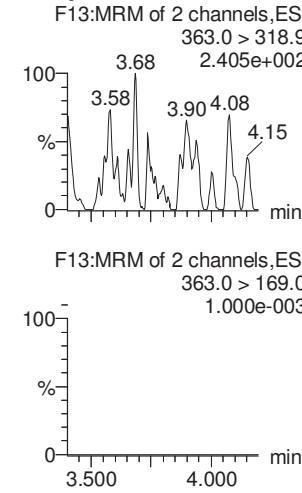
PFBS



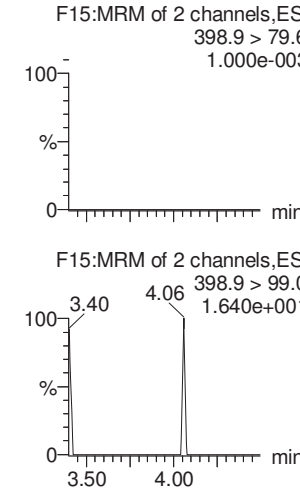
PFHxA



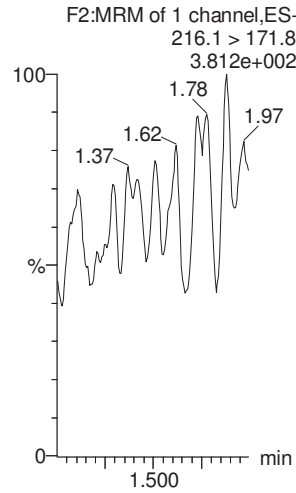
PFHpA



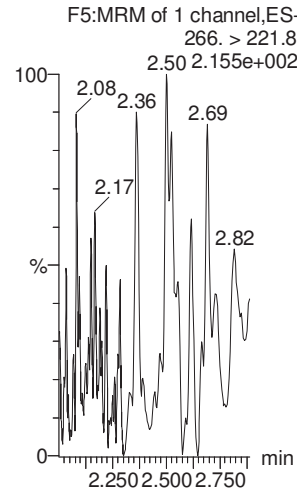
L-PFHxS



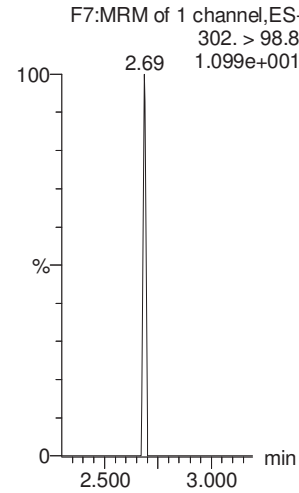
13C3-PFBA



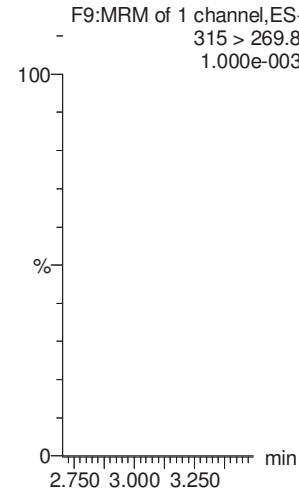
13C3-PFPeA



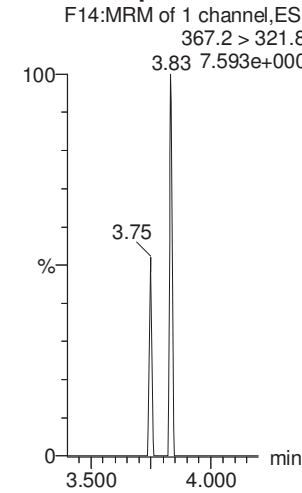
13C3-PFBS



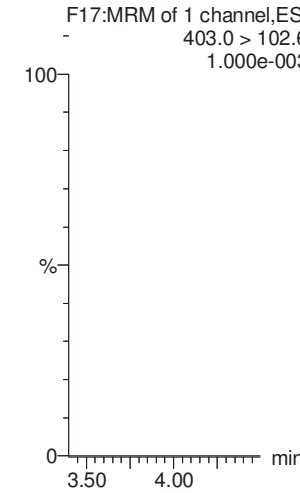
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

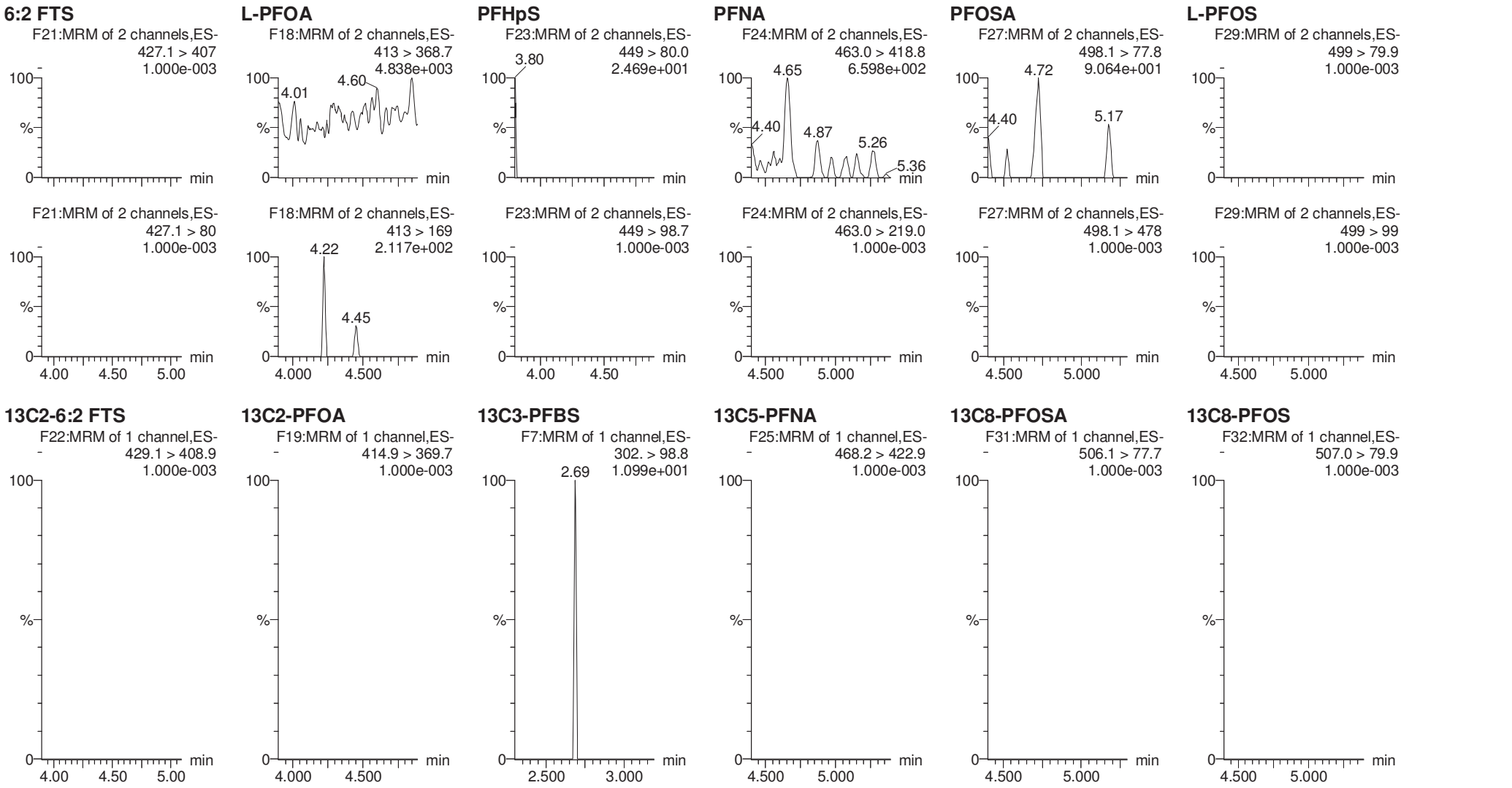


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Printed: Thursday, January 11, 2018 14:13:30 Pacific Standard Time

Name: 180110M3_11, Date: 11-Jan-2018, Time: 11:14:39, ID: IPA, Description: IPA



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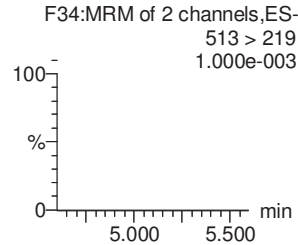
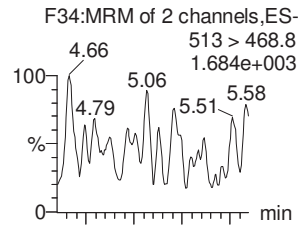
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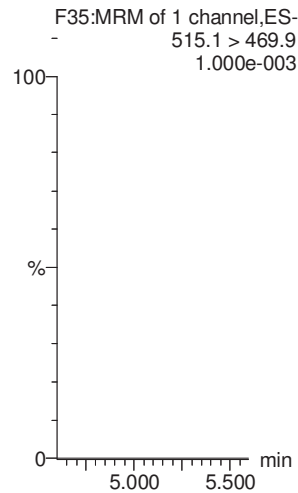
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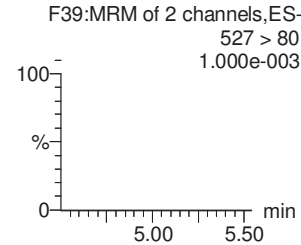
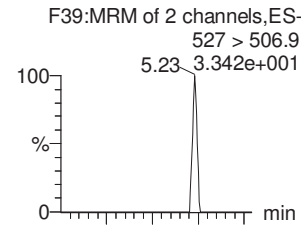
PFDA



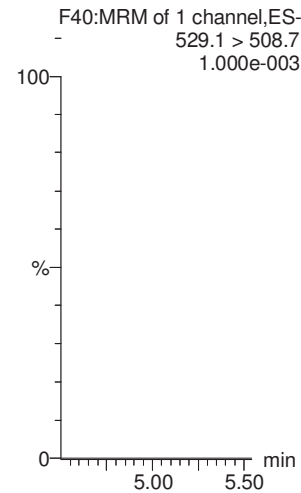
13C2-PFDA



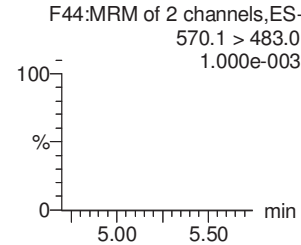
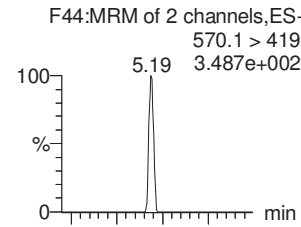
8:2 FTS



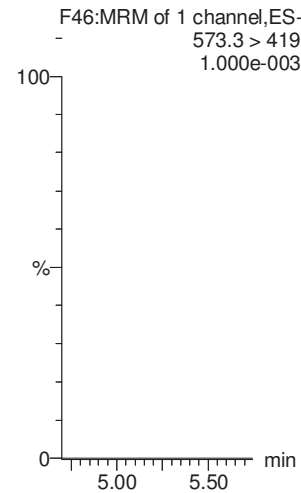
13C2-8:2 FTS



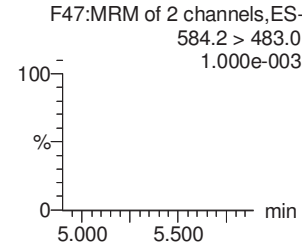
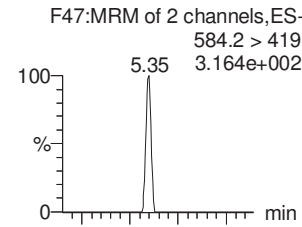
N-MeFOSAA



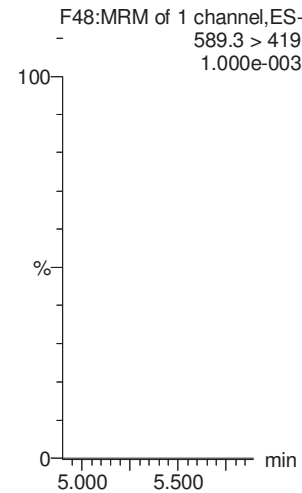
d3-N-MeFOSAA



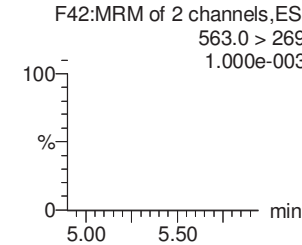
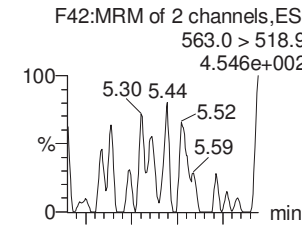
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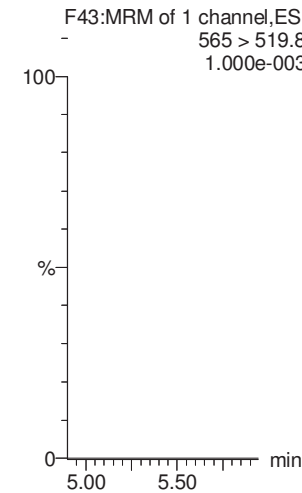
d5-N-EtFOSAA



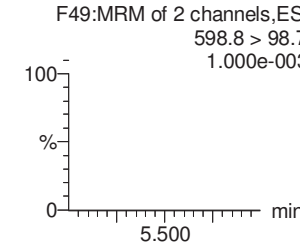
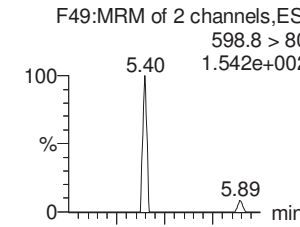
PFUdA



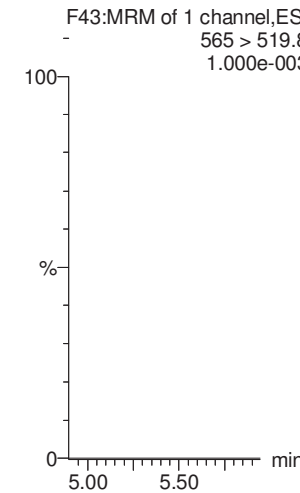
13C2-PFUdA



PFDS



13C2-PFUdA



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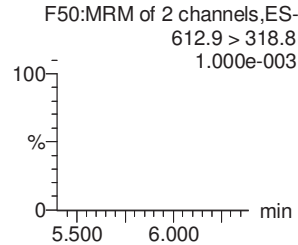
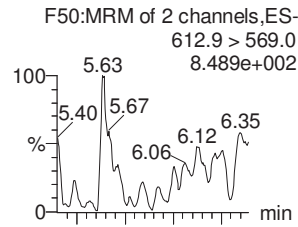
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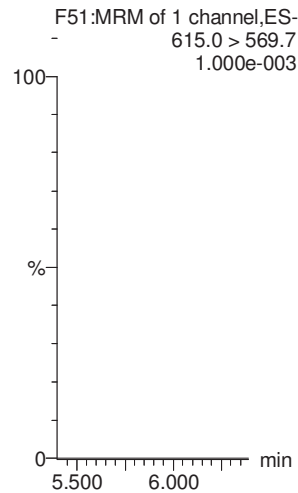
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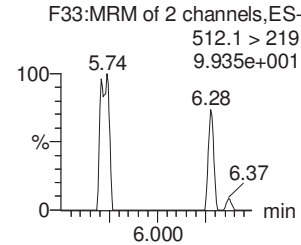
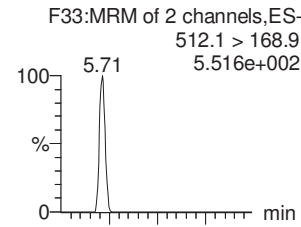
PFD_oA



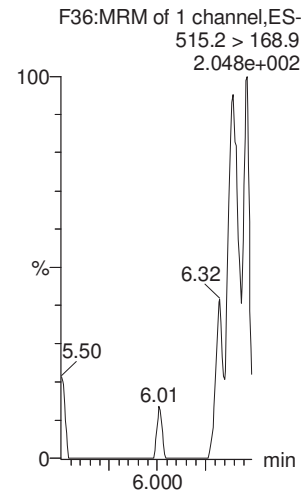
13C2-PFD_oA



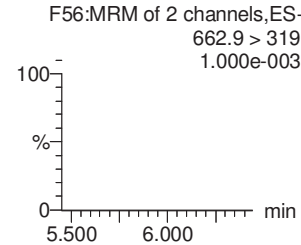
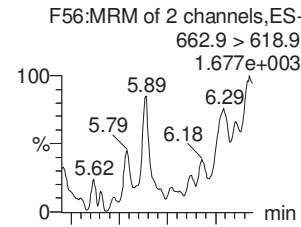
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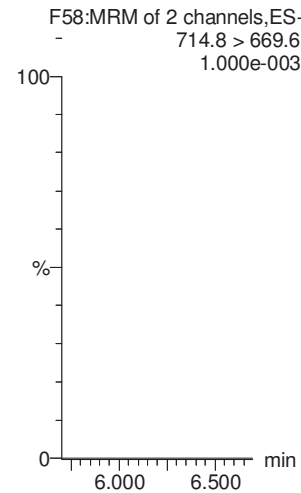
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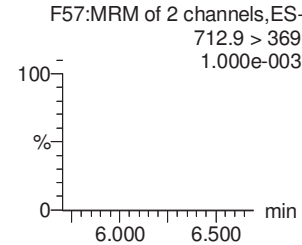
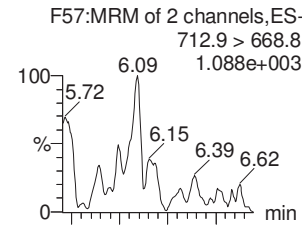
PFT_rDA



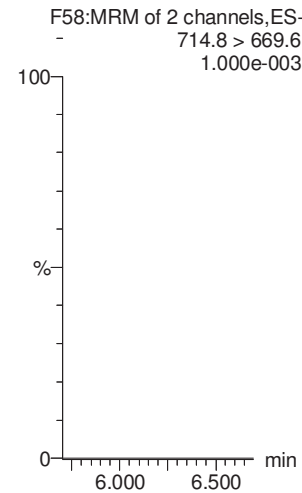
13C2-PFT_rDA



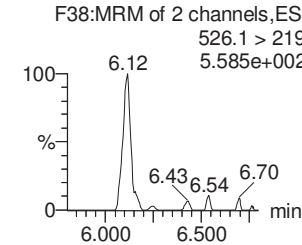
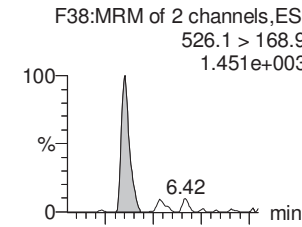
PFT_eDA



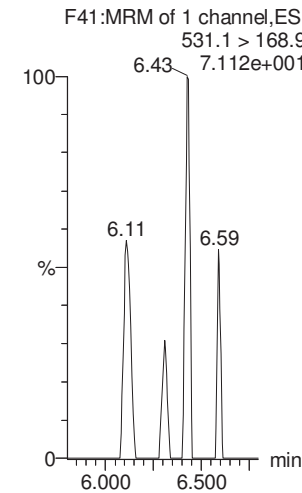
13C2-PFT_eDA



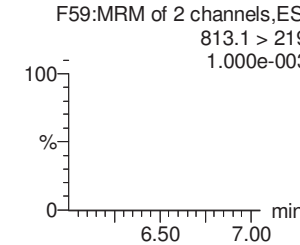
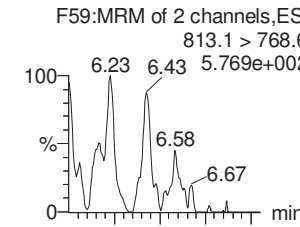
N-EtFOSA



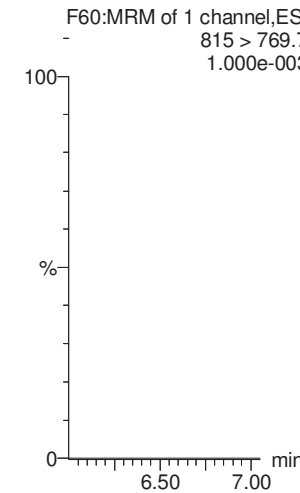
d5-N-ETFOSA



PFH_xDA



13C2-PFH_xDA

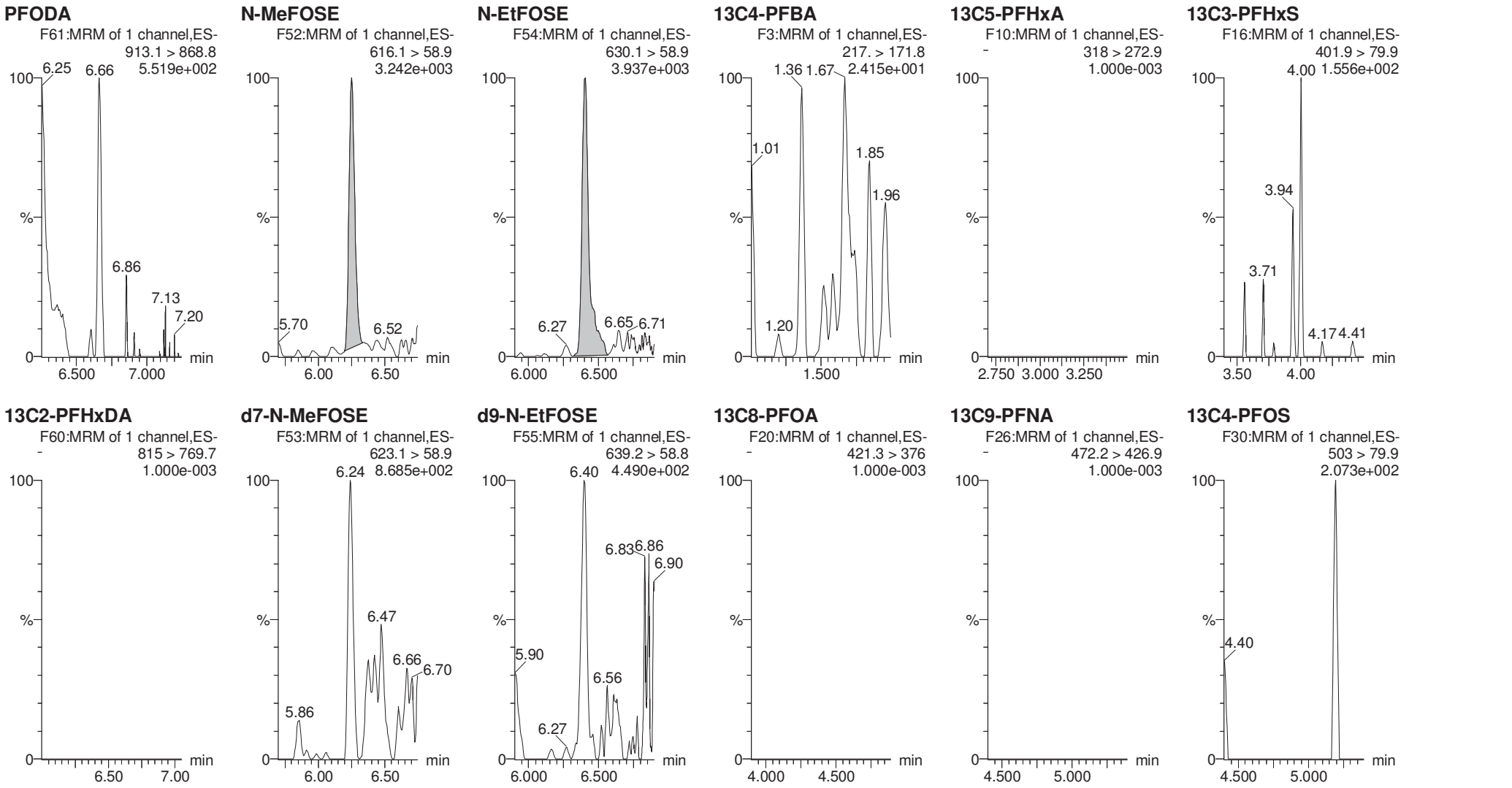


Dataset: U:\Q4.PRO\results\180110M3\180110M3_11.qld

Last Altered: Thursday, January 11, 2018 14:12:26 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:13:30 Pacific Standard Time

Name: 180110M3_11, Date: 11-Jan-2018, Time: 11:14:39, ID: IPA, Description: IPA



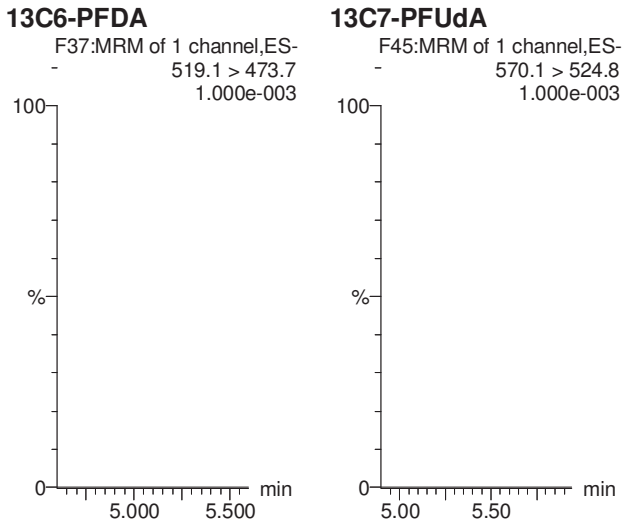
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180110M3\180110M3_11.qld

Last Altered: Thursday, January 11, 2018 14:12:26 Pacific Standard Time

Printed: Thursday, January 11, 2018 14:13:30 Pacific Standard Time

Name: 180110M3_11, Date: 11-Jan-2018, Time: 11:14:39, ID: IPA, Description: IPA



Vista Analytical Laboratory

- 13C6.12 & 8.2 FTS used in IAL

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:01 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 14 Jan 2018 14:14:32

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Compound name: PFBACorrelation coefficient: $r = 0.996964$, $r^2 = 0.993936$ Calibration curve: $1.3668 * x + -0.0652293$

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

P/15/18

r/A-01/15/2018

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	1.37	129.083	3626.099	0.445	0.4	49.3	YES	0.994	NO	MMX
2	2 180114M1_2	Standard	0.500	1.48	263.176	4142.458	0.794	0.6	25.7	NO	0.994	NO	MM
3	3 180114M1_3	Standard	1.000	1.48	422.732	4653.577	1.136	0.9	-12.1	NO	0.994	NO	MM
4	4 180114M1_4	Standard	2.000	1.45	738.489	4077.286	2.264	1.7	-14.8	NO	0.994	NO	db
5	5 180114M1_5	Standard	5.000	1.47	2209.521	4270.448	6.467	4.8	-4.4	NO	0.994	NO	db
6	6 180114M1_6	Standard	10.000	1.45	4556.776	4150.907	13.722	10.1	0.9	NO	0.994	NO	db
7	7 180114M1_7	Standard	50.000	1.45	20990.666	4293.536	61.111	44.8	-10.5	NO	0.994	NO	db
8	8 180114M1_8	Standard	100.000	1.44	40736.000	3527.442	144.354	105.7	5.7	NO	0.994	NO	bb

Compound name: PFPeACorrelation coefficient: $r = 0.998347$, $r^2 = 0.996696$ Calibration curve: $1.21215 * x + -0.1723$

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 180114M1_1	Standard	0.250	2.27	198.462	7627.178	0.325	0.4	64.2	YES	0.997	NO	MMX
2	2 180114M1_2	Standard	0.500	2.38	305.584	8186.502	0.467	0.5	5.4	NO	0.997	NO	MM
3	3 180114M1_3	Standard	1.000	2.38	767.546	8937.973	1.073	1.0	2.8	NO	0.997	NO	bb
4	4 180114M1_4	Standard	2.000	2.37	1364.127	7741.137	2.203	2.0	-2.0	NO	0.997	NO	bb
5	5 180114M1_5	Standard	5.000	2.37	3925.066	8589.766	5.712	4.9	-2.9	NO	0.997	NO	bb
6	6 180114M1_6	Standard	10.000	2.36	7817.732	8111.649	12.047	10.1	0.8	NO	0.997	NO	bb
7	7 180114M1_7	Standard	50.000	2.35	35828.809	8074.398	55.467	45.9	-8.2	NO	0.997	NO	bb
8	8 180114M1_8	Standard	100.000	2.35	74453.281	7382.000	126.072	104.1	4.1	NO	0.997	NO	bb

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time
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Compound name: PFBS

Coefficient of Determination: $R^2 = 0.998347$

Calibration curve: $0.00424493 * x^2 + 1.8508 * x + 0.12144$

Response type: Internal Std (Ref 33), 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 180114M1_1	Standard	0.250	2.51	33.426	934.175	0.447	0.2	-29.6	NO	0.998	NO	MM
2	2 180114M1_2	Standard	0.500	2.62	77.424	890.167	1.087	0.5	4.2	NO	0.998	NO	bb
3	3 180114M1_3	Standard	1.000	2.62	177.969	1034.113	2.151	1.1	9.4	NO	0.998	NO	bb
4	4 180114M1_4	Standard	2.000	2.61	271.763	890.175	3.816	2.0	-0.6	NO	0.998	NO	bb
5	5 180114M1_5	Standard	5.000	2.60	880.576	1044.159	10.542	5.6	11.2	NO	0.998	NO	bb
6	6 180114M1_6	Standard	10.000	2.60	1617.037	970.681	20.823	10.9	9.1	NO	0.998	NO	bb
7	7 180114M1_7	Standard	50.000	2.59	7971.468	1017.077	97.970	47.7	-4.7	NO	0.998	NO	bb
8	8 180114M1_8	Standard	100.000	2.59	16560.941	899.773	230.071	100.9	0.9	NO	0.998	NO	bb

Compound name: PFHxA

Correlation coefficient: $r = 0.999450$, $r^2 = 0.998900$

Calibration curve: $1.8219 * x + 0.0775713$

Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	3.00	298.466	2593.698	0.575	0.3	9.3	NO	0.999	NO	bb
2	2 180114M1_2	Standard	0.500	3.03	476.716	2417.925	0.986	0.5	-0.3	NO	0.999	NO	bb
3	3 180114M1_3	Standard	1.000	3.04	950.021	2496.623	1.903	1.0	0.2	NO	0.999	NO	bb
4	4 180114M1_4	Standard	2.000	3.02	1585.091	2285.827	3.467	1.9	-7.0	NO	0.999	NO	bb
5	5 180114M1_5	Standard	5.000	3.02	4849.127	2659.516	9.117	5.0	-0.8	NO	0.999	NO	bb
6	6 180114M1_6	Standard	10.000	3.02	9812.054	2659.548	18.447	10.1	0.8	NO	0.999	NO	bb
7	7 180114M1_7	Standard	50.000	3.01	44306.566	2547.623	86.957	47.7	-4.6	NO	0.999	NO	bb
8	8 180114M1_8	Standard	100.000	3.01	91646.156	2455.493	186.615	102.4	2.4	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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Compound name: PFHpA

Correlation coefficient: $r = 0.996428$, $r^2 = 0.992868$

Calibration curve: $1.28453 * x + 0.105213$

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 180114M1_1	Standard	0.250	3.57	190.819	6881.557	0.347	0.2	-24.8	NO	0.993	NO	bb
2	2 180114M1_2	Standard	0.500	3.58	308.878	5947.945	0.649	0.4	-15.3	NO	0.993	NO	bb
3	3 180114M1_3	Standard	1.000	3.57	743.958	6964.397	1.335	1.0	-4.2	NO	0.993	NO	bb
4	4 180114M1_4	Standard	2.000	3.56	1486.634	5740.771	3.237	2.4	21.9	NO	0.993	NO	bb
5	5 180114M1_5	Standard	5.000	3.55	4142.738	6804.188	7.611	5.8	16.9	NO	0.993	NO	bb
6	6 180114M1_6	Standard	10.000	3.55	7681.042	6758.660	14.206	11.0	9.8	NO	0.993	NO	bb
7	7 180114M1_7	Standard	50.000	3.55	33208.555	6731.813	61.663	47.9	-4.2	NO	0.993	NO	bb
8	8 180114M1_8	Standard	100.000	3.54	74400.289	5891.095	157.866	122.8	22.8	NO	0.993	NO	bbX

Compound name: L-PFHxS

Coefficient of Determination: $R^2 = 0.990036$

Calibration curve: $0.00482749 * x^2 + 1.6414 * x + 0.202957$

Response type: Internal Std (Ref 36), 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 180114M1_1	Standard	0.250	3.71	38.644	737.179	0.655	0.3	10.1	NO	0.990	NO	MM
2	2 180114M1_2	Standard	0.500	3.72	48.241	711.707	0.847	0.4	-21.6	NO	0.990	NO	MM
3	3 180114M1_3	Standard	1.000	3.70	142.858	884.671	2.019	1.1	10.3	NO	0.990	NO	MM
4	4 180114M1_4	Standard	2.000	3.70	224.301	730.128	3.840	2.2	10.1	NO	0.990	NO	MM
5	5 180114M1_5	Standard	5.000	3.69	614.187	723.937	10.605	6.2	24.5	NO	0.990	NO	MM
6	6 180114M1_6	Standard	10.000	3.68	1378.504	799.959	21.540	12.5	25.4	NO	0.990	NO	MM
7	7 180114M1_7	Standard	50.000	3.68	6001.384	918.361	81.686	44.0	-12.1	NO	0.990	NO	MM
8	8 180114M1_8	Standard	100.000	3.68	12680.335	725.783	218.391	102.2	2.2	NO	0.990	NO	MM

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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Compound name: 6:2 FTS

Coefficient of Determination: $R^2 = 0.995652$

Calibration curve: $-0.00171263 * x^2 + 1.07888 * x + 0.0650312$

Response type: Internal Std (Ref 37), 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	180114M1_1	Standard	0.250	4.03	48.842	1996.372	0.306	0.2	-10.7	NO	0.996	NO	MM
2	2	180114M1_2	Standard	0.500	4.03	74.110	1495.703	0.619	0.5	2.8	NO	0.996	NO	MM
3	3	180114M1_3	Standard	1.000	4.02	179.165	1626.136	1.377	1.2	21.9	NO	0.996	NO	MM
4	4	180114M1_4	Standard	2.000	4.01	275.994	1735.917	1.987	1.8	-10.7	NO	0.996	NO	MM
5	5	180114M1_5	Standard	5.000	4.00	845.264	1683.943	6.274	5.8	16.2	NO	0.996	NO	MM
6	6	180114M1_6	Standard	10.000	4.00	1421.508	1511.655	11.755	11.0	10.3	NO	0.996	NO	MM
7	7	180114M1_7	Standard	50.000	3.99	8232.155	2228.404	46.177	46.1	-7.8	NO	0.996	NO	MM
8	8	180114M1_8	Standard	100.000	3.99	13453.490	1818.953	92.454	102.2	2.2	NO	0.996	NO	MM

Compound name: L-PFOA

Coefficient of Determination: $R^2 = 0.999272$

Calibration curve: $-0.0005185 * x^2 + 1.18475 * x + 0.254039$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	180114M1_1	Standard	0.250	4.11	400.479	8707.114	0.575	0.3	8.4	NO	0.999	NO	MM
2	2	180114M1_2	Standard	0.500	4.11	666.423	9668.123	0.862	0.5	2.6	NO	0.999	NO	bb
3	3	180114M1_3	Standard	1.000	4.10	1149.828	11837.389	1.214	0.8	-18.9	NO	0.999	NO	bb
4	4	180114M1_4	Standard	2.000	4.09	1873.390	9123.959	2.567	2.0	-2.3	NO	0.999	NO	bb
5	5	180114M1_5	Standard	5.000	4.08	5219.928	9599.560	6.797	5.5	10.7	NO	0.999	NO	bb
6	6	180114M1_6	Standard	10.000	4.08	8956.753	9220.297	12.143	10.1	0.8	NO	0.999	NO	bb
7	7	180114M1_7	Standard	50.000	4.08	40625.789	8862.797	57.298	49.2	-1.6	NO	0.999	NO	bb
8	8	180114M1_8	Standard	100.000	4.07	73704.883	8084.847	113.955	100.4	0.4	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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Compound name: PFHpS

Coefficient of Determination: $R^2 = 0.999513$

Calibration curve: $0.000669016 * x^2 + 0.247135 * x + -0.0134056$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	4.23	29.425	8707.114	0.042	0.2	-10.0	NO	1.000	NO	MM
2	2 180114M1_2	Standard	0.500	4.23	88.014	9668.123	0.114	0.5	2.8	NO	1.000	NO	MM
3	3 180114M1_3	Standard	1.000	4.22	210.065	11837.389	0.222	0.9	-5.1	NO	1.000	NO	MM
4	4 180114M1_4	Standard	2.000	4.21	358.776	9123.959	0.492	2.0	1.6	NO	1.000	NO	MM
5	5 180114M1_5	Standard	5.000	4.20	1074.789	9599.560	1.400	5.6	12.6	NO	1.000	NO	MM
6	6 180114M1_6	Standard	10.000	4.20	1848.967	9220.297	2.507	9.9	-0.7	NO	1.000	NO	MM
7	7 180114M1_7	Standard	50.000	4.20	9754.969	8862.797	13.758	49.2	-1.6	NO	1.000	NO	MM
8	8 180114M1_8	Standard	100.000	4.19	20382.117	8084.847	31.513	100.3	0.3	NO	1.000	NO	MM

Compound name: PFNA

Coefficient of Determination: $R^2 = 0.991098$

Calibration curve: $-0.00851903 * x^2 + 1.56926 * x + -0.036541$

Response type: Internal Std (Ref 39), 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 180114M1_1	Standard	0.250	4.58	380.759	10672.131	0.446	0.3	23.2	NO	0.991	NO	MM
2	2 180114M1_2	Standard	0.500	4.58	557.026	7959.980	0.875	0.6	16.5	NO	0.991	NO	bb
3	3 180114M1_3	Standard	1.000	4.57	923.066	9755.683	1.183	0.8	-22.0	NO	0.991	NO	bb
4	4 180114M1_4	Standard	2.000	4.56	1797.713	8907.903	2.523	1.6	-17.7	NO	0.991	NO	bb
5	5 180114M1_5	Standard	5.000	4.56	4726.958	8863.639	6.666	4.4	-12.5	NO	0.991	NO	bb
6	6 180114M1_6	Standard	10.000	4.55	10893.765	8177.809	16.651	11.3	13.3	NO	0.991	NO	bb
7	7 180114M1_7	Standard	50.000	4.55	46157.016	10143.640	56.879	49.7	-0.7	NO	0.991	NO	bb
8	8 180114M1_8	Standard	100.000	4.54	80995.242	6660.756	152.001			NO	0.991	NO	bbXI

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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Compound name: PFOSA

Coefficient of Determination: $R^2 = 0.994286$

Calibration curve: $-0.011251 * x^2 + 1.65021 * x + -0.536272$

Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	4.65	51.013	2131.943	0.299	0.5	103.2	NO	0.994	NO	MMX
2	2 180114M1_2	Standard	0.500	4.65	72.145	1705.021	0.529	0.6	29.7	NO	0.994	NO	bb
3	3 180114M1_3	Standard	1.000	4.64	120.939	1727.581	0.875	0.9	-14.0	NO	0.994	NO	bb
4	4 180114M1_4	Standard	2.000	4.64	280.306	1645.980	2.129	1.6	-18.3	NO	0.994	NO	bb
5	5 180114M1_5	Standard	5.000	4.62	961.796	1691.695	7.107	4.8	-4.2	NO	0.994	NO	bb
6	6 180114M1_6	Standard	10.000	4.62	2061.423	1621.123	15.895	10.7	7.4	NO	0.994	NO	bb
7	7 180114M1_7	Standard	50.000	4.61	8042.539	1872.306	53.694	49.7	-0.6	NO	0.994	NO	bb
8	8 180114M1_8	Standard	100.000	4.61	17648.303	1510.559	146.041			NO	0.994	NO	bbXI

Compound name: L-PFOS

Coefficient of Determination: $R^2 = 0.992332$

Calibration curve: $-0.00413738 * x^2 + 1.22769 * x + 0.000665389$

Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	4.66	66.122	2577.436	0.321	0.3	4.4	NO	0.992	NO	MM
2	2 180114M1_2	Standard	0.500	4.67	95.933	2178.322	0.550	0.4	-10.3	NO	0.992	NO	MM
3	3 180114M1_3	Standard	1.000	4.66	260.746	2129.911	1.530	1.3	25.1	NO	0.992	NO	MM
4	4 180114M1_4	Standard	2.000	4.65	385.296	2219.514	2.170	1.8	-11.1	NO	0.992	NO	MM
5	5 180114M1_5	Standard	5.000	4.64	938.400	2380.628	4.927	4.1	-18.6	NO	0.992	NO	MM
6	6 180114M1_6	Standard	10.000	4.64	2323.159	2213.260	13.121	11.1	11.0	NO	0.992	NO	MM
7	7 180114M1_7	Standard	50.000	4.63	9813.793	2409.764	50.906	49.8	-0.3	NO	0.992	NO	MM
8	8 180114M1_8	Standard	100.000	4.63	21375.043	2020.897	132.213			NO	0.992	NO	MMXI

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Compound name: PFDA

Coefficient of Determination: $R^2 = 0.993028$

Calibration curve: $0.00973524 * x^2 + 1.186 * x + 0.269585$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	4.97	404.357	10273.528	0.492	0.2	-25.1	NO	0.993	NO	bb
2	2 180114M1_2	Standard	0.500	4.98	467.710	7666.422	0.763	0.4	-17.1	NO	0.993	NO	MM
3	3 180114M1_3	Standard	1.000	4.97	869.876	8011.753	1.357	0.9	-9.0	NO	0.993	NO	bb
4	4 180114M1_4	Standard	2.000	4.96	1905.592	8420.399	2.829	2.1	6.0	NO	0.993	NO	bb
5	5 180114M1_5	Standard	5.000	4.95	4409.593	7078.627	7.787	6.0	20.8	NO	0.993	NO	bb
6	6 180114M1_6	Standard	10.000	4.95	9710.402	7007.409	17.322	13.0	29.9	NO	0.993	NO	bb
7	7 180114M1_7	Standard	50.000	4.94	46880.445	7914.971	74.038	45.3	-9.3	NO	0.993	NO	bb
8	8 180114M1_8	Standard	100.000	4.94	103663.273	5872.147	220.667	101.4	1.4	NO	0.993	NO	bb

Compound name: 8:2 FTS

Correlation coefficient: $r = 0.996158$, $r^2 = 0.992331$

Calibration curve: $1.90577 * x + -0.0745651$

Response type: Internal Std (Ref 43), 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 180114M1_1	Standard	0.250	4.93	34.407	1619.860	0.266	0.2	-28.6	NO	0.992	NO	MMX
2	2 180114M1_2	Standard	0.500	4.93	57.468	684.343	1.050	0.6	18.0	NO	0.992	NO	MM
3	3 180114M1_3	Standard	1.000	4.92	120.484	939.969	1.602	0.9	-12.0	NO	0.992	NO	bb
4	4 180114M1_4	Standard	2.000	4.91	250.011	1008.736	3.098	1.7	-16.8	NO	0.992	NO	bb
5	5 180114M1_5	Standard	5.000	4.90	669.049	897.015	9.323	4.9	-1.4	NO	0.992	NO	bb
6	6 180114M1_6	Standard	10.000	4.90	1510.262	952.935	19.811	10.4	4.3	NO	0.992	NO	MM
7	7 180114M1_7	Standard	50.000	4.89	6595.664	1216.973	67.747	35.6	-28.8	NO	0.992	NO	bbX
8	8 180114M1_8	Standard	100.000	4.88	15628.073	1130.511	172.799	90.7	-9.3	NO	0.992	NO	bbX

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Compound name: N-MeFOSAA

Coefficient of Determination: $R^2 = 0.996900$

Calibration curve: $0.0978372 * x^2 + 1.26132 * x + -0.000840061$

Response type: Internal Std (Ref 44), 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 180114M1_1	Standard	0.250	5.13	65.729	2386.166	0.344	0.3	7.2	NO	0.997	NO	bb
2	2 180114M1_2	Standard	0.500	5.13	109.305	2679.466	0.510	0.4	-21.4	NO	0.997	NO	bb
3	3 180114M1_3	Standard	1.000	5.12	332.162	2887.384	1.438	1.1	5.4	NO	0.997	NO	bb
4	4 180114M1_4	Standard	2.000	5.11	654.021	2460.522	3.323	2.2	12.2	NO	0.997	NO	bb
5	5 180114M1_5	Standard	5.000	5.10	1730.441	2643.908	8.181	4.7	-5.2	NO	0.997	NO	bb
6	6 180114M1_6	Standard	10.000	5.10	3411.308	1886.944	22.598	10.1	0.6	NO	0.997	NO	bb
7	7 180114M1_7	Standard	50.000	5.09	13429.551	2602.104	64.513	20.0	-59.9	NO	0.997	NO	bbX
8	8 180114M1_8	Standard	100.000	5.09	29816.752	2276.305	163.734	35.0	-65.0	NO	0.997	NO	bbX

Compound name: N-EtFOSAA

Correlation coefficient: $r = 0.995957$, $r^2 = 0.991929$

Calibration curve: $1.2718 * x + -0.278352$

Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	5.30	41.404	2456.595	0.211	0.4	53.8	NO	0.992	NO	MMX
2	2 180114M1_2	Standard	0.500	5.31	124.612	3198.114	0.487	0.6	20.4	NO	0.992	NO	MMX
3	3 180114M1_3	Standard	1.000	5.30	299.620	3229.057	1.160	1.1	13.1	NO	0.992	NO	MM
4	4 180114M1_4	Standard	2.000	5.29	331.844	2758.213	1.504	1.4	-29.9	NO	0.992	NO	MM
5	5 180114M1_5	Standard	5.000	5.29	1772.276	3064.781	7.228	5.9	18.0	NO	0.992	NO	MM
6	6 180114M1_6	Standard	10.000	5.28	3749.556	3574.455	13.112	10.5	5.3	NO	0.992	NO	bb
7	7 180114M1_7	Standard	50.000	5.28	16552.547	3676.360	56.280	44.5	-11.1	NO	0.992	NO	MM
8	8 180114M1_8	Standard	100.000	5.27	30935.979	2913.941	132.707	104.6	4.6	NO	0.992	NO	bb

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Compound name: PFUDa

Coefficient of Determination: $R^2 = 0.991571$

Calibration curve: $0.00136055 * x^2 + 1.14892 * x + 0.218768$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	5.32	272.133	11952.269	0.285	0.1	-77.1	NO	0.992	NO	bbX
2	2 180114M1_2	Standard	0.500	5.32	443.587	8142.762	0.681	0.4	-19.6	NO	0.992	NO	bb
3	3 180114M1_3	Standard	1.000	5.31	1032.473	9973.248	1.294	0.9	-6.5	NO	0.992	NO	bb
4	4 180114M1_4	Standard	2.000	5.31	1673.701	9333.110	2.242	1.8	-12.2	NO	0.992	NO	bb
5	5 180114M1_5	Standard	5.000	5.30	5575.767	9466.337	7.363	6.2	23.5	NO	0.992	NO	bb
6	6 180114M1_6	Standard	10.000	5.29	10551.473	9079.952	14.526	12.3	22.7	NO	0.992	NO	bb
7	7 180114M1_7	Standard	50.000	5.29	42337.848	9698.532	54.567	44.9	-10.2	NO	0.992	NO	bb
8	8 180114M1_8	Standard	100.000	5.29	86419.133	8206.241	131.636	102.1	2.1	NO	0.992	NO	bb

Compound name: PFDS

Coefficient of Determination: $R^2 = 0.993596$

Calibration curve: $-0.000379067 * x^2 + 0.349857 * x + -0.0291515$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	5.36	54.187	11952.269	0.057	0.2	-1.9	NO	0.994	NO	MM
2	2 180114M1_2	Standard	0.500	5.37	63.647	8142.762	0.098	0.4	-27.5	NO	0.994	NO	bb
3	3 180114M1_3	Standard	1.000	5.35	338.900	9973.248	0.425	1.3	29.9	NO	0.994	NO	bb
4	4 180114M1_4	Standard	2.000	5.34	422.089	9333.110	0.565	1.7	-14.9	NO	0.994	NO	bb
5	5 180114M1_5	Standard	5.000	5.34	1274.110	9466.337	1.682	4.9	-1.6	NO	0.994	NO	bb
6	6 180114M1_6	Standard	10.000	5.34	3029.879	9079.952	4.171	12.2	21.7	NO	0.994	NO	bb
7	7 180114M1_7	Standard	50.000	5.33	11897.124	9698.532	15.334	46.2	-7.5	NO	0.994	NO	bb
8	8 180114M1_8	Standard	100.000	5.33	20801.719	8206.241	31.686	101.9	1.9	NO	0.994	NO	bb

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Compound name: PFDaA

Coefficient of Determination: $R^2 = 0.996462$

Calibration curve: $-0.0186224 * x^2 + 2.78866 * x + -0.491721$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: $1/x$, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	5.62	476.521	7560.831	0.788	0.5	84.1	NO	0.996	NO	bbX
2	2 180114M1_2	Standard	0.500	5.62	615.205	6692.443	1.149	0.6	18.1	NO	0.996	NO	bb
3	3 180114M1_3	Standard	1.000	5.61	1249.795	7193.966	2.172	1.0	-3.9	NO	0.996	NO	bb
4	4 180114M1_4	Standard	2.000	5.60	2531.175	7520.150	4.207	1.7	-14.8	NO	0.996	NO	bb
5	5 180114M1_5	Standard	5.000	5.60	6172.939	6317.912	12.213	4.7	-5.9	NO	0.996	NO	bb
6	6 180114M1_6	Standard	10.000	5.60	11802.197	5426.459	27.187	10.7	6.9	NO	0.996	NO	bb
7	7 180114M1_7	Standard	50.000	5.59	52322.867	7096.452	92.164	49.8	-0.5	NO	0.996	NO	bb
8	8 180114M1_8	Standard	100.000	5.59	109564.680	5518.140	248.192			NO	0.996	NO	bbXI

Compound name: N-MeFOSA

Correlation coefficient: $r = 0.999223$, $r^2 = 0.998448$

Calibration curve: $1.09225 * x + -0.176455$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: $1/x$, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	1.250	5.93	80.300	8791.715	1.370	1.4	13.3	NO	0.998	NO	bbX
2	2 180114M1_2	Standard	2.500	5.94	189.429	14062.988	2.021	2.0	-19.5	NO	0.998	NO	bb
3	3 180114M1_3	Standard	5.000	5.92	531.614	16152.640	4.937	4.7	-6.4	NO	0.998	NO	bb
4	4 180114M1_4	Standard	10.000	5.92	1083.273	14597.956	11.131	10.4	3.5	NO	0.998	NO	bb
5	5 180114M1_5	Standard	25.000	5.92	2949.133	15082.849	29.329	27.0	8.1	NO	0.998	NO	bb
6	6 180114M1_6	Standard	50.000	5.92	6030.591	14954.120	60.491	55.5	11.1	NO	0.998	NO	bb
7	7 180114M1_7	Standard	250.000	5.91	26838.785	15302.427	263.084	241.0	-3.6	NO	0.998	NO	bb
8	8 180114M1_8	Standard	500.000	5.91	55005.156	15056.446	547.989	501.9	0.4	NO	0.998	NO	bb

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Compound name: PFTrDA

Coefficient of Determination: $R^2 = 0.997017$

Calibration curve: $0.359559 * x^2 + 2.96789 * x + 1.12885$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	5.89	358.953	2445.649	1.835	0.2	-7.5	NO	0.997	NO	bb
2	2 180114M1_2	Standard	0.500	5.89	615.254	2977.955	2.583	0.5	-7.3	NO	0.997	NO	bb
3	3 180114M1_3	Standard	1.000	5.88	1355.767	3643.180	4.652	1.1	5.3	NO	0.997	NO	bb
4	4 180114M1_4	Standard	2.000	5.87	2567.119	3315.638	9.678	2.3	13.1	NO	0.997	NO	bb
5	5 180114M1_5	Standard	5.000	5.86	5644.954	3058.884	23.068	4.7	-5.9	NO	0.997	NO	bb
6	6 180114M1_6	Standard	10.000	5.87	13760.456	2549.694	67.461	10.1	0.7	NO	0.997	NO	bb
7	7 180114M1_7	Standard	50.000	5.85	51574.625	3307.861	194.894	19.5	-61.1	NO	0.997	NO	bbX
8	8 180114M1_8	Standard	100.000	5.85	118604.547	2959.760	500.904	33.4	-66.6	NO	0.997	NO	bbX

Compound name: PFTeDA

Coefficient of Determination: $R^2 = 0.998702$

Calibration curve: $-0.0178968 * x^2 + 2.90614 * x + -0.360258$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	6.12	204.285	2445.649	1.044	0.5	93.9	NO	0.999	NO	bbX
2	2 180114M1_2	Standard	0.500	6.12	289.165	2977.955	1.214	0.5	8.7	NO	0.999	NO	bb
3	3 180114M1_3	Standard	1.000	6.11	702.186	3643.180	2.409	1.0	-4.1	NO	0.999	NO	bb
4	4 180114M1_4	Standard	2.000	6.10	1393.470	3315.638	5.253	2.0	-2.2	NO	0.999	NO	bb
5	5 180114M1_5	Standard	5.000	6.10	3134.013	3058.884	12.807	4.7	-6.7	NO	0.999	NO	bb
6	6 180114M1_6	Standard	10.000	6.09	5728.576	2549.694	28.085	10.5	4.6	NO	0.999	NO	bb
7	7 180114M1_7	Standard	50.000	6.09	26480.877	3307.861	100.068	49.9	-0.2	NO	0.999	NO	bb
8	8 180114M1_8	Standard	100.000	6.09	52322.582	2959.760	220.975			NO	0.999	NO	bbXI

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Compound name: N-EtFOSA

Coefficient of Determination: $R^2 = 0.997385$

Calibration curve: $5.6043e-005 * x^2 + 0.980236 * x + 0.202634$

Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	1.250	6.34	60.281	7003.886	1.291	1.1	-11.2	NO	0.997	NO	bbX
2	2 180114M1_2	Standard	2.500	6.35	237.305	14916.356	2.386	2.2	-10.9	NO	0.997	NO	bb
3	3 180114M1_3	Standard	5.000	6.34	549.312	17570.045	4.690	4.6	-8.5	NO	0.997	NO	bb
4	4 180114M1_4	Standard	10.000	6.34	1040.310	15895.931	9.817	9.8	-2.0	NO	0.997	NO	bb
5	5 180114M1_5	Standard	25.000	6.33	3046.671	15906.663	28.730	29.1	16.2	NO	0.997	NO	bb
6	6 180114M1_6	Standard	50.000	6.33	5995.736	16634.855	54.065	54.8	9.6	NO	0.997	NO	bb
7	7 180114M1_7	Standard	250.000	6.33	26309.844	16833.201	234.446	235.8	-5.7	NO	0.997	NO	db
8	8 180114M1_8	Standard	500.000	6.33	53376.750	15673.545	510.830	506.3	1.3	NO	0.997	NO	db

Compound name: PFHxDA

Coefficient of Determination: $R^2 = 0.998421$

Calibration curve: $-0.000730462 * x^2 + 0.939725 * x + 0.0652426$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	6.47	76.576	1259.462	0.304	0.3	1.6	NO	0.998	NO	bb
2	2 180114M1_2	Standard	0.500	6.47	155.693	1324.833	0.588	0.6	11.2	NO	0.998	NO	bb
3	3 180114M1_3	Standard	1.000	6.46	292.503	1804.456	0.811	0.8	-20.6	NO	0.998	NO	bb
4	4 180114M1_4	Standard	2.000	6.46	603.794	1677.991	1.799	1.8	-7.6	NO	0.998	NO	bb
5	5 180114M1_5	Standard	5.000	6.45	1786.034	1683.883	5.303	5.6	12.0	NO	0.998	NO	bb
6	6 180114M1_6	Standard	10.000	6.45	3168.905	1592.045	9.952	10.6	6.1	NO	0.998	NO	bb
7	7 180114M1_7	Standard	50.000	6.45	13665.340	1563.429	43.703	48.2	-3.5	NO	0.998	NO	bb
8	8 180114M1_8	Standard	100.000	6.45	29897.400	1710.092	87.415	100.9	0.9	NO	0.998	NO	bb

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Compound name: PFODA

Coefficient of Determination: $R^2 = 0.999427$

Calibration curve: $-0.00146894 * x^2 + 0.987634 * x + -0.0538913$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	0.250	6.73	49.562	1259.462	0.197	0.3	1.6	NO	0.999	NO	MM
2	2 180114M1_2	Standard	0.500	6.73	110.328	1324.833	0.416	0.5	-4.7	NO	0.999	NO	bb
3	3 180114M1_3	Standard	1.000	6.72	323.203	1804.456	0.896	1.0	-3.7	NO	0.999	NO	bb
4	4 180114M1_4	Standard	2.000	6.71	545.935	1677.991	1.627	1.7	-14.7	NO	0.999	NO	bb
5	5 180114M1_5	Standard	5.000	6.71	1589.412	1683.883	4.719	4.9	-2.6	NO	0.999	NO	bb
6	6 180114M1_6	Standard	10.000	6.71	3117.084	1592.045	9.790	10.1	1.2	NO	0.999	NO	bb
7	7 180114M1_7	Standard	50.000	6.71	14499.442	1563.429	46.371	50.9	1.7	NO	0.999	NO	bb
8	8 180114M1_8	Standard	100.000	6.71	28614.531	1710.092	83.664	99.5	-0.5	NO	0.999	NO	bb

Compound name: N-MeFOSE

Correlation coefficient: $r = 0.996233$, $r^2 = 0.992481$

Calibration curve: $1.14152 * x + -0.140648$

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	1.250	6.44	66.552	7869.949	1.268	1.2	-1.2	NO	0.992	NO	bbX
2	2 180114M1_2	Standard	2.500	6.44	326.595	15028.852	3.260	3.0	19.2	NO	0.992	NO	bb
3	3 180114M1_3	Standard	5.000	6.43	633.853	17803.043	5.341	4.8	-4.0	NO	0.992	NO	bb
4	4 180114M1_4	Standard	10.000	6.43	1208.495	18520.922	9.788	8.7	-13.0	NO	0.992	NO	bb
5	5 180114M1_5	Standard	25.000	6.43	3227.090	18115.793	26.721	23.5	-5.9	NO	0.992	NO	bb
6	6 180114M1_6	Standard	50.000	6.43	7053.091	16859.029	62.754	55.1	10.2	NO	0.992	NO	bb
7	7 180114M1_7	Standard	250.000	6.43	30057.412	17944.828	251.249	220.2	-11.9	NO	0.992	NO	bb
8	8 180114M1_8	Standard	500.000	6.43	65726.547	16387.014	601.634	527.2	5.4	NO	0.992	NO	bb

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Compound name: N-EtFOSE

Correlation coefficient: $r = 0.999829$, $r^2 = 0.999658$

Calibration curve: $1.26852 * x + -0.111988$

Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	1.250	6.59	68.801	6029.012	1.712	1.4	15.0	NO	1.000	NO	bbX
2	2 180114M1_2	Standard	2.500	6.59	297.298	13869.331	3.215	2.6	4.9	NO	1.000	NO	bb
3	3 180114M1_3	Standard	5.000	6.58	612.203	15938.377	5.762	4.6	-7.4	NO	1.000	NO	bb
4	4 180114M1_4	Standard	10.000	6.58	1271.909	15460.814	12.340	9.8	-1.8	NO	1.000	NO	bb
5	5 180114M1_5	Standard	25.000	6.58	3414.765	16420.498	31.194	24.7	-1.3	NO	1.000	NO	bb
6	6 180114M1_6	Standard	50.000	6.58	7046.067	15833.701	66.751	52.7	5.4	NO	1.000	NO	bb
7	7 180114M1_7	Standard	250.000	6.58	33836.492	15829.665	320.631	252.8	1.1	NO	1.000	NO	bb
8	8 180114M1_8	Standard	500.000	6.58	67335.586	16082.061	628.050	495.2	-1.0	NO	1.000	NO	bb

Compound name: 13C3-PFBA

Response Factor: 0.789861

RRF SD: 0.03458, Relative SD: 4.37798

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	1.37	3626.099	4521.253	10.025	12.7	1.5	NO		NO	bb
2	2 180114M1_2	Standard	12.500	1.47	4142.458	5177.300	10.001	12.7	1.3	NO		NO	db
3	3 180114M1_3	Standard	12.500	1.48	4653.577	5888.580	9.878	12.5	0.1	NO		NO	db
4	4 180114M1_4	Standard	12.500	1.45	4077.286	5277.585	9.657	12.2	-2.2	NO		NO	db
5	5 180114M1_5	Standard	12.500	1.47	4270.448	5737.021	9.305	11.8	-5.8	NO		NO	db
6	6 180114M1_6	Standard	12.500	1.46	4150.907	5292.935	9.803	12.4	-0.7	NO		NO	db
7	7 180114M1_7	Standard	12.500	1.45	4293.536	4986.576	10.763	13.6	9.0	NO		NO	db
8	8 180114M1_8	Standard	12.500	1.44	3527.442	4615.271	9.554	12.1	-3.2	NO		NO	bb

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Compound name: 13C3-PFPeA

Response Factor: 0.808707

RRF SD: 0.0430151, Relative SD: 5.31899

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	2.27	7627.178	9210.972	10.351	12.8	2.4	NO		NO	MMX
2	2 180114M1_2	Standard	12.500	2.38	8186.502	10089.155	10.143	12.5	0.3	NO		NO	bb
3	3 180114M1_3	Standard	12.500	2.38	8937.973	11252.926	9.928	12.3	-1.8	NO		NO	bb
4	4 180114M1_4	Standard	12.500	2.37	7741.137	10699.900	9.043	11.2	-10.5	NO		NO	bb
5	5 180114M1_5	Standard	12.500	2.37	8589.766	9946.984	10.794	13.3	6.8	NO		NO	bb
6	6 180114M1_6	Standard	12.500	2.36	8111.649	9835.177	10.309	12.7	2.0	NO		NO	bb
7	7 180114M1_7	Standard	12.500	2.35	8074.398	9791.318	10.308	12.7	2.0	NO		NO	bb
8	8 180114M1_8	Standard	12.500	2.35	7382.000	9015.478	10.235	12.7	1.2	NO		NO	bb

Compound name: 13C3-PFBS

Response Factor: 0.096511

RRF SD: 0.00786237, Relative SD: 8.1466

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	2.53	934.175	9210.972	1.268	13.1	5.1	NO		NO	bb
2	2 180114M1_2	Standard	12.500	2.62	890.167	10089.155	1.103	11.4	-8.6	NO		NO	bb
3	3 180114M1_3	Standard	12.500	2.62	1034.113	11252.926	1.149	11.9	-4.8	NO		NO	bb
4	4 180114M1_4	Standard	12.500	2.61	890.175	10699.900	1.040	10.8	-13.8	NO		NO	bb
5	5 180114M1_5	Standard	12.500	2.61	1044.159	9946.984	1.312	13.6	8.8	NO		NO	bb
6	6 180114M1_6	Standard	12.500	2.60	970.681	9835.177	1.234	12.8	2.3	NO		NO	bb
7	7 180114M1_7	Standard	12.500	2.60	1017.077	9791.318	1.298	13.5	7.6	NO		NO	bb
8	8 180114M1_8	Standard	12.500	2.59	899.773	9015.478	1.248	12.9	3.4	NO		NO	bb

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Compound name: 13C2-PFHxA

Response Factor: 0.633461

RRF SD: 0.0630324, Relative SD: 9.95048

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	5.000	3.00	2593.698	9210.972	3.520	5.6	11.1	NO		NO	bb
2	2 180114M1_2	Standard	5.000	3.03	2417.925	10089.155	2.996	4.7	-5.4	NO		NO	bb
3	3 180114M1_3	Standard	5.000	3.04	2496.623	11252.926	2.773	4.4	-12.4	NO		NO	bb
4	4 180114M1_4	Standard	5.000	3.02	2285.827	10699.900	2.670	4.2	-15.7	NO		NO	bb
5	5 180114M1_5	Standard	5.000	3.02	2659.516	9946.984	3.342	5.3	5.5	NO		NO	bb
6	6 180114M1_6	Standard	5.000	3.02	2659.548	9835.177	3.380	5.3	6.7	NO		NO	bb
7	7 180114M1_7	Standard	5.000	3.01	2547.623	9791.318	3.252	5.1	2.7	NO		NO	bb
8	8 180114M1_8	Standard	5.000	3.01	2455.493	9015.478	3.405	5.4	7.5	NO		NO	bb

Compound name: 13C4-PFHpA

Response Factor: 0.650534

RRF SD: 0.0664283, Relative SD: 10.2113

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	3.57	6881.557	9210.972	9.339	14.4	14.8	NO		NO	bb
2	2 180114M1_2	Standard	12.500	3.58	5947.945	10089.155	7.369	11.3	-9.4	NO		NO	bb
3	3 180114M1_3	Standard	12.500	3.57	6964.397	11252.926	7.736	11.9	-4.9	NO		NO	bb
4	4 180114M1_4	Standard	12.500	3.56	5740.771	10699.900	6.707	10.3	-17.5	NO		NO	bb
5	5 180114M1_5	Standard	12.500	3.55	6804.188	9946.984	8.551	13.1	5.2	NO		NO	bb
6	6 180114M1_6	Standard	12.500	3.55	6758.660	9835.177	8.590	13.2	5.6	NO		NO	bb
7	7 180114M1_7	Standard	12.500	3.55	6731.813	9791.318	8.594	13.2	5.7	NO		NO	bb
8	8 180114M1_8	Standard	12.500	3.54	5891.095	9015.478	8.168	12.6	0.4	NO		NO	bb

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Compound name: 1802-PFHxS

Response Factor: 0.325559

RRF SD: 0.0357919, Relative SD: 10.994

Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	3.71	737.179	2175.515	4.236	13.0	4.1	NO		NO	MM
2	2 180114M1_2	Standard	12.500	3.71	711.707	2176.997	4.087	12.6	0.4	NO		NO	MM
3	3 180114M1_3	Standard	12.500	3.70	884.671	3018.722	3.663	11.3	-10.0	NO		NO	MM
4	4 180114M1_4	Standard	12.500	3.70	730.128	2390.356	3.818	11.7	-6.2	NO		NO	MM
5	5 180114M1_5	Standard	12.500	3.69	723.937	2228.038	4.062	12.5	-0.2	NO		NO	MM
6	6 180114M1_6	Standard	12.500	3.69	799.959	2721.157	3.675	11.3	-9.7	NO		NO	bb
7	7 180114M1_7	Standard	12.500	3.68	918.361	2269.660	5.058	15.5	24.3	NO		NO	bb
8	8 180114M1_8	Standard	12.500	3.68	725.783	2291.941	3.958	12.2	-2.7	NO		NO	MM

Compound name: 13C2-6:2 FTS

Response Factor: 0.170535

RRF SD: 0.0270675, Relative SD: 15.8721

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.02	1996.372	10472.973	2.383	14.0	11.8	NO		NO	bb
2	2 180114M1_2	Standard	12.500	4.03	1495.703	9606.144	1.946	11.4	-8.7	NO		NO	bb
3	3 180114M1_3	Standard	12.500	4.02	1626.136	11842.083	1.716	10.1	-19.5	NO		NO	bb
4	4 180114M1_4	Standard	12.500	4.01	1735.917	9795.903	2.215	13.0	3.9	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.00	1683.943	10407.573	2.022	11.9	-5.1	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.00	1511.655	10876.848	1.737	10.2	-18.5	NO		NO	bb
7	7 180114M1_7	Standard	12.500	3.99	2228.404	10351.587	2.691	15.8	26.2	NO		NO	bb
8	8 180114M1_8	Standard	12.500	3.99	1818.953	9707.305	2.342	13.7	9.9	NO		NO	bb

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Compound name: 13C2-PFOA

Response Factor: 0.903494

RRF SD: 0.0722223, Relative SD: 7.99366

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.11	8707.114	10472.973	10.392	11.5	-8.0	NO		NO	bb
2	2 180114M1_2	Standard	12.500	4.11	9668.123	9606.144	12.581	13.9	11.4	NO		NO	bb
3	3 180114M1_3	Standard	12.500	4.10	11837.389	11842.083	12.495	13.8	10.6	NO		NO	bb
4	4 180114M1_4	Standard	12.500	4.09	9123.959	9795.903	11.643	12.9	3.1	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.08	9599.560	10407.573	11.530	12.8	2.1	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.08	9220.297	10876.848	10.596	11.7	-6.2	NO		NO	bb
7	7 180114M1_7	Standard	12.500	4.07	8862.797	10351.587	10.702	11.8	-5.2	NO		NO	bb
8	8 180114M1_8	Standard	12.500	4.07	8084.847	9707.305	10.411	11.5	-7.8	NO		NO	bb

Compound name: 13C5-PFNA

Response Factor: 0.843898

RRF SD: 0.0785728, Relative SD: 9.3107

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.58	10672.131	12992.061	10.268	12.2	-2.7	NO		NO	bb
2	2 180114M1_2	Standard	12.500	4.58	7959.980	9578.678	10.388	12.3	-1.5	NO		NO	bb
3	3 180114M1_3	Standard	12.500	4.57	9755.683	10428.236	11.694	13.9	10.9	NO		NO	bb
4	4 180114M1_4	Standard	12.500	4.56	8907.903	11171.644	9.967	11.8	-5.5	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.56	8863.639	11839.788	9.358	11.1	-11.3	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.55	8177.809	10148.734	10.072	11.9	-4.5	NO		NO	bb
7	7 180114M1_7	Standard	12.500	4.55	10143.640	10483.977	12.094	14.3	14.7	NO		NO	bb
8	8 180114M1_8	Standard	12.500	4.54	6660.756	8460.493	9.841	11.7	-6.7	NO		NO	bbX

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Compound name: 13C8-PFOSA

Response Factor: 0.165457

RRF SD: 0.0245251, Relative SD: 14.8226

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.65	2131.943	12194.069	2.185	13.2	5.7	NO		NO	MMX
2	2 180114M1_2	Standard	12.500	4.65	1705.021	10256.481	2.078	12.6	0.5	NO		NO	bb
3	3 180114M1_3	Standard	12.500	4.64	1727.581	11023.619	1.959	11.8	-5.3	NO		NO	bb
4	4 180114M1_4	Standard	12.500	4.63	1645.980	12061.290	1.706	10.3	-17.5	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.62	1691.695	10339.285	2.045	12.4	-1.1	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.62	1621.123	10194.419	1.988	12.0	-3.9	NO		NO	bb
7	7 180114M1_7	Standard	12.500	4.61	1872.306	8886.922	2.634	15.9	27.3	NO		NO	bb
8	8 180114M1_8	Standard	12.500	4.61	1510.559	9725.023	1.942	11.7	-6.1	NO		NO	bbX

Compound name: 13C8-PFOS

Response Factor: 0.920205

RRF SD: 0.0697273, Relative SD: 7.57736

Response type: Internal Std (Ref 59), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.66	2577.436	2969.778	10.849	11.8	-5.7	NO		NO	MM
2	2 180114M1_2	Standard	12.500	4.67	2178.322	2439.645	11.161	12.1	-3.0	NO		NO	bb
3	3 180114M1_3	Standard	12.500	4.66	2129.911	2524.730	10.545	11.5	-8.3	NO		NO	bb
4	4 180114M1_4	Standard	12.500	4.65	2219.514	2586.834	10.725	11.7	-6.8	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.64	2380.628	2405.455	12.371	13.4	7.5	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.63	2213.260	2234.363	12.382	13.5	7.6	NO		NO	bb
7	7 180114M1_7	Standard	12.500	4.63	2409.764	2412.649	12.485	13.6	8.5	NO		NO	bb
8	8 180114M1_8	Standard	12.500	4.62	2020.897	2545.754	9.923	10.8	-13.7	NO		NO	bbX

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Compound name: 13C2-PFDA

Response Factor: 1.04437

RRF SD: 0.18473, Relative SD: 17.6882

Response type: Internal Std (Ref 60), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.97	10273.528	9030.209	14.221	13.6	8.9	NO		NO	bb
2	2 180114M1_2	Standard	12.500	4.98	7666.422	6290.355	15.234	14.6	16.7	NO		NO	bb
3	3 180114M1_3	Standard	12.500	4.96	8011.753	7754.163	12.915	12.4	-1.1	NO		NO	bb
4	4 180114M1_4	Standard	12.500	4.96	8420.399	9446.257	11.143	10.7	-14.6	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.95	7078.627	8319.136	10.636	10.2	-18.5	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.95	7007.409	7269.614	12.049	11.5	-7.7	NO		NO	bb
7	7 180114M1_7	Standard	12.500	4.94	7914.971	5767.910	17.153	16.4	31.4	NO		NO	bb
8	8 180114M1_8	Standard	12.500	4.94	5872.147	6621.671	11.085	10.6	-15.1	NO		NO	bb

Compound name: 13C2-8:2 FTS

Response Factor: 0.0865412

RRF SD: 0.0116119, Relative SD: 13.4178

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.93	1619.860	9210.972	2.198	25.4	103.2	NO		NO	bbX
2	2 180114M1_2	Standard	12.500	4.93	684.343	10089.155	0.848	9.8	-21.6	NO		NO	MM
3	3 180114M1_3	Standard	12.500	4.92	939.969	11252.926	1.044	12.1	-3.5	NO		NO	MM
4	4 180114M1_4	Standard	12.500	4.91	1008.736	10699.900	1.178	13.6	8.9	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.90	897.015	9946.984	1.127	13.0	4.2	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.90	952.935	9835.177	1.211	14.0	12.0	NO		NO	MM
7	7 180114M1_7	Standard	12.500	4.89	1216.973	9791.318	1.554	18.0	43.6	NO		NO	bbX
8	8 180114M1_8	Standard	12.500	4.89	1130.511	9015.478	1.567	18.1	44.9	NO		NO	bbX

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Compound name: d3-N-MeFOSAA

Response Factor: 0.227278

RRF SD: 0.0360068, Relative SD: 15.8426

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	5.12	2386.166	12194.069	2.446	10.8	-13.9	NO		NO	bb
2	2 180114M1_2	Standard	12.500	5.13	2679.466	10256.481	3.266	14.4	14.9	NO		NO	bb
3	3 180114M1_3	Standard	12.500	5.12	2887.384	11023.619	3.274	14.4	15.2	NO		NO	bb
4	4 180114M1_4	Standard	12.500	5.10	2460.522	12061.290	2.550	11.2	-10.2	NO		NO	bb
5	5 180114M1_5	Standard	12.500	5.10	2643.908	10339.285	3.196	14.1	12.5	NO		NO	bb
6	6 180114M1_6	Standard	12.500	5.09	1886.944	10194.419	2.314	10.2	-18.6	NO		NO	bb
7	7 180114M1_7	Standard	12.500	5.09	2602.104	8886.922	3.660	16.1	28.8	NO		NO	bbX
8	8 180114M1_8	Standard	12.500	5.08	2276.305	9725.023	2.926	12.9	3.0	NO		NO	bbX

Compound name: d5-N-EtFOSAA

Response Factor: 0.313398

RRF SD: 0.0570367, Relative SD: 18.1995

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	5.30	2456.595	12194.069	2.518	8.0	-35.7	NO		NO	bbX
2	2 180114M1_2	Standard	12.500	5.31	3198.114	10256.481	3.898	12.4	-0.5	NO		NO	MM
3	3 180114M1_3	Standard	12.500	5.29	3229.057	11023.619	3.662	11.7	-6.5	NO		NO	MM
4	4 180114M1_4	Standard	12.500	5.29	2758.213	12061.290	2.859	9.1	-27.0	NO		NO	MM
5	5 180114M1_5	Standard	12.500	5.28	3064.781	10339.285	3.705	11.8	-5.4	NO		NO	MM
6	6 180114M1_6	Standard	12.500	5.28	3574.455	10194.419	4.383	14.0	11.9	NO		NO	MM
7	7 180114M1_7	Standard	12.500	5.27	3676.360	8886.922	5.171	16.5	32.0	NO		NO	bb
8	8 180114M1_8	Standard	12.500	5.27	2913.941	9725.023	3.745	12.0	-4.4	NO		NO	MM

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Compound name: 13C2-PFUdA

Response Factor: 0.899251

RRF SD: 0.102619, Relative SD: 11.4116

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	5.32	11952.269	12194.069	12.252	13.6	9.0	NO		NO	bb
2	2 180114M1_2	Standard	12.500	5.32	8142.762	10256.481	9.924	11.0	-11.7	NO		NO	bb
3	3 180114M1_3	Standard	12.500	5.31	9973.248	11023.619	11.309	12.6	0.6	NO		NO	bb
4	4 180114M1_4	Standard	12.500	5.30	9333.110	12061.290	9.673	10.8	-13.9	NO		NO	bb
5	5 180114M1_5	Standard	12.500	5.30	9466.337	10339.285	11.445	12.7	1.8	NO		NO	bb
6	6 180114M1_6	Standard	12.500	5.30	9079.952	10194.419	11.133	12.4	-1.0	NO		NO	bb
7	7 180114M1_7	Standard	12.500	5.29	9698.532	8886.922	13.642	15.2	21.4	NO		NO	bb
8	8 180114M1_8	Standard	12.500	5.28	8206.241	9725.023	10.548	11.7	-6.2	NO		NO	bb

Compound name: 13C2-PFDoA

Response Factor: 0.64508

RRF SD: 0.0871793, Relative SD: 13.5145

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	5.62	7560.831	12194.069	7.751	12.0	-3.9	NO		NO	bbX
2	2 180114M1_2	Standard	12.500	5.62	6692.443	10256.481	8.156	12.6	1.2	NO		NO	bb
3	3 180114M1_3	Standard	12.500	5.61	7193.966	11023.619	8.157	12.6	1.2	NO		NO	bb
4	4 180114M1_4	Standard	12.500	5.61	7520.150	12061.290	7.794	12.1	-3.3	NO		NO	bb
5	5 180114M1_5	Standard	12.500	5.60	6317.912	10339.285	7.638	11.8	-5.3	NO		NO	bb
6	6 180114M1_6	Standard	12.500	5.60	5426.459	10194.419	6.654	10.3	-17.5	NO		NO	bb
7	7 180114M1_7	Standard	12.500	5.59	7096.452	8886.922	9.982	15.5	23.8	NO		NO	bb
8	8 180114M1_8	Standard	12.500	5.59	5518.140	9725.023	7.093	11.0	-12.0	NO		NO	bbX

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Compound name: d3-N-MeFOSA

Response Factor: 0.121935

RRF SD: 0.0130269, Relative SD: 10.6835

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	150.000	5.96	8791.715	12194.069	9.012	73.9	-50.7	NO		NO	bbX
2	2 180114M1_2	Standard	150.000	5.97	14062.988	10256.481	17.139	140.6	-6.3	NO		NO	bb
3	3 180114M1_3	Standard	150.000	5.95	16152.640	11023.619	18.316	150.2	0.1	NO		NO	bb
4	4 180114M1_4	Standard	150.000	5.95	14597.956	12061.290	15.129	124.1	-17.3	NO		NO	bb
5	5 180114M1_5	Standard	150.000	5.95	15082.849	10339.285	18.235	149.5	-0.3	NO		NO	bb
6	6 180114M1_6	Standard	150.000	5.94	14954.120	10194.419	18.336	150.4	0.3	NO		NO	bb
7	7 180114M1_7	Standard	150.000	5.94	15302.427	8886.922	21.524	176.5	17.7	NO		NO	bb
8	8 180114M1_8	Standard	150.000	5.94	15056.446	9725.023	19.353	158.7	5.8	NO		NO	bb

Compound name: 13C2-PFTeDA

Response Factor: 0.289852

RRF SD: 0.05135, Relative SD: 17.716

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	6.12	2445.649	12194.069	2.507	8.6	-30.8	NO		NO	bb
2	2 180114M1_2	Standard	12.500	6.12	2977.955	10256.481	3.629	12.5	0.2	NO		NO	bb
3	3 180114M1_3	Standard	12.500	6.11	3643.180	11023.619	4.131	14.3	14.0	NO		NO	bb
4	4 180114M1_4	Standard	12.500	6.10	3315.638	12061.290	3.436	11.9	-5.2	NO		NO	bb
5	5 180114M1_5	Standard	12.500	6.10	3058.884	10339.285	3.698	12.8	2.1	NO		NO	bb
6	6 180114M1_6	Standard	12.500	6.09	2549.694	10194.419	3.126	10.8	-13.7	NO		NO	bb
7	7 180114M1_7	Standard	12.500	6.09	3307.861	8886.922	4.653	16.1	28.4	NO		NO	bb
8	8 180114M1_8	Standard	12.500	6.09	2959.760	9725.023	3.804	13.1	5.0	NO		NO	bb

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Compound name: d5-N-ETFOSA

Response Factor: 0.131454

RRF SD: 0.0147792, Relative SD: 11.2428

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	150.000	6.35	7003.886	12194.069	7.180	54.6	-63.6	NO		NO	bbX
2	2 180114M1_2	Standard	150.000	6.36	14916.356	10256.481	18.179	138.3	-7.8	NO		NO	bb
3	3 180114M1_3	Standard	150.000	6.35	17570.045	11023.619	19.923	151.6	1.0	NO		NO	bb
4	4 180114M1_4	Standard	150.000	6.35	15895.931	12061.290	16.474	125.3	-16.5	NO		NO	bb
5	5 180114M1_5	Standard	150.000	6.35	15906.663	10339.285	19.231	146.3	-2.5	NO		NO	bb
6	6 180114M1_6	Standard	150.000	6.35	16634.855	10194.419	20.397	155.2	3.4	NO		NO	bb
7	7 180114M1_7	Standard	150.000	6.34	16833.201	8886.922	23.677	180.1	20.1	NO		NO	bb
8	8 180114M1_8	Standard	150.000	6.34	15673.545	9725.023	20.146	153.3	2.2	NO		NO	bb

Compound name: 13C2-PFHxDA

Response Factor: 0.376896

RRF SD: 0.0631103, Relative SD: 16.7447

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	5.000	6.47	1259.462	12194.069	1.291	3.4	-31.5	NO		NO	bb
2	2 180114M1_2	Standard	5.000	6.47	1324.833	10256.481	1.615	4.3	-14.3	NO		NO	bb
3	3 180114M1_3	Standard	5.000	6.46	1804.456	11023.619	2.046	5.4	8.6	NO		NO	bb
4	4 180114M1_4	Standard	5.000	6.46	1677.991	12061.290	1.739	4.6	-7.7	NO		NO	bb
5	5 180114M1_5	Standard	5.000	6.46	1683.883	10339.285	2.036	5.4	8.0	NO		NO	bb
6	6 180114M1_6	Standard	5.000	6.45	1592.045	10194.419	1.952	5.2	3.6	NO		NO	bb
7	7 180114M1_7	Standard	5.000	6.45	1563.429	8886.922	2.199	5.8	16.7	NO		NO	bb
8	8 180114M1_8	Standard	5.000	6.45	1710.092	9725.023	2.198	5.8	16.6	NO		NO	bb

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Compound name: d7-N-MeFOSE

Response Factor: 0.139595

RRF SD: 0.0149078, Relative SD: 10.6793

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	150.000	6.43	7869.949	12194.069	8.067	57.8	-61.5	NO		NO	bbX
2	2 180114M1_2	Standard	150.000	6.43	15028.852	10256.481	18.316	131.2	-12.5	NO		NO	bb
3	3 180114M1_3	Standard	150.000	6.43	17803.043	11023.619	20.187	144.6	-3.6	NO		NO	bb
4	4 180114M1_4	Standard	150.000	6.42	18520.922	12061.290	19.195	137.5	-8.3	NO		NO	bb
5	5 180114M1_5	Standard	150.000	6.42	18115.793	10339.285	21.902	156.9	4.6	NO		NO	bb
6	6 180114M1_6	Standard	150.000	6.42	16859.029	10194.419	20.672	148.1	-1.3	NO		NO	bb
7	7 180114M1_7	Standard	150.000	6.42	17944.828	8886.922	25.240	180.8	20.5	NO		NO	bb
8	8 180114M1_8	Standard	150.000	6.42	16387.014	9725.023	21.063	150.9	0.6	NO		NO	bb

Compound name: d9-N-EtFOSE

Response Factor: 0.126859

RRF SD: 0.0145207, Relative SD: 11.4463

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	150.000	6.58	6029.012	12194.069	6.180	48.7	-67.5	NO		NO	bbX
2	2 180114M1_2	Standard	150.000	6.58	13869.331	10256.481	16.903	133.2	-11.2	NO		NO	bb
3	3 180114M1_3	Standard	150.000	6.57	15938.377	11023.619	18.073	142.5	-5.0	NO		NO	bb
4	4 180114M1_4	Standard	150.000	6.57	15460.814	12061.290	16.023	126.3	-15.8	NO		NO	bb
5	5 180114M1_5	Standard	150.000	6.57	16420.498	10339.285	19.852	156.5	4.3	NO		NO	bb
6	6 180114M1_6	Standard	150.000	6.57	15833.701	10194.419	19.415	153.0	2.0	NO		NO	bb
7	7 180114M1_7	Standard	150.000	6.57	15829.665	8886.922	22.265	175.5	17.0	NO		NO	bb
8	8 180114M1_8	Standard	150.000	6.57	16082.061	9725.023	20.671	162.9	8.6	NO		NO	bb

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Compound name: 13C4-PFBA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	1.37	4521.253	4521.253	12.500	12.5	0.0	NO		NO	bb
2	2 180114M1_2	Standard	12.500	1.48	5177.300	5177.300	12.500	12.5	0.0	NO		NO	db
3	3 180114M1_3	Standard	12.500	1.48	5888.580	5888.580	12.500	12.5	0.0	NO		NO	db
4	4 180114M1_4	Standard	12.500	1.45	5277.585	5277.585	12.500	12.5	0.0	NO		NO	db
5	5 180114M1_5	Standard	12.500	1.47	5737.021	5737.021	12.500	12.5	0.0	NO		NO	db
6	6 180114M1_6	Standard	12.500	1.45	5292.935	5292.935	12.500	12.5	0.0	NO		NO	db
7	7 180114M1_7	Standard	12.500	1.45	4986.576	4986.576	12.500	12.5	0.0	NO		NO	db
8	8 180114M1_8	Standard	12.500	1.44	4615.271	4615.271	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 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	3.00	9210.972	9210.972	12.500	12.5	0.0	NO		NO	bb
2	2 180114M1_2	Standard	12.500	3.03	10089.155	10089.155	12.500	12.5	0.0	NO		NO	bb
3	3 180114M1_3	Standard	12.500	3.04	11252.926	11252.926	12.500	12.5	0.0	NO		NO	bb
4	4 180114M1_4	Standard	12.500	3.02	10699.900	10699.900	12.500	12.5	0.0	NO		NO	MM
5	5 180114M1_5	Standard	12.500	3.02	9946.984	9946.984	12.500	12.5	0.0	NO		NO	bb
6	6 180114M1_6	Standard	12.500	3.01	9835.177	9835.177	12.500	12.5	0.0	NO		NO	MM
7	7 180114M1_7	Standard	12.500	3.01	9791.318	9791.318	12.500	12.5	0.0	NO		NO	MM
8	8 180114M1_8	Standard	12.500	3.01	9015.478	9015.478	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C3-PFHxS

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	3.71	2175.515	2175.515	12.500	12.5	0.0	NO		NO	bb
2	2 180114M1_2	Standard	12.500	3.71	2176.997	2176.997	12.500	12.5	0.0	NO		NO	bb
3	3 180114M1_3	Standard	12.500	3.70	3018.722	3018.722	12.500	12.5	0.0	NO		NO	bb
4	4 180114M1_4	Standard	12.500	3.70	2390.356	2390.356	12.500	12.5	0.0	NO		NO	bb
5	5 180114M1_5	Standard	12.500	3.69	2228.038	2228.038	12.500	12.5	0.0	NO		NO	bb
6	6 180114M1_6	Standard	12.500	3.68	2721.157	2721.157	12.500	12.5	0.0	NO		NO	bb
7	7 180114M1_7	Standard	12.500	3.68	2269.660	2269.660	12.500	12.5	0.0	NO		NO	bb
8	8 180114M1_8	Standard	12.500	3.68	2291.941	2291.941	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C8-PFOA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.11	10472.973	10472.973	12.500	12.5	0.0	NO		NO	bb
2	2 180114M1_2	Standard	12.500	4.11	9606.144	9606.144	12.500	12.5	0.0	NO		NO	bb
3	3 180114M1_3	Standard	12.500	4.10	11842.083	11842.083	12.500	12.5	0.0	NO		NO	bb
4	4 180114M1_4	Standard	12.500	4.09	9795.903	9795.903	12.500	12.5	0.0	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.08	10407.573	10407.573	12.500	12.5	0.0	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.08	10876.848	10876.848	12.500	12.5	0.0	NO		NO	bb
7	7 180114M1_7	Standard	12.500	4.07	10351.587	10351.587	12.500	12.5	0.0	NO		NO	bb
8	8 180114M1_8	Standard	12.500	4.07	9707.305	9707.305	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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Compound name: 13C9-PFNA

Response Factor: 1

RRF SD: 5.93439e-017, Relative SD: 5.93439e-015

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	180114M1_1	Standard	12.500	4.58	12992.061	12992.061	12.500	12.5	0.0	NO		NO	bb
2	2	180114M1_2	Standard	12.500	4.59	9578.678	9578.678	12.500	12.5	0.0	NO		NO	bb
3	3	180114M1_3	Standard	12.500	4.57	10428.236	10428.236	12.500	12.5	0.0	NO		NO	bb
4	4	180114M1_4	Standard	12.500	4.56	11171.644	11171.644	12.500	12.5	0.0	NO		NO	bb
5	5	180114M1_5	Standard	12.500	4.56	11839.788	11839.788	12.500	12.5	0.0	NO		NO	bb
6	6	180114M1_6	Standard	12.500	4.55	10148.734	10148.734	12.500	12.5	0.0	NO		NO	bb
7	7	180114M1_7	Standard	12.500	4.54	10483.977	10483.977	12.500	12.5	0.0	NO		NO	bb
8	8	180114M1_8	Standard	12.500	4.54	8460.493	8460.493	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 59), Area * (IS Conc. / IS Area)

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1	180114M1_1	Standard	12.500	4.66	2969.778	2969.778	12.500	12.5	0.0	NO		NO	bb
2	2	180114M1_2	Standard	12.500	4.67	2439.645	2439.645	12.500	12.5	0.0	NO		NO	bb
3	3	180114M1_3	Standard	12.500	4.66	2524.730	2524.730	12.500	12.5	0.0	NO		NO	bb
4	4	180114M1_4	Standard	12.500	4.65	2586.834	2586.834	12.500	12.5	0.0	NO		NO	bb
5	5	180114M1_5	Standard	12.500	4.64	2405.455	2405.455	12.500	12.5	0.0	NO		NO	bb
6	6	180114M1_6	Standard	12.500	4.63	2234.363	2234.363	12.500	12.5	0.0	NO		NO	bb
7	7	180114M1_7	Standard	12.500	4.63	2412.649	2412.649	12.500	12.5	0.0	NO		NO	bb
8	8	180114M1_8	Standard	12.500	4.63	2545.754	2545.754	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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Compound name: 13C6-PFDA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 60), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	4.97	9030.209	9030.209	12.500	12.5	0.0	NO		NO	bb
2	2 180114M1_2	Standard	12.500	4.98	6290.355	6290.355	12.500	12.5	0.0	NO		NO	bb
3	3 180114M1_3	Standard	12.500	4.96	7754.163	7754.163	12.500	12.5	0.0	NO		NO	bb
4	4 180114M1_4	Standard	12.500	4.96	9446.257	9446.257	12.500	12.5	0.0	NO		NO	bb
5	5 180114M1_5	Standard	12.500	4.95	8319.136	8319.136	12.500	12.5	0.0	NO		NO	bb
6	6 180114M1_6	Standard	12.500	4.95	7269.614	7269.614	12.500	12.5	0.0	NO		NO	bb
7	7 180114M1_7	Standard	12.500	4.94	5767.910	5767.910	12.500	12.5	0.0	NO		NO	bb
8	8 180114M1_8	Standard	12.500	4.94	6621.671	6621.671	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C7-PFUdA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180114M1_1	Standard	12.500	5.32	12194.069	12194.069	12.500	12.5	0.0	NO		NO	bb
2	2 180114M1_2	Standard	12.500	5.32	10256.481	10256.481	12.500	12.5	0.0	NO		NO	bb
3	3 180114M1_3	Standard	12.500	5.31	11023.619	11023.619	12.500	12.5	0.0	NO		NO	bb
4	4 180114M1_4	Standard	12.500	5.30	12061.290	12061.290	12.500	12.5	0.0	NO		NO	bb
5	5 180114M1_5	Standard	12.500	5.30	10339.285	10339.285	12.500	12.5	0.0	NO		NO	bb
6	6 180114M1_6	Standard	12.500	5.29	10194.419	10194.419	12.500	12.5	0.0	NO		NO	bb
7	7 180114M1_7	Standard	12.500	5.29	8886.922	8886.922	12.500	12.5	0.0	NO		NO	bb
8	8 180114M1_8	Standard	12.500	5.28	9725.023	9725.023	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 14 Jan 2018 14:14:32

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_1, Date: 14-Jan-2018, Time: 13:30:44, ID: ST180114M1-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

#	Name	CoD	CoD Flag	%RSD
1	1 PFBA	0.9939	NO	
2	2 PFPeA	0.9967	NO	
3	3 PFBS	0.9983	NO	
4	4 PFHxA	0.9989	NO	
5	5 PFHpA	0.9929	NO	
6	6 L-PFHxS	0.9900	NO	
7	8 6:2 FTS	0.9957	NO	
8	9 L-PFOA	0.9993	NO	
9	11 PFHpS	0.9995	NO	
10	12 PFNA	0.9911	NO	
11	13 PFOSA	0.9943	NO	
12	14 L-PFOS	0.9923	NO	
13	16 PFDA	0.9930	NO	
14	17 8:2 FTS	0.9923	NO	
15	18 N-MeFOSAA	0.9969	NO	
16	19 N-EtFOSAA	0.9919	NO	
17	20 PFUdA	0.9916	NO	
18	21 PFDS	0.9936	NO	
19	22 PFDoA	0.9965	NO	
20	23 N-MeFOSA	0.9984	NO	
21	24 PFTriDA	0.9970	NO	
22	25 PFTeDA	0.9987	NO	
23	26 N-EtFOSA	0.9974	NO	
24	27 PFHxDA	0.9984	NO	
25	28 PFODA	0.9994	NO	
26	29 N-MeFOSE	0.9925	NO	
27	30 N-EtFOSE	0.9997	NO	
28	31 13C3-PFBA		NO	4.378
29	32 13C3-PFPeA		NO	5.319
30	33 13C3-PFBS		NO	8.147
31	34 13C2-PFHxA		NO	9.950

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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Name: 180114M1_1, Date: 14-Jan-2018, Time: 13:30:44, ID: ST180114M1-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

#	Name	CoD	CoD Flag	%RSD
32	35 13C4-PFHpA		NO	10.211
33	36 18O2-PFHxS		NO	10.994
34	37 13C2-6:2 FTS		NO	15.872
35	38 13C2-PFOA		NO	7.994
36	39 13C5-PFNA		NO	9.311
37	40 13C8-PFOSA		NO	14.823
38	41 13C8-PFOS		NO	7.577
39	42 13C2-PFDA		NO	17.688
40	43 13C2-8:2 FTS		NO	13.418
41	44 d3-N-MeFOSAA		NO	15.843
42	45 d5-N-EtFOSAA		NO	18.199
43	46 13C2-PFUdA		NO	11.412
44	47 13C2-PFDoA		NO	13.514
45	48 d3-N-MeFOSA		NO	10.683
46	49 13C2-PFTeDA		NO	17.716
47	50 d5-N-ETFOSA		NO	11.243
48	51 13C2-PFHxDA		NO	16.745
49	52 d7-N-MeFOSE		NO	10.679
50	53 d9-N-EtFOSE		NO	11.446
51	54 13C4-PFBA		NO	0.000
52	55 13C5-PFHxA		NO	0.000
53	56 13C3-PFHxS		NO	0.000
54	57 13C8-PFOA		NO	0.000
55	58 13C9-PFNA		NO	0.000
56	59 13C4-PFOS		NO	0.000
57	60 13C6-PFDA		NO	0.000
58	61 13C7-PFUdA		NO	0.000

Dataset: Untitled

Last Altered: Monday, January 15, 2018 15:03:31 Pacific Standard Time

Printed: Monday, January 15, 2018 15:07:41 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: 15 Jan 2018 15:03:31

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	180114M1_1	ST180114M1-1 PFC CS-2 17L2606	14-Jan-18	13:30:44
2	180114M1_2	ST180114M1-2 PFC CS-1 17L2607	14-Jan-18	13:42:02
3	180114M1_3	ST180114M1-3 PFC CS0 17L2608	14-Jan-18	13:53:10
4	180114M1_4	ST180114M1-4 PFC CS1 17L2609	14-Jan-18	14:04:21
5	180114M1_5	ST180114M1-5 PFC CS2 17L2610	14-Jan-18	14:15:32
6	180114M1_6	ST180114M1-6 PFC CS3 17L2611	14-Jan-18	14:26:42
7	180114M1_7	ST180114M1-7 PFC CS4 17L1208	14-Jan-18	14:37:53
8	180114M1_8	ST180114M1-8 PFC CS5 17L2613	14-Jan-18	14:49:04
9	180114M1_9	IPA	14-Jan-18	15:00:15
10	180114M1_11	ICV180114M1-1 PFC ICV 17L1201	14-Jan-18	15:11:29
11	180114M1_12	IPA	14-Jan-18	15:31:46

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 14 Jan 2018 14:14:32

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

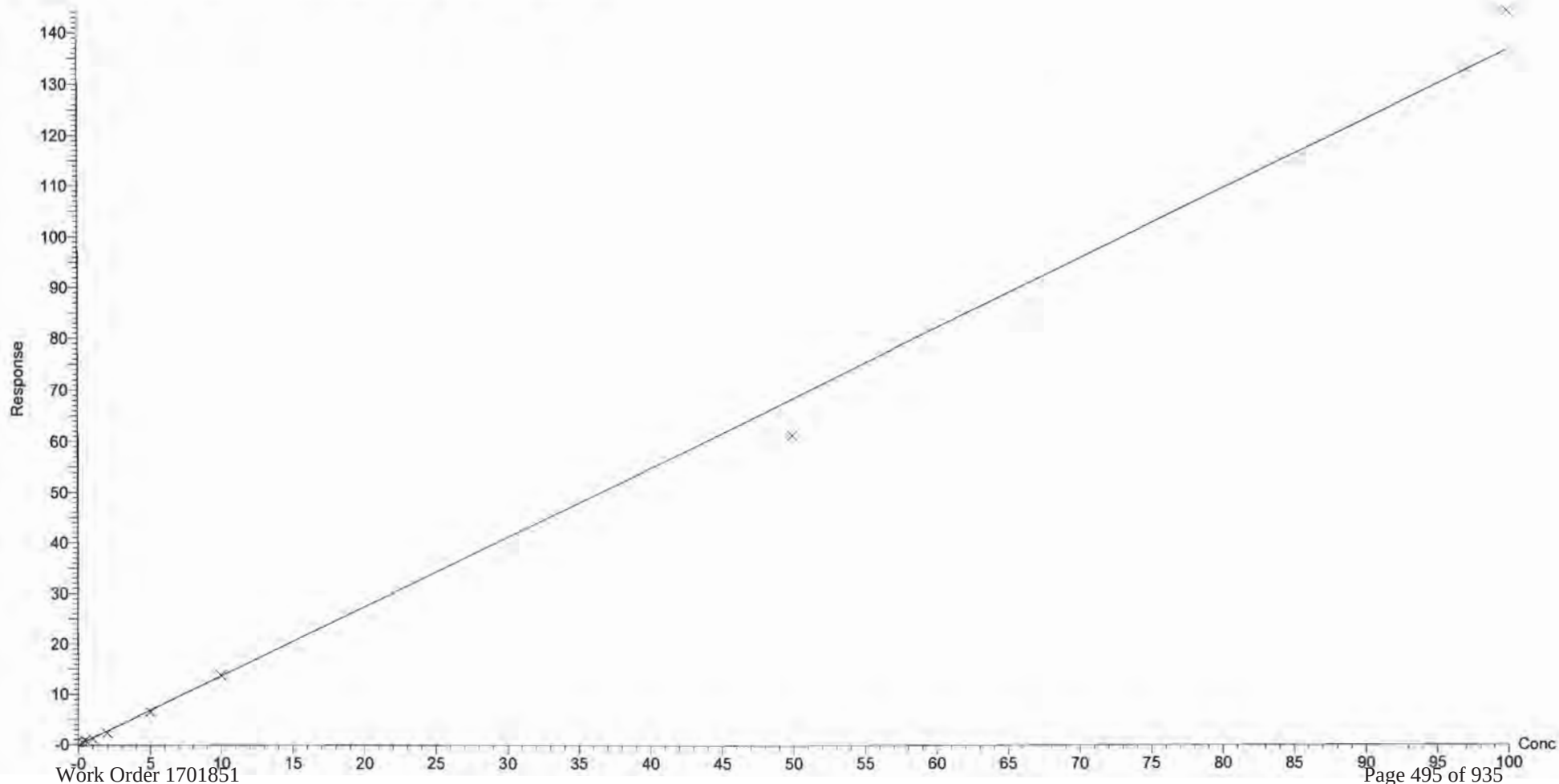
Compound name: PFBA

Correlation coefficient: $r = 0.996964$, $r^2 = 0.993936$

Calibration curve: $1.3668 * x + -0.0652293$

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

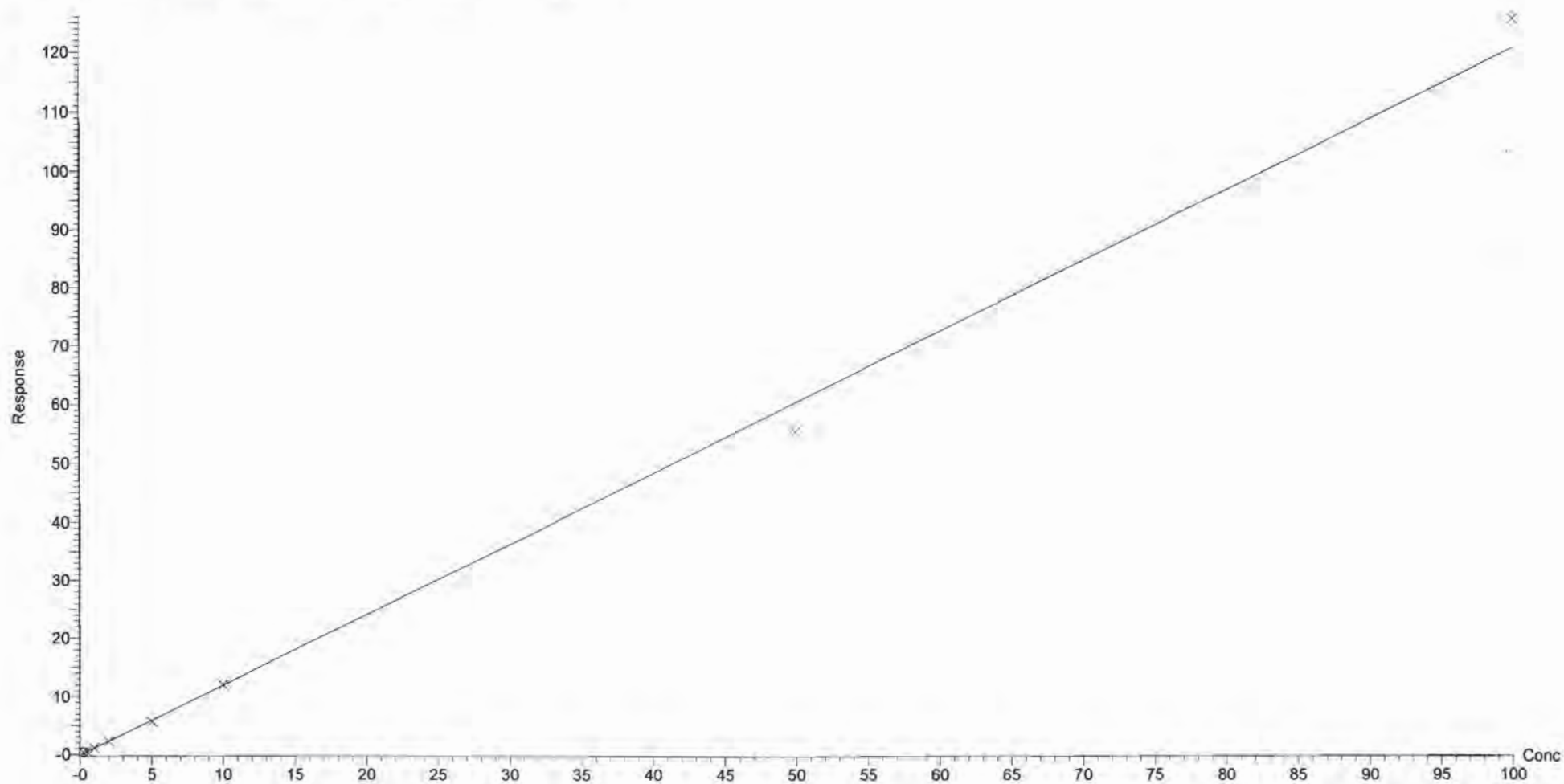
Compound name: PFPeA

Correlation coefficient: $r = 0.998347$, $r^2 = 0.996696$

Calibration curve: $1.21215 * x + -0.1723$

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\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

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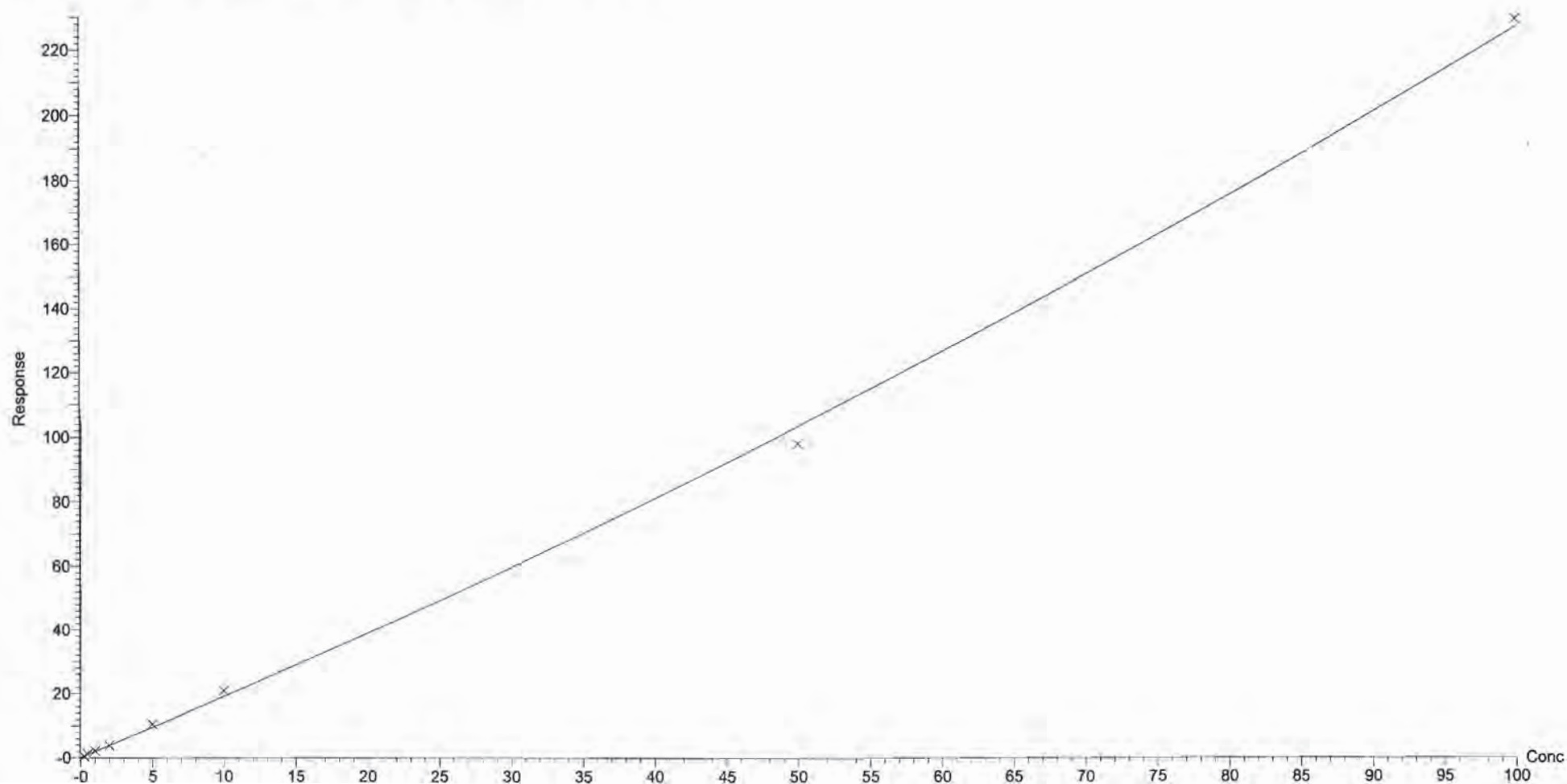
Compound name: PFBS

Coefficient of Determination: $R^2 = 0.998347$

Calibration curve: $0.00424493 * x^2 + 1.8508 * x + 0.12144$

Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

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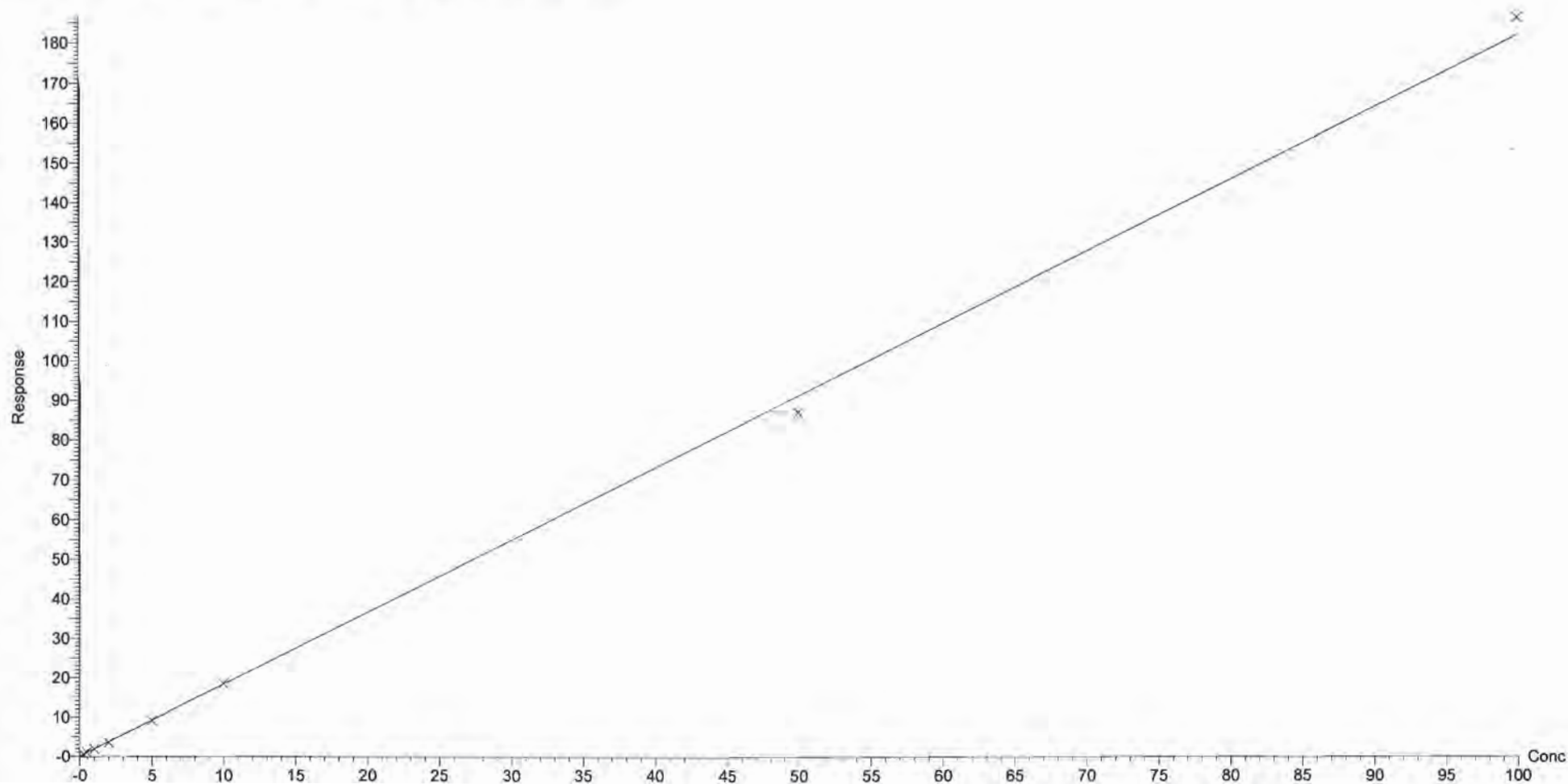
Compound name: PFHxA

Correlation coefficient: $r = 0.999450$, $r^2 = 0.998900$

Calibration curve: $1.8219 * x + 0.0775713$

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\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

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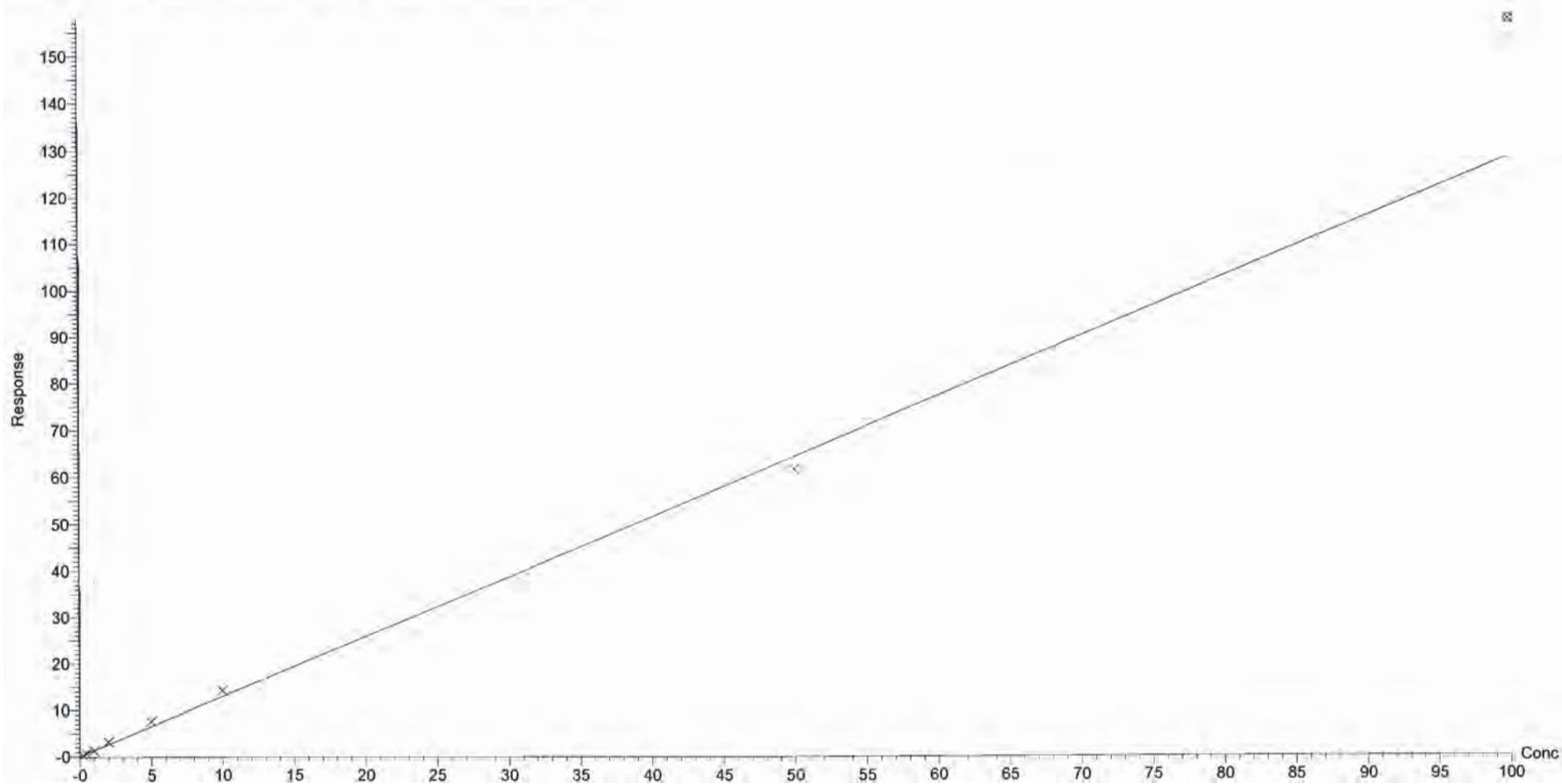
Compound name: PFHpA

Correlation coefficient: $r = 0.996428$, $r^2 = 0.992868$

Calibration curve: $1.28453 * x + 0.105213$

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\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

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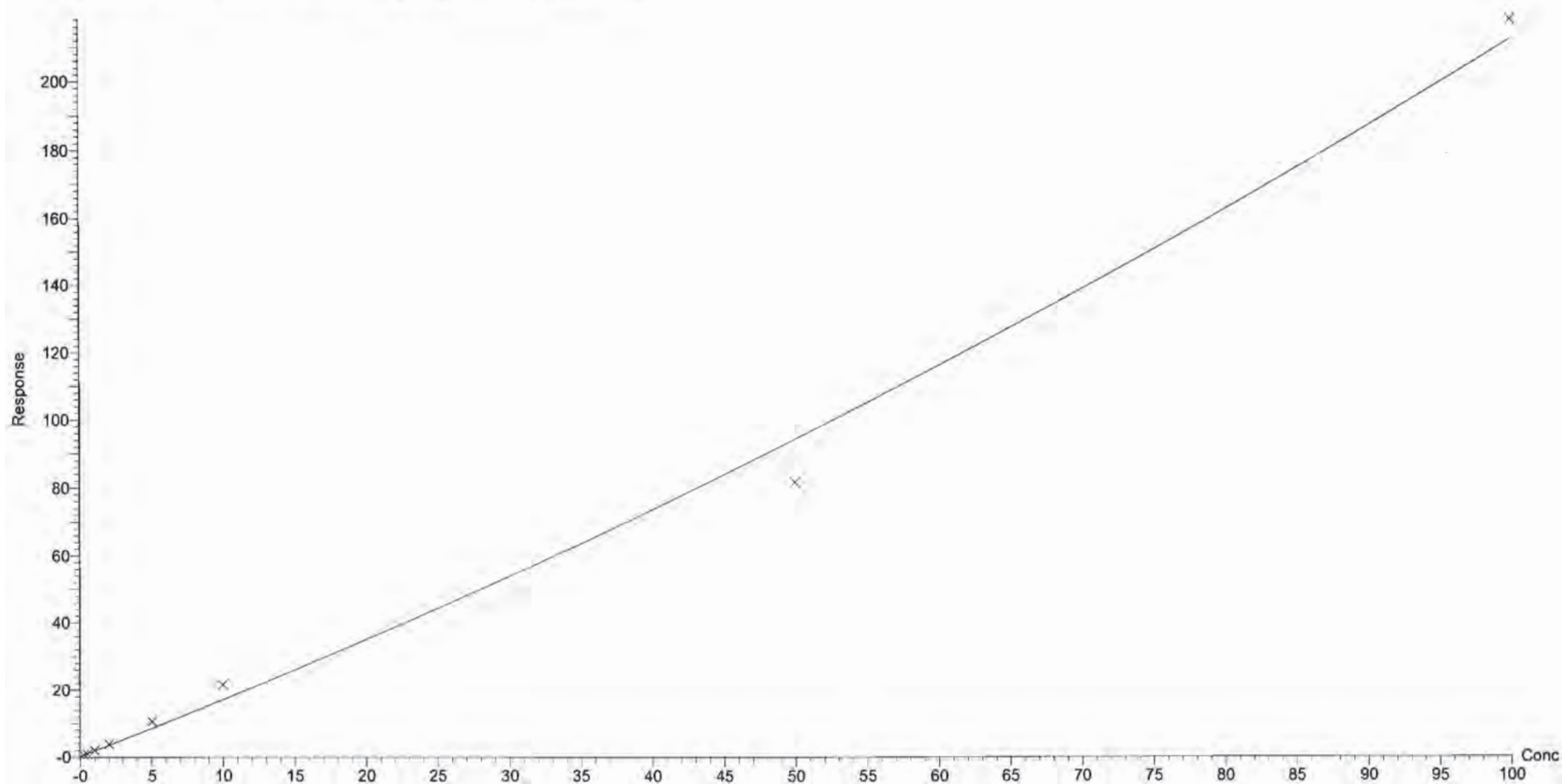
Compound name: L-PFHxS

Coefficient of Determination: $R^2 = 0.990036$

Calibration curve: $0.00482749 * x^2 + 1.6414 * x + 0.202957$

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

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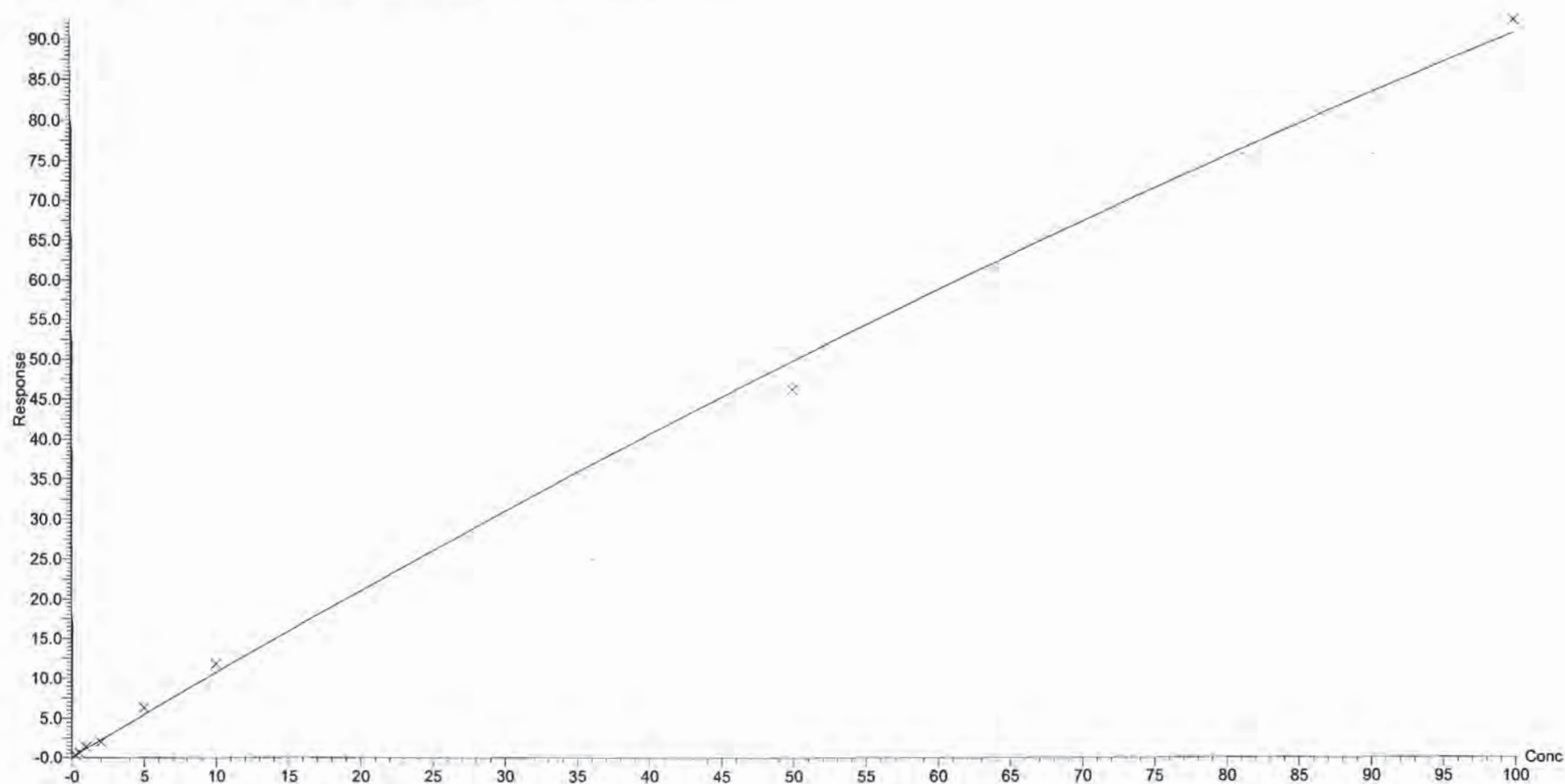
Compound name: 6:2 FTS

Coefficient of Determination: $R^2 = 0.995652$

Calibration curve: $-0.00171263 * x^2 + 1.07888 * x + 0.0650312$

Response type: Internal Std (Ref 37), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

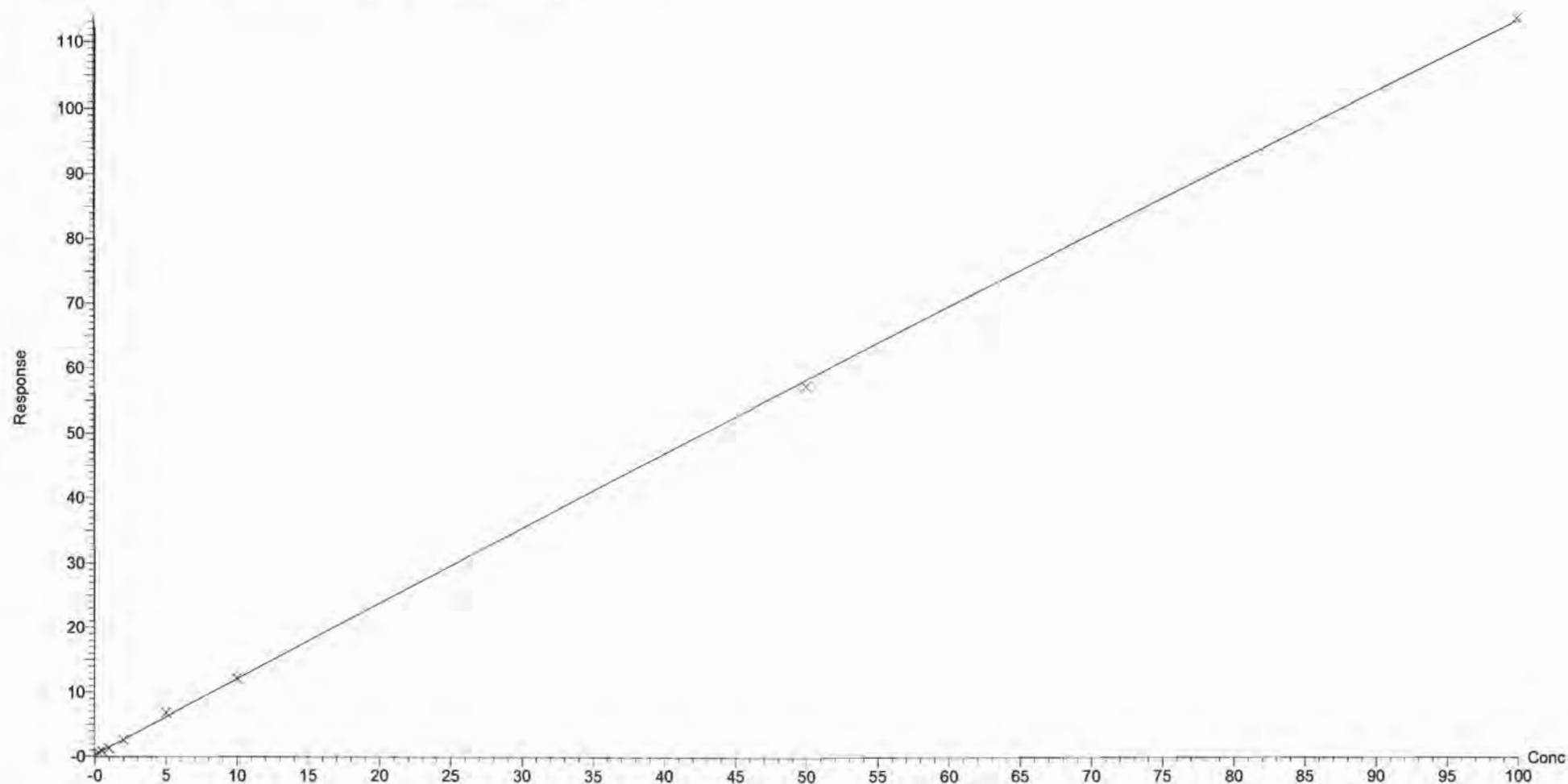
Compound name: L-PFOA

Coefficient of Determination: $R^2 = 0.999272$

Calibration curve: $-0.0005185 * x^2 + 1.18475 * x + 0.254039$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

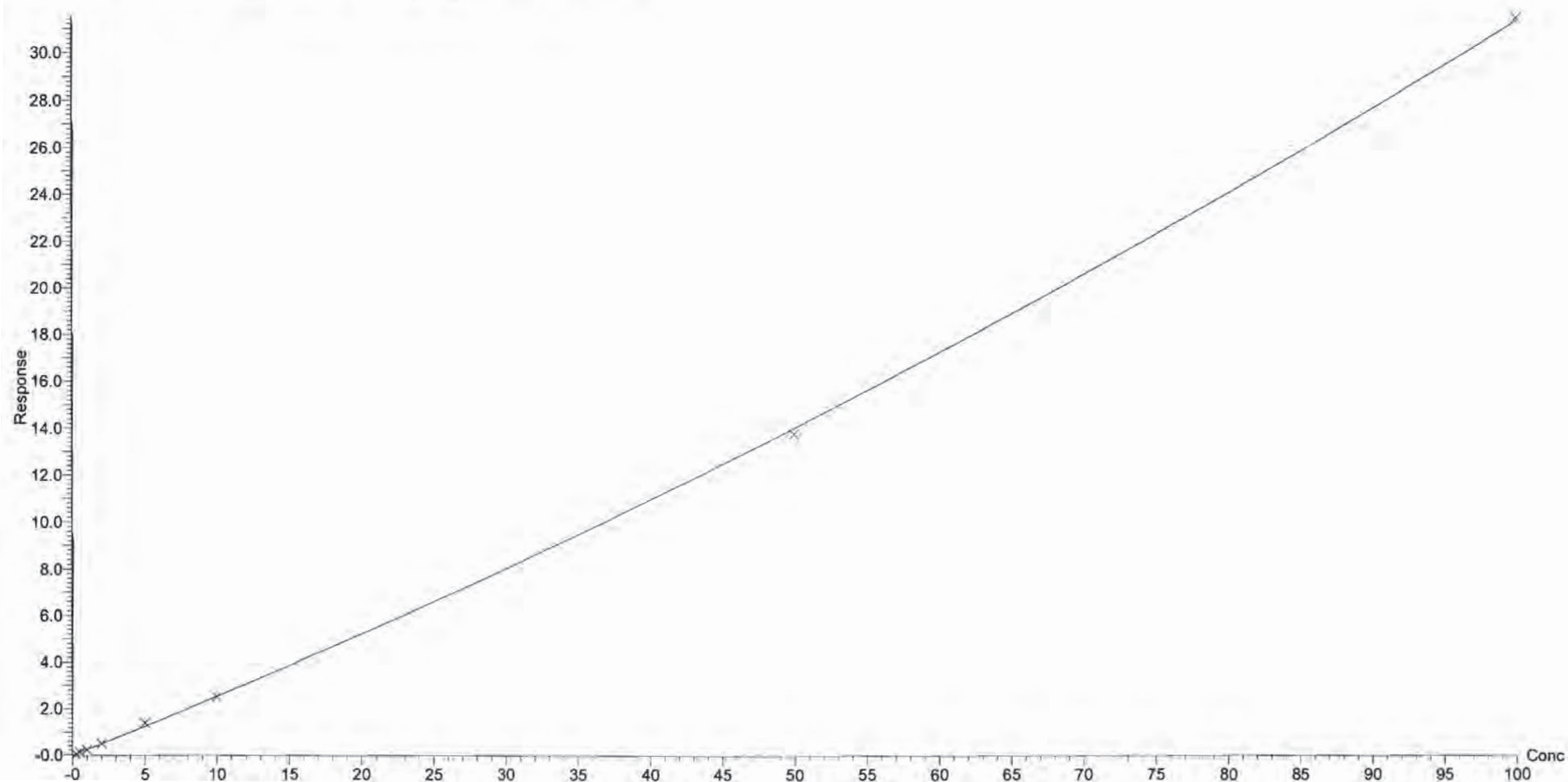
Compound name: PFHpS

Coefficient of Determination: $R^2 = 0.999513$

Calibration curve: $0.000669016 * x^2 + 0.247135 * x + -0.0134056$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

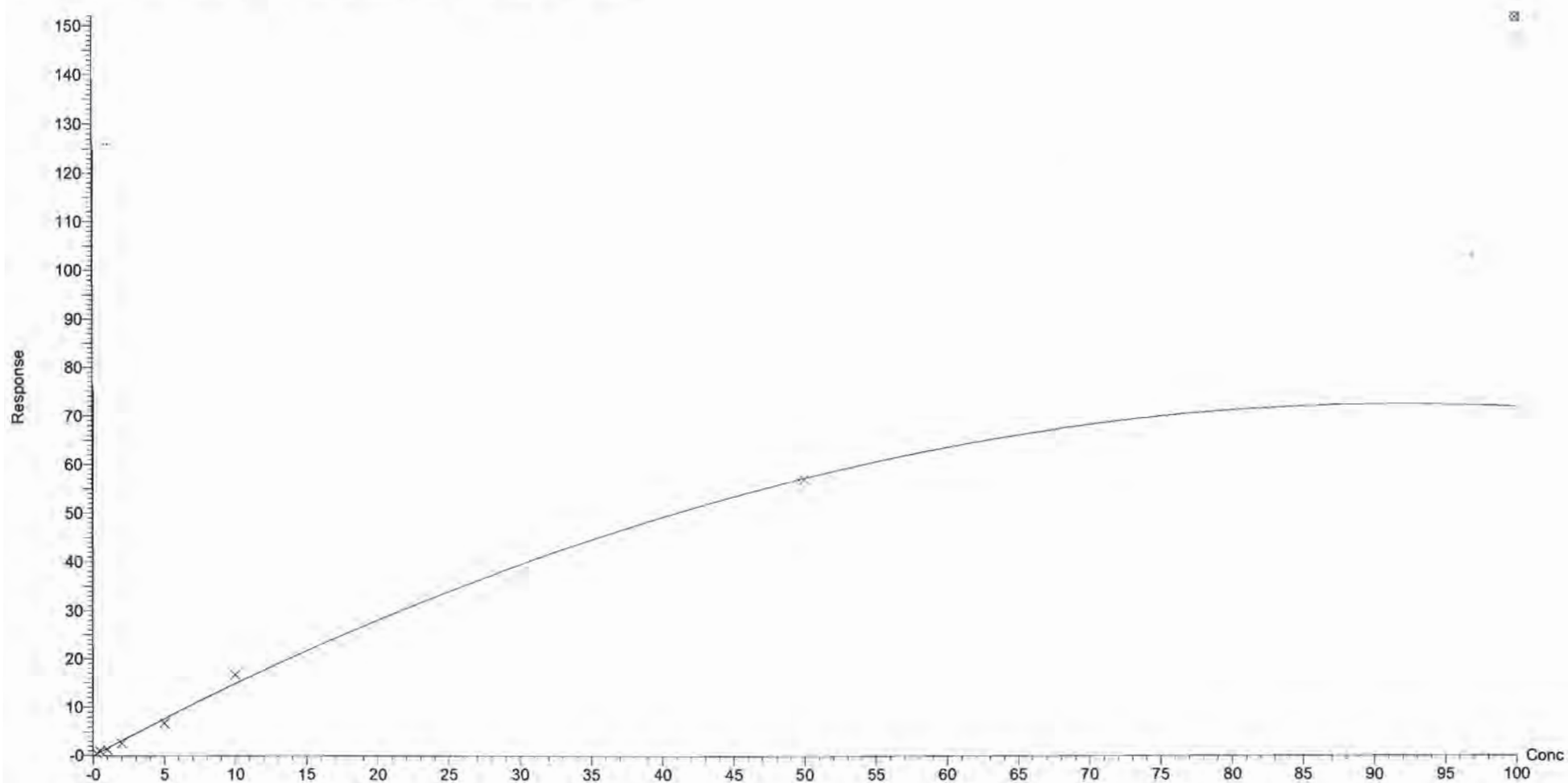
Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

Compound name: PFNA

Coefficient of Determination: $R^2 = 0.991098$ Calibration curve: $-0.00851903 * x^2 + 1.56926 * x + -0.036541$

Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

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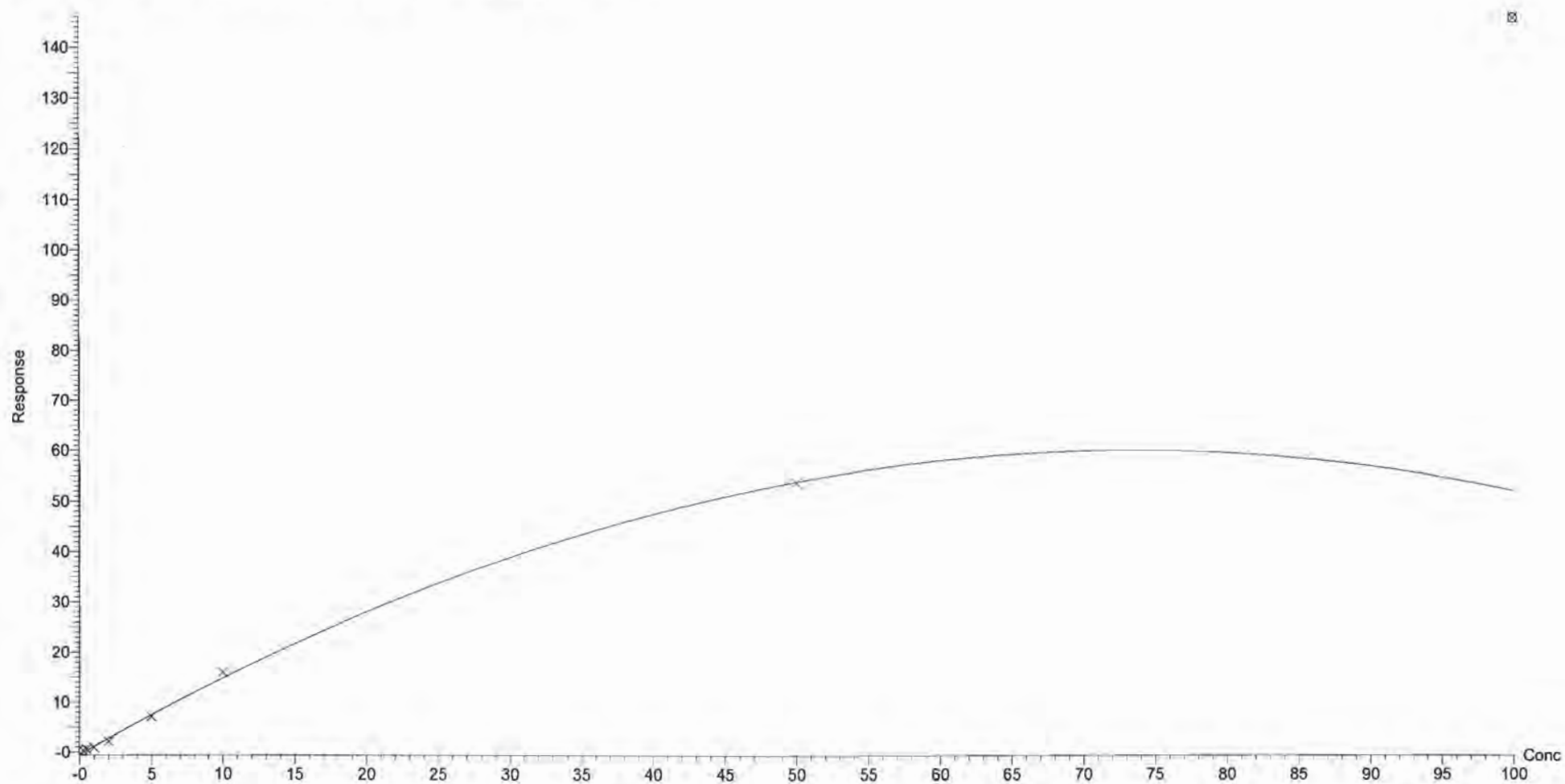
Compound name: PFOSA

Coefficient of Determination: $R^2 = 0.994286$

Calibration curve: $-0.011251 * x^2 + 1.65021 * x - 0.536272$

Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

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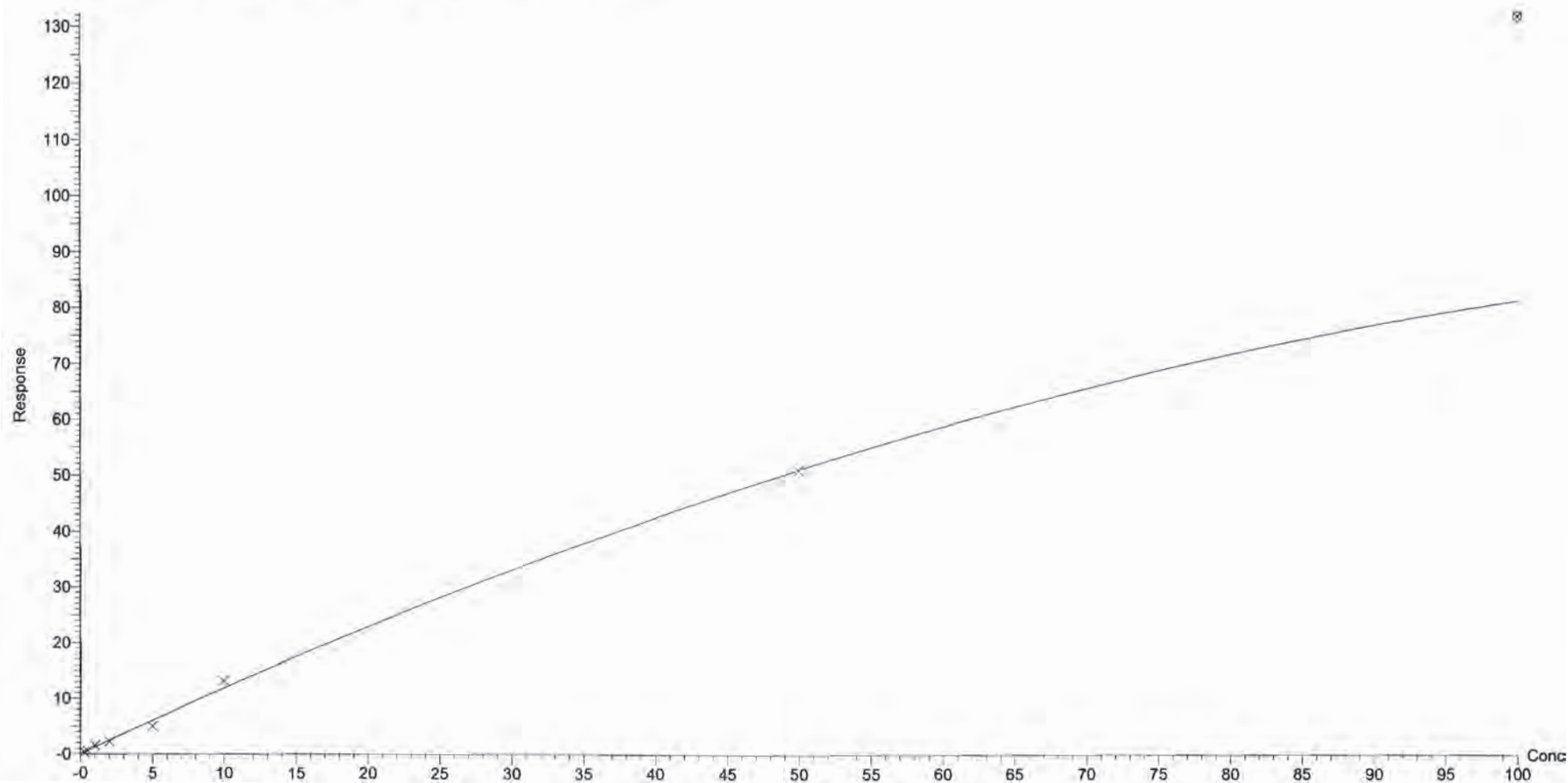
Compound name: L-PFOS

Coefficient of Determination: $R^2 = 0.992332$

Calibration curve: $-0.00413738 * x^2 + 1.22769 * x + 0.000665389$

Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

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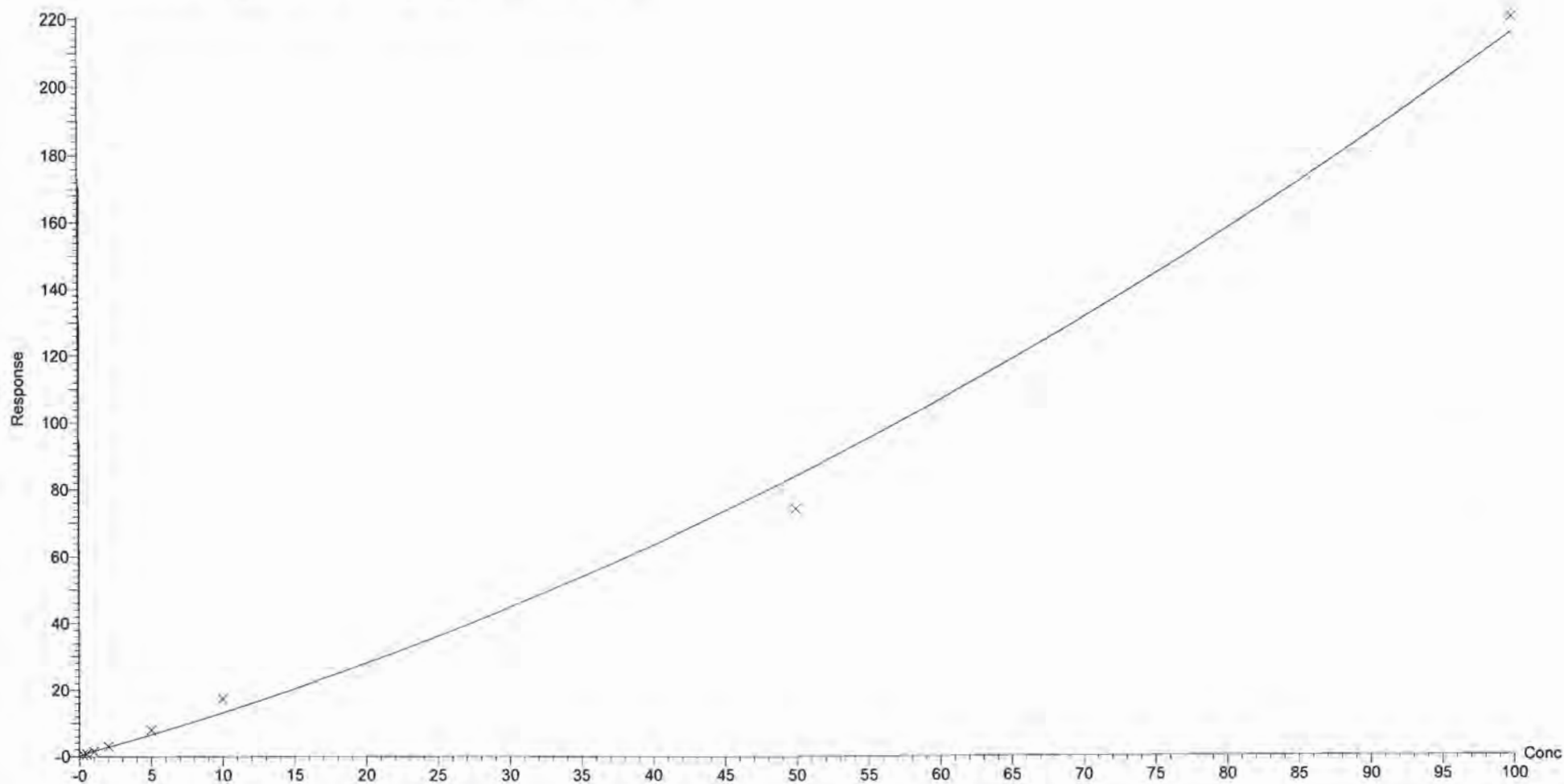
Compound name: PFDA

Coefficient of Determination: $R^2 = 0.993028$

Calibration curve: $0.00973524 * x^2 + 1.186 * x + 0.269585$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

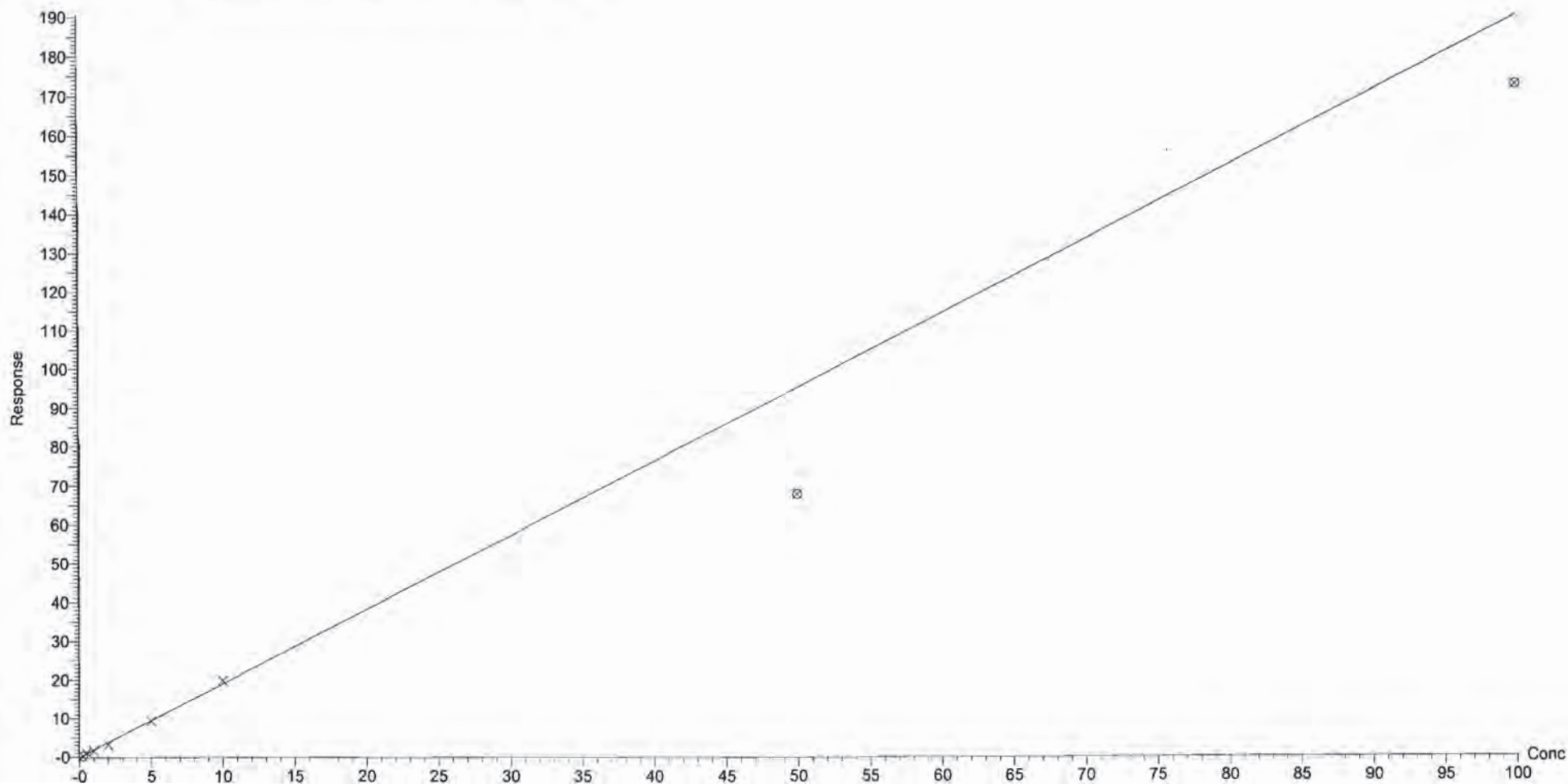
Compound name: 8:2 FTS

Correlation coefficient: $r = 0.996158$, $r^2 = 0.992331$

Calibration curve: $1.90577 * x + -0.0745651$

Response type: Internal Std (Ref 43), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

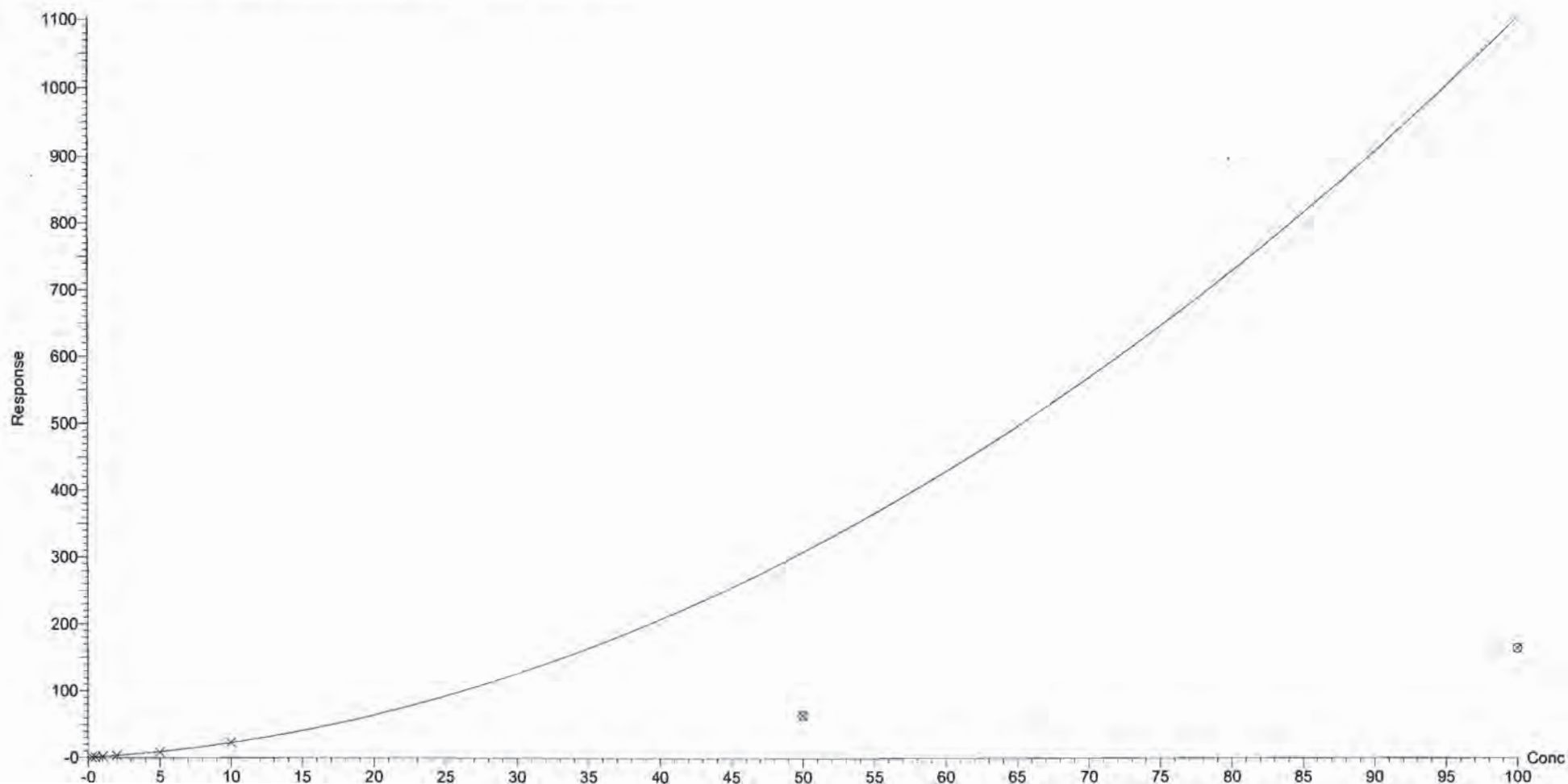
Compound name: N-MeFOSAA

Coefficient of Determination: $R^2 = 0.996900$

Calibration curve: $0.0978372 * x^2 + 1.26132 * x + -0.000840061$

Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

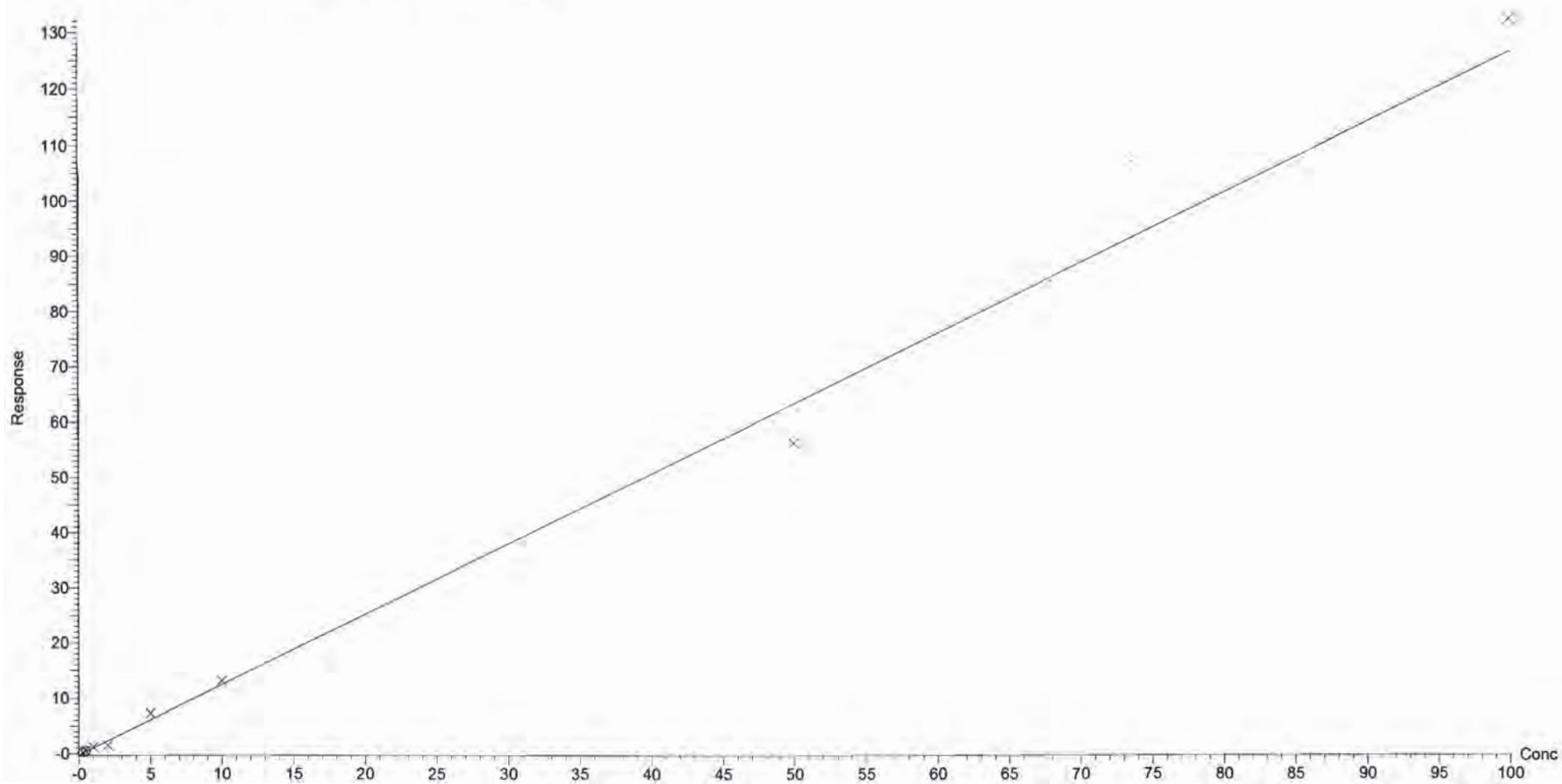
Compound name: N-EtFOSAA

Correlation coefficient: $r = 0.995957$, $r^2 = 0.991929$

Calibration curve: $1.2718 * x + -0.278352$

Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

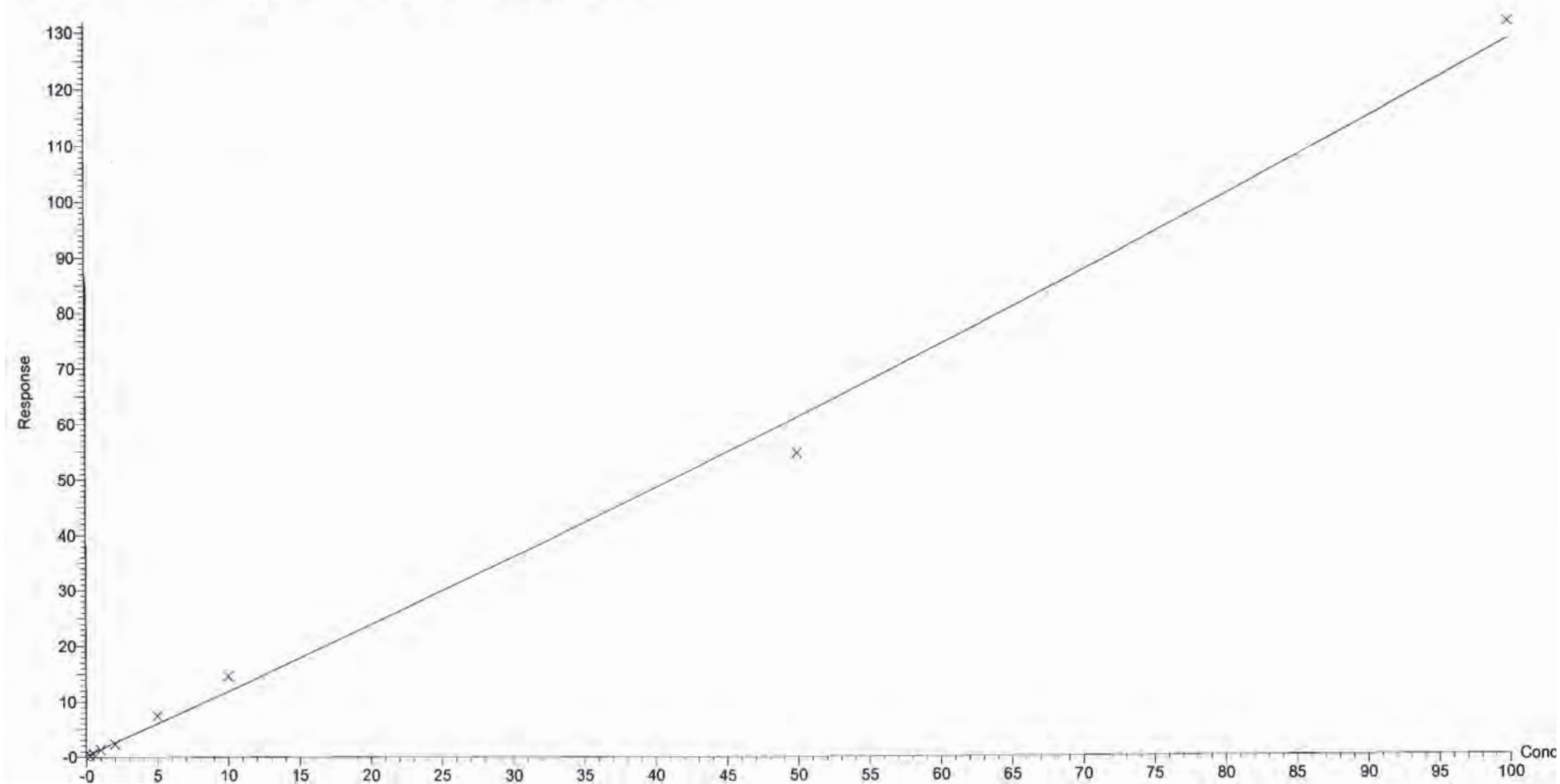
Compound name: PFUDa

Coefficient of Determination: $R^2 = 0.991571$

Calibration curve: $0.00136055 * x^2 + 1.14892 * x + 0.218768$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

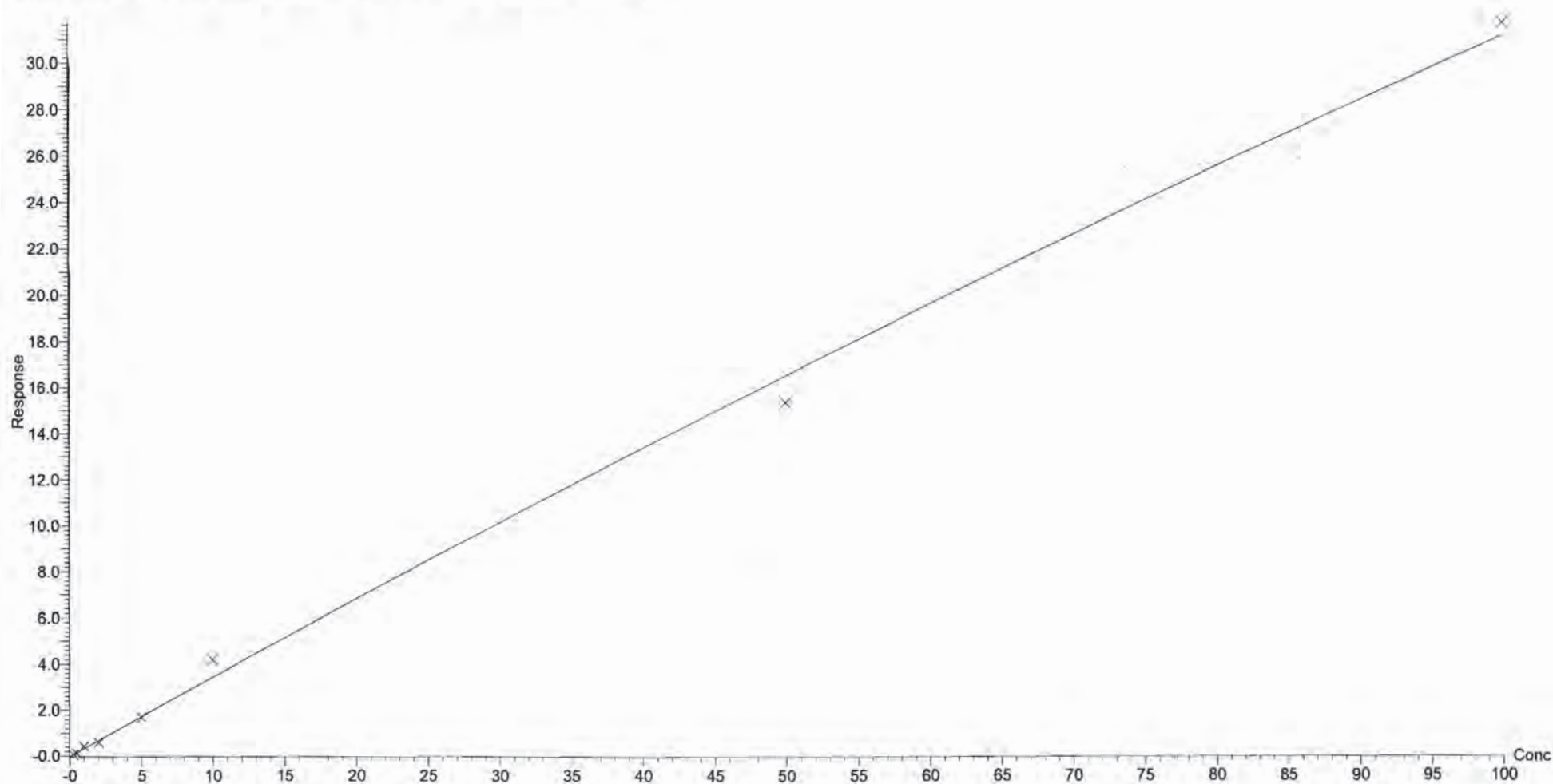
Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

Compound name: PFDS

Coefficient of Determination: $R^2 = 0.993596$ Calibration curve: $-0.000379067 * x^2 + 0.349857 * x + -0.0291515$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

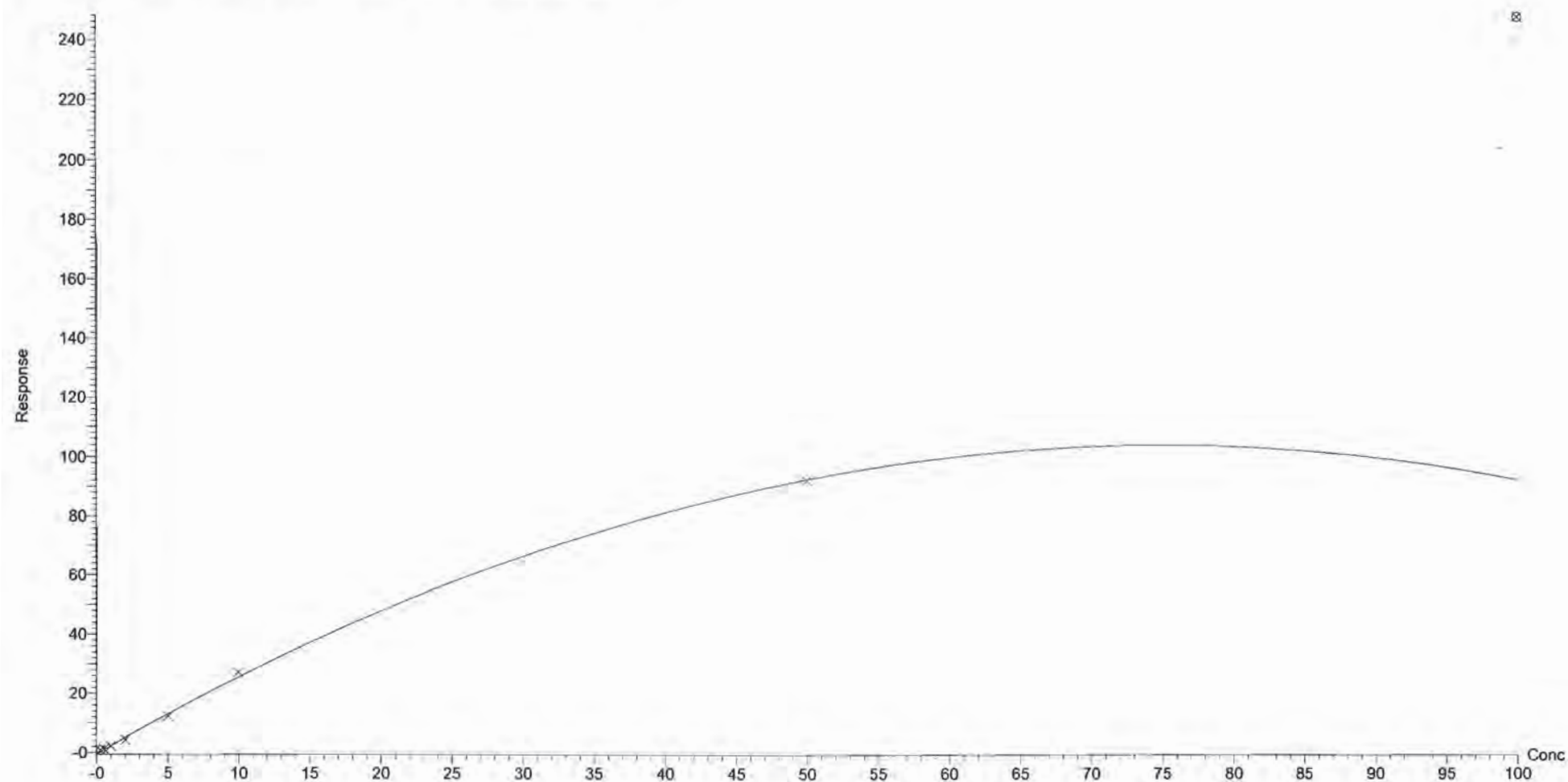
Compound name: PFDoA

Coefficient of Determination: $R^2 = 0.996462$

Calibration curve: $-0.0186224 * x^2 + 2.78866 * x + -0.491721$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

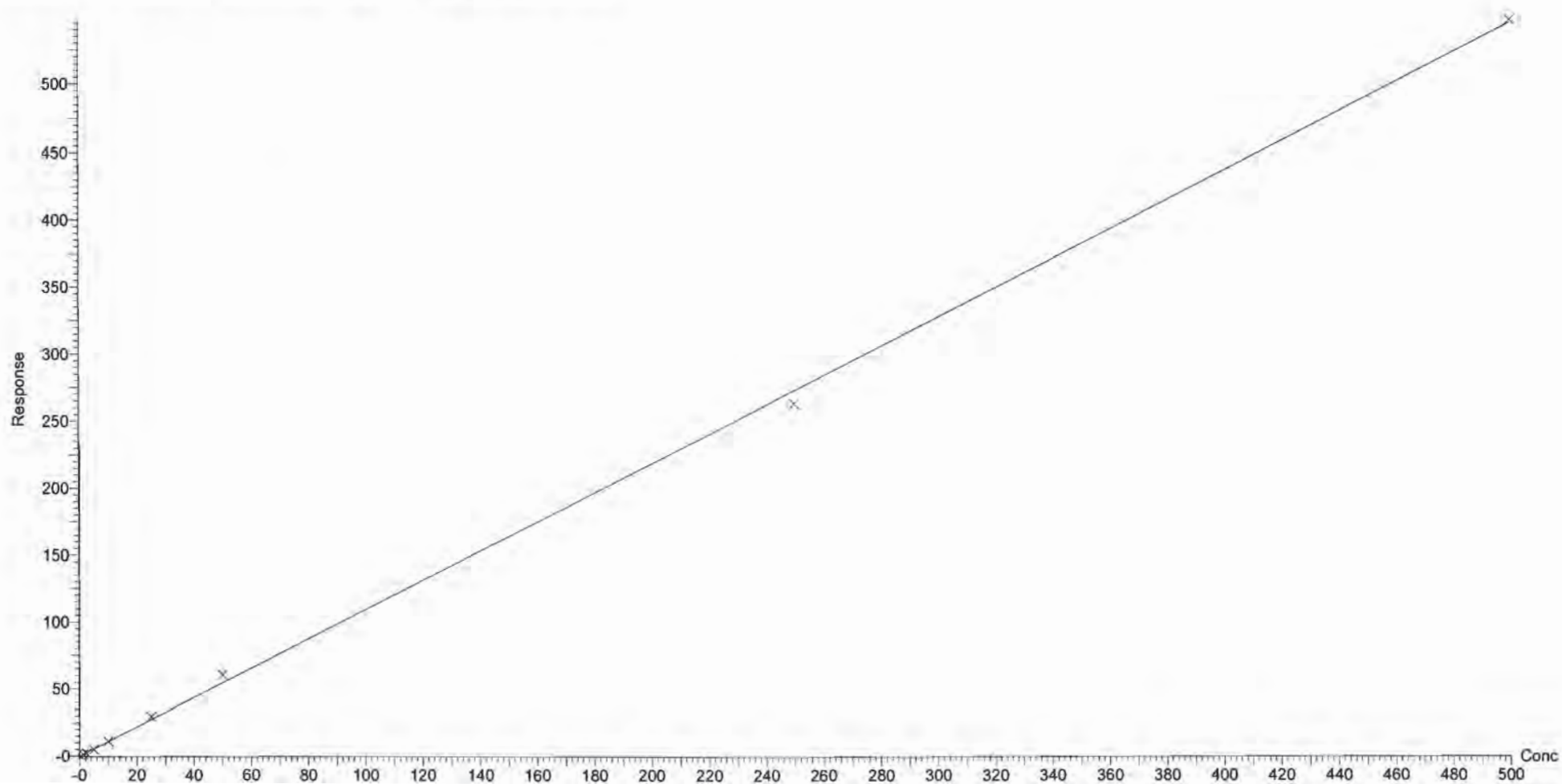
Compound name: N-MeFOSA

Correlation coefficient: $r = 0.999223$, $r^2 = 0.998448$

Calibration curve: $1.09225 * x + -0.176455$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

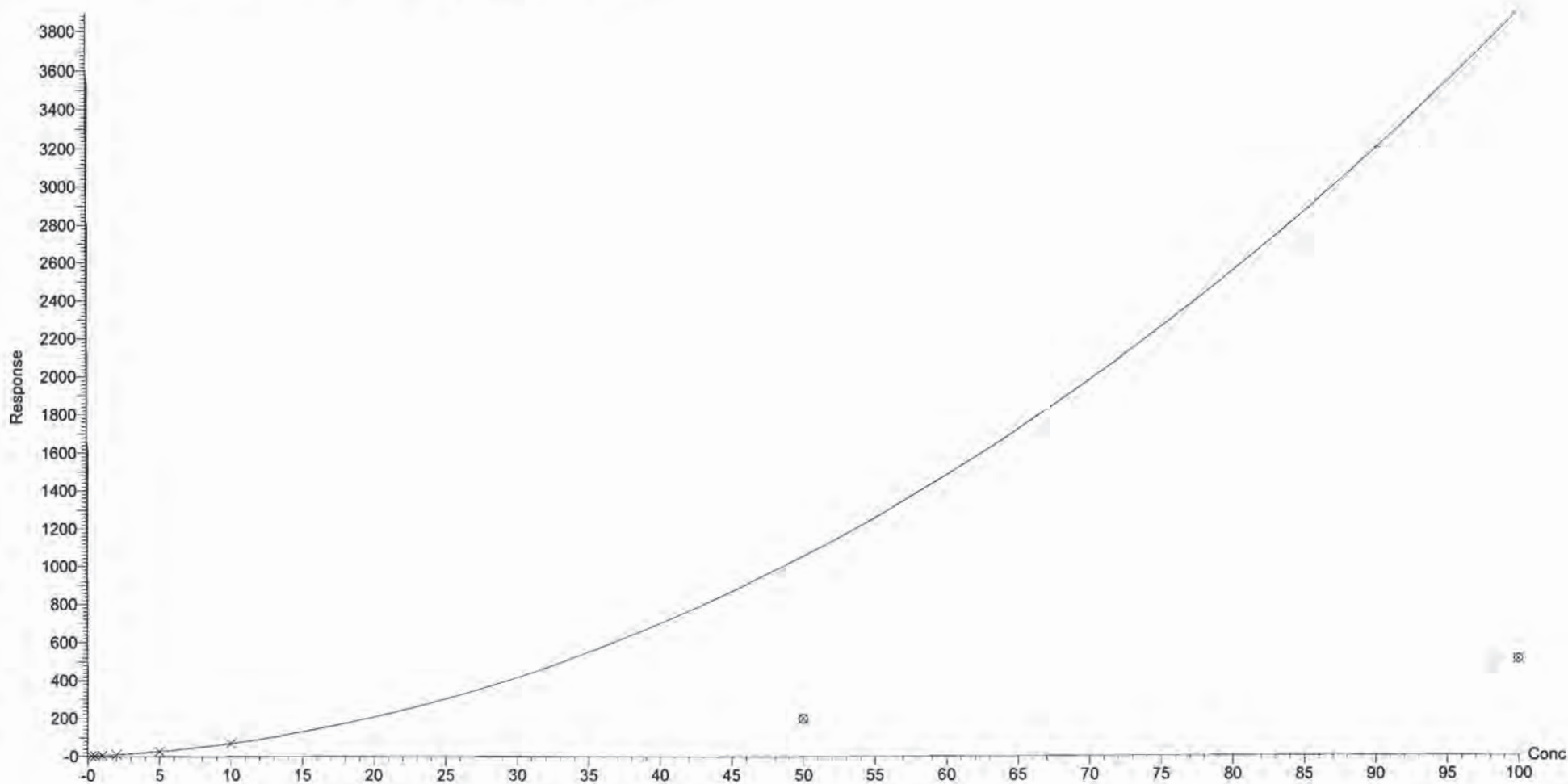
Compound name: PFTTrDA

Coefficient of Determination: $R^2 = 0.997017$

Calibration curve: $0.359559 * x^2 + 2.96789 * x + 1.12885$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

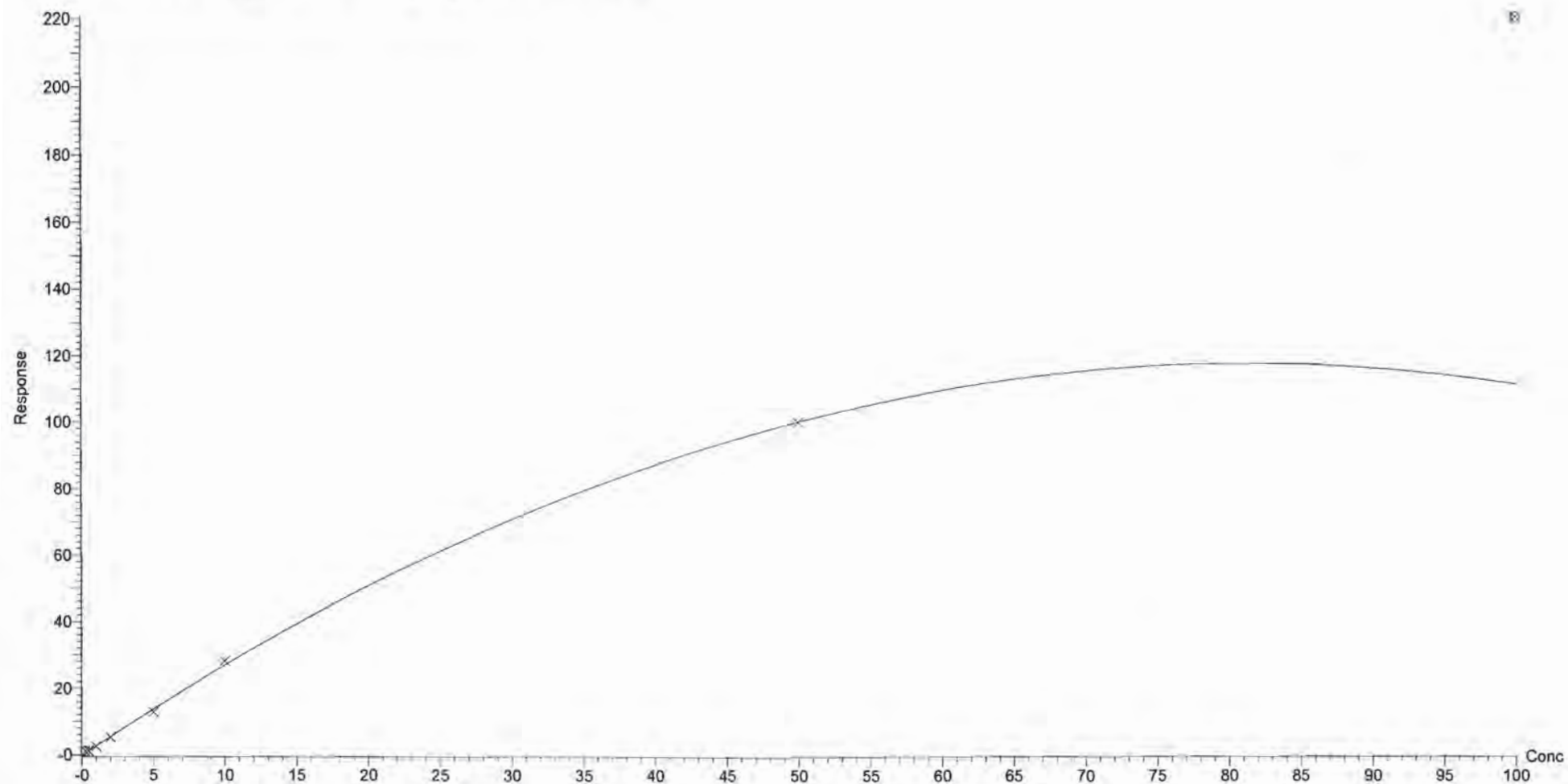
Compound name: PFTeDA

Coefficient of Determination: $R^2 = 0.998702$

Calibration curve: $-0.0178968 * x^2 + 2.90614 * x + -0.360258$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

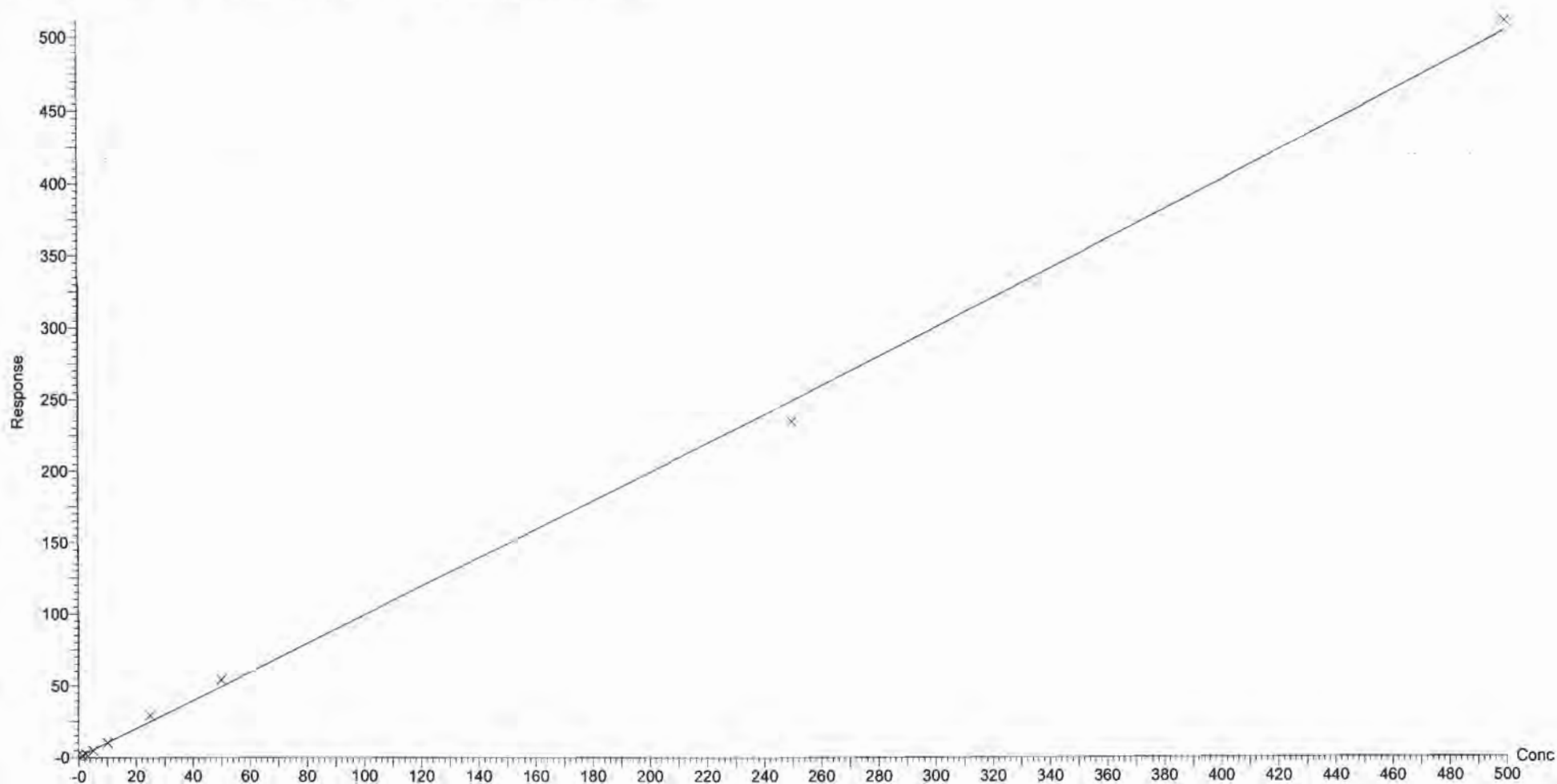
Compound name: N-EtFOSA

Coefficient of Determination: $R^2 = 0.997385$

Calibration curve: $5.6043e-005 * x^2 + 0.980236 * x + 0.202634$

Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

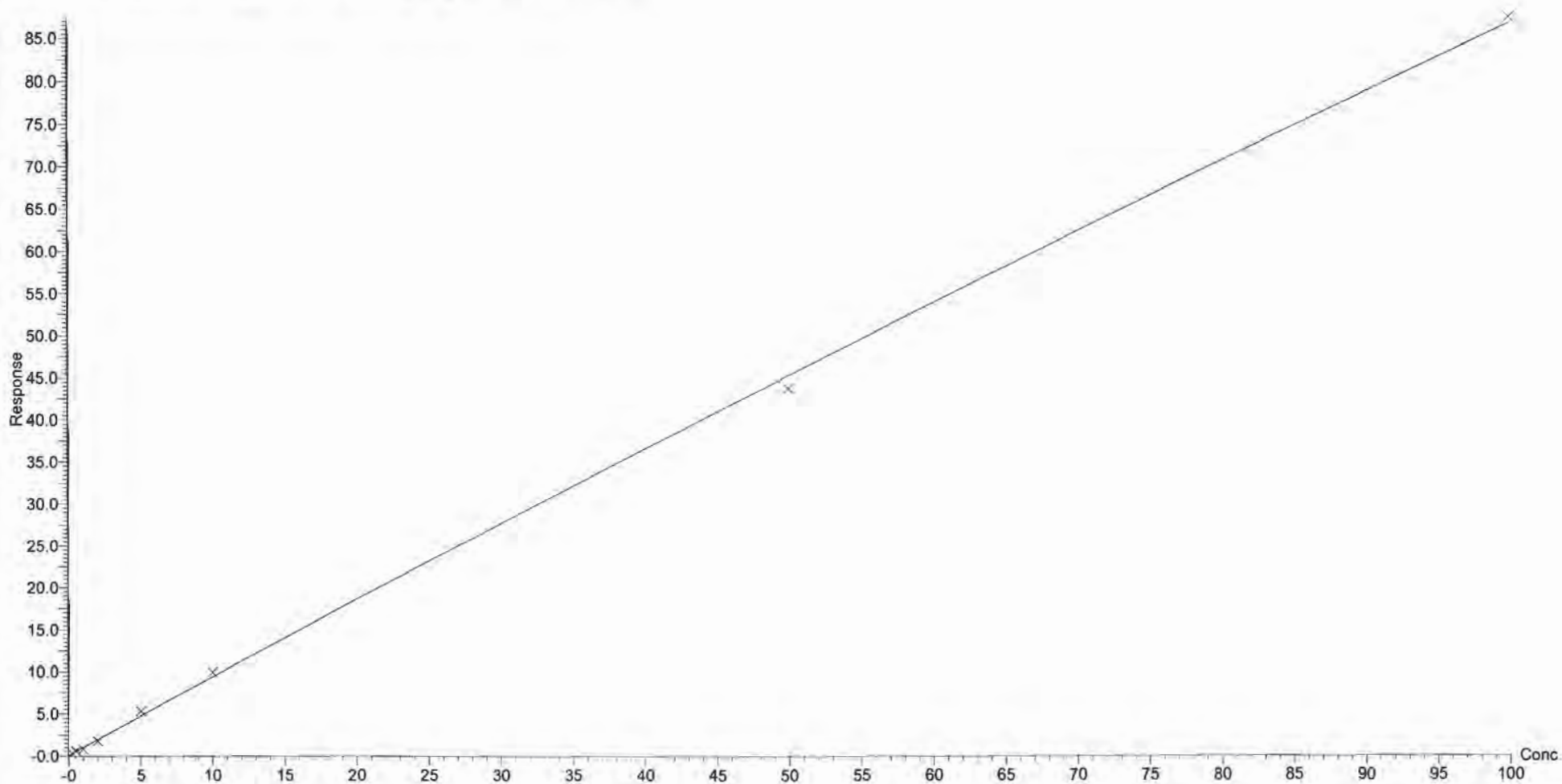
Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

Compound name: PFHxDA

Coefficient of Determination: $R^2 = 0.998421$ Calibration curve: $-0.000730462 * x^2 + 0.939725 * x + 0.0652426$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Vista Analytical Laboratory Q1

Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

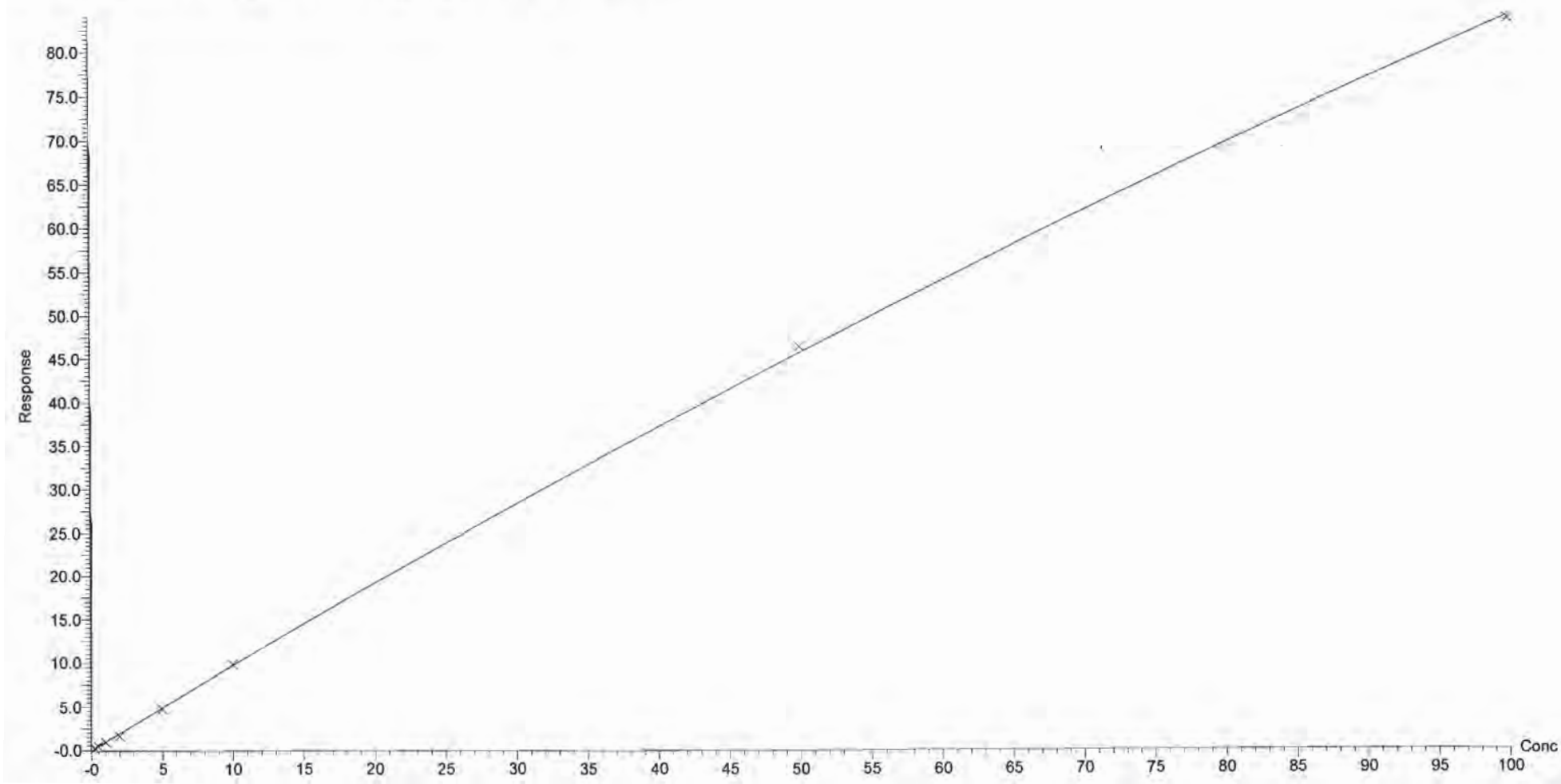
Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

Compound name: PFODA

Coefficient of Determination: $R^2 = 0.999427$ Calibration curve: $-0.00146894 * x^2 + 0.987634 * x + -0.0538913$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

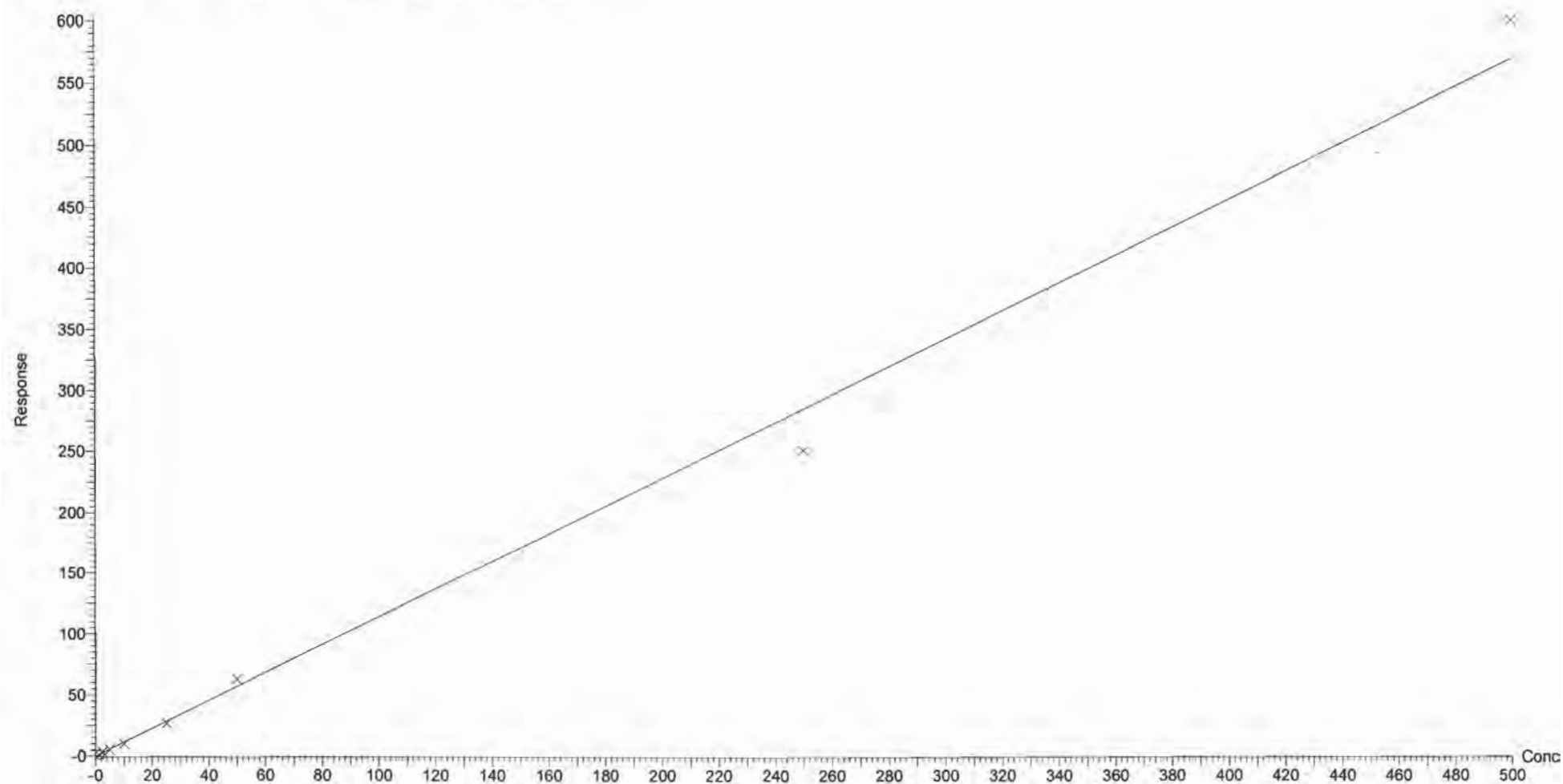
Compound name: N-MeFOSE

Correlation coefficient: $r = 0.996233$, $r^2 = 0.992481$

Calibration curve: $1.14152 * x + -0.140648$

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:40 Pacific Standard Time

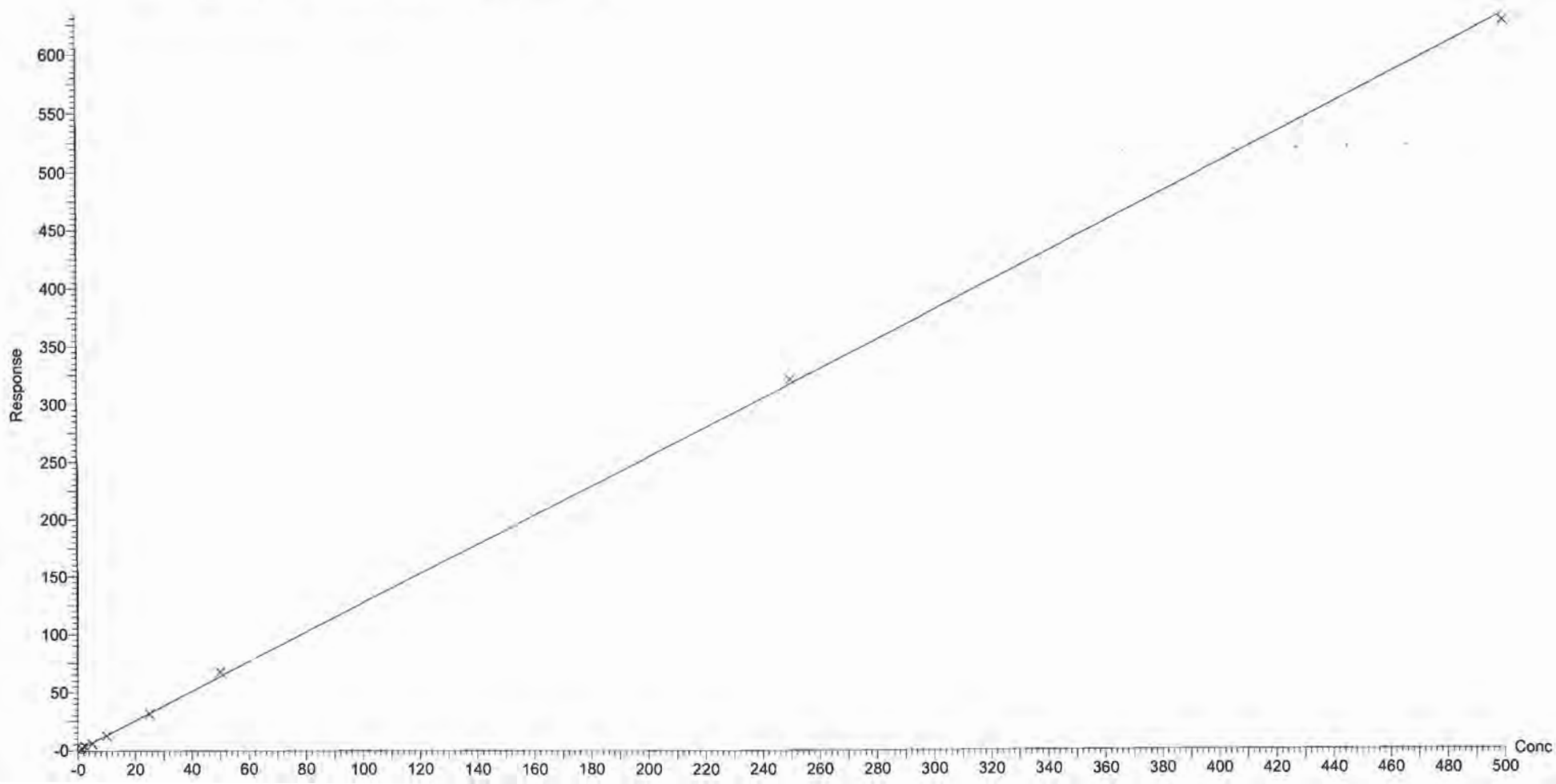
Compound name: N-EtFOSE

Correlation coefficient: $r = 0.999829$, $r^2 = 0.999658$

Calibration curve: $1.26852 * x + -0.111988$

Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

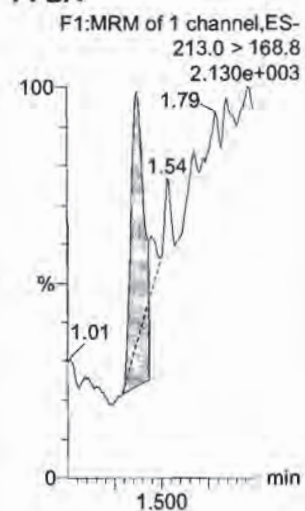
Printed: Monday, January 15, 2018 15:01:56 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 14 Jan 2018 14:14:32

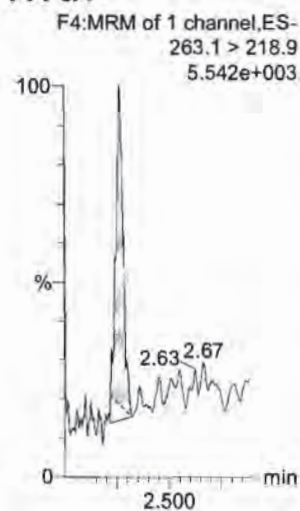
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_1, Date: 14-Jan-2018, Time: 13:30:44, ID: ST180114M1-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

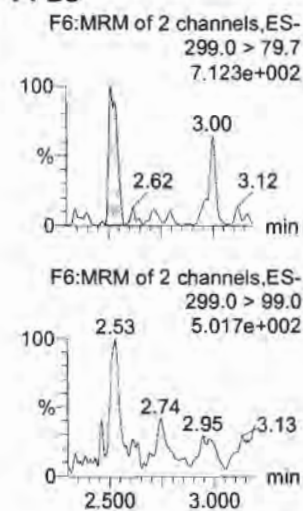
PFBA



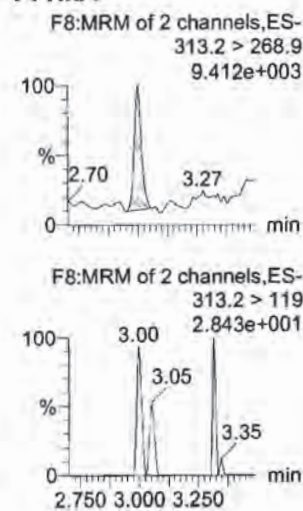
PFPeA



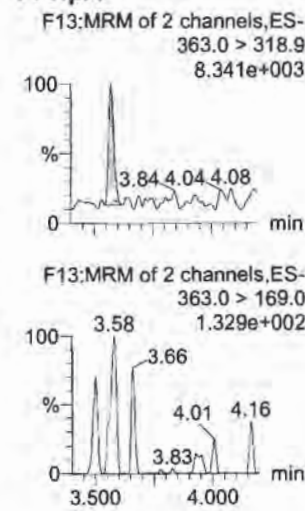
PFBS



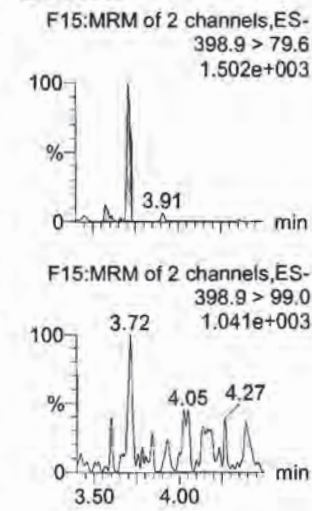
PFHxA



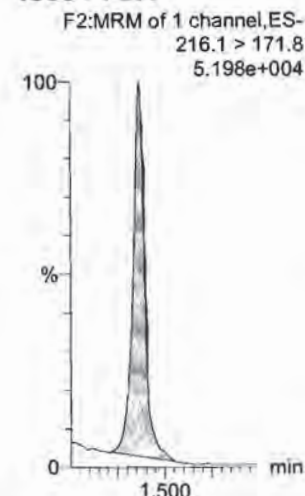
PFHpA



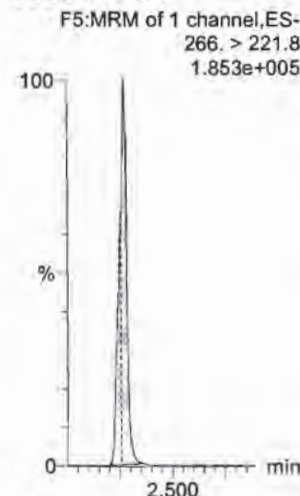
L-PFHxS



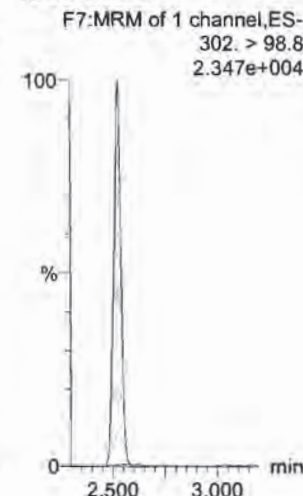
13C3-PFBA



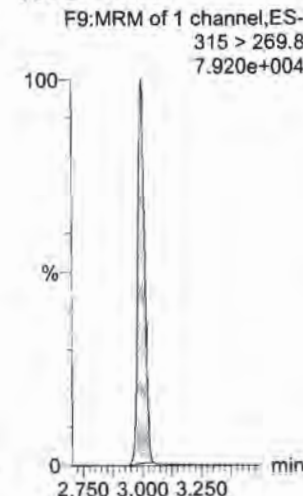
13C3-PFPeA



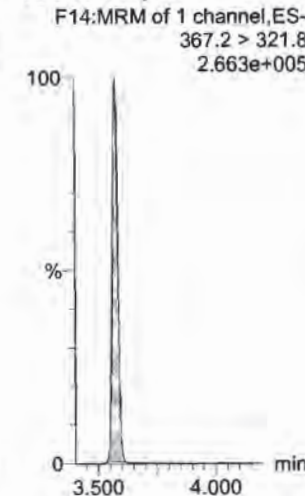
13C3-PFBS



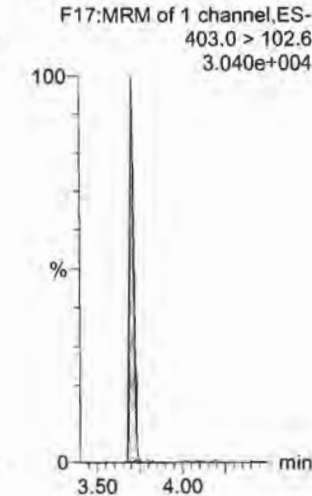
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

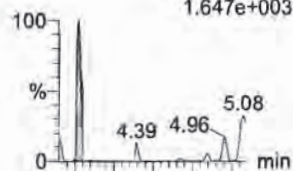
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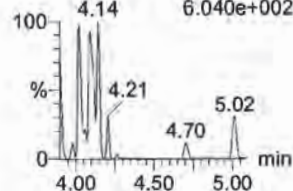
Name: 180114M1_1, Date: 14-Jan-2018, Time: 13:30:44, ID: ST180114M1-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
1.647e+003

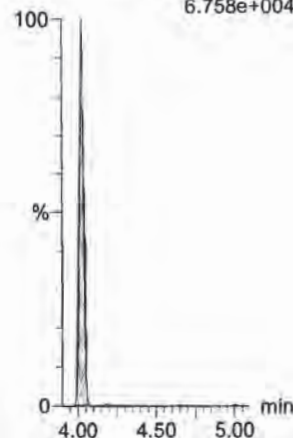


F21:MRM of 2 channels,ES-
427.1 > 80
6.040e+002



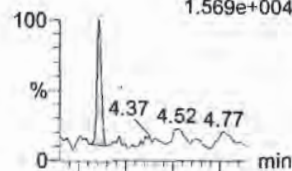
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
6.758e+004

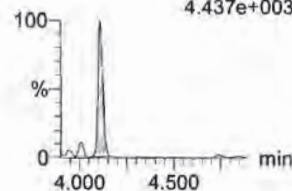


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
1.569e+004

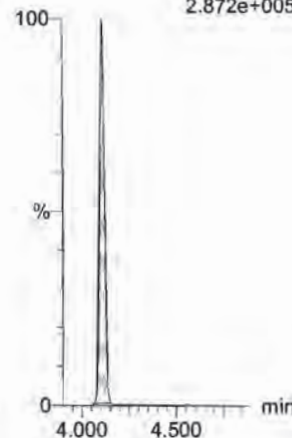


F18:MRM of 2 channels,ES-
413 > 169
4.437e+003



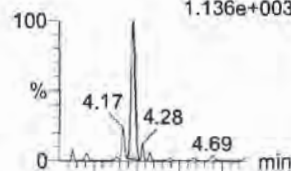
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
2.872e+005

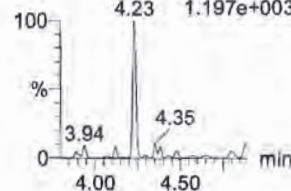


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
1.136e+003

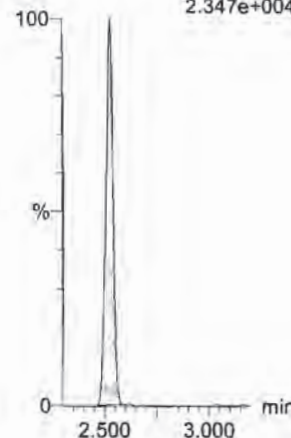


F23:MRM of 2 channels,ES-
449 > 98.7
1.197e+003



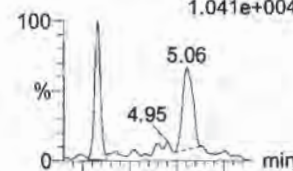
13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
2.347e+004

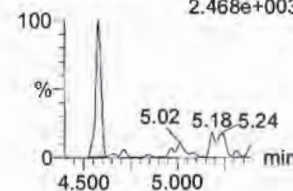


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
1.041e+004

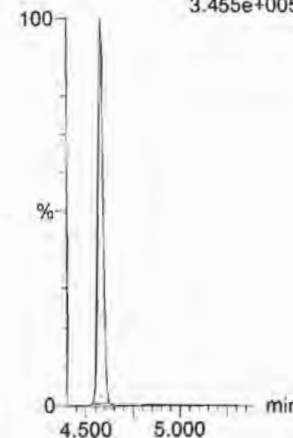


F24:MRM of 2 channels,ES-
463.0 > 219.0
2.468e+003



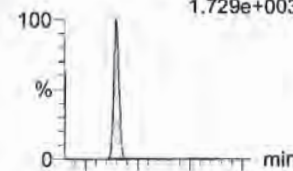
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
3.455e+005

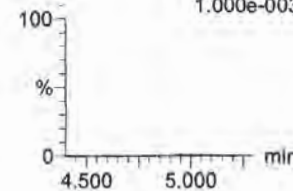


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
1.729e+003

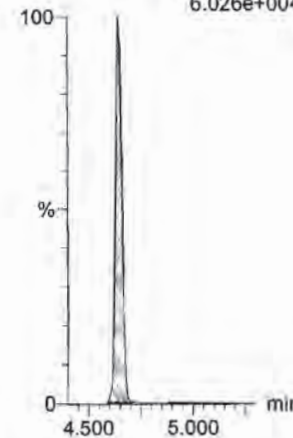


F27:MRM of 2 channels,ES-
498.1 > 478
1.000e+003



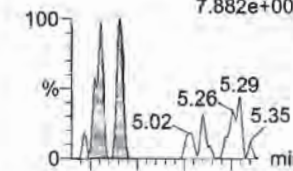
13C8-PFOA

F31:MRM of 1 channel,ES-
506.1 > 77.7
6.026e+004

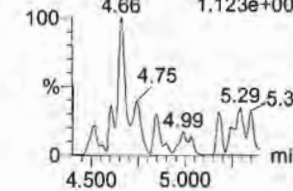


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
7.882e+002

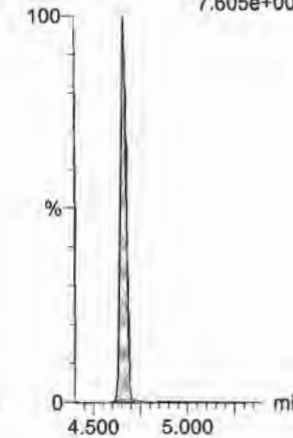


F29:MRM of 2 channels,ES-
499 > 99
1.123e+003



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
7.605e+004



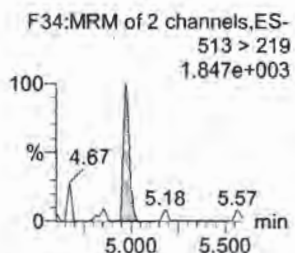
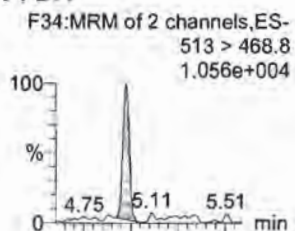
Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

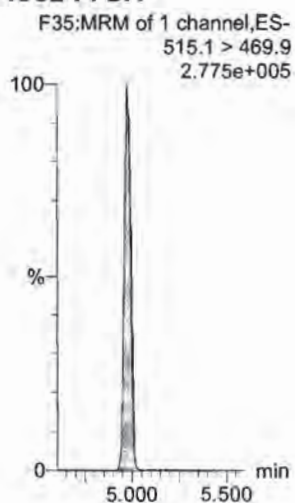
Printed: Monday, January 15, 2018 15:01:56 Pacific Standard Time

Name: 180114M1_1, Date: 14-Jan-2018, Time: 13:30:44, ID: ST180114M1-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

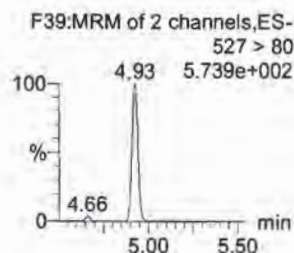
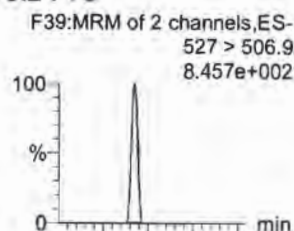
PFDA



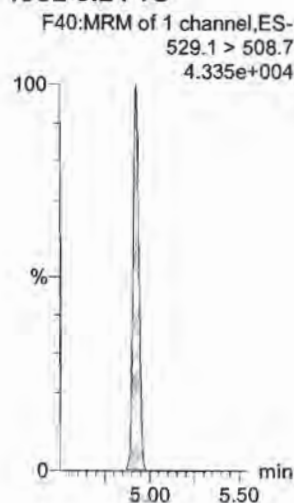
13C2-PFDA



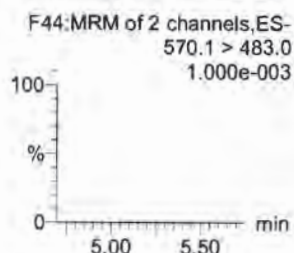
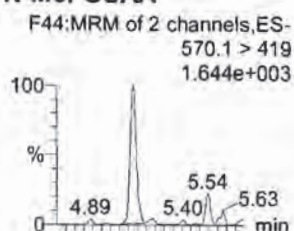
8:2 FTS



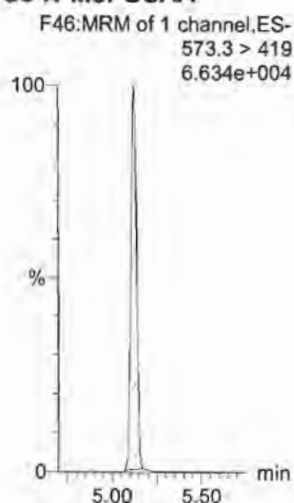
13C2-8:2 FTS



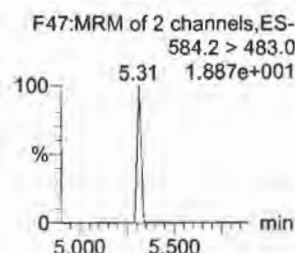
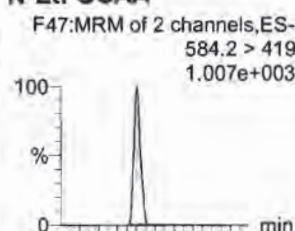
N-MeFOSAA



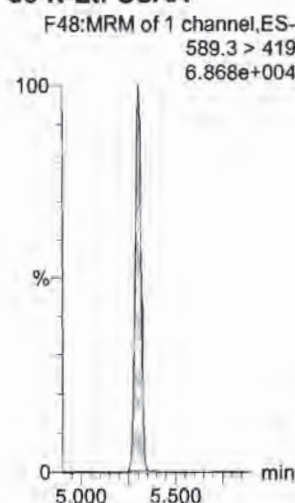
d3-N-MeFOSAA



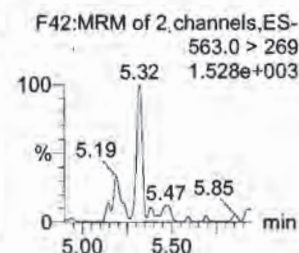
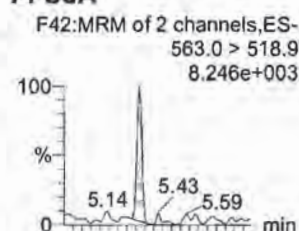
N-EtFOSAA



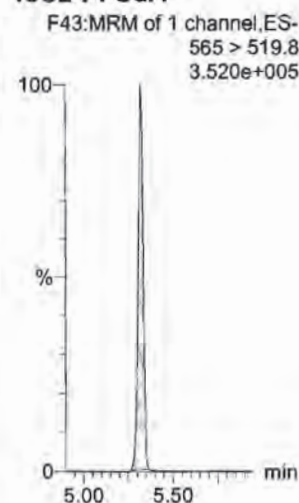
d5-N-EtFOSAA



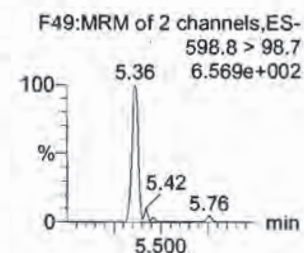
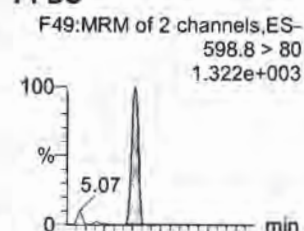
PFUdA



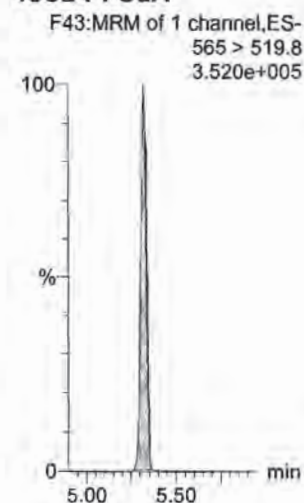
13C2-PFUdA



PFDS



13C2-PFUdA



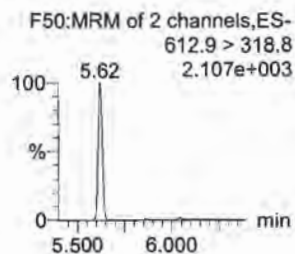
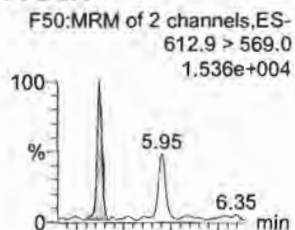
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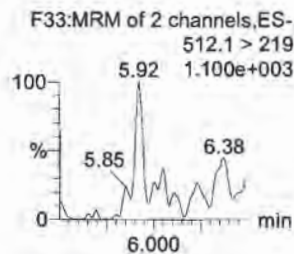
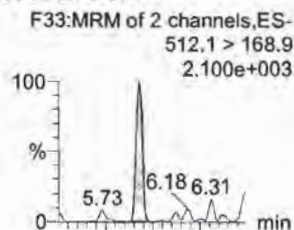
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Name: 180114M1_1, Date: 14-Jan-2018, Time: 13:30:44, ID: ST180114M1-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

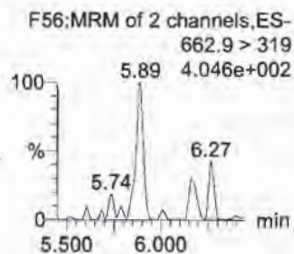
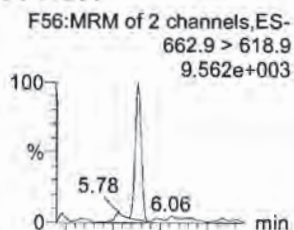
PFDaA



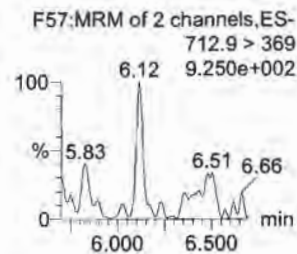
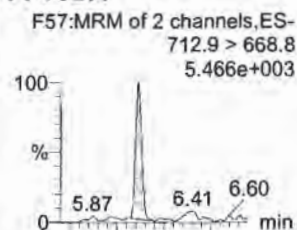
N-MeFOSA



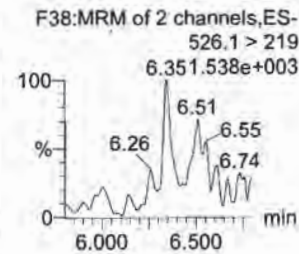
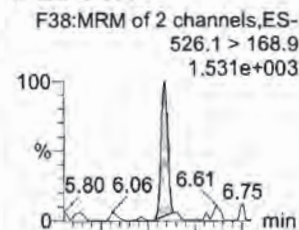
PFTTrDA



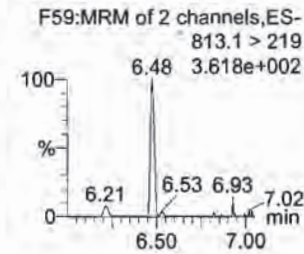
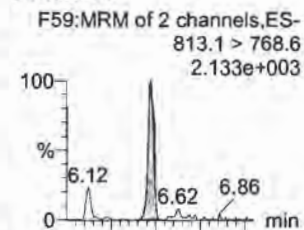
PFTeDA



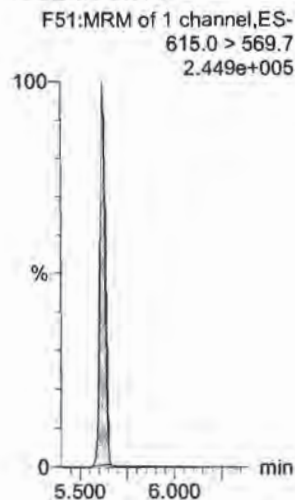
N-EtFOSA



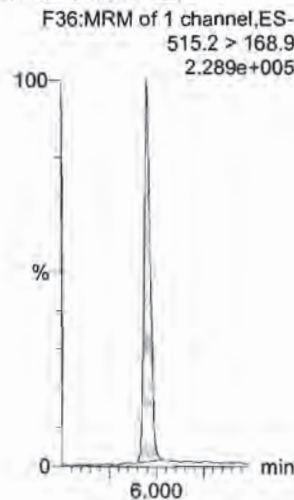
PFHxDA



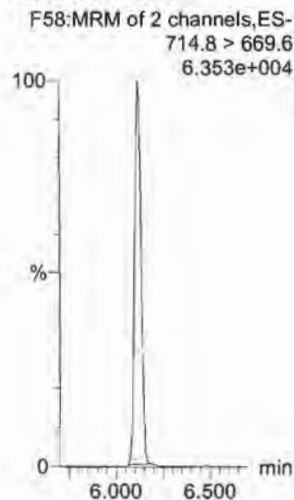
13C2-PFDaA



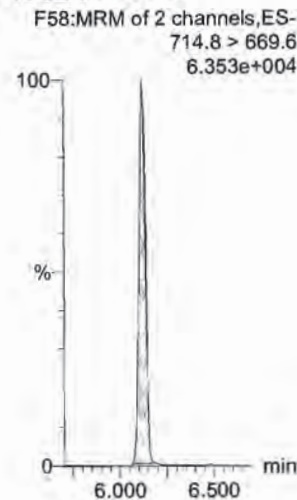
d3-N-MeFOSA



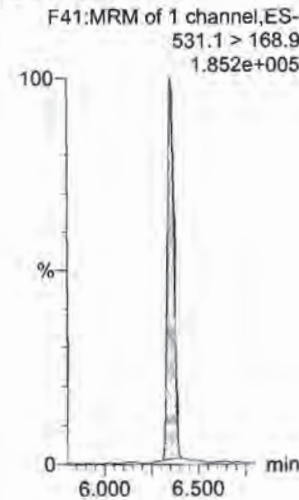
13C2-PFTeDA



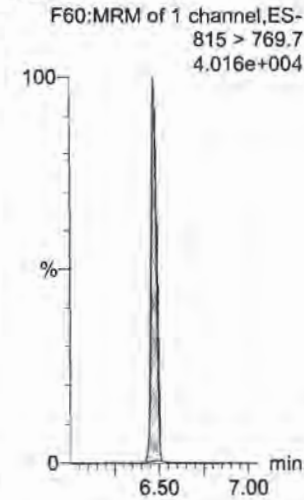
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



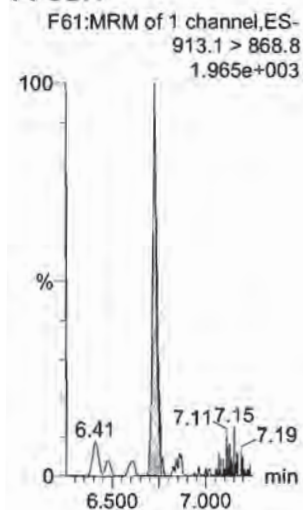
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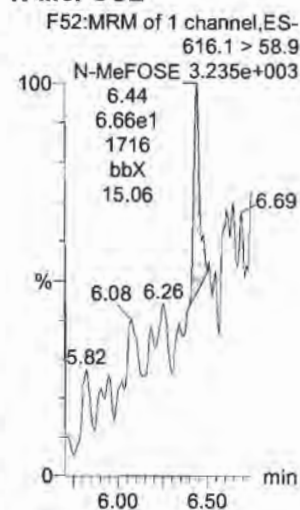
Printed: Monday, January 15, 2018 15:01:56 Pacific Standard Time

Name: 180114M1_1, Date: 14-Jan-2018, Time: 13:30:44, ID: ST180114M1-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

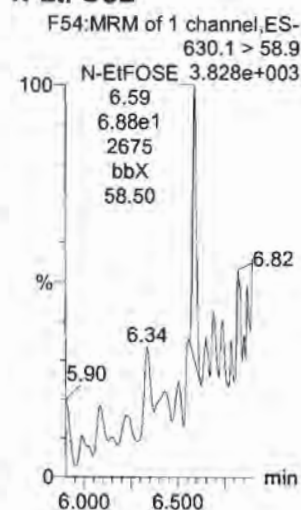
PFODA



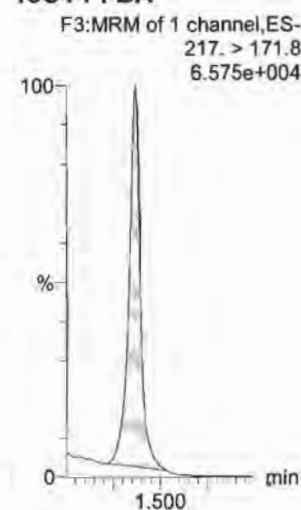
N-MeFOSE



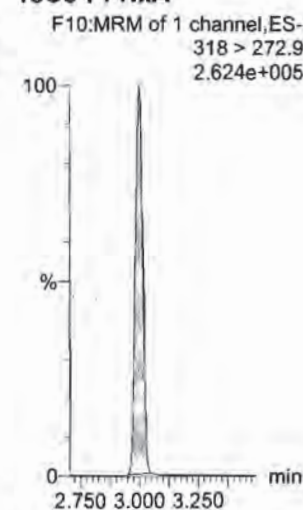
N-EtFOSE



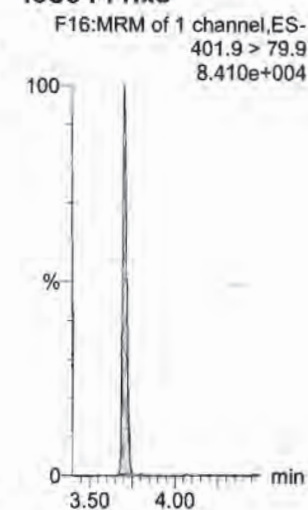
13C4-PFBA



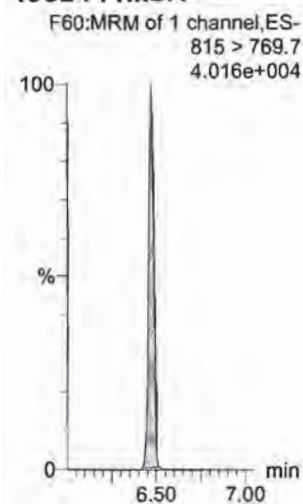
13C5-PFHxA



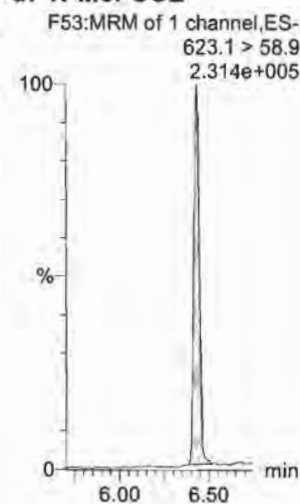
13C3-PFHxS



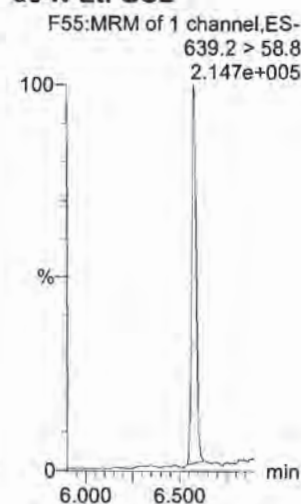
13C2-PFHxDA



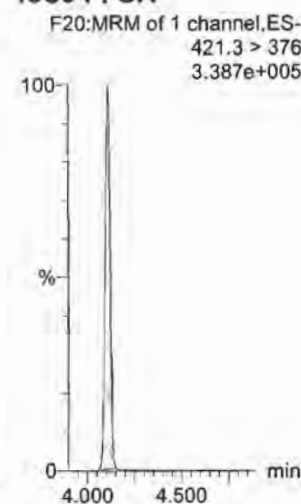
d7-N-MeFOSE



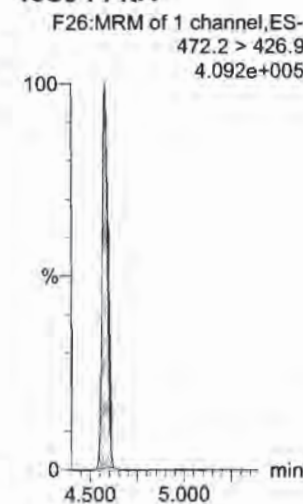
d9-N-EtFOSE



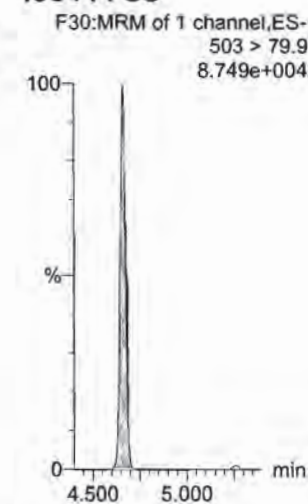
13C8-PFOA



13C9-PFNA



13C4-PFOS



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

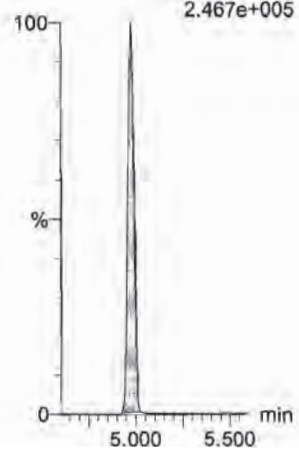
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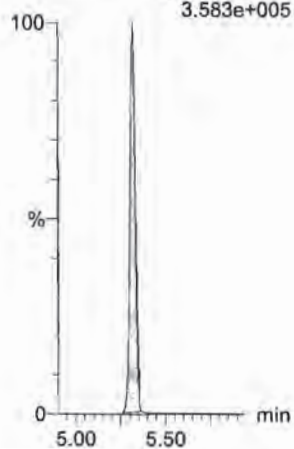
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.467e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
3.583e+005



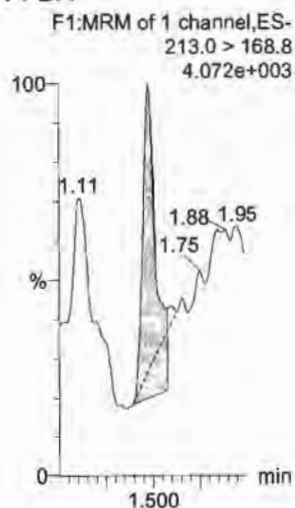
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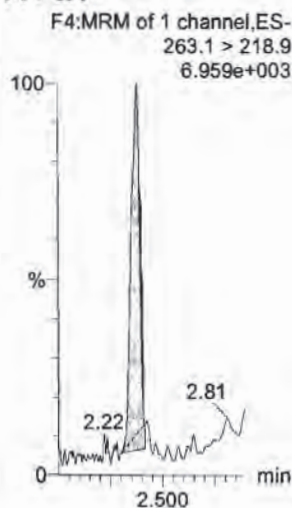
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Name: 180114M1_2, Date: 14-Jan-2018, Time: 13:42:02, ID: ST180114M1-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607

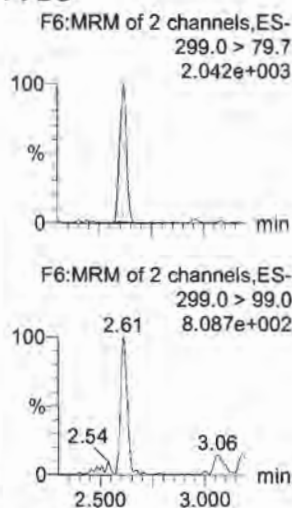
PFBA



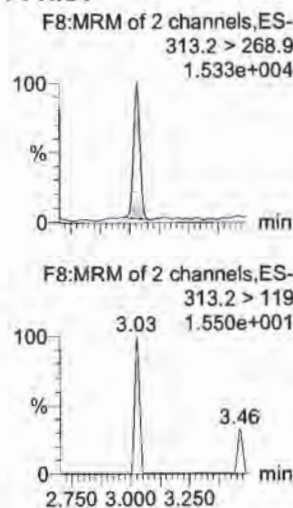
PFPeA



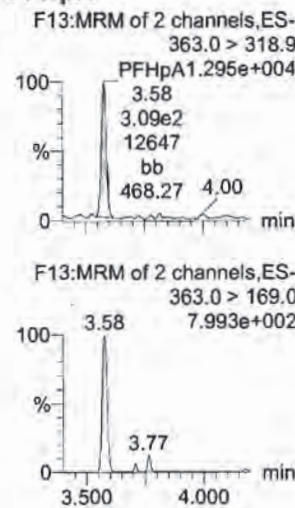
PFBS



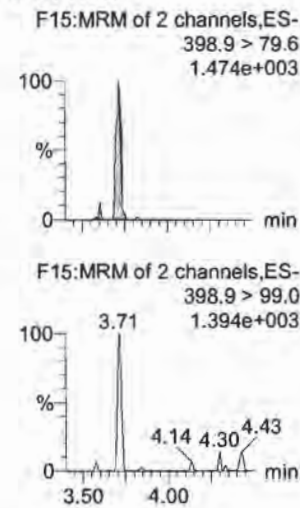
PFHxA



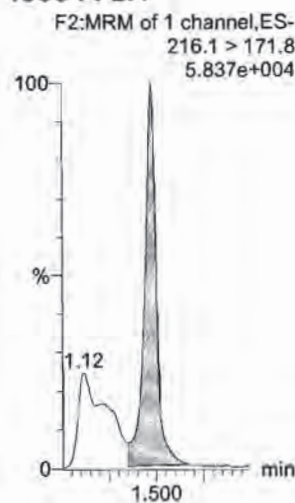
PFHpA



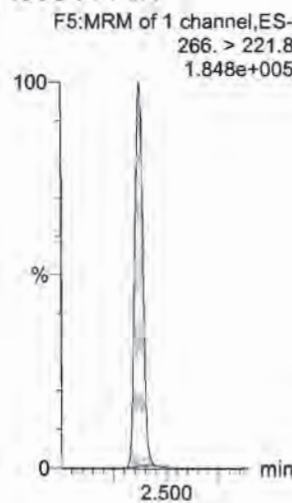
L-PFHxS



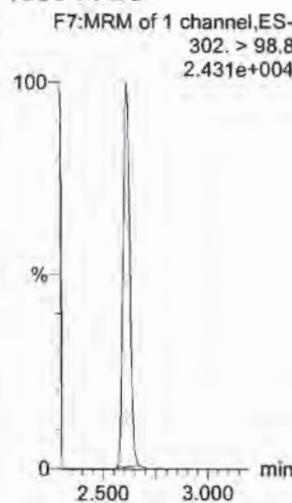
13C3-PFBA



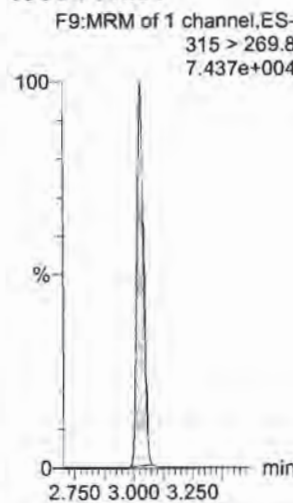
13C3-PFPeA



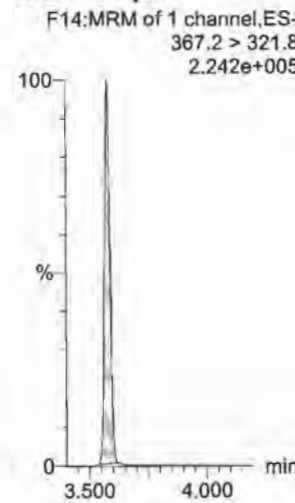
13C3-PFBS



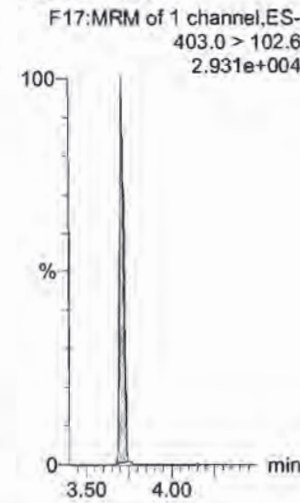
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

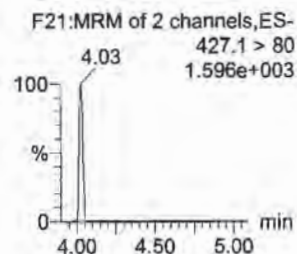
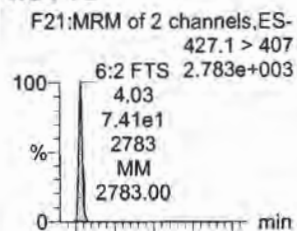


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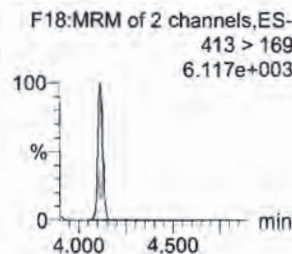
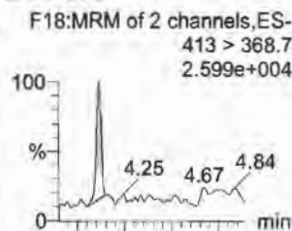
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Name: 180114M1_2, Date: 14-Jan-2018, Time: 13:42:02, ID: ST180114M1-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607

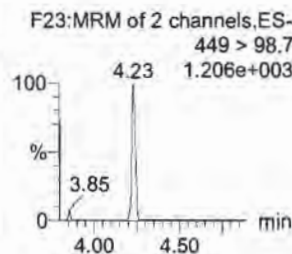
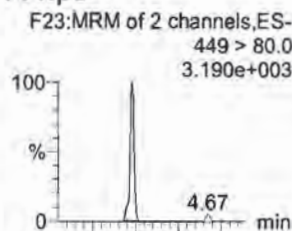
6:2 FTS



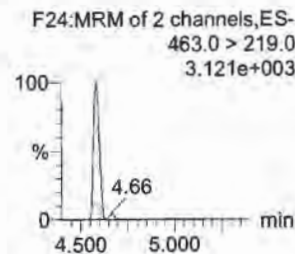
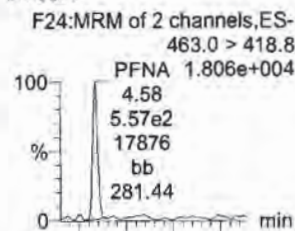
L-PFOA



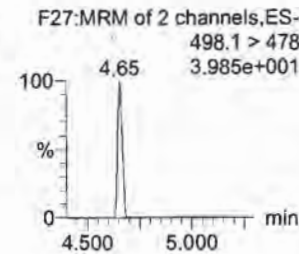
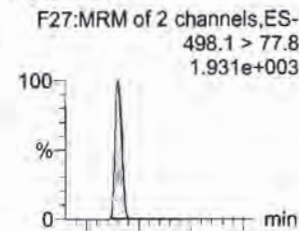
PFHpS



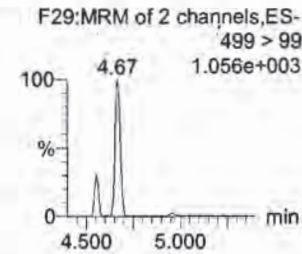
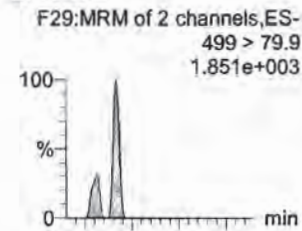
PFNA



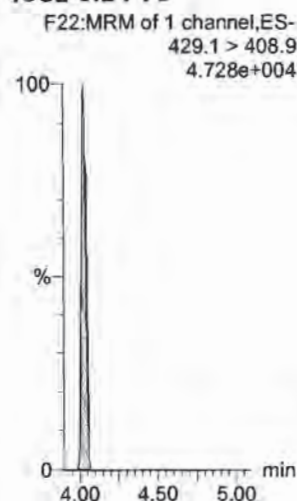
PFOSA



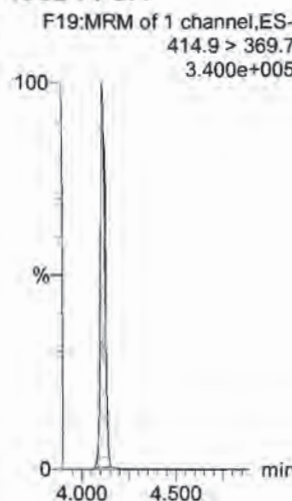
L-PFOS



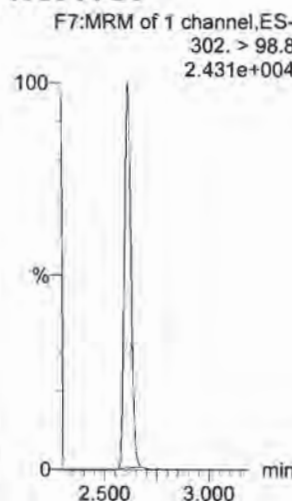
13C2-6:2 FTS



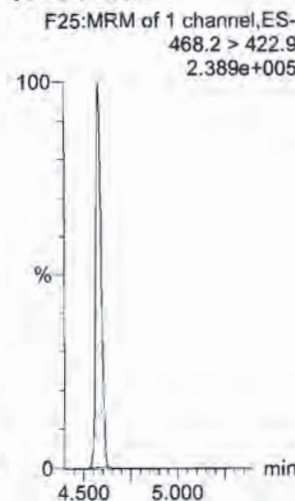
13C2-PFOA



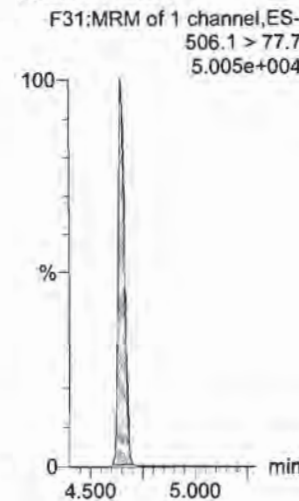
13C3-PFBS



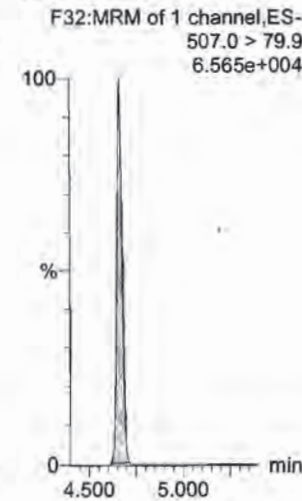
13C5-PFNA



13C8-PFOSA



13C8-PFOS



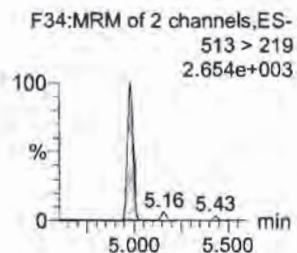
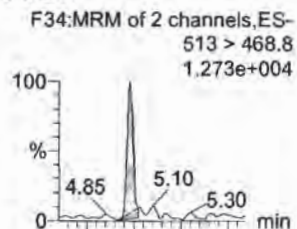
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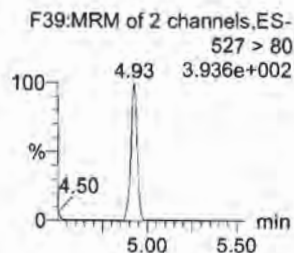
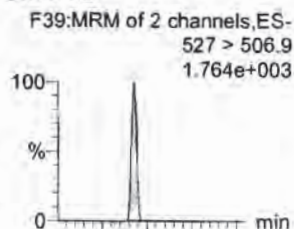
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Name: 180114M1_2, Date: 14-Jan-2018, Time: 13:42:02, ID: ST180114M1-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607

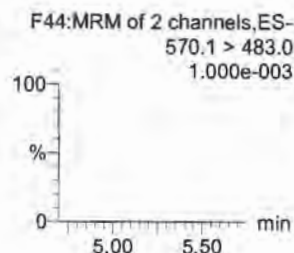
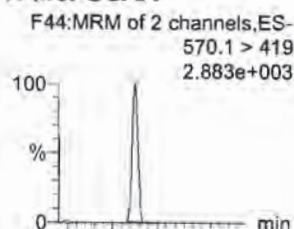
PFDA



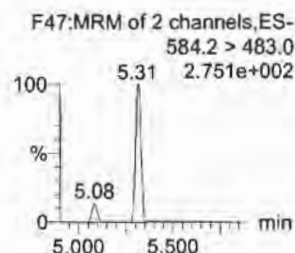
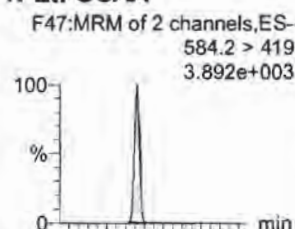
8:2 FTS



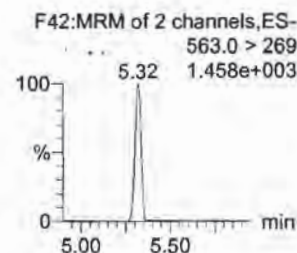
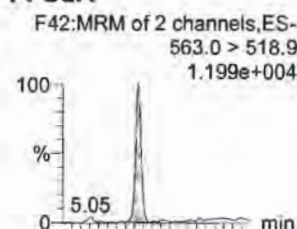
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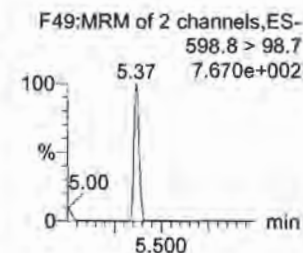
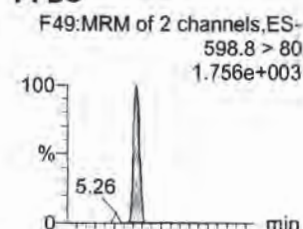
N-EtFOSAA



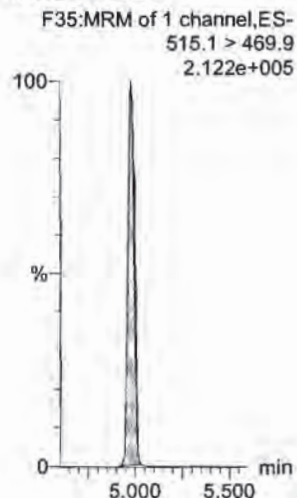
PFUdA



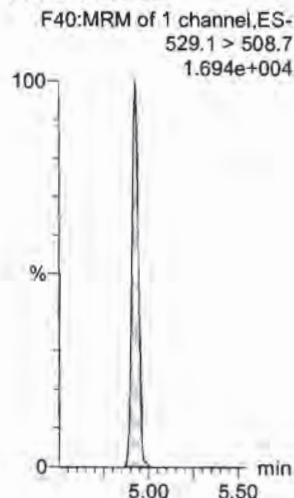
PFDS



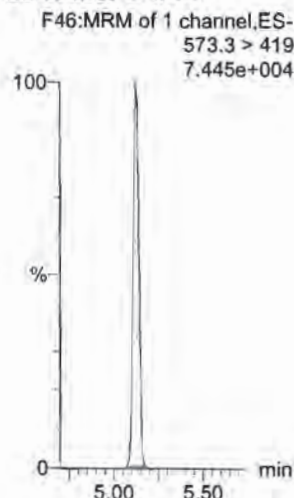
13C2-PFDA



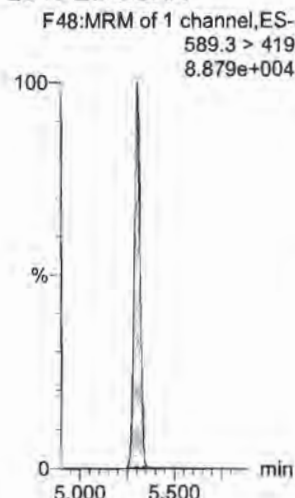
13C2-8:2 FTS



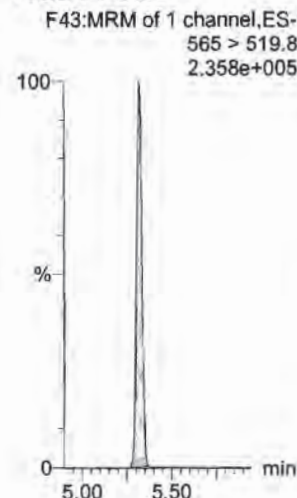
d3-N-MeFOSAA



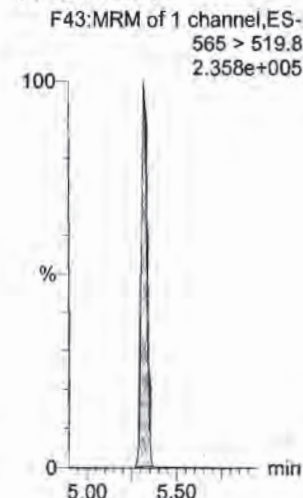
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA

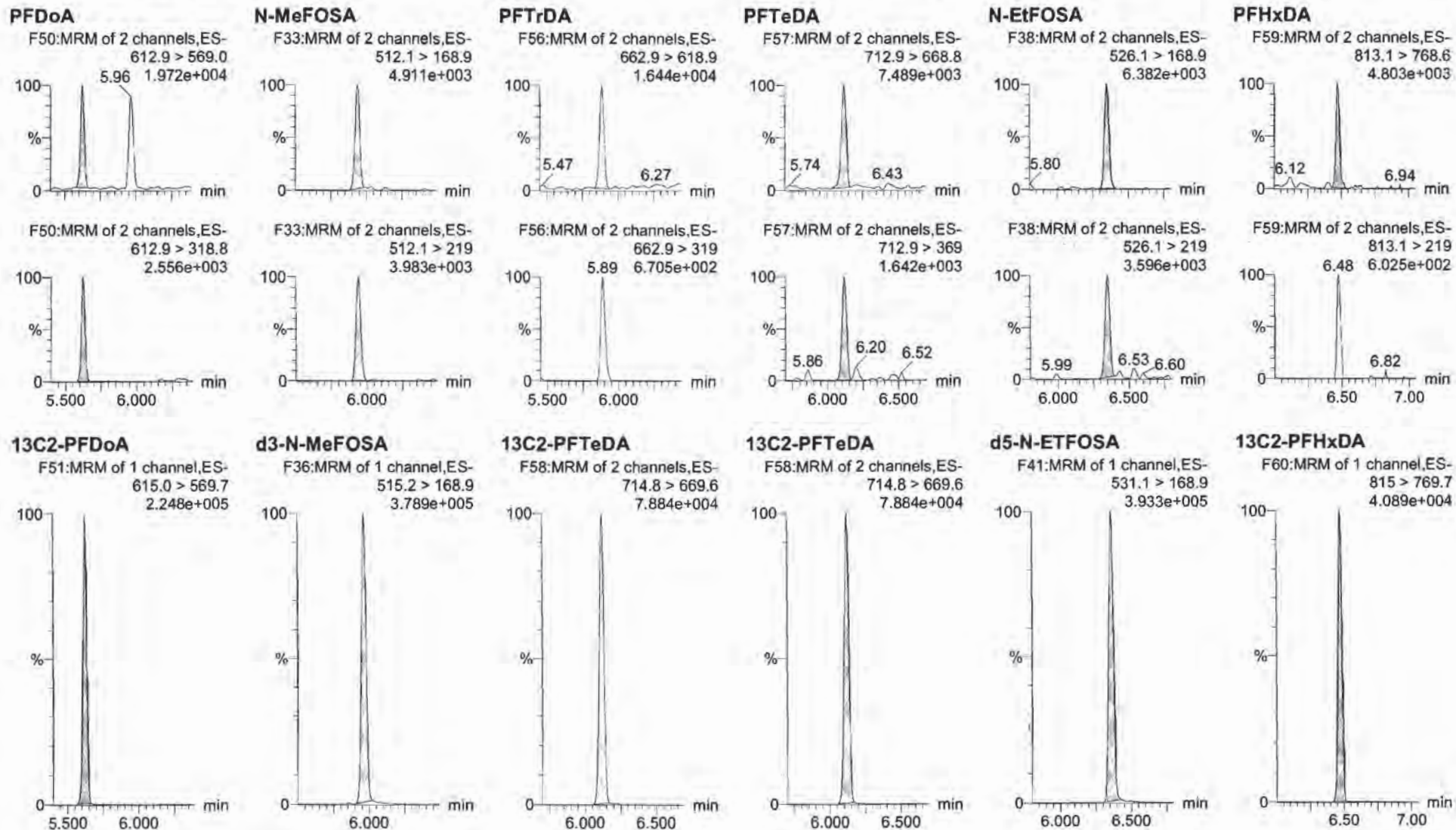


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Printed: Monday, January 15, 2018 15:01:56 Pacific Standard Time

Name: 180114M1_2, Date: 14-Jan-2018, Time: 13:42:02, ID: ST180114M1-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607



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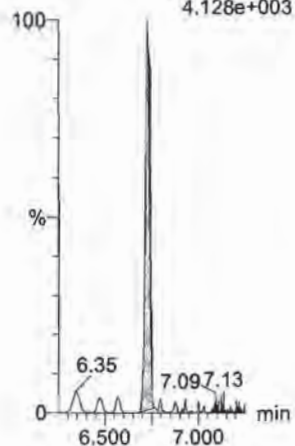
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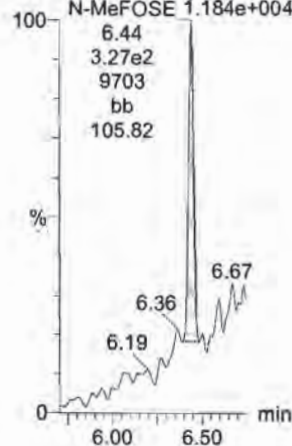
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
4.128e+003



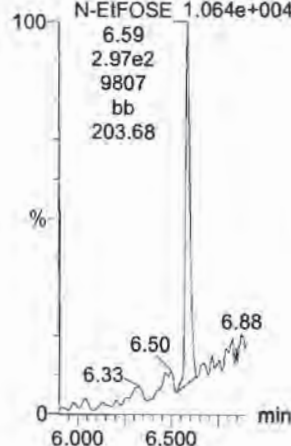
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
1.184e+004



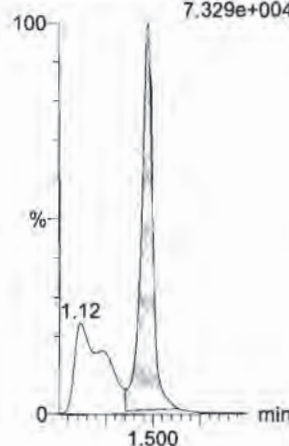
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
1.064e+004



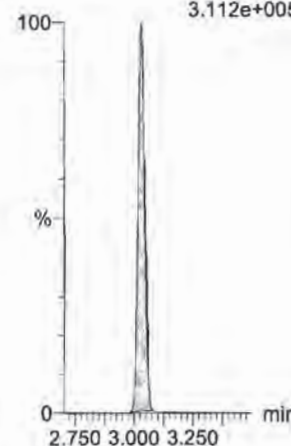
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
7.329e+004



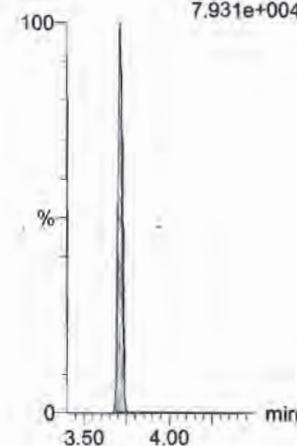
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
3.112e+005



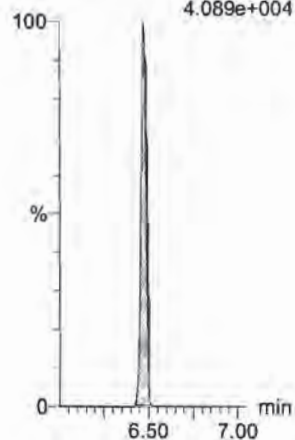
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
7.931e+004



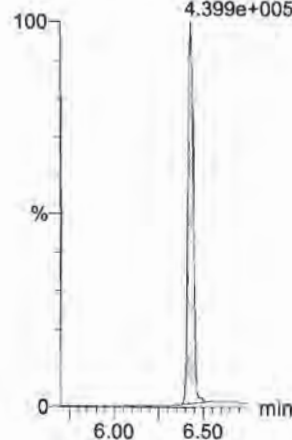
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
4.089e+004



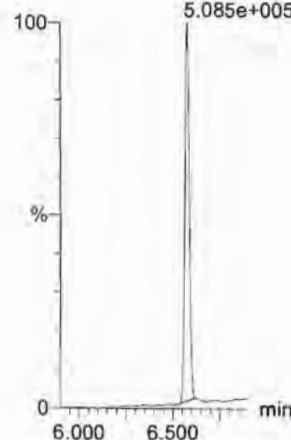
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
4.399e+005



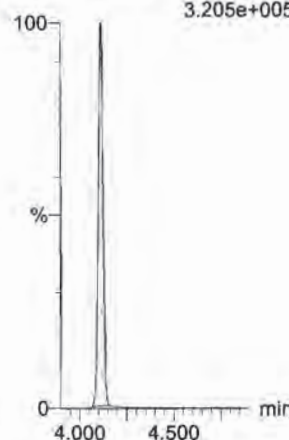
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
5.085e+005



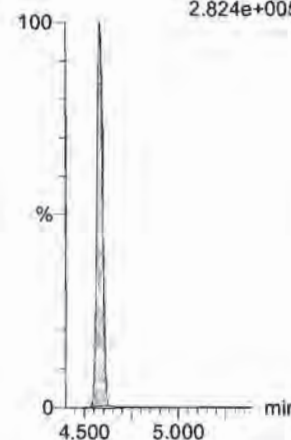
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.205e+005



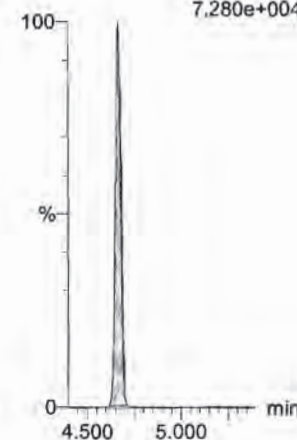
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
2.824e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
7.280e+004



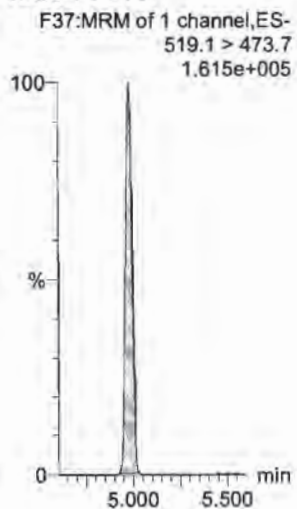
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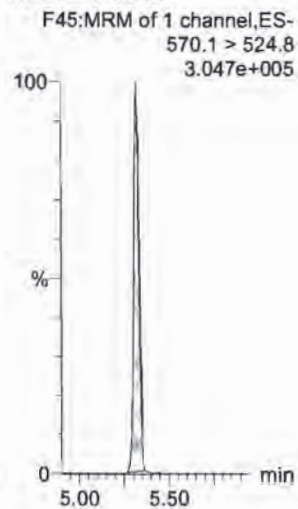
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Name: 180114M1_2, Date: 14-Jan-2018, Time: 13:42:02, ID: ST180114M1-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607

13C6-PFDA



13C7-PFUDa



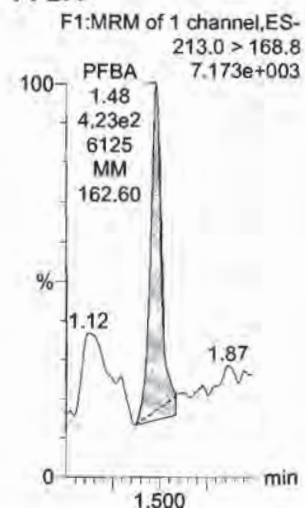
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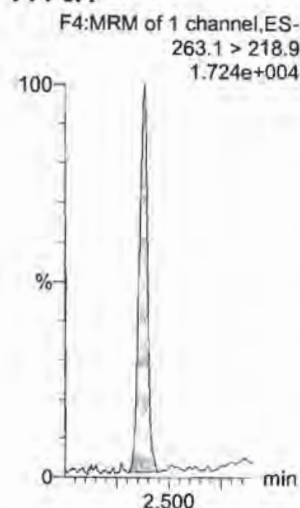
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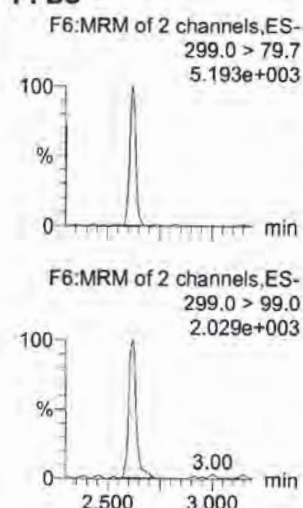
PFBA



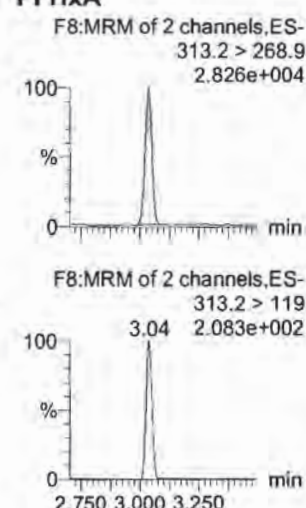
PFPeA



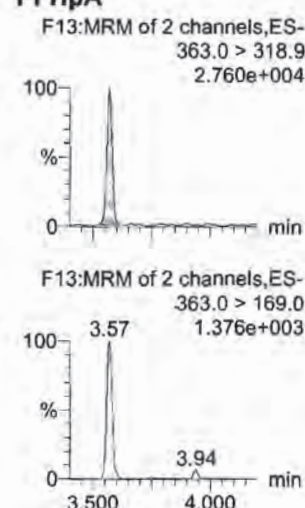
PFBS



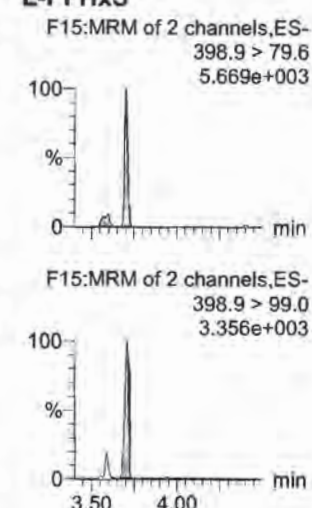
PFHxA



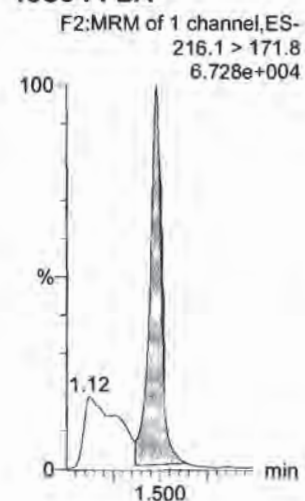
PFHpA



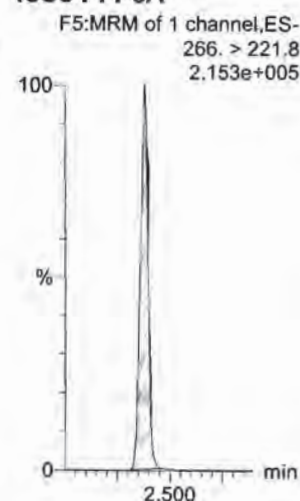
L-PFHxS



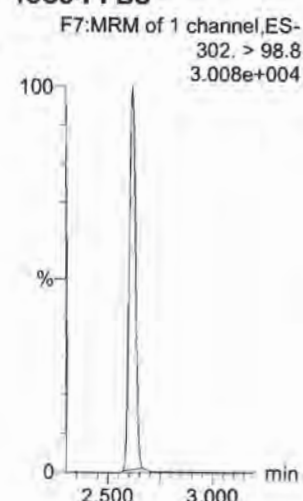
13C3-PFBA



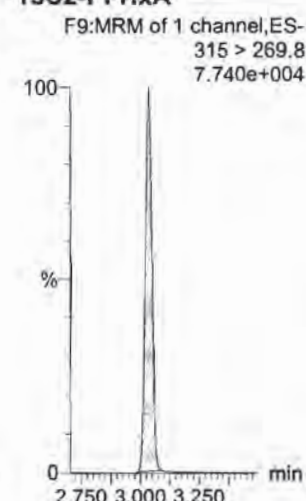
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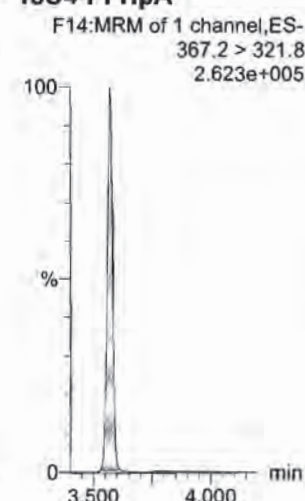
13C3-PFBS



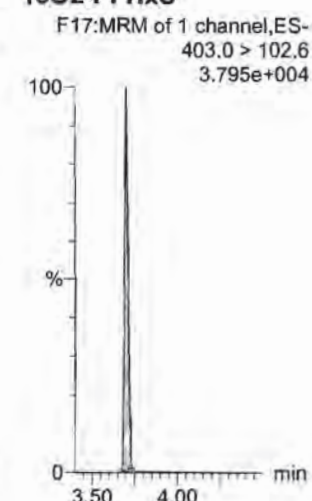
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



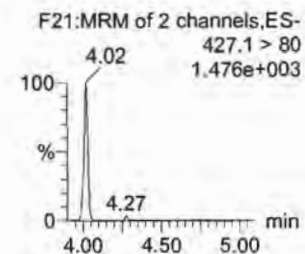
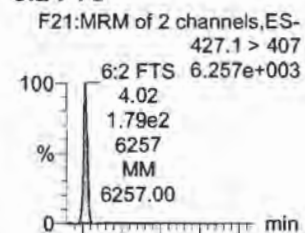
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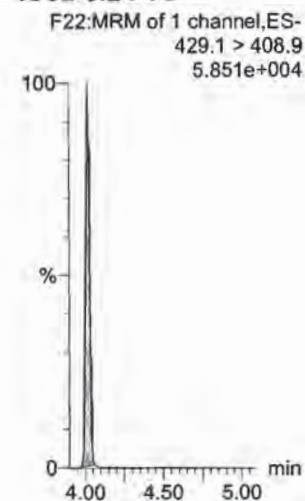
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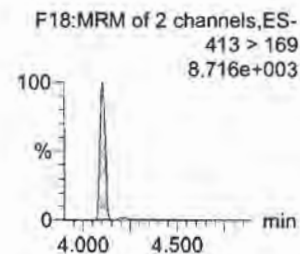
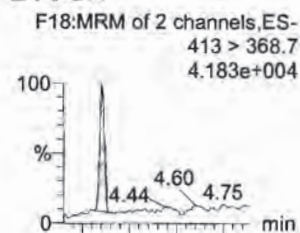
6:2 FTS



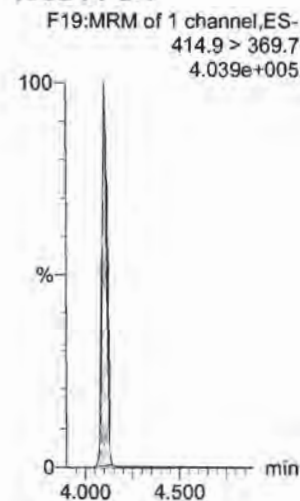
13C2-6:2 FTS



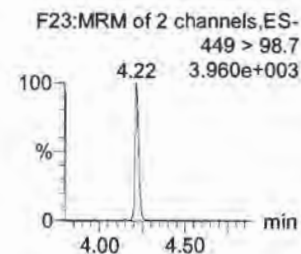
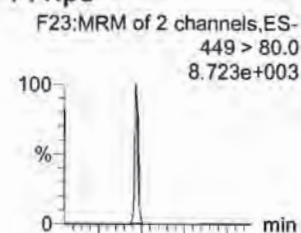
L-PFOA



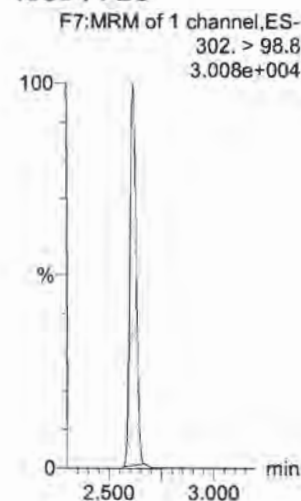
13C2-PFOA



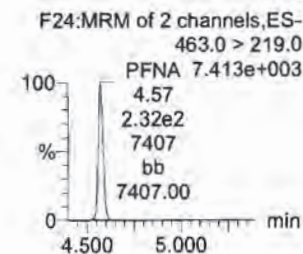
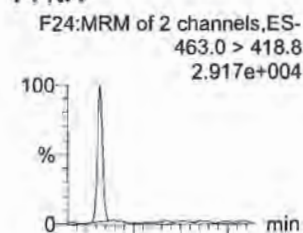
PFHpS



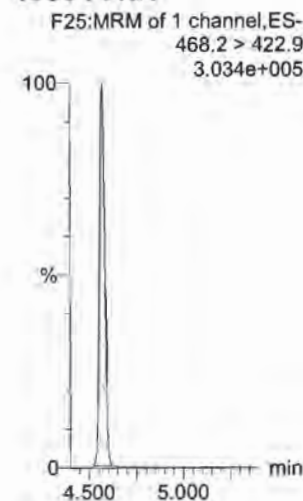
13C3-PFBS



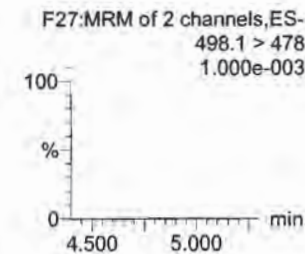
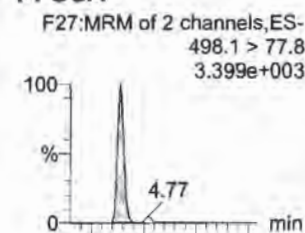
PFNA



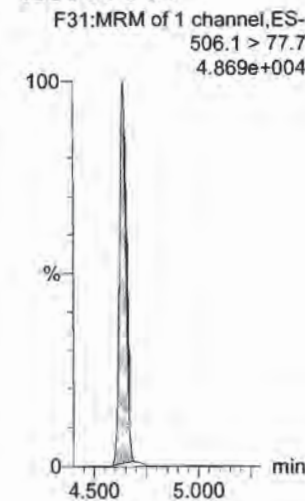
13C5-PFNA



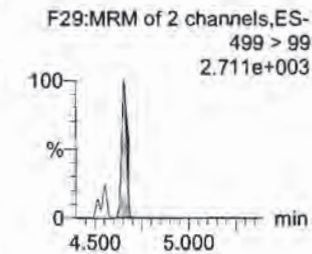
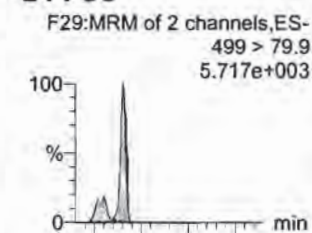
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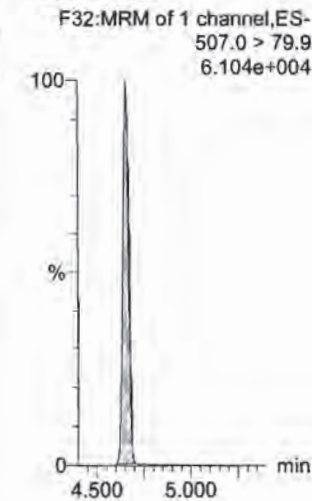
13C8-PFOSA



L-PFOS



13C8-PFOS



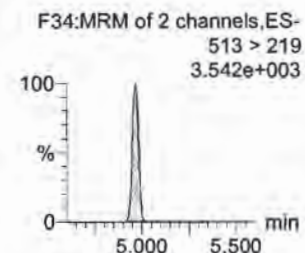
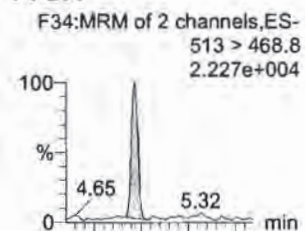
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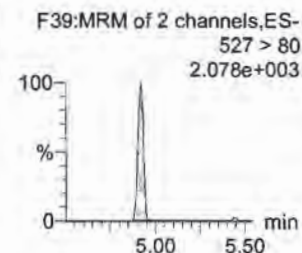
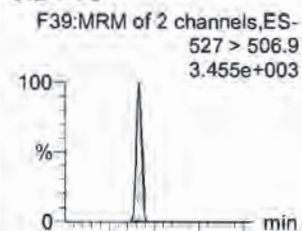
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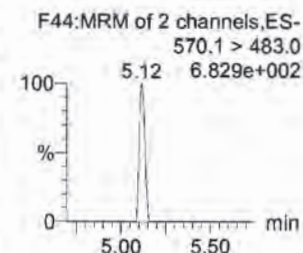
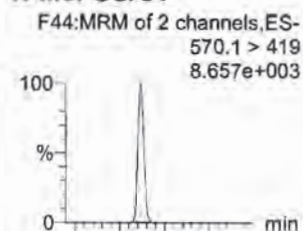
PFDA



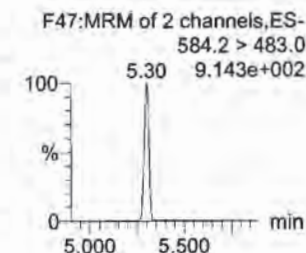
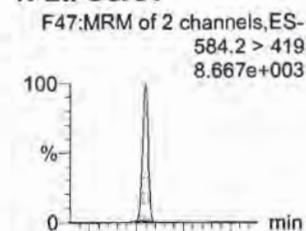
8:2 FTS



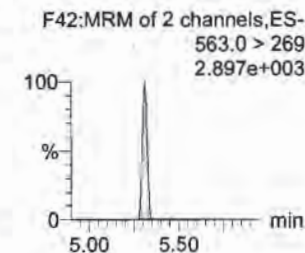
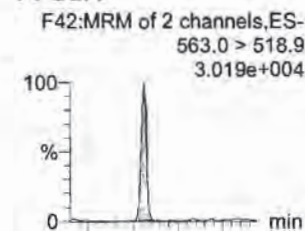
N-MeFOSAA



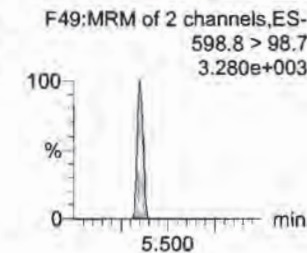
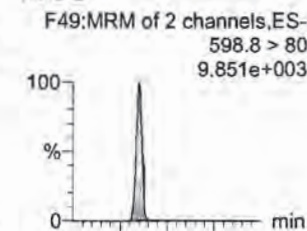
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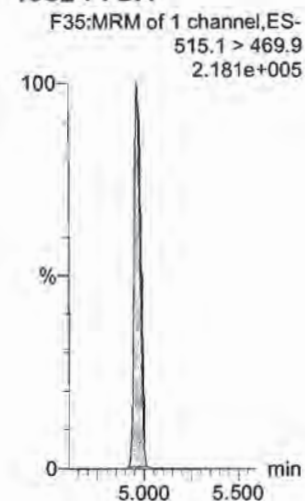
PFUdA



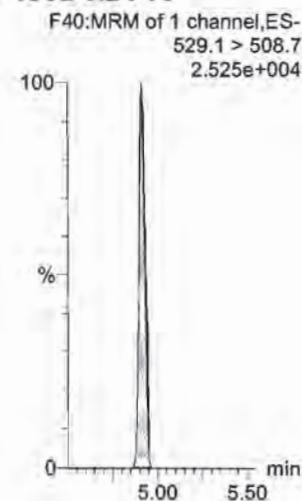
PFDS



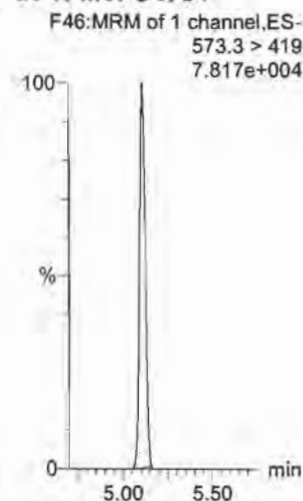
13C2-PFDA



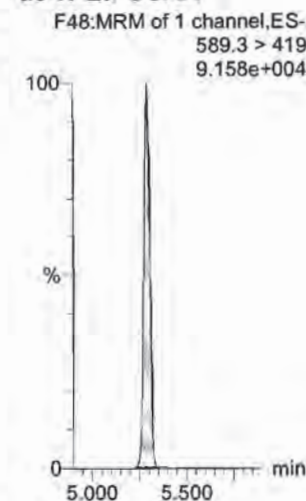
13C2-8:2 FTS



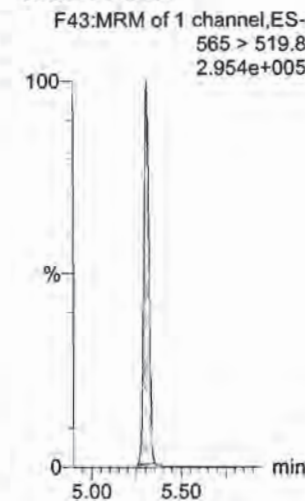
d3-N-MeFOSAA



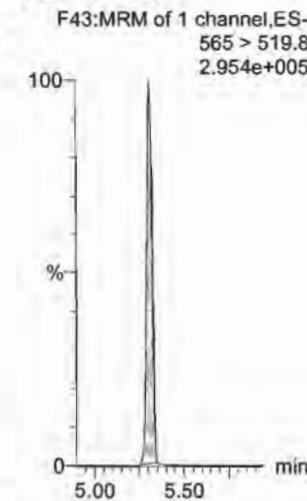
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13C2-PFUdA



13C2-PFUdA



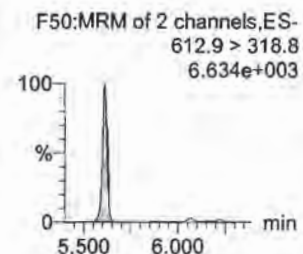
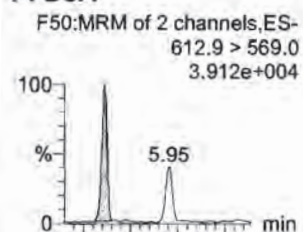
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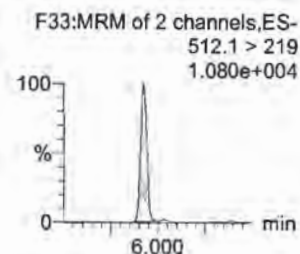
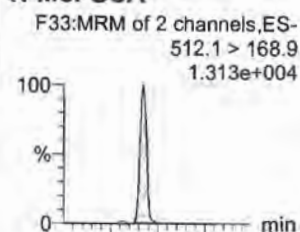
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Name: 180114M1_3, Date: 14-Jan-2018, Time: 13:53:10, ID: ST180114M1-3 PFC CS0 17L2608, Description: PFC CS0 17L2608

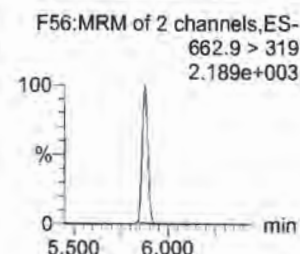
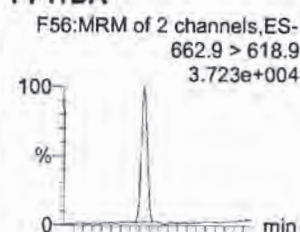
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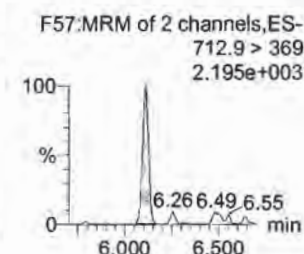
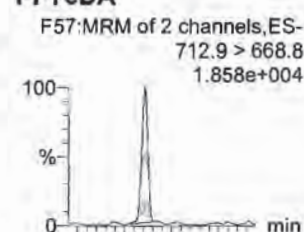
N-MeFOSA



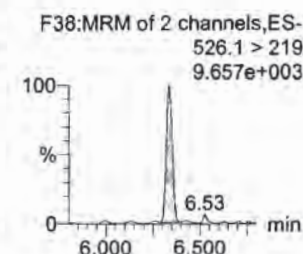
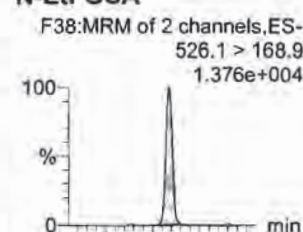
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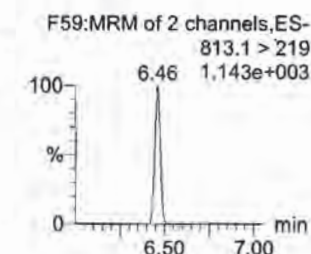
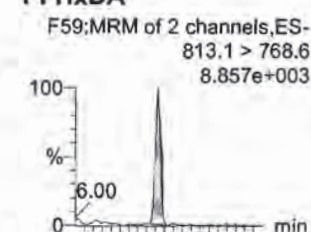
PFT_eDA



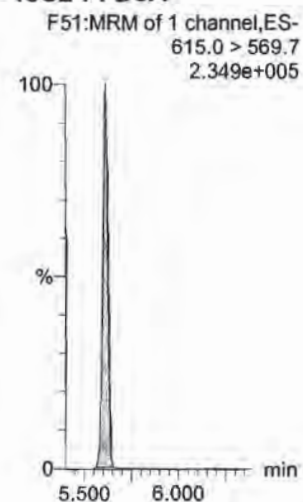
N-EtFOSA



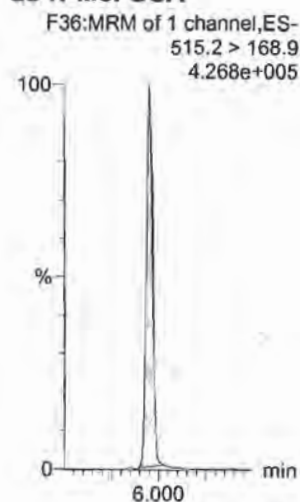
PFH_xDA



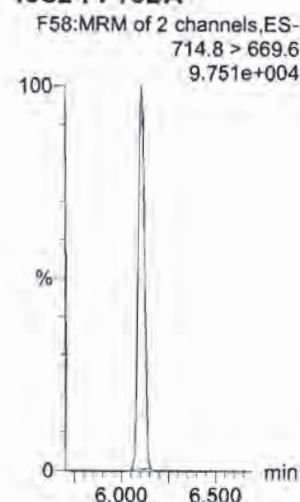
¹³C2-PFD_oA



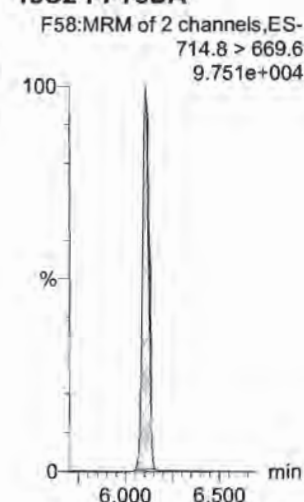
d3-N-MeFOSA



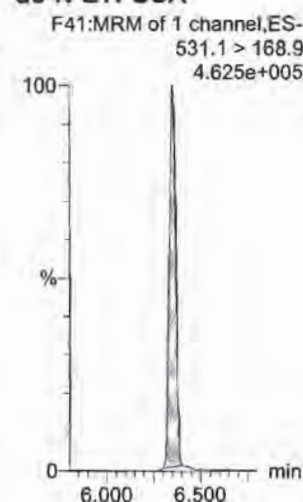
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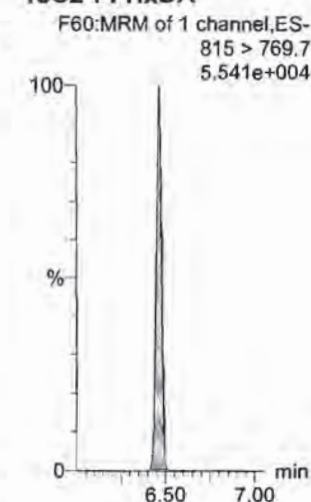
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d5-N-ETFOSA



¹³C2-PFH_xDA

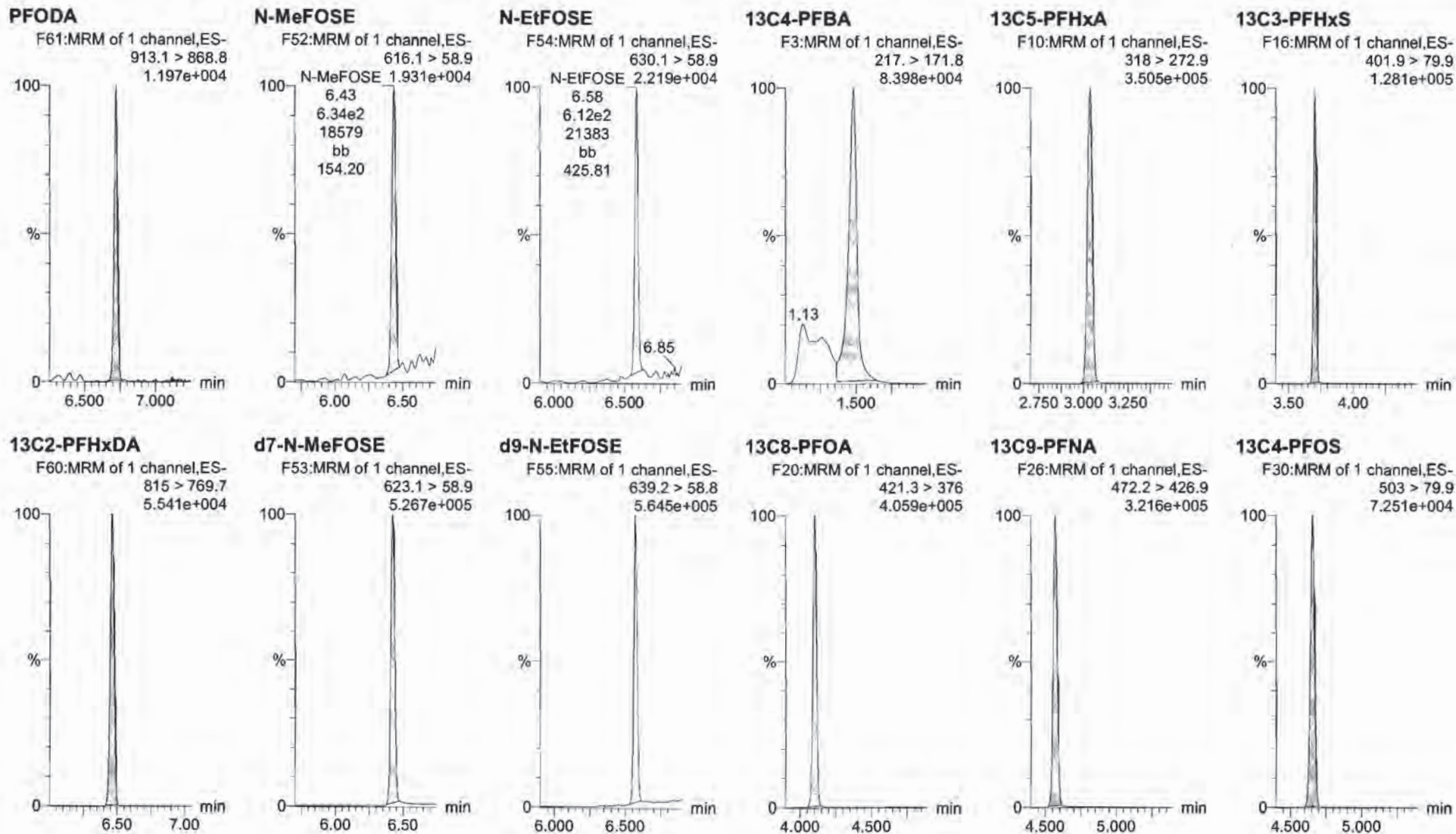


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Name: 180114M1_3, Date: 14-Jan-2018, Time: 13:53:10, ID: ST180114M1-3 PFC CS0 17L2608, Description: PFC CS0 17L2608



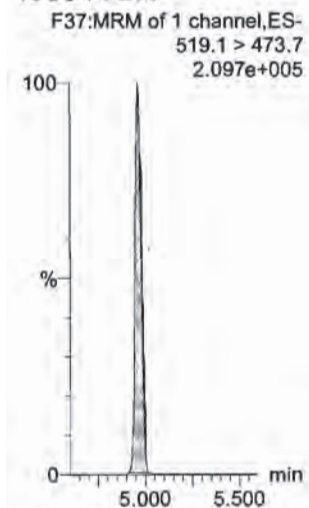
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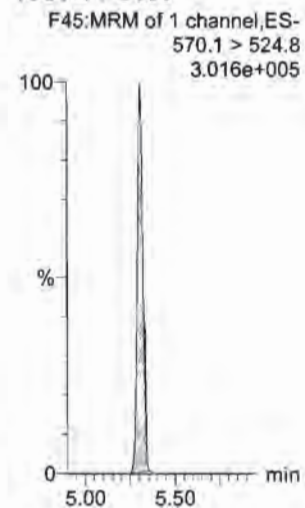
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13C6-PFDA



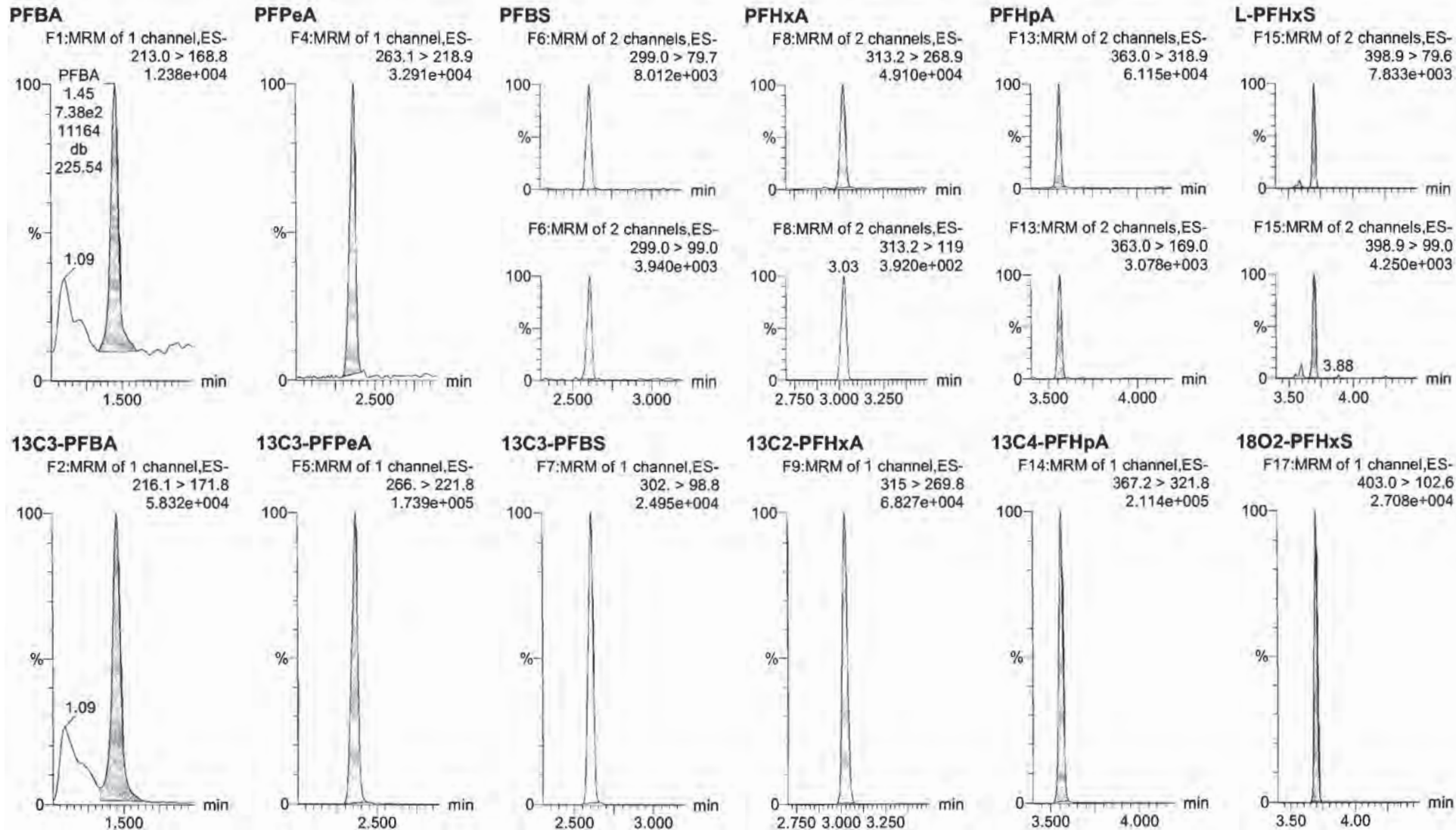
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Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time
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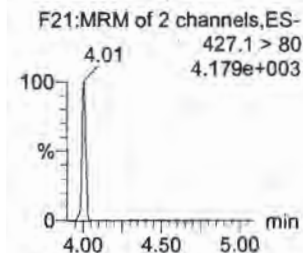
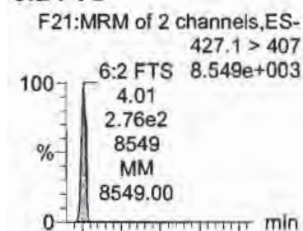
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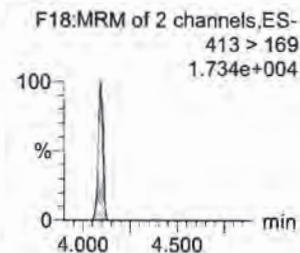
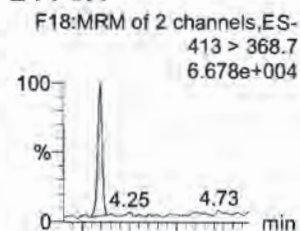
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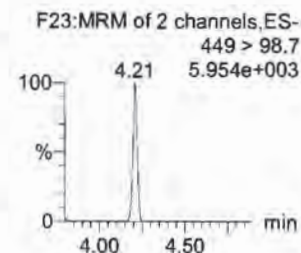
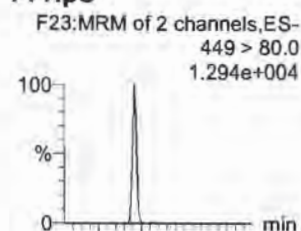
6:2 FTS



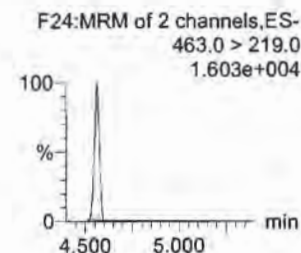
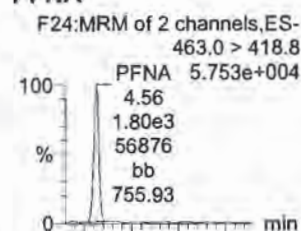
L-PFOA



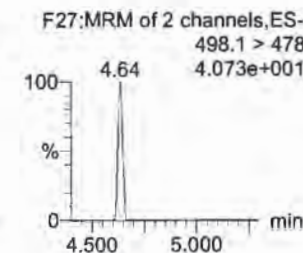
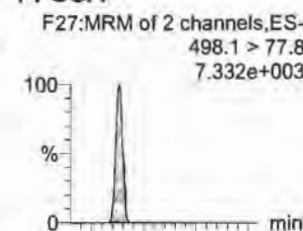
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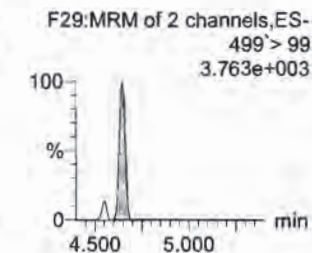
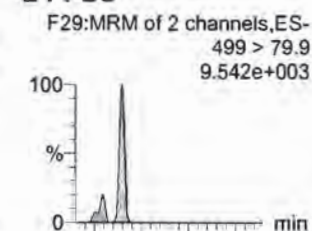
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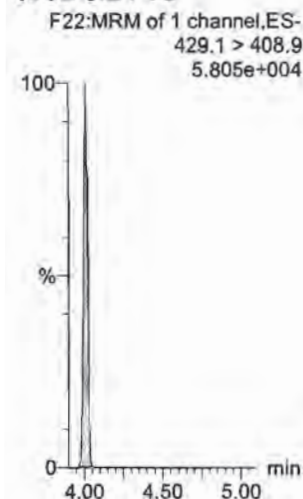
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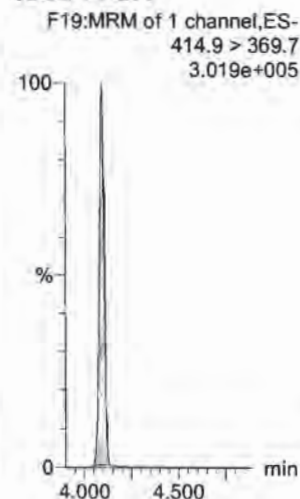
L-PFOS



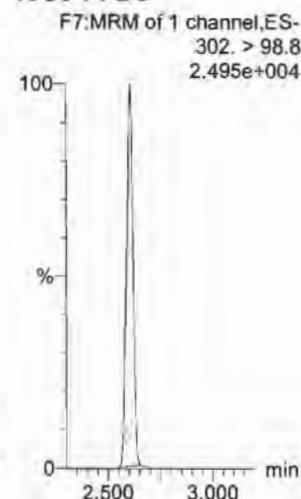
13C2-6:2 FTS



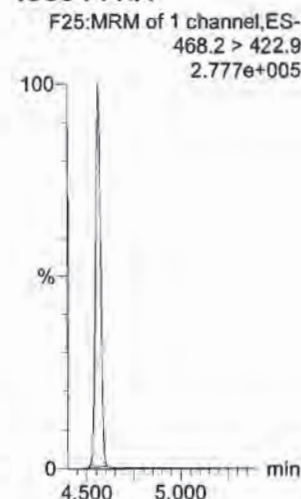
13C2-PFOA



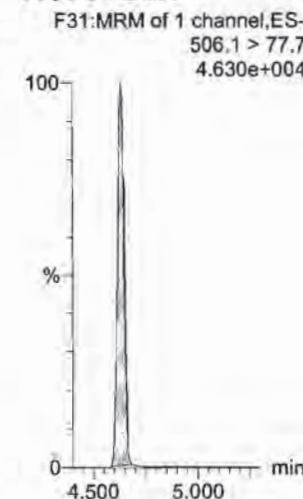
13C3-PFBS



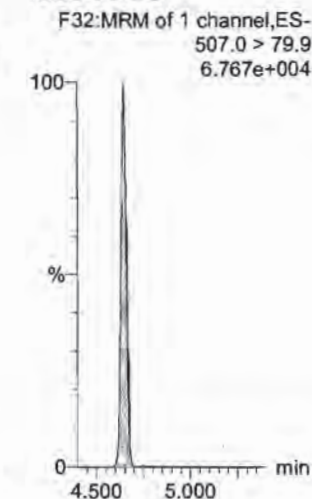
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13C8-PFOSA



13C8-PFOS



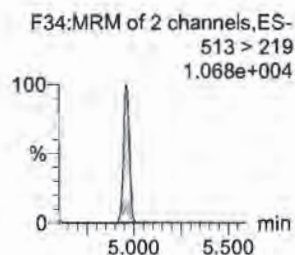
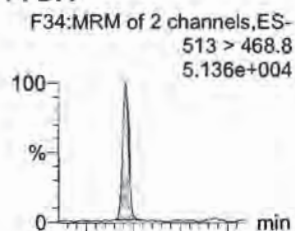
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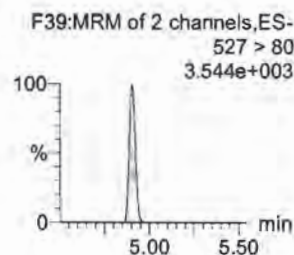
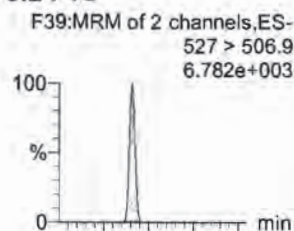
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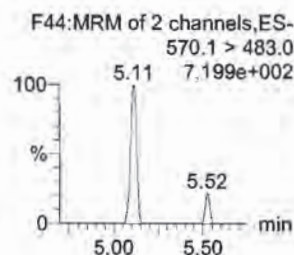
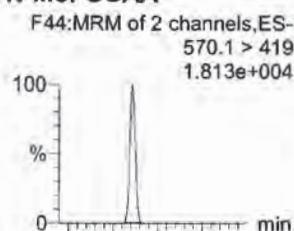
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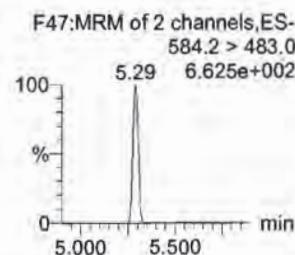
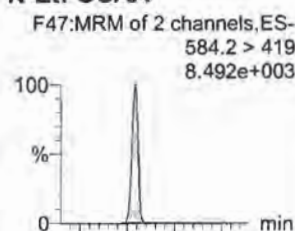
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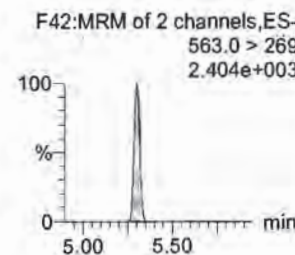
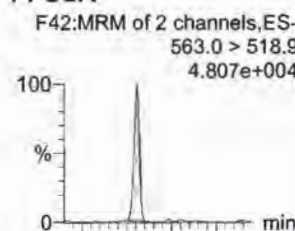
N-MeFOSAA



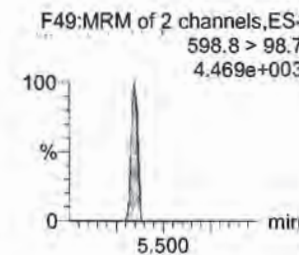
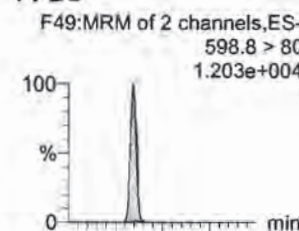
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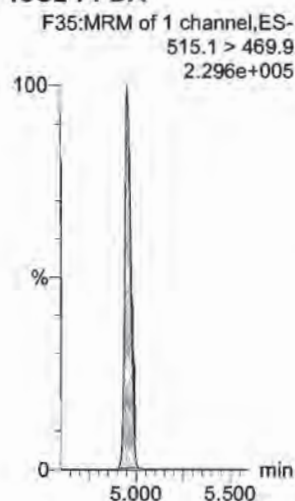
PFUdA



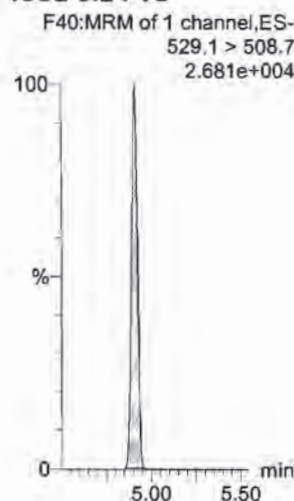
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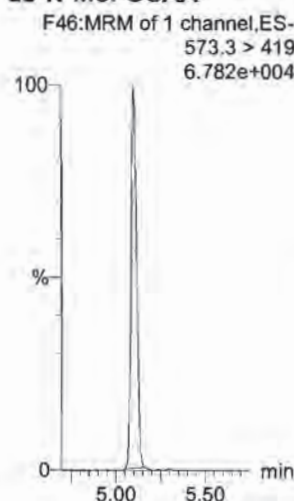
13C2-PFDA



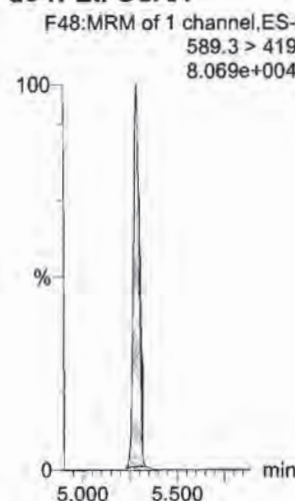
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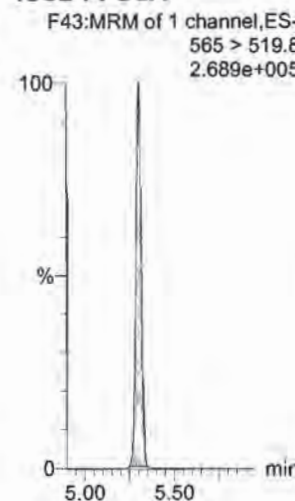
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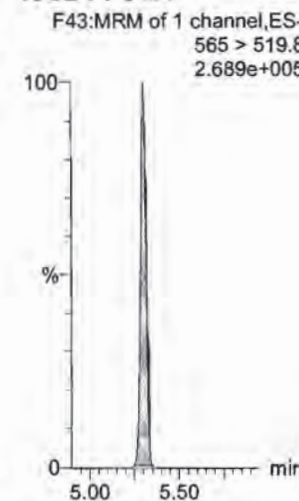
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13C2-PFUdA



13C2-PFUdA

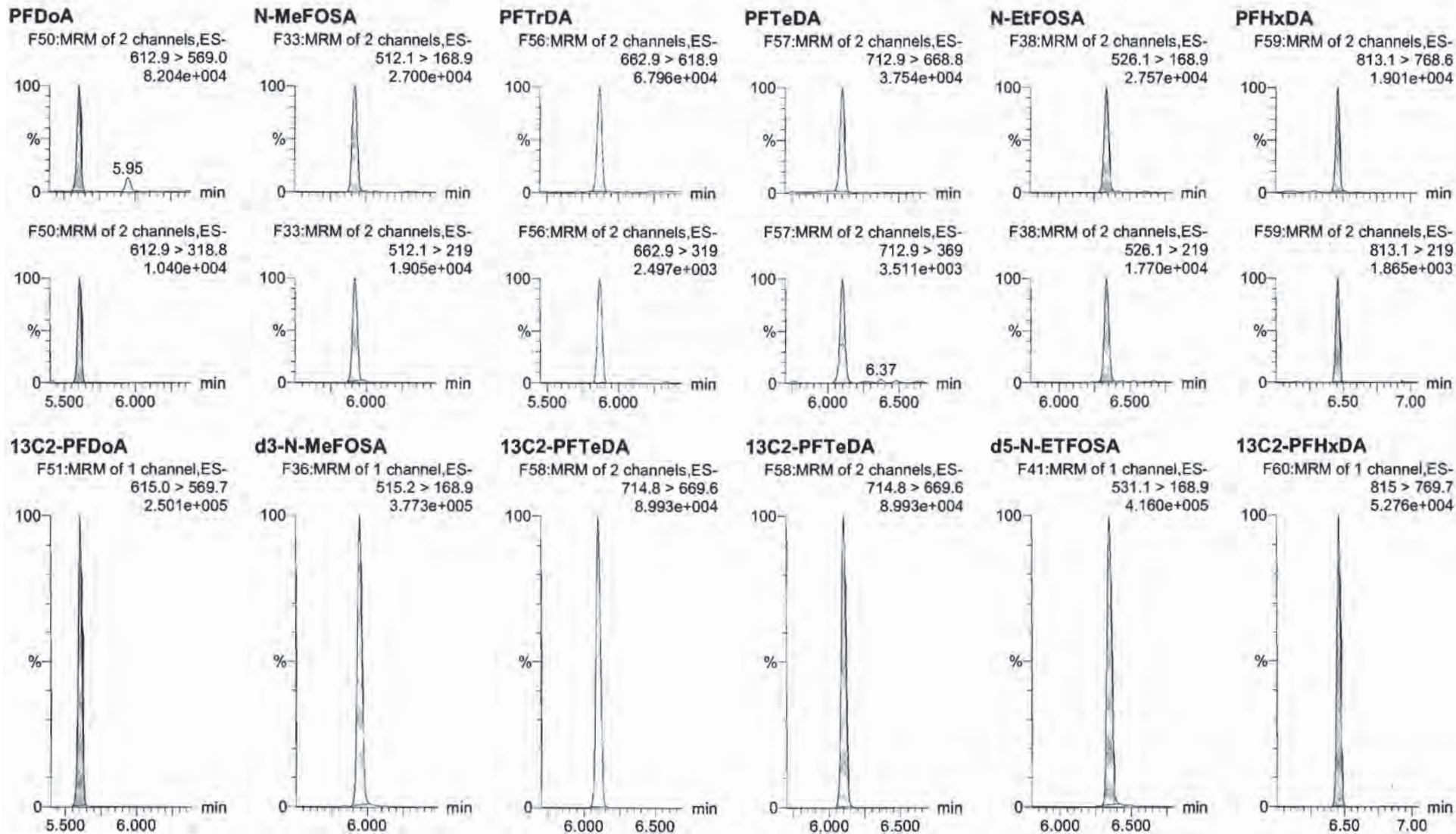


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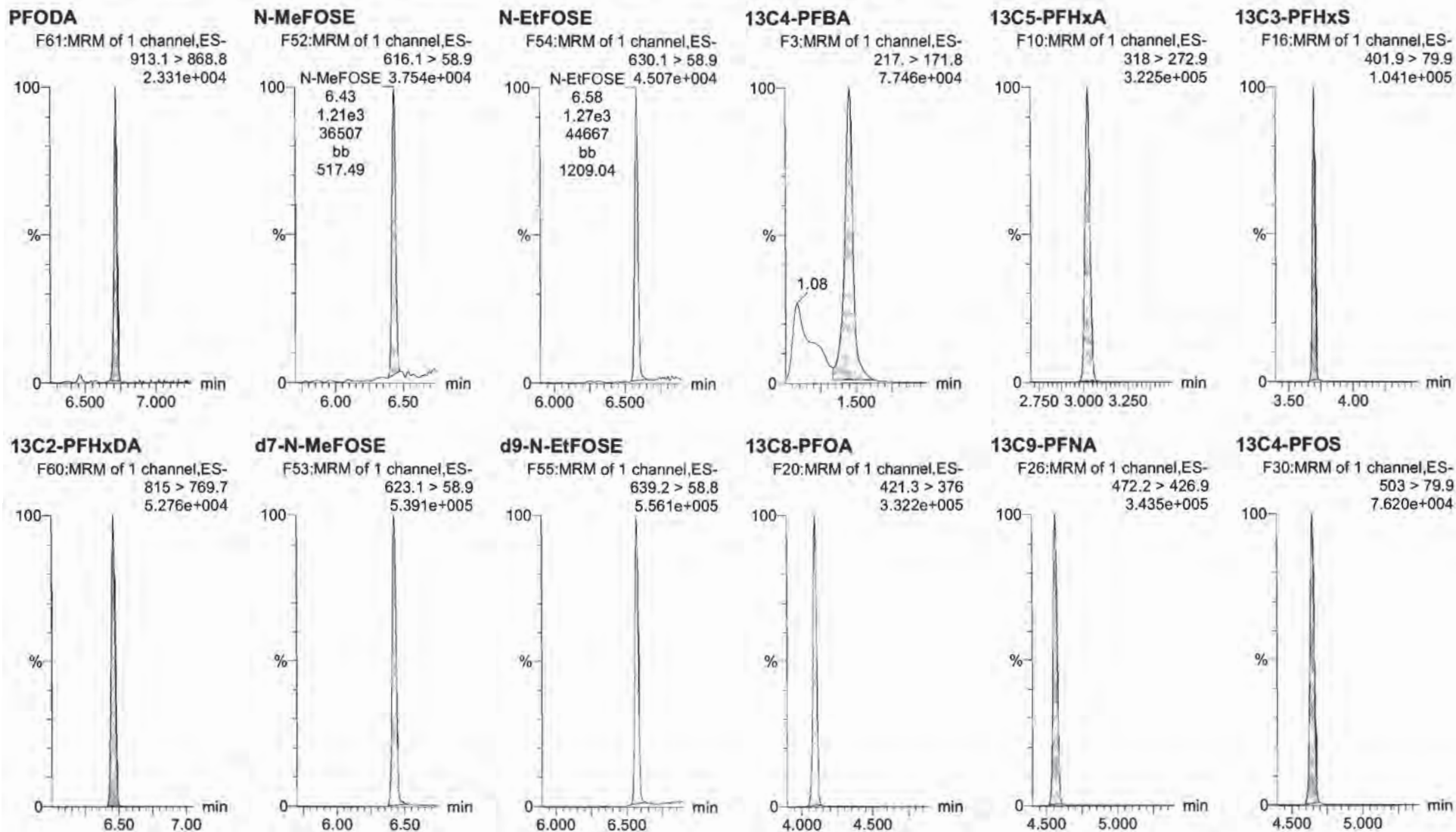


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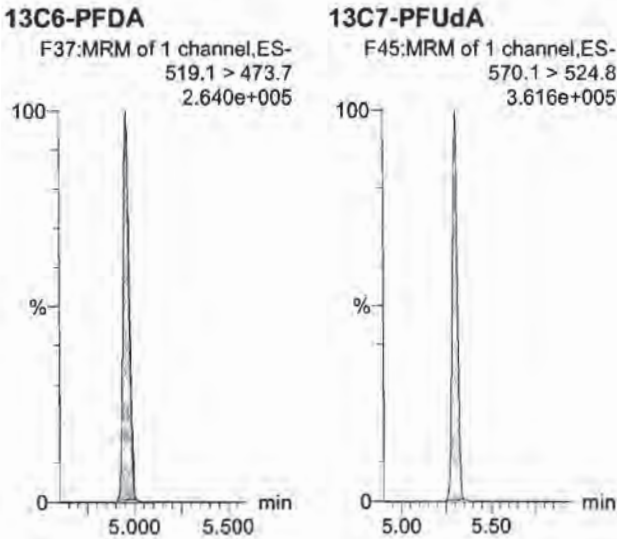


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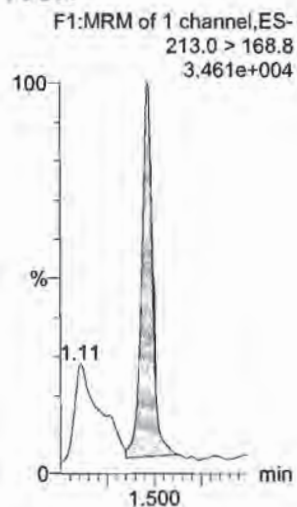
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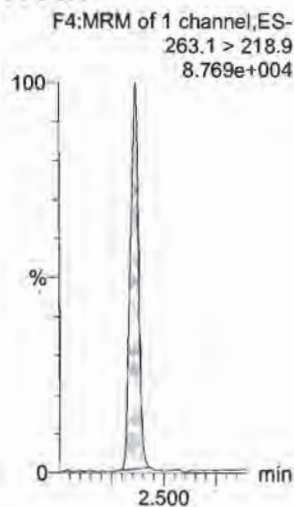
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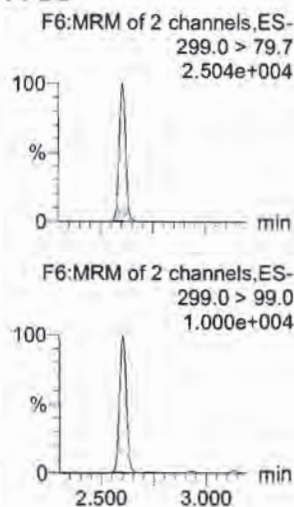
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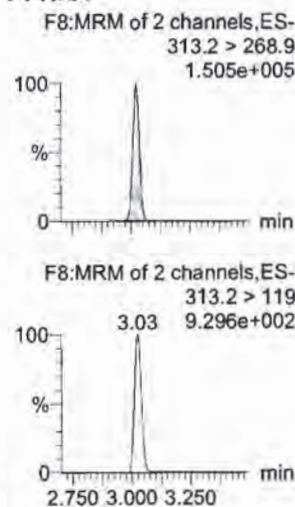
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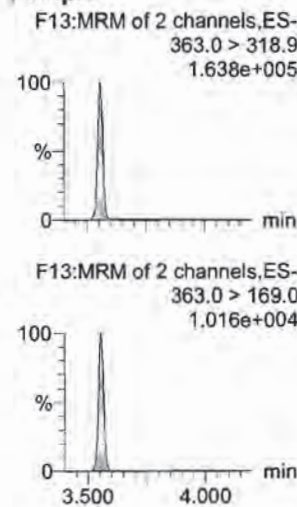
PFBS



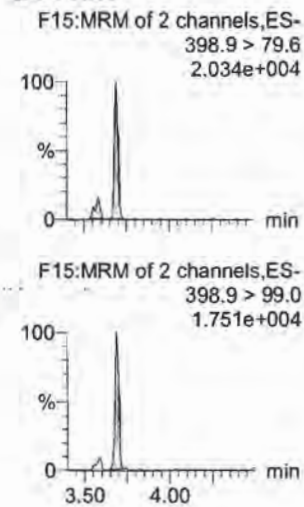
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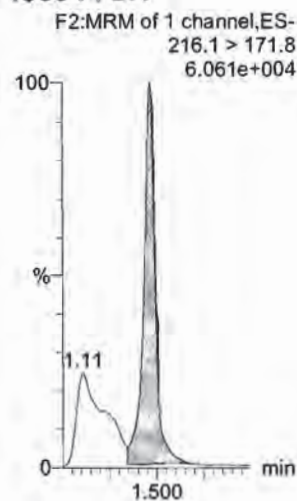
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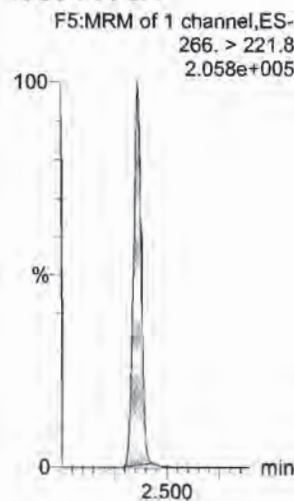
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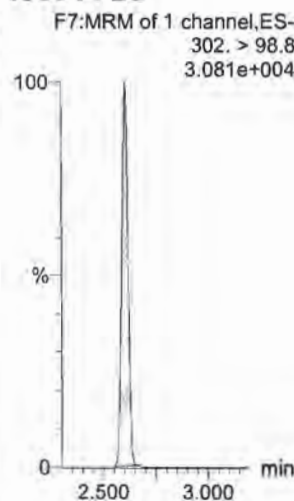
13C3-PFBA



13C3-PFPeA



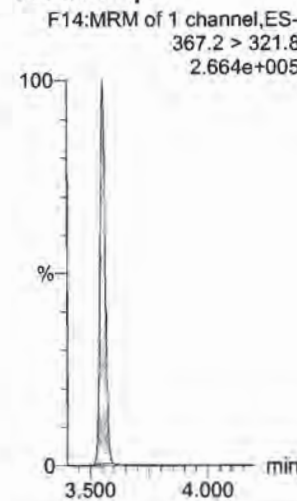
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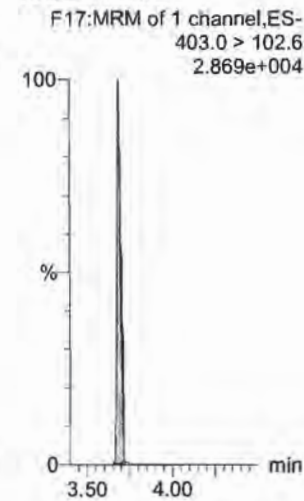
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



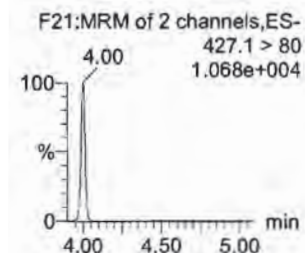
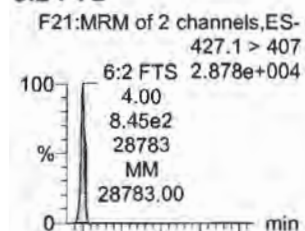
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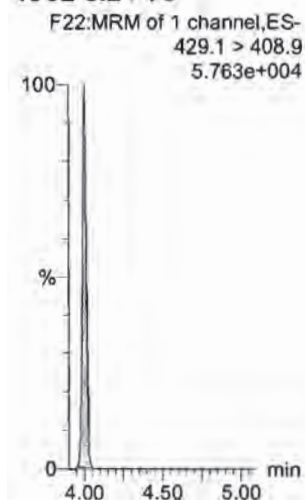
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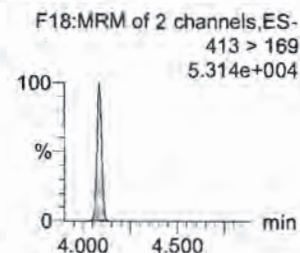
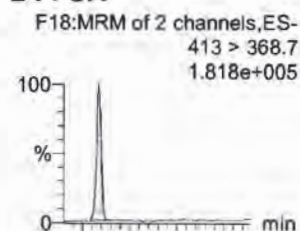
6:2 FTS



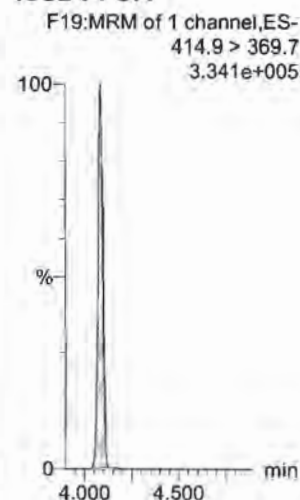
13C2-6:2 FTS



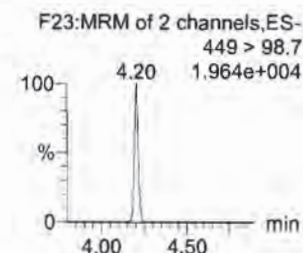
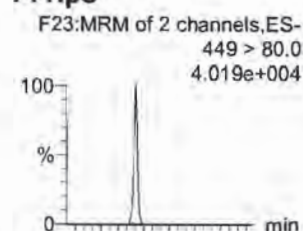
L-PFOA



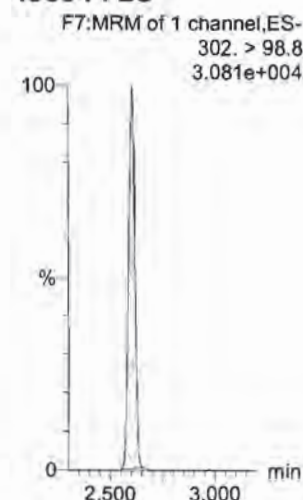
13C2-PFOA



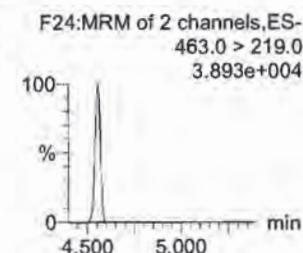
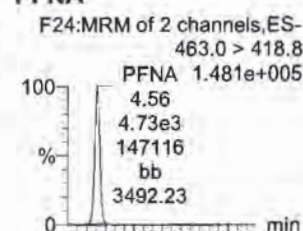
PFHpS



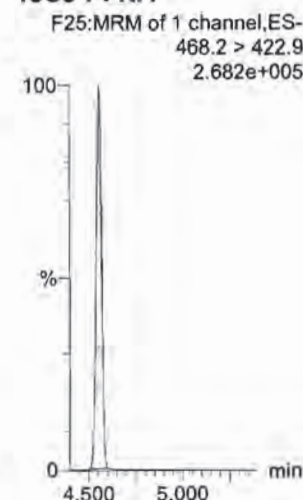
13C3-PFBS



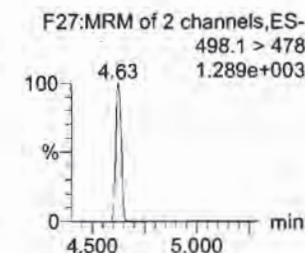
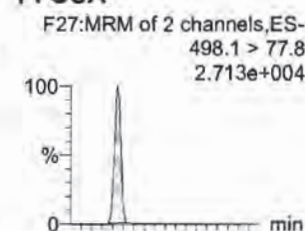
PFNA



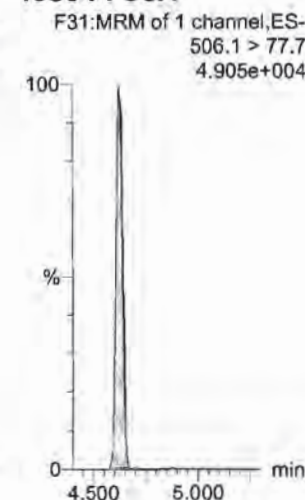
13C5-PFNA



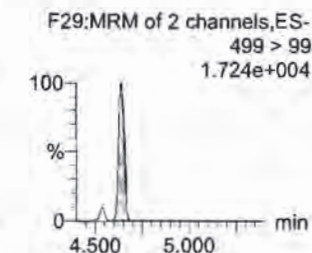
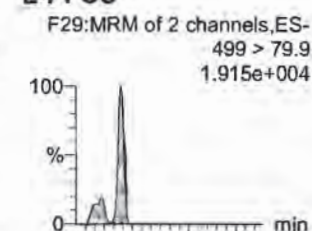
PFOSA



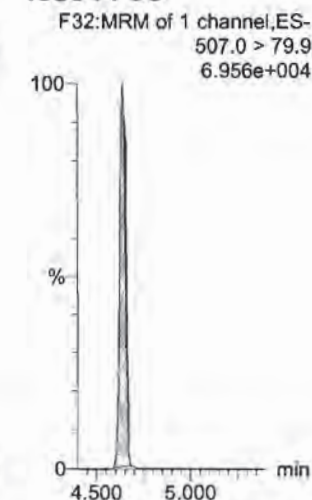
13C8-PFOSA



L-PFOS



13C8-PFOS

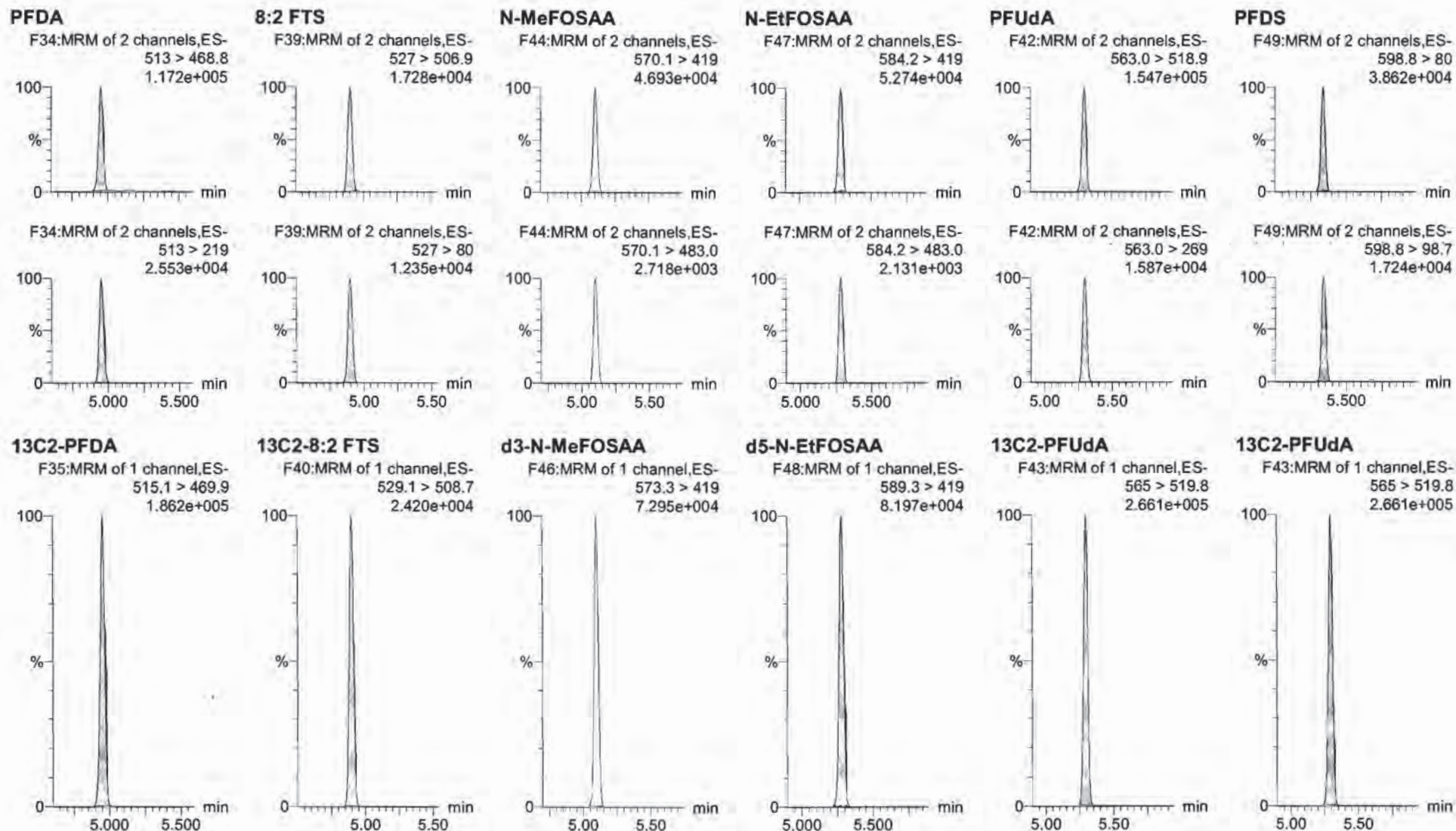


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Name: 180114M1_5, Date: 14-Jan-2018, Time: 14:15:32, ID: ST180114M1-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

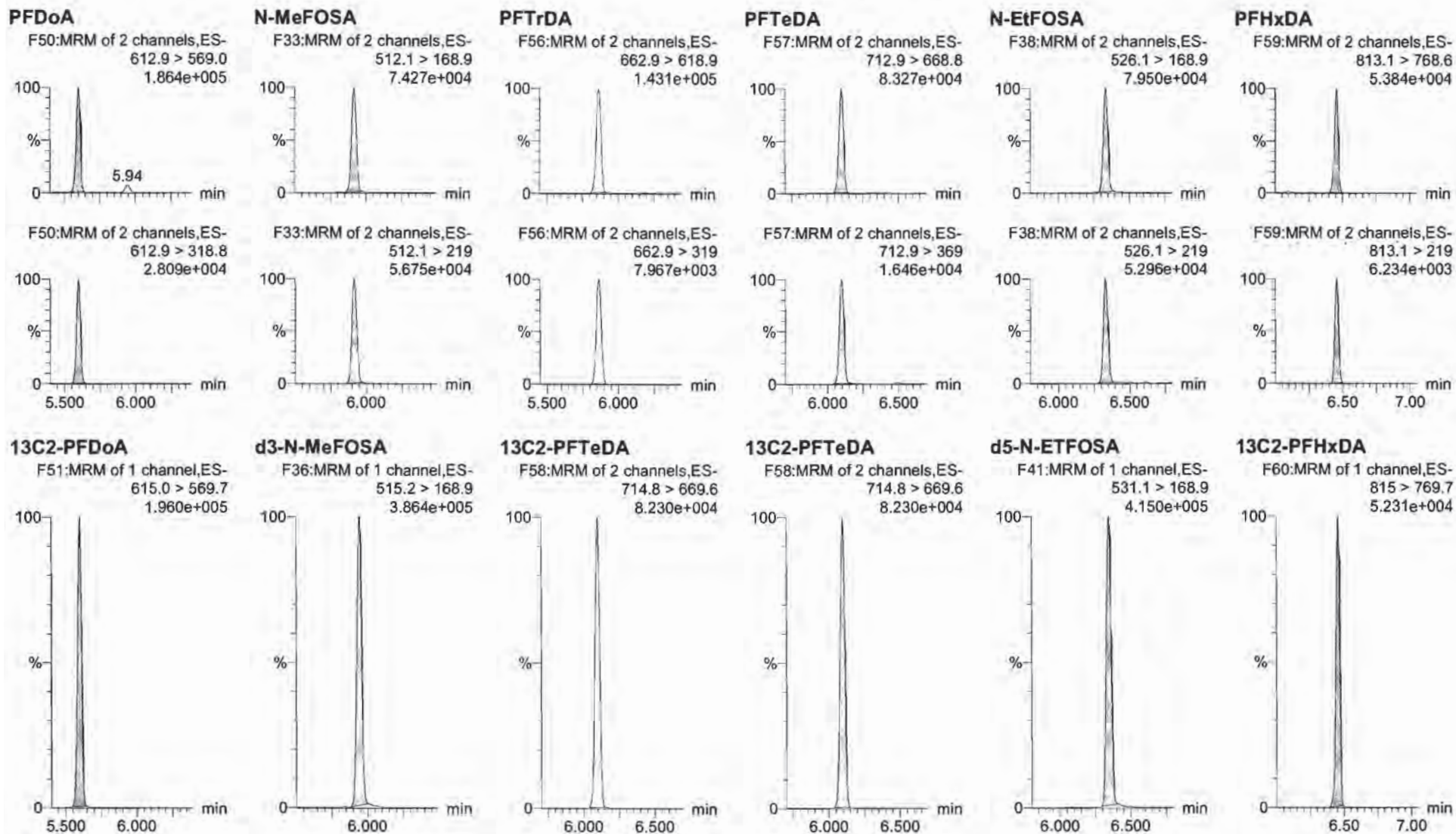


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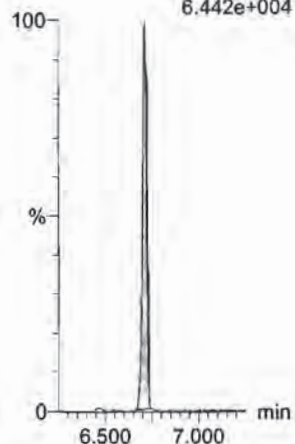
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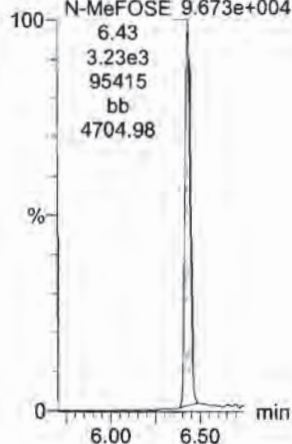
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
6.442e+004



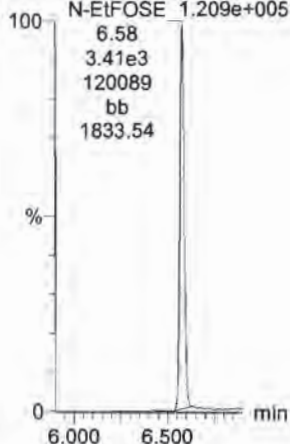
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
9.673e+004



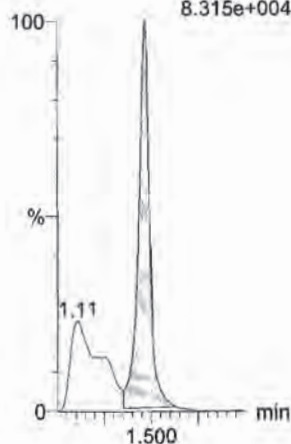
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
1.209e+005



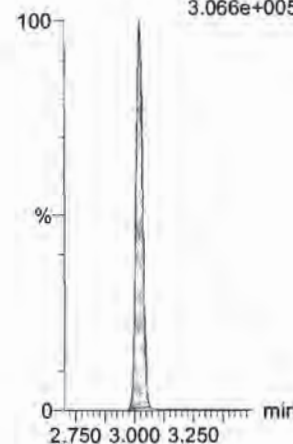
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
8.315e+004



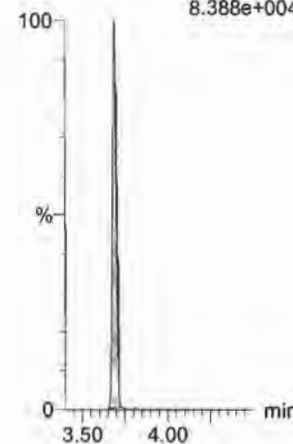
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
3.066e+005



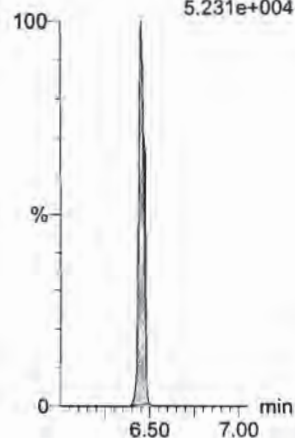
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
8.388e+004



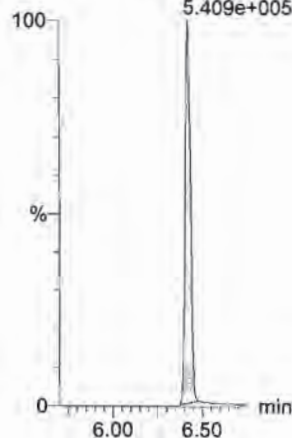
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
5.231e+004



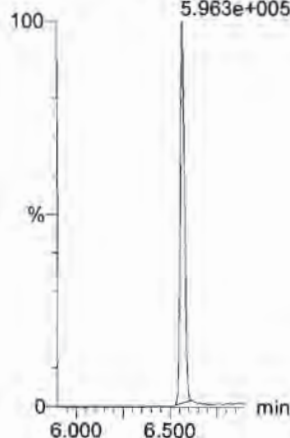
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
5.409e+005



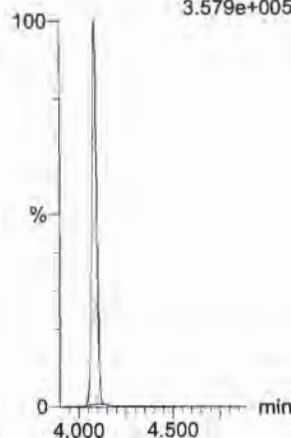
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
5.963e+005



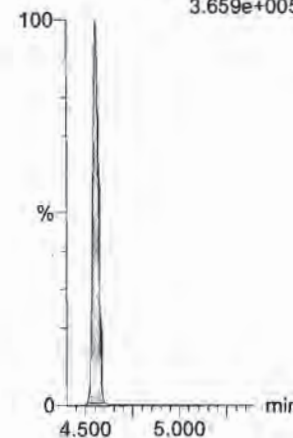
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.579e+005



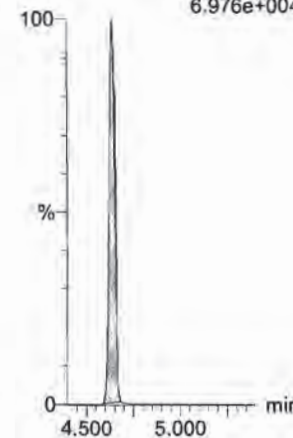
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
3.659e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
6.976e+004

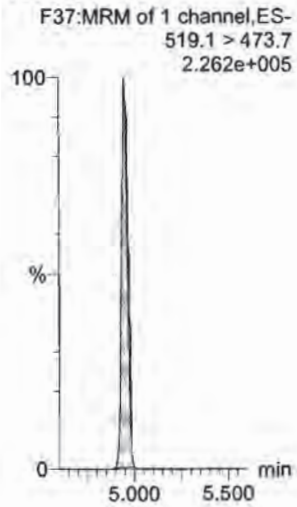


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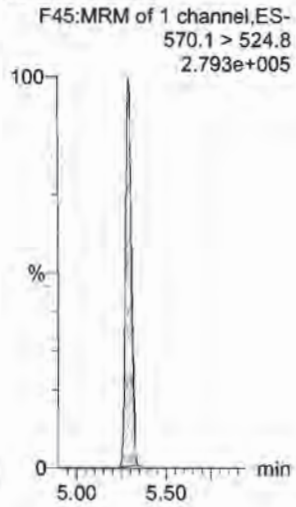
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Name: 180114M1_5, Date: 14-Jan-2018, Time: 14:15:32, ID: ST180114M1-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

13C6-PFDA



13C7-PFUDa



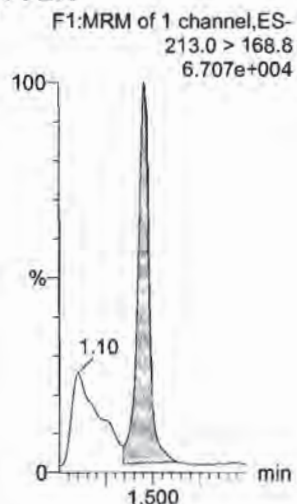
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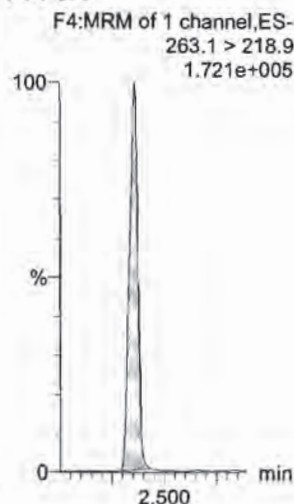
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Name: 180114M1_6, Date: 14-Jan-2018, Time: 14:26:42, ID: ST180114M1-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

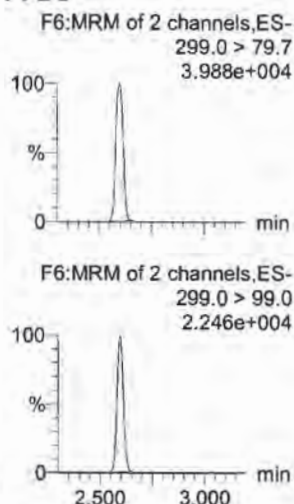
PFBA



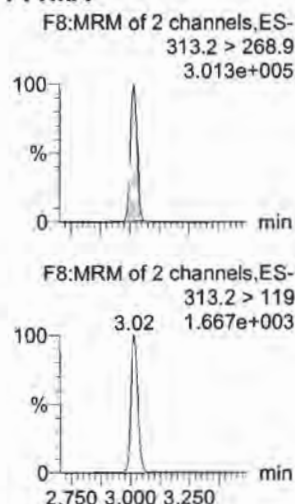
PFPeA



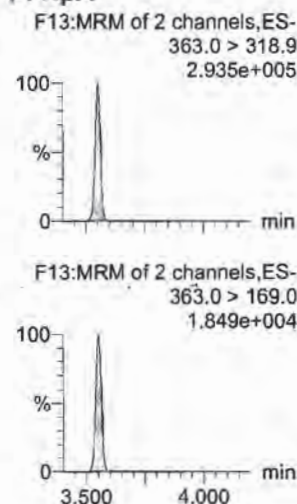
PFBS



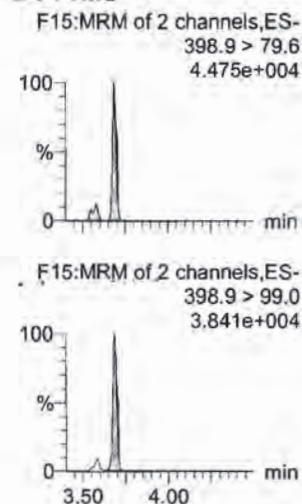
PFHxA



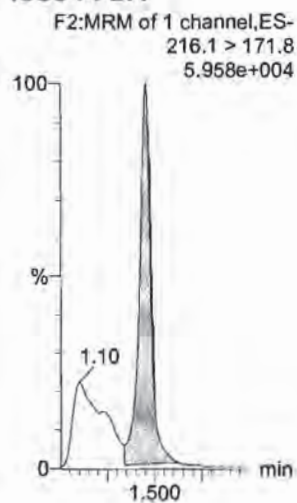
PFHpA



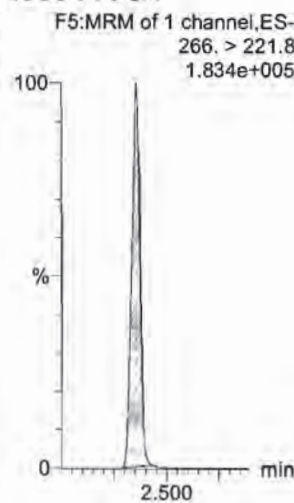
L-PFHxS



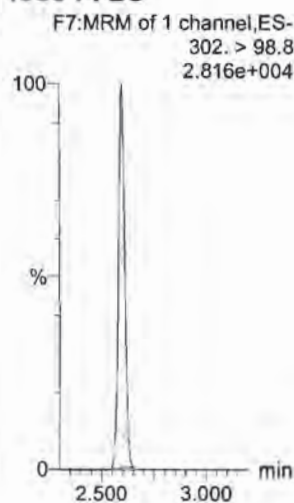
13C3-PFBA



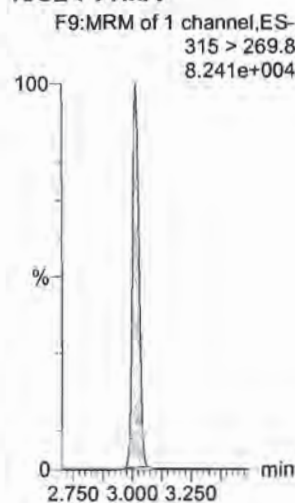
13C3-PFPeA



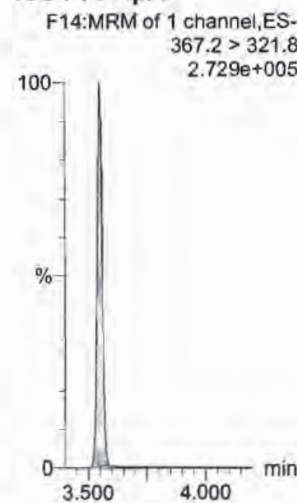
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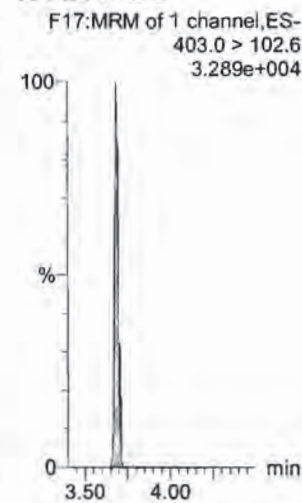
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

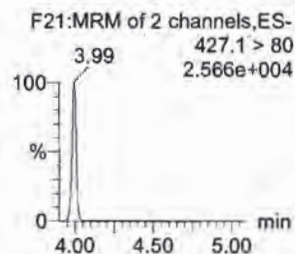
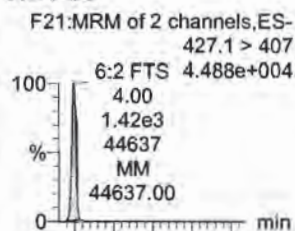


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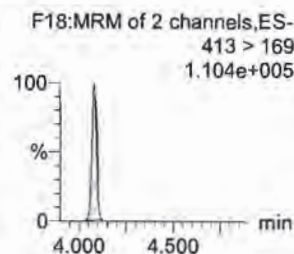
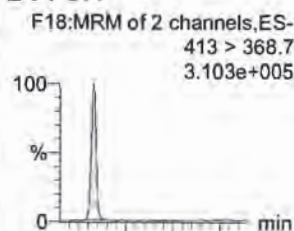
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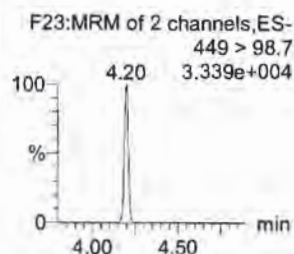
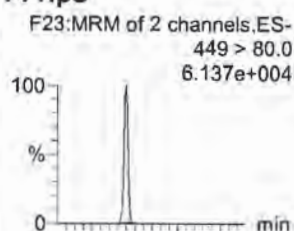
6:2 FTS



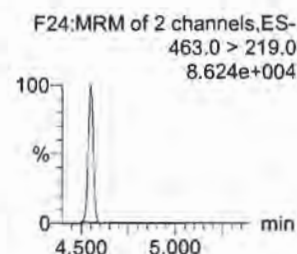
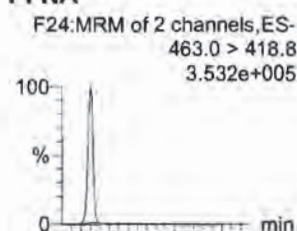
L-PFOA



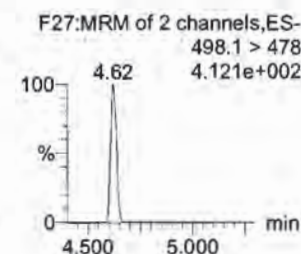
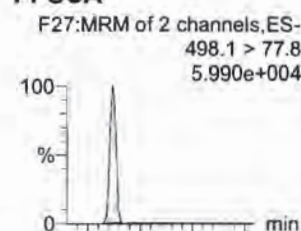
PFHpS



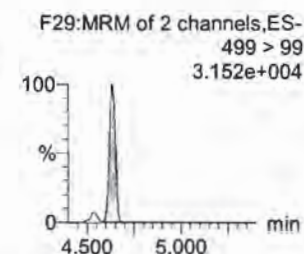
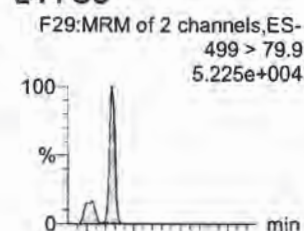
PFNA



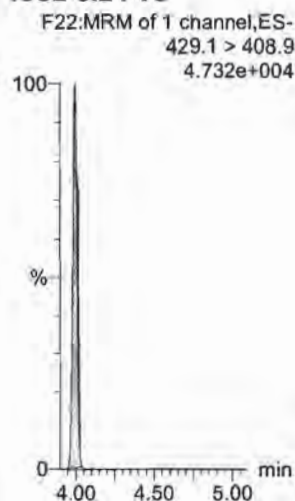
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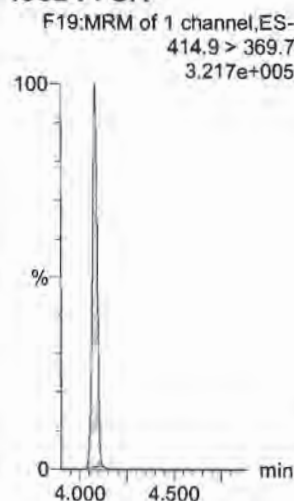
L-PFOS



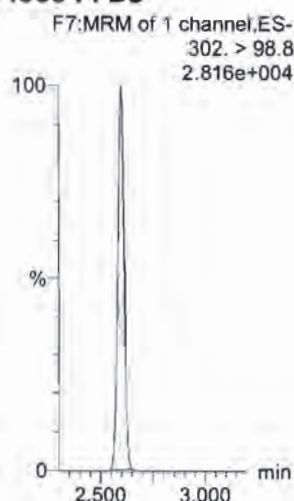
13C2-6:2 FTS



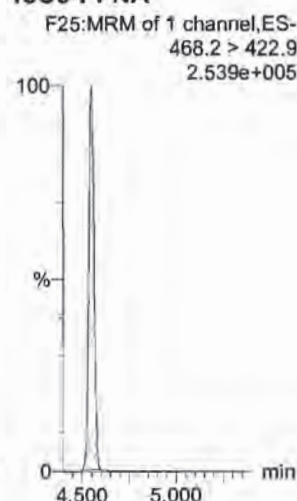
13C2-PFOA



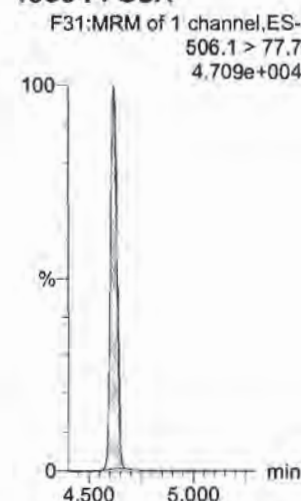
13C3-PFBS



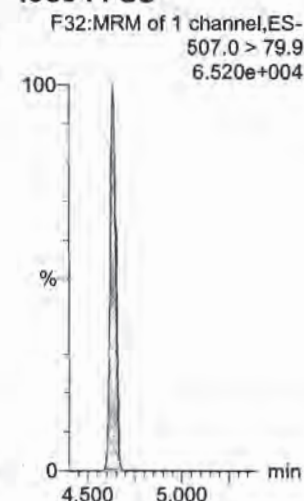
13C5-PFNA



13C8-PFOA



13C8-PFOS



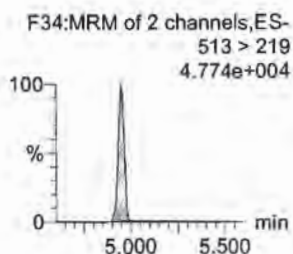
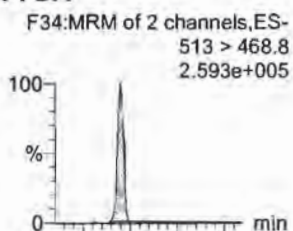
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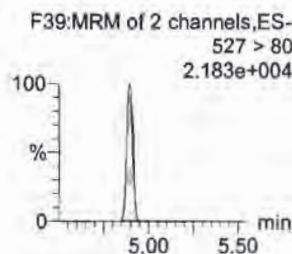
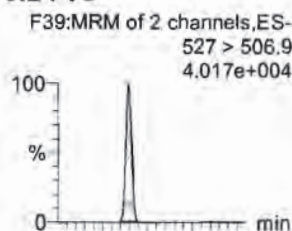
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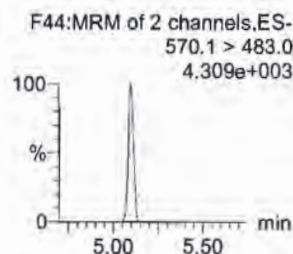
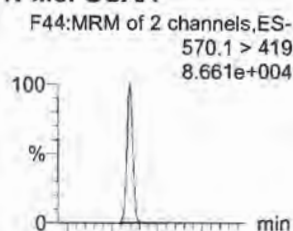
PFDA



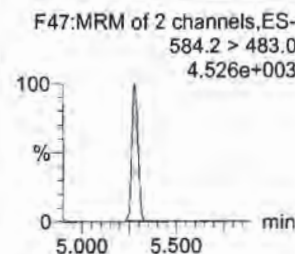
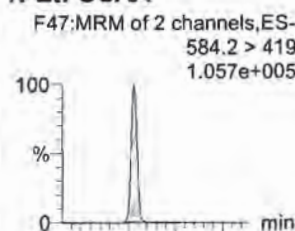
8:2 FTS



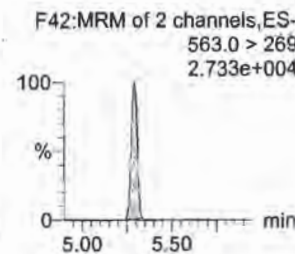
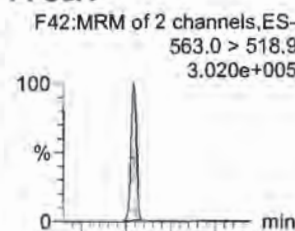
N-MeFOSAA



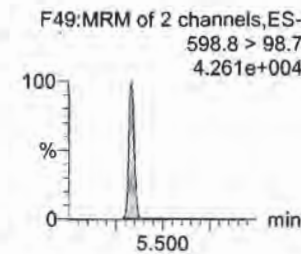
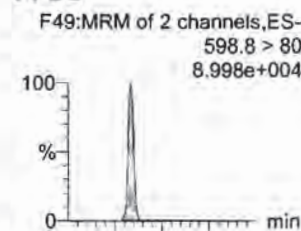
N-EtFOSAA



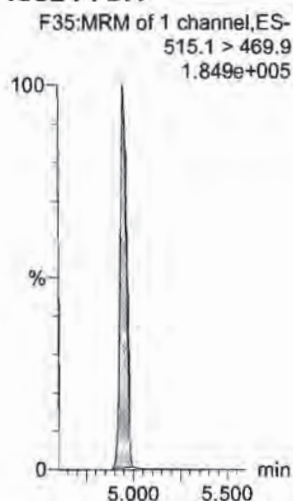
PFUdA



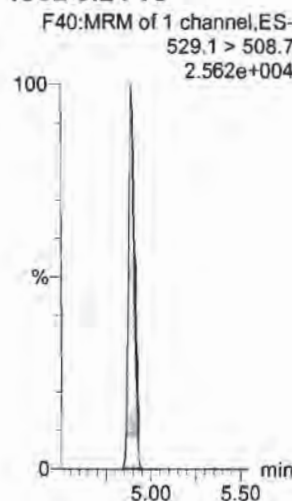
PFDS



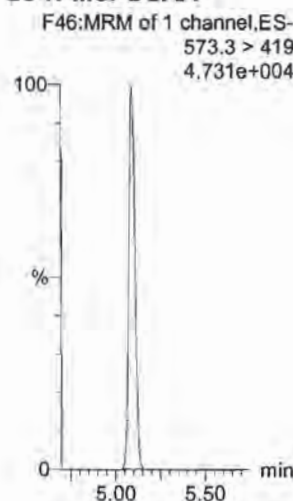
13C2-PFDA



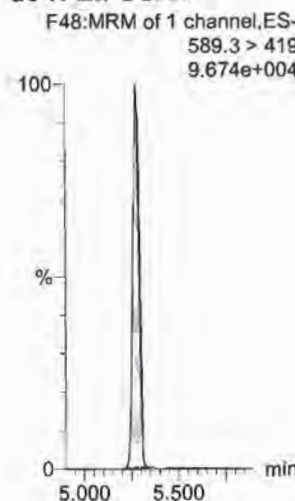
13C2-8:2 FTS



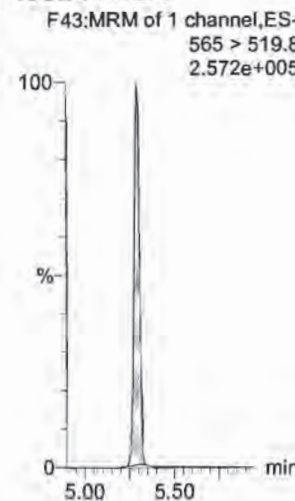
d3-N-MeFOSAA



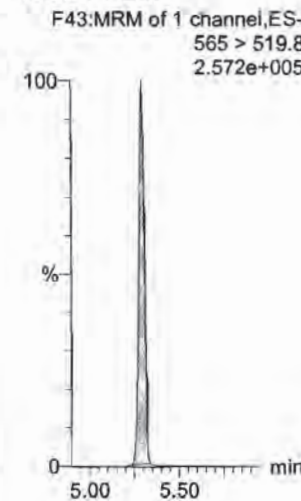
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13C2-PFUdA



13C2-PFUdA



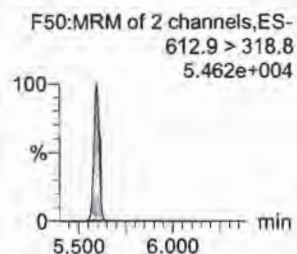
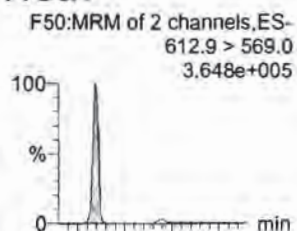
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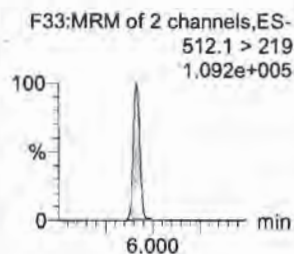
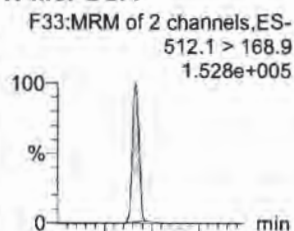
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Name: 180114M1_6, Date: 14-Jan-2018, Time: 14:26:42, ID: ST180114M1-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

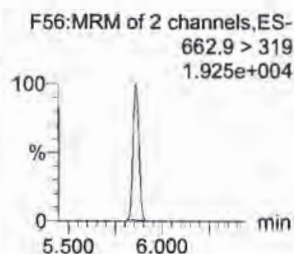
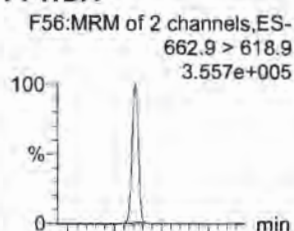
PFD_oA



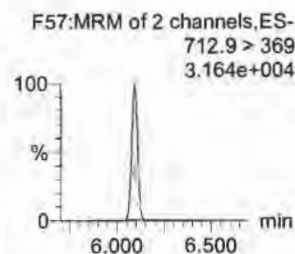
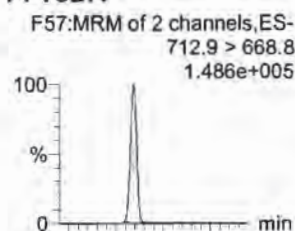
N-MeFOSA



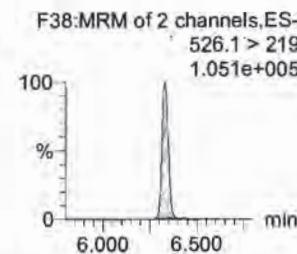
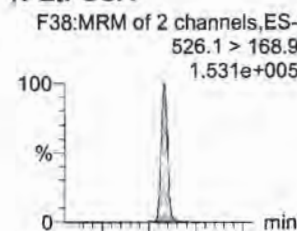
PFT_rDA



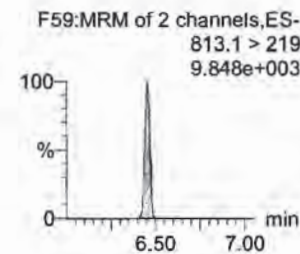
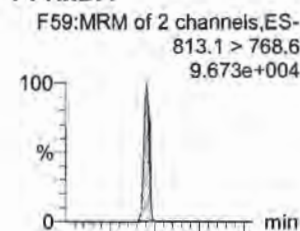
PFT_eDA



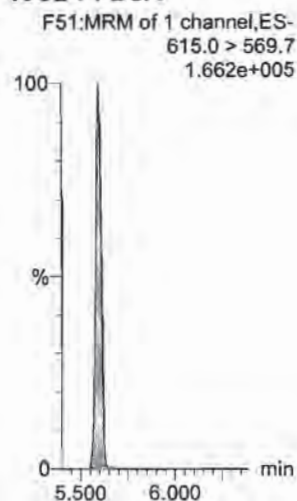
N-EtFOSA



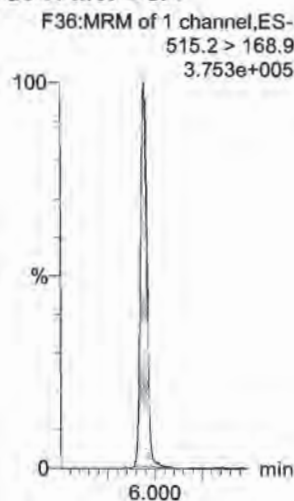
PFH_xDA



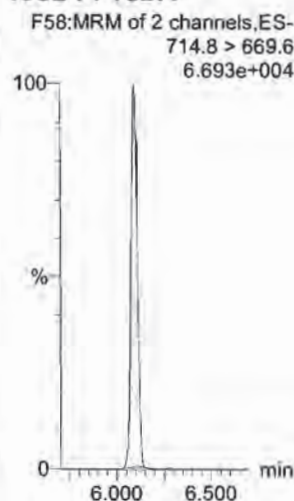
¹³C₂-PFD_oA



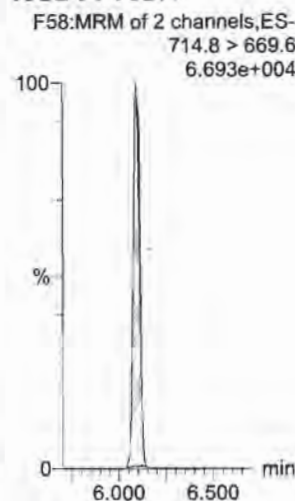
d₃-N-MeFOSA



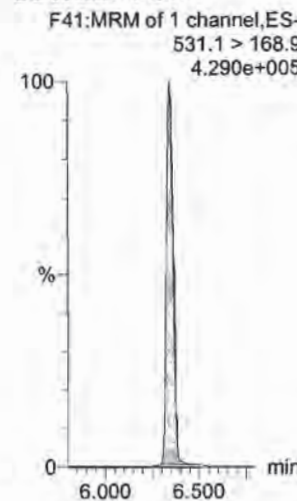
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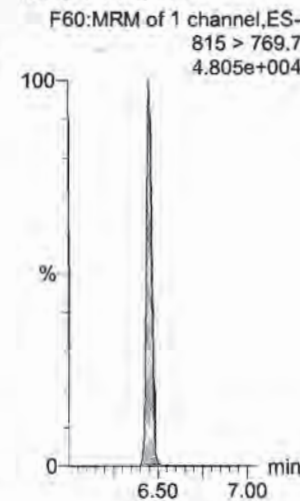
¹³C₂-PFT_eDA



d₅-N-ETFOSA



¹³C₂-PFH_xDA

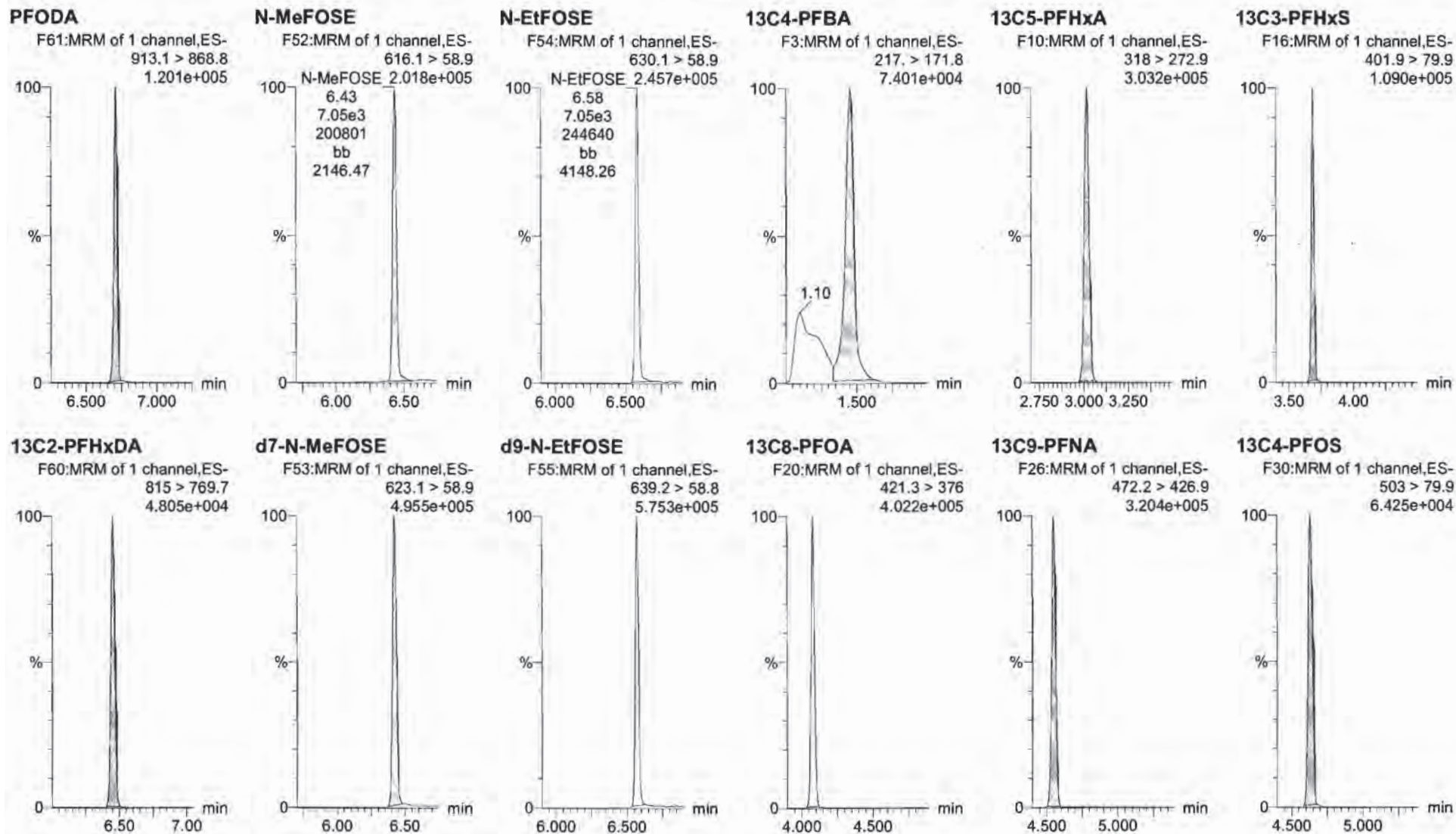


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Printed: Monday, January 15, 2018 15:01:56 Pacific Standard Time

Name: 180114M1_6, Date: 14-Jan-2018, Time: 14:26:42, ID: ST180114M1-6 PFC CS3 17L2611, Description: PFC CS3 17L2611



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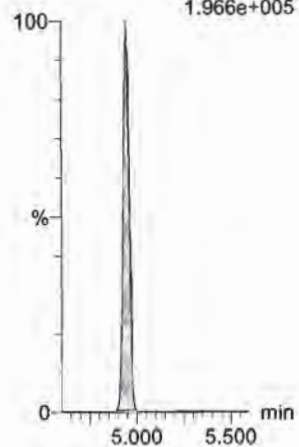
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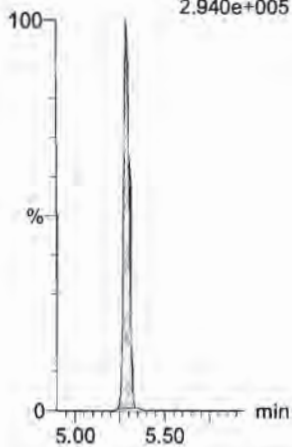
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.966e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.940e+005

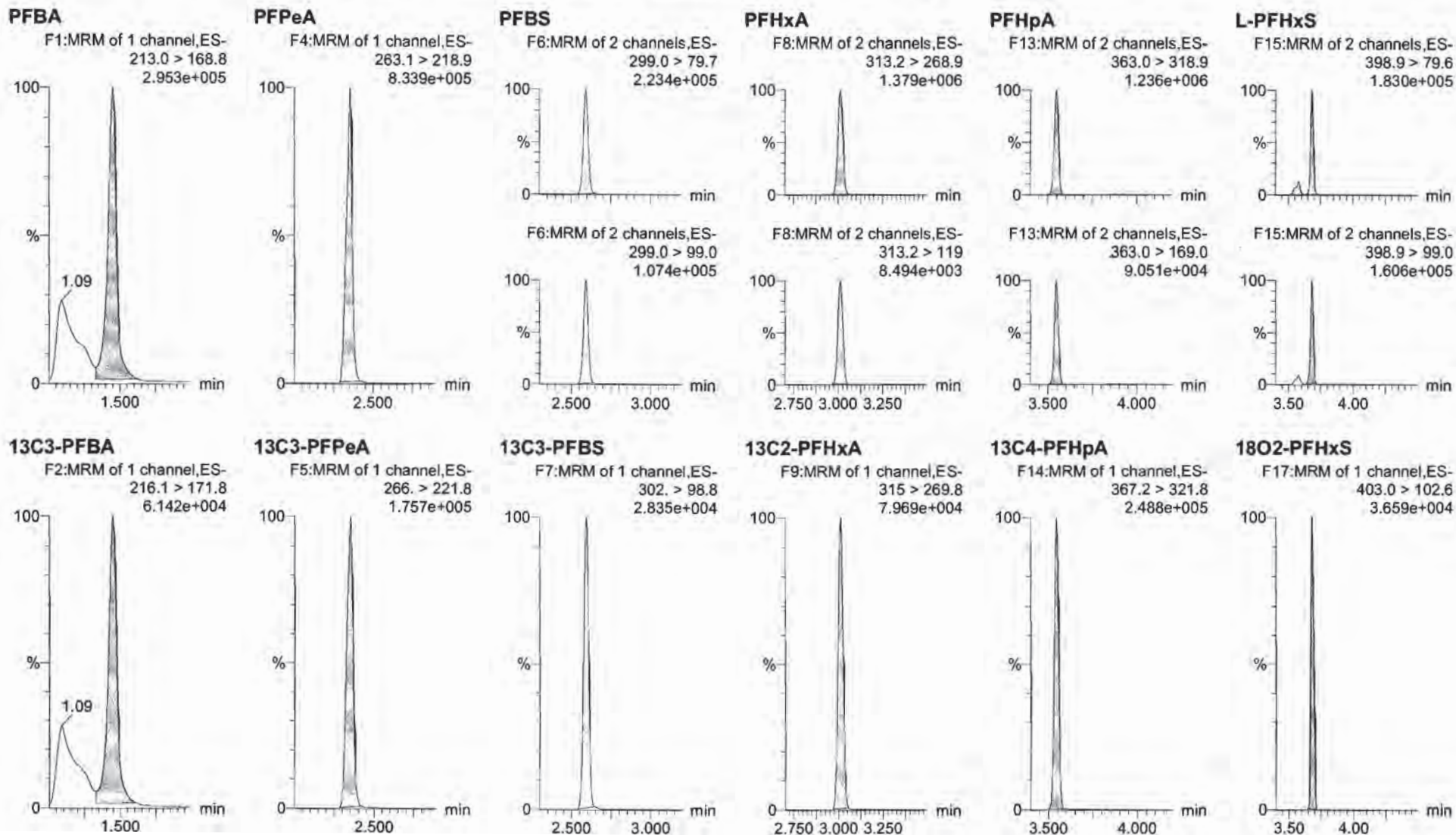


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Name: 180114M1_7, Date: 14-Jan-2018, Time: 14:37:53, ID: ST180114M1-7 PFC CS4 17L1208, Description: PFC CS4 17L1208



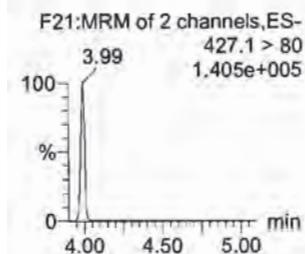
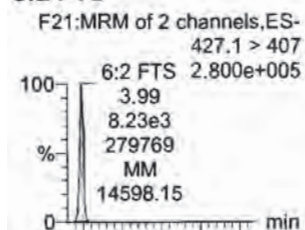
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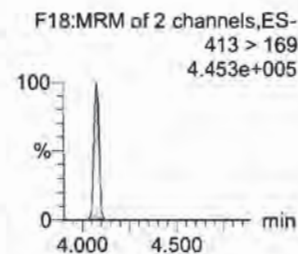
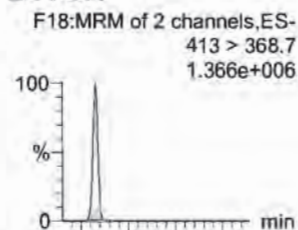
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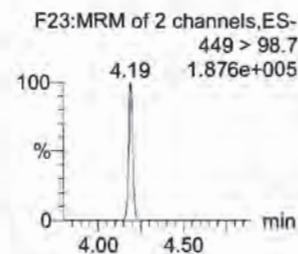
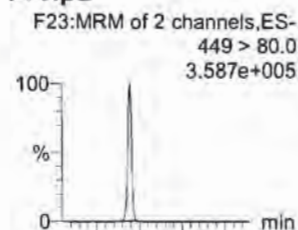
6:2 FTS



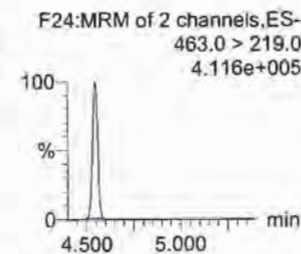
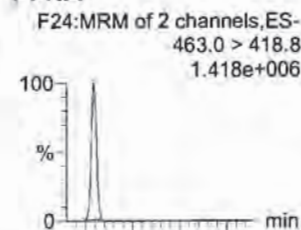
L-PFOA



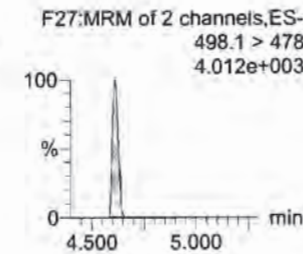
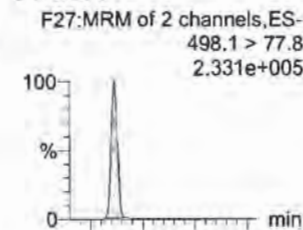
PFHpS



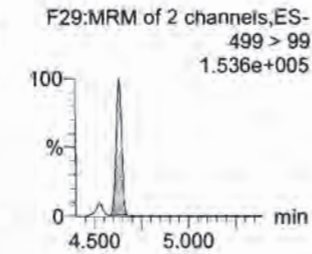
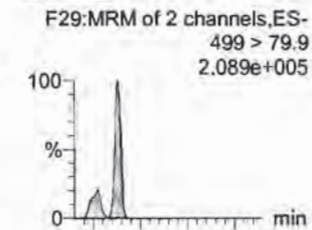
PFNA



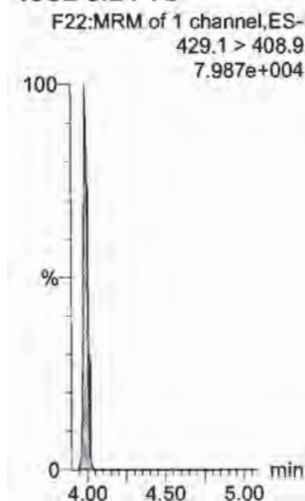
PFOSA



L-PFOS



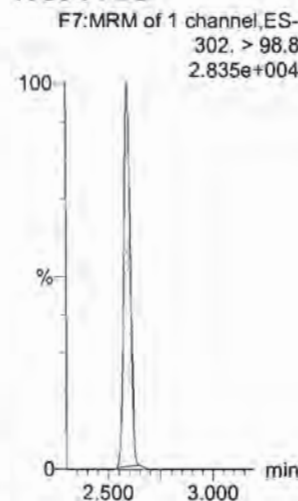
13C2-6:2 FTS



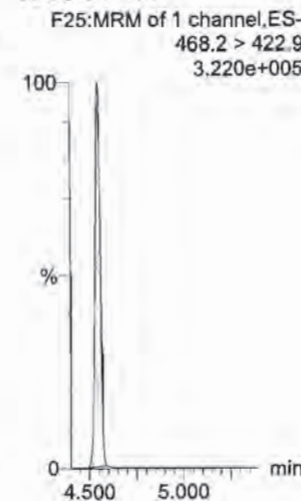
13C2-PFOA



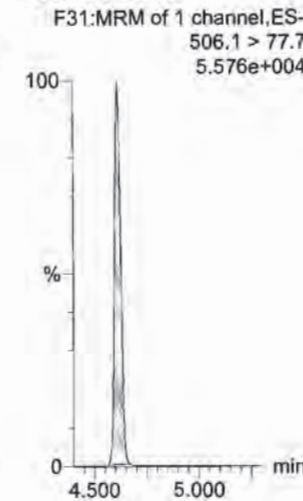
13C3-PFBS



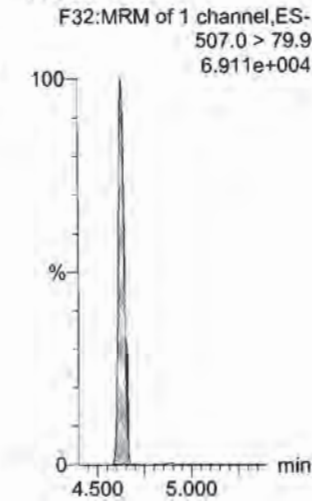
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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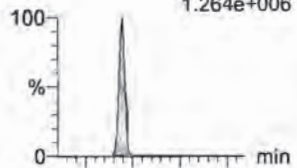
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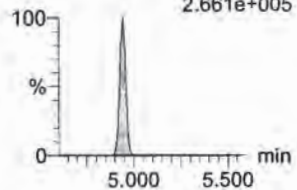
Name: 180114M1_7, Date: 14-Jan-2018, Time: 14:37:53, ID: ST180114M1-7 PFC CS4 17L1208, Description: PFC CS4 17L1208

PFDA

F34:MRM of 2 channels,ES-
513 > 468.8
1.264e+006

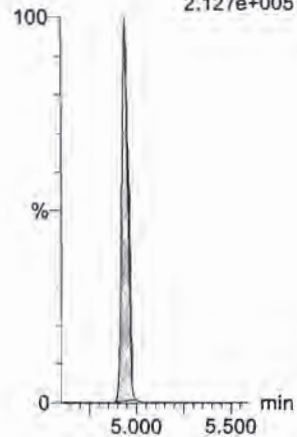


F34:MRM of 2 channels,ES-
513 > 219
2.661e+005



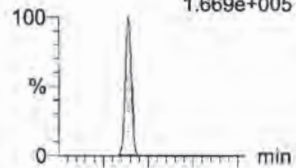
13C2-PFDA

F35:MRM of 1 channel,ES-
515.1 > 469.9
2.127e+005

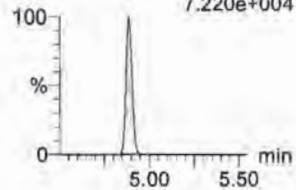


8:2 FTS

F39:MRM of 2 channels,ES-
527 > 506.9
1.669e+005

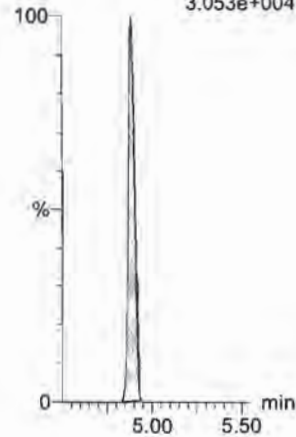


F39:MRM of 2 channels,ES-
527 > 80
7.220e+004



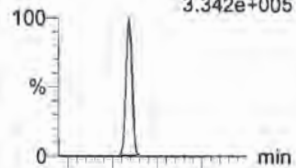
13C2-8:2 FTS

F40:MRM of 1 channel,ES-
529.1 > 508.7
3.053e+004

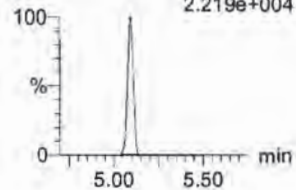


N-MeFOSAA

F44:MRM of 2 channels,ES-
570.1 > 419
3.342e+005

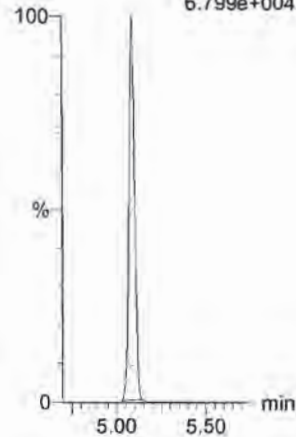


F44:MRM of 2 channels,ES-
570.1 > 483.0
2.219e+004



d3-N-MeFOSAA

F46:MRM of 1 channel,ES-
573.3 > 419
6.799e+004

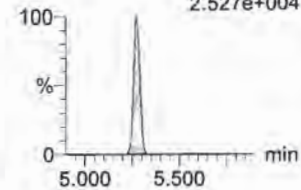


N-EtFOSAA

F47:MRM of 2 channels,ES-
584.2 > 419
4.527e+005

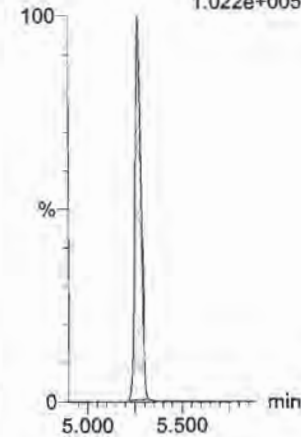


F47:MRM of 2 channels,ES-
584.2 > 483.0
2.527e+004



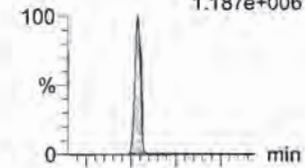
d5-N-EtFOSAA

F48:MRM of 1 channel,ES-
589.3 > 419
1.022e+005

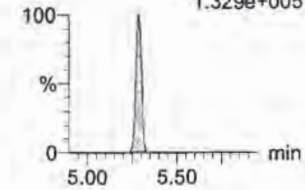


PFUdA

F42:MRM of 2 channels,ES-
563.0 > 518.9
1.187e+006

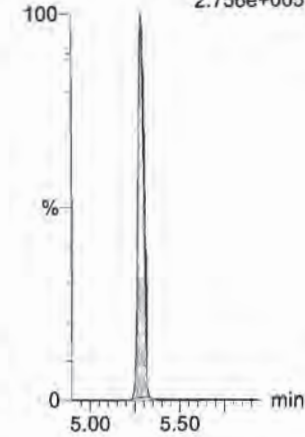


F42:MRM of 2 channels,ES-
563.0 > 269
1.329e+005



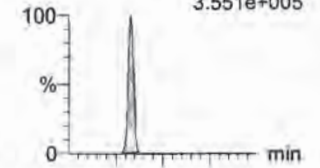
13C2-PFUdA

F43:MRM of 1 channel,ES-
565 > 519.8
2.756e+005

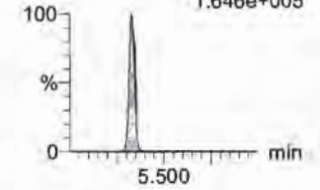


PFDS

F49:MRM of 2 channels,ES-
598.8 > 80
3.551e+005

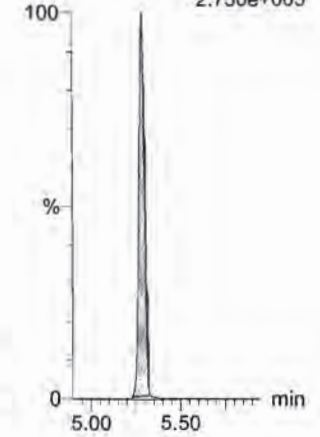


F49:MRM of 2 channels,ES-
598.8 > 98.7
1.646e+005



13C2-PFUdA

F43:MRM of 1 channel,ES-
565 > 519.8
2.756e+005



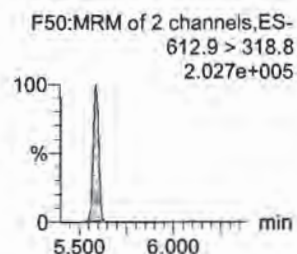
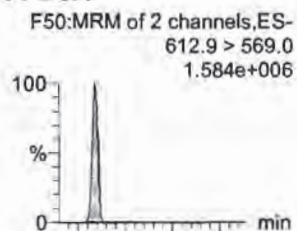
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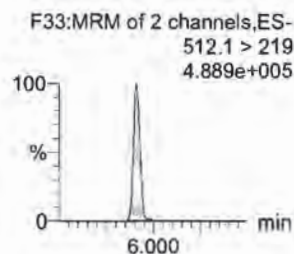
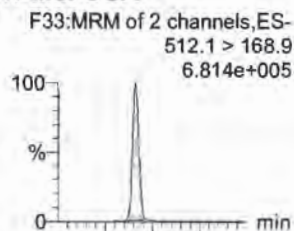
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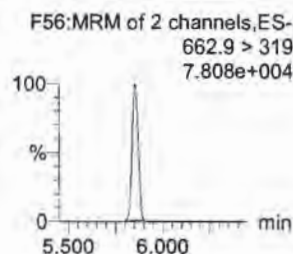
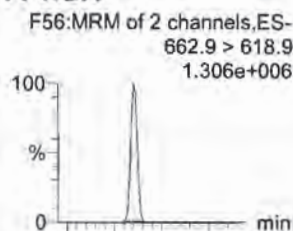
PFD_oA



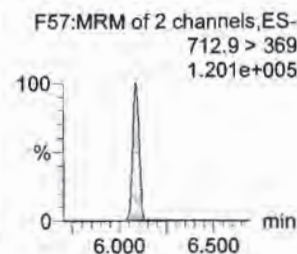
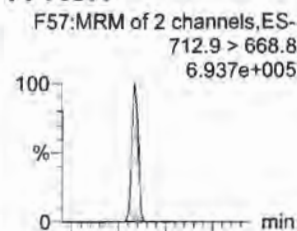
N-MeFOSA



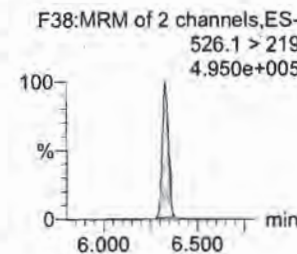
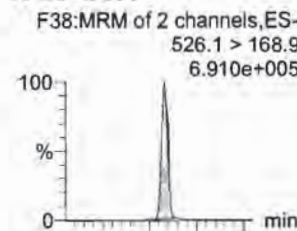
PFT_rDA



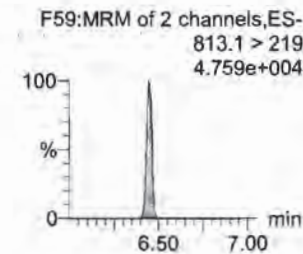
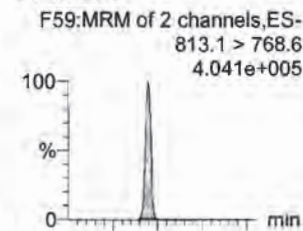
PFT_eDA



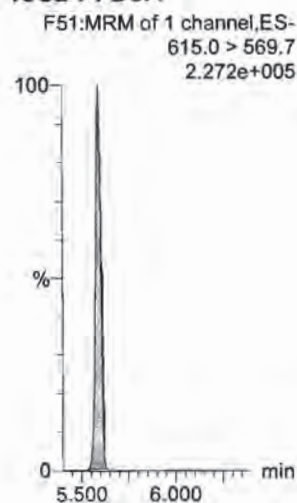
N-EtFOSA



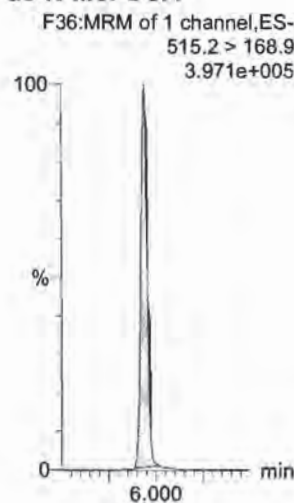
PFH_xDA



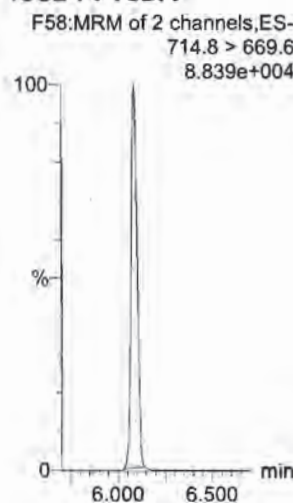
¹³C₂-PFD_oA



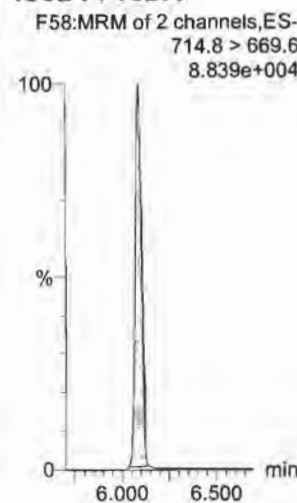
d₃-N-MeFOSA



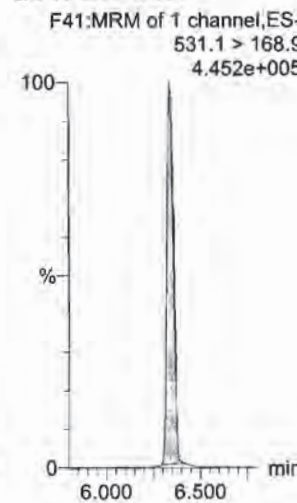
¹³C₂-PFT_eDA



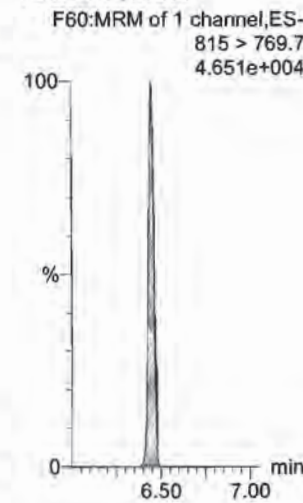
¹³C₂-PFT_eDA



d₅-N-ETFOSA



¹³C₂-PFH_xDA

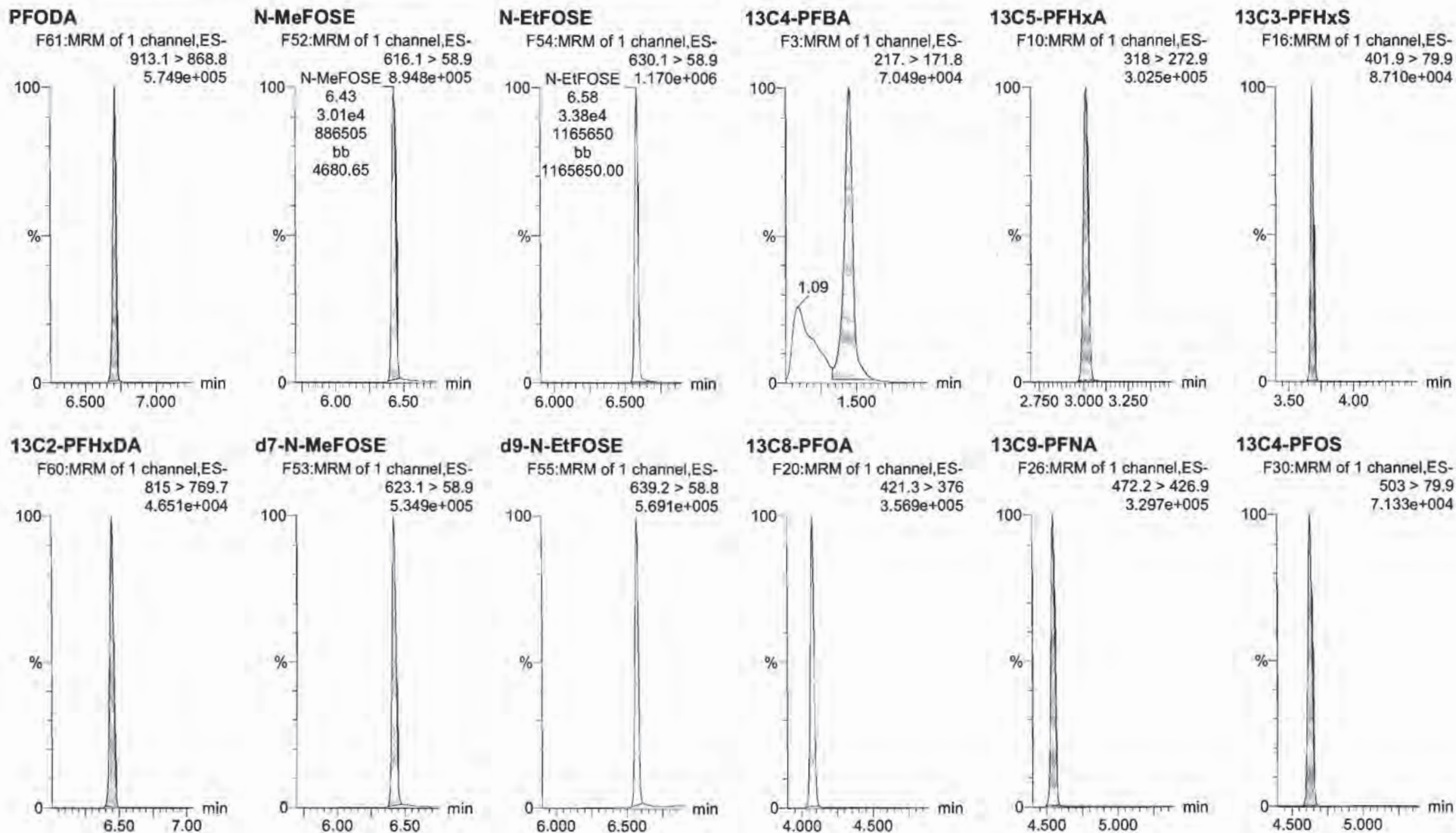


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Name: 180114M1_7, Date: 14-Jan-2018, Time: 14:37:53, ID: ST180114M1-7 PFC CS4 17L1208, Description: PFC CS4 17L1208



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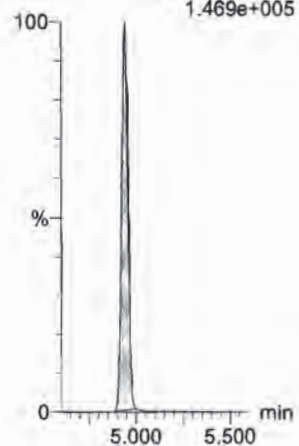
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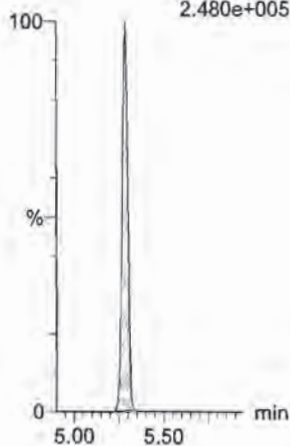
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.469e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.480e+005

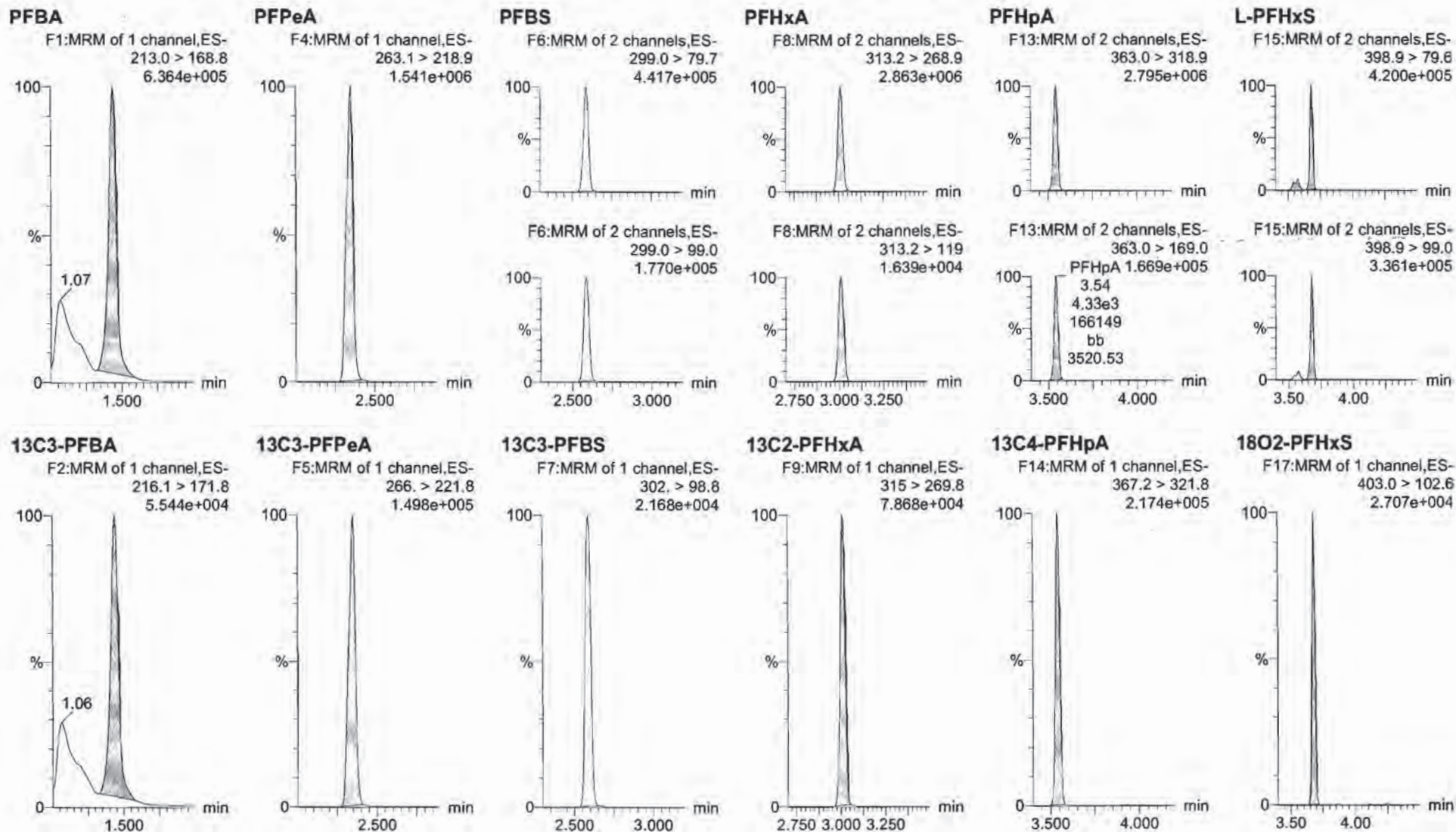


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Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

Printed: Monday, January 15, 2018 15:01:56 Pacific Standard Time

Name: 180114M1_8, Date: 14-Jan-2018, Time: 14:49:04, ID: ST180114M1-8 PFC CS5 17L2613, Description: PFC CS5 17L2613



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

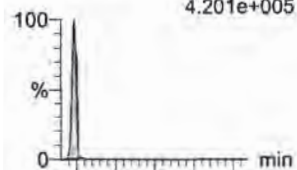
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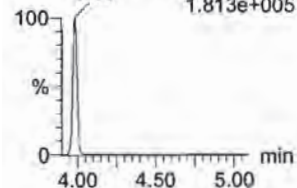
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6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
4.201e+005

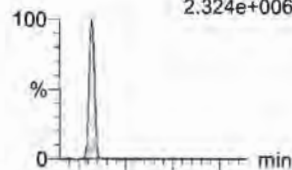


F21:MRM of 2 channels,ES-
427.1 > 80
1.813e+005

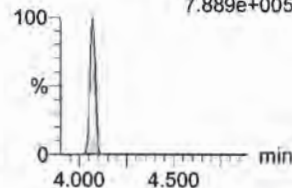


L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
2.324e+006

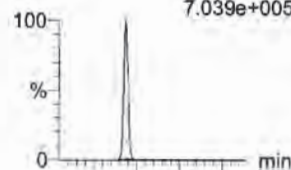


F18:MRM of 2 channels,ES-
413 > 169
7.889e+005

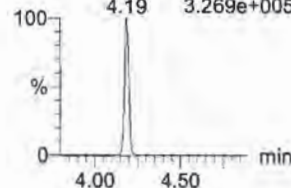


PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
7.039e+005

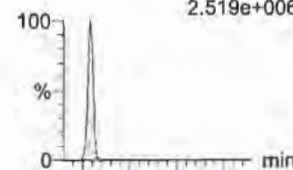


F23:MRM of 2 channels,ES-
449 > 98.7
3.269e+005

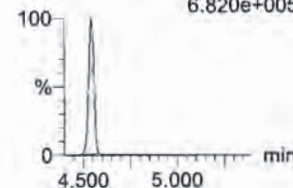


PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
2.519e+006

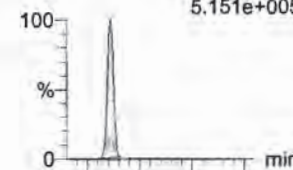


F24:MRM of 2 channels,ES-
463.0 > 219.0
6.820e+005

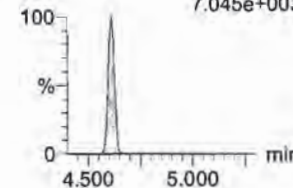


PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
5.151e+005

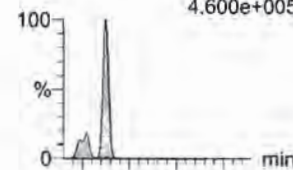


F27:MRM of 2 channels,ES-
498.1 > 478
7.045e+003

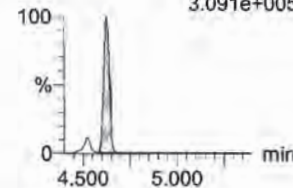


L-PFOS

F29:MRM of 2 channels,ES-
499 > 79.9
4.600e+005

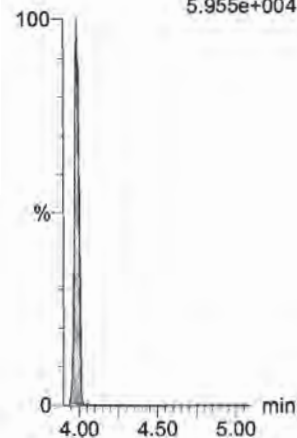


F29:MRM of 2 channels,ES-
499 > 99
3.091e+005



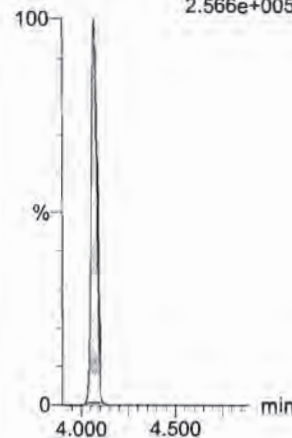
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
5.955e+004



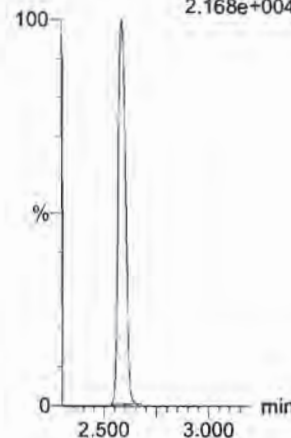
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
2.566e+005



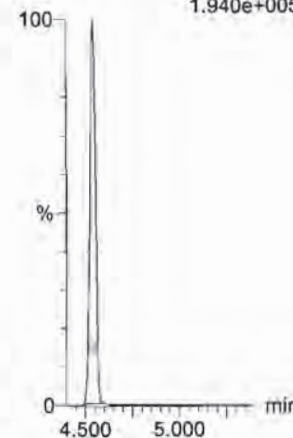
13C3-PFBS

F7:MRM of 1 channel,ES-
302. > 98.8
2.168e+004



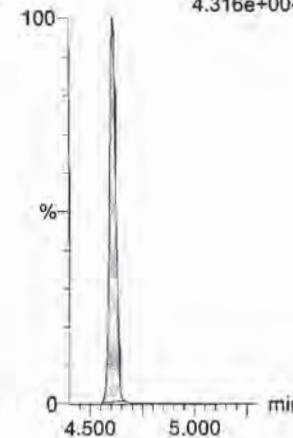
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
1.940e+005



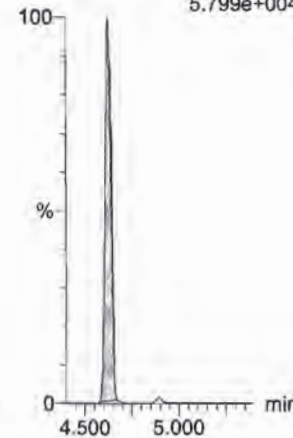
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
4.316e+004



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
5.799e+004



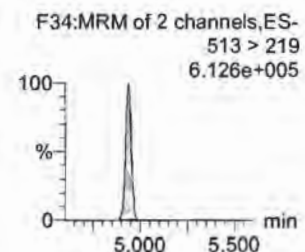
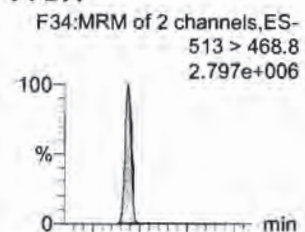
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Last Altered: Monday, January 15, 2018 14:59:57 Pacific Standard Time

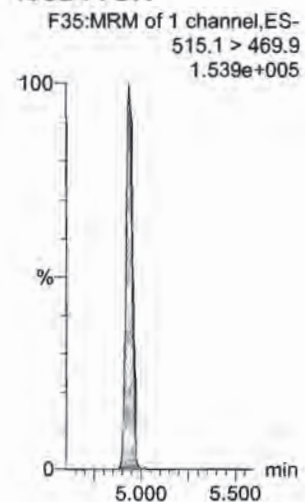
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Name: 180114M1_8, Date: 14-Jan-2018, Time: 14:49:04, ID: ST180114M1-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

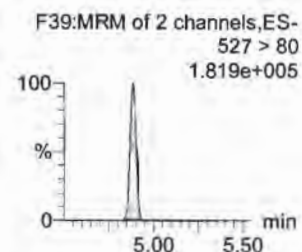
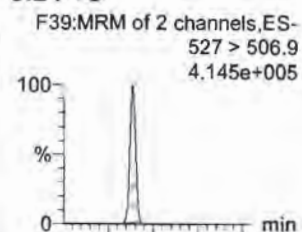
PFDA



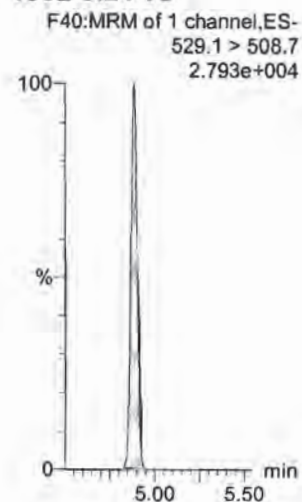
13C2-PFDA



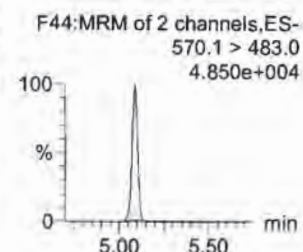
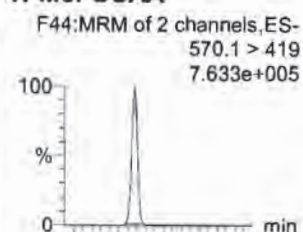
8:2 FTS



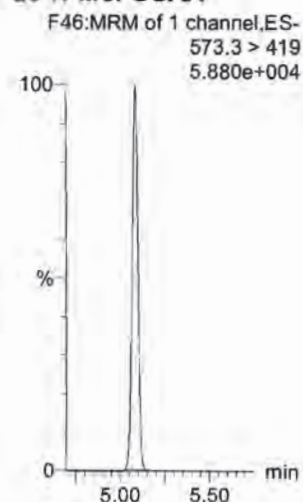
13C2-8:2 FTS



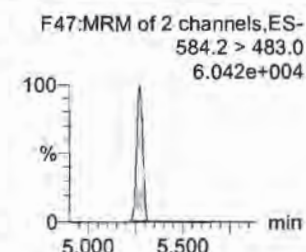
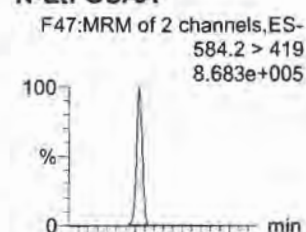
N-MeFOSAA



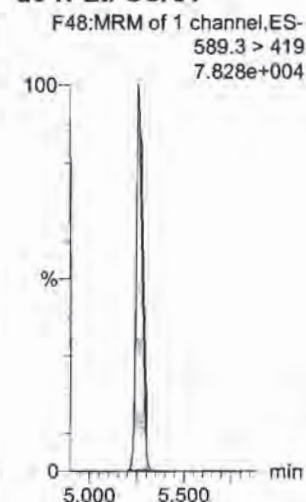
d3-N-MeFOSAA



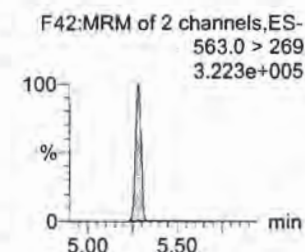
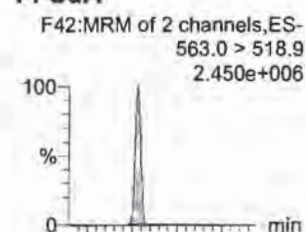
N-EtFOSAA



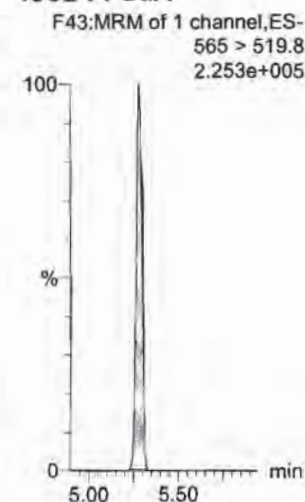
d5-N-EtFOSAA



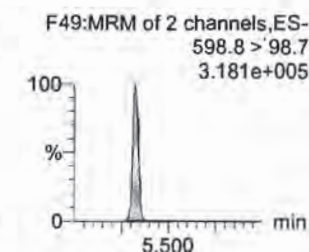
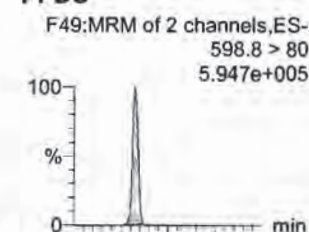
PFUdA



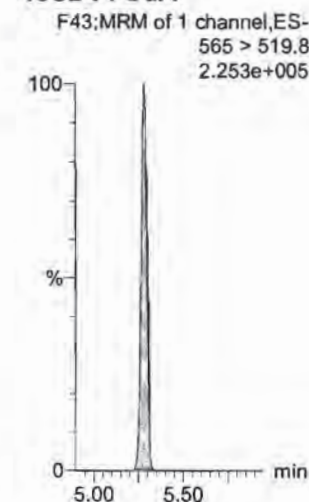
13C2-PFUdA



PFDS



13C2-PFUdA



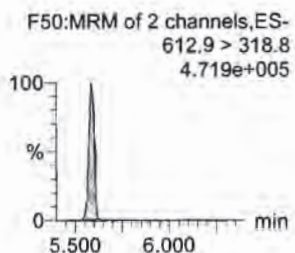
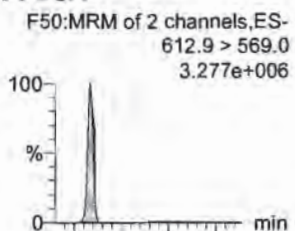
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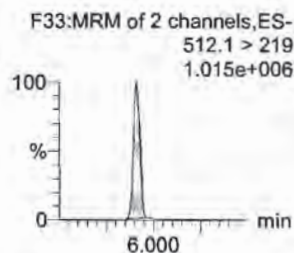
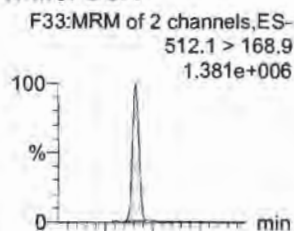
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Name: 180114M1_8, Date: 14-Jan-2018, Time: 14:49:04, ID: ST180114M1-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

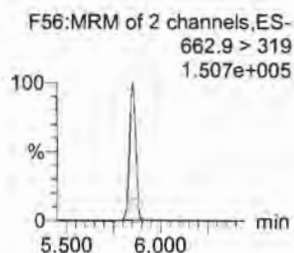
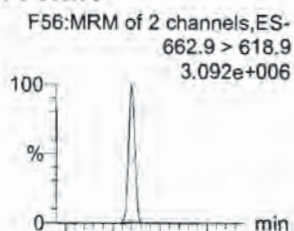
PFD_oA



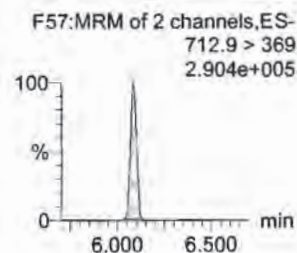
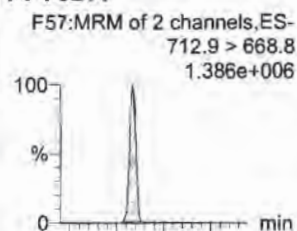
N-MeFOSA



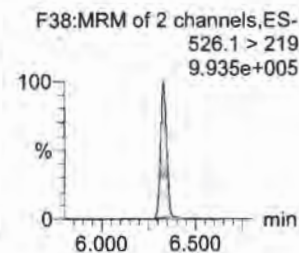
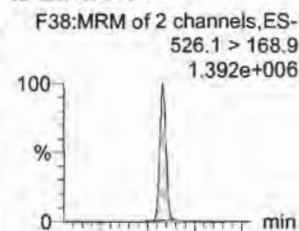
PFT_rDA



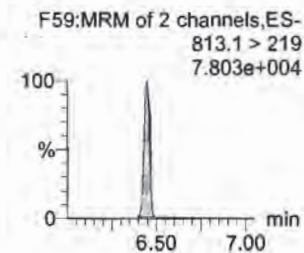
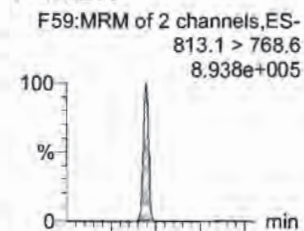
PFT_eDA



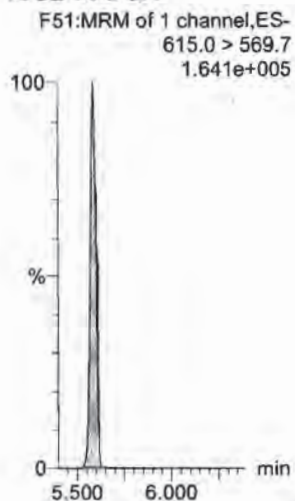
N-EtFOSA



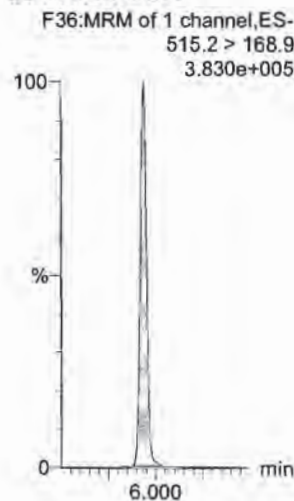
PFH_xDA



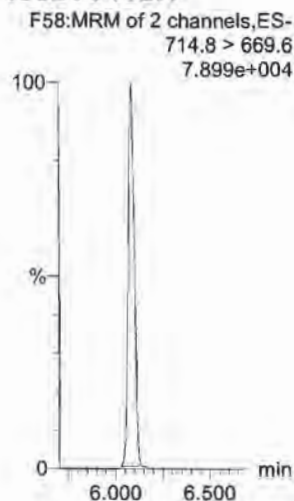
¹³C₂-PFD_oA



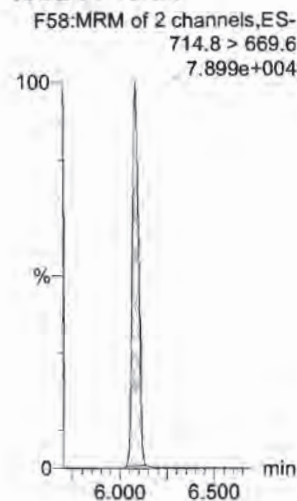
d₃-N-MeFOSA



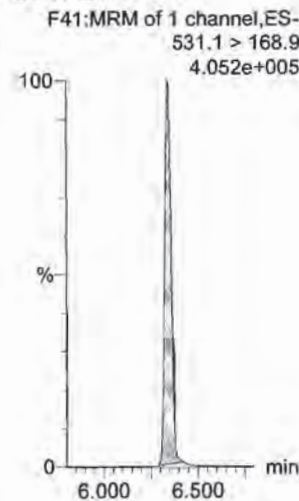
¹³C₂-PFT_eDA



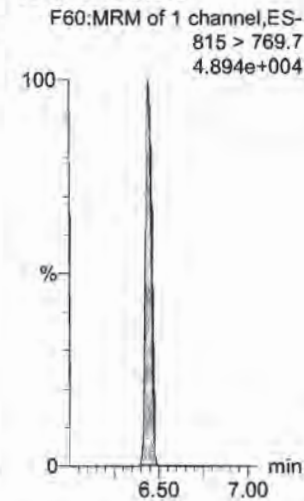
¹³C₂-PFT_eDA



d₅-N-ETFOSA



¹³C₂-PFH_xDA



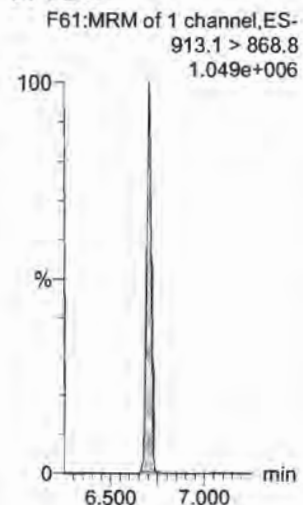
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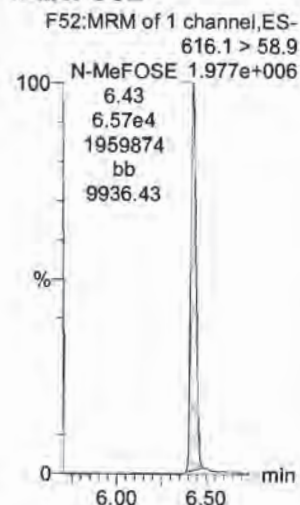
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Name: 180114M1_8, Date: 14-Jan-2018, Time: 14:49:04, ID: ST180114M1-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

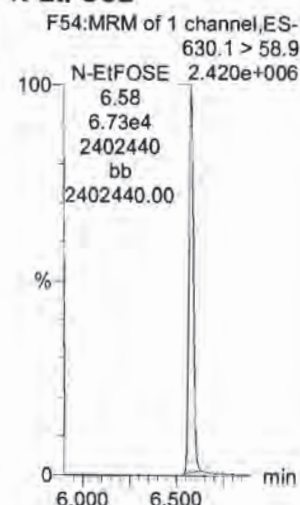
PFODA



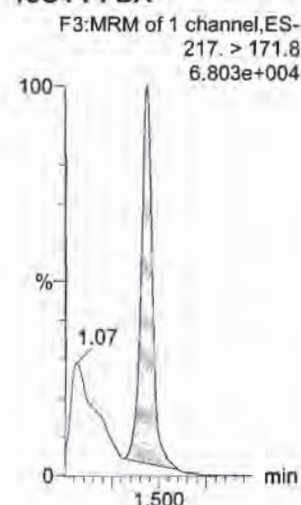
N-MeFOSE



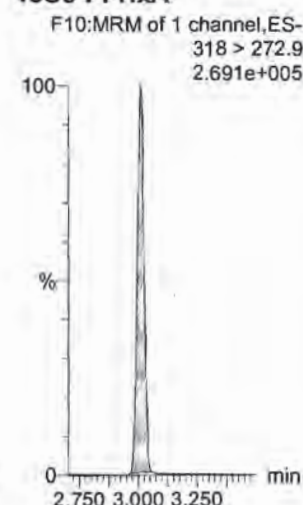
N-EtFOSE



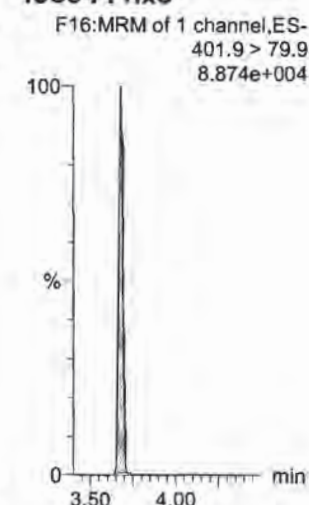
13C4-PFBA



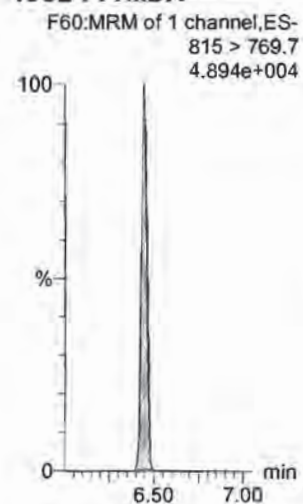
13C5-PFHxA



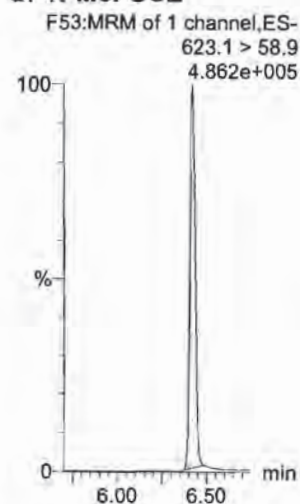
13C3-PFHxS



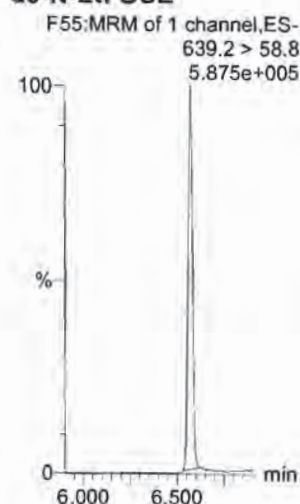
13C2-PFHxDA



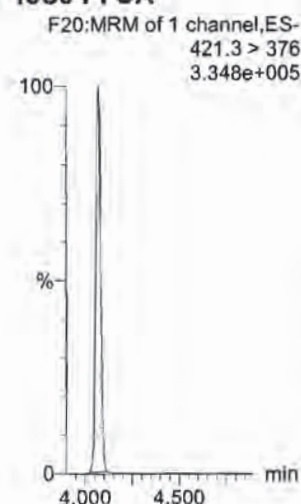
d7-N-MeFOSE



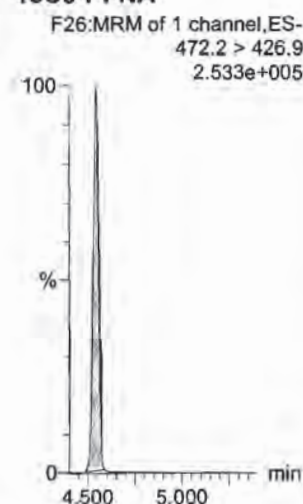
d9-N-EtFOSE



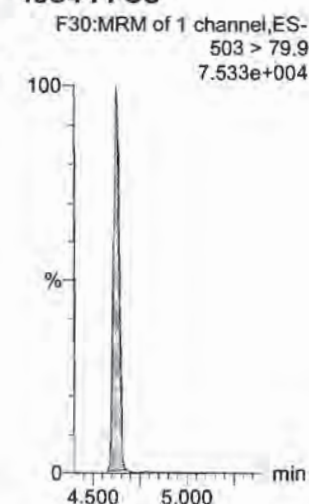
13C8-PFOA



13C9-PFNA



13C4-PFOS



Dataset: U:\Q4.PRO\results\180114M1\180114M1-crv.qld

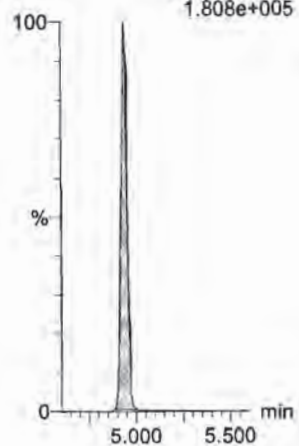
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Name: 180114M1_8, Date: 14-Jan-2018, Time: 14:49:04, ID: ST180114M1-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

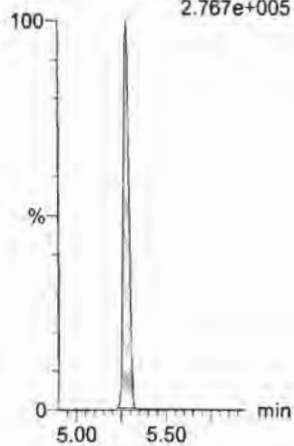
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.808e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.767e+005



Dataset: U:\Q4.PRO\results\180114M1\180114M1-11.qld

Ⓐ Not present in SS

Last Altered: Monday, January 15, 2018 15:09:12 Pacific Standard Time

Printed: Monday, January 15, 2018 15:11:46 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_11, Date: 14-Jan-2018, Time: 15:11:29, ID: ICV180114M1-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

Ⓐ 1/15/18
JHA
01/15/2018

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
1	1 PFBA	213.0 > 168.8	2.65e4	2.78e4		1.44	1.43	11.9	8.78	87.8	NO
2	2 PFPeA	263.1 > 218.9	2.81e4	3.32e4		2.37	2.34	10.6	8.86	88.6	NO
3	3 PFBS	299.0 > 79.7	5.56e3	3.91e3		2.60	2.59	17.8	9.33	93.3	NO
4	4 PFHxA	313.2 > 268.9	3.26e4	1.07e4		3.00	3.00	15.3	8.33	83.3	NO
5	5 PFHpA	363.0 > 318.9	2.47e4	2.80e4		3.54	3.54	11.0	8.51	85.1	NO
6	6 L-PFHxS	398.9 > 79.6	4.17e3	3.12e3		3.68	3.67	16.7	9.76	97.6	NO
7	8 6:2 FTS	427.1 > 407	5.31e3	6.49e3		4.00	3.97	10.2	9.56	95.6	NO
8	9 L-PFOA	413 > 368.7	3.20e4	4.09e4		4.07	4.06	9.78	8.07	80.7	NO
9	11 PFHpS	449 > 80.0	7.15e3	4.09e4		4.20	4.18	2.19	8.70	87.0	NO
10	12 PFNA	463.0 > 418.8	2.90e4	3.05e4		4.54	4.53	11.9	7.96	79.6	NO
11	13 PFOSA	498.1 > 77.8	5.86e3	6.95e3		4.61	4.60	10.6	7.06	70.6	NO
12	14 L-PFOS	499 > 79.9	6.95e3	9.49e3		4.63	4.62	9.16	7.66	76.6	NO
13	16 PFDA	513 > 468.8	3.07e4	3.05e4		4.94	4.93	12.5	9.60	96.0	NO
14	17 8:2 FTS	527 > 506.9	4.90e3	3.84e3		4.88	4.87	15.9	8.41	84.1	NO
15	18 N-MeFOSAA	570.1 > 419	1.11e4	1.00e4		5.10	5.08	13.8	7.08	70.8	NO
16	19 N-EtFOSAA	584.2 > 419	1.17e4	1.16e4		5.27	5.26	12.6	10.1	101.4	NO
17	20 PFUdA	563.0 > 518.9	3.40e4	3.49e4		5.30	5.28	12.2	10.3	102.8	NO
18	21 PFDS	598.8 > 80	6.82e3	3.49e4		5.33	5.32	2.44	7.12	71.2	NO
19	22 PFDoA	612.9 > 569.0	3.52e4	1.87e4		5.60	5.58	23.5	9.16	91.6	NO
20	23 N-MeFOSA	512.1 > 168.9		2.09e4		5.91					NO
21	24 PFTrDA	662.9 > 618.9	1.94e4	2.99e3		5.85	5.84	81.0	11.3	113.4	NO
22	25 PFTeDA	712.9 > 668.8	5.33e3	2.99e3		6.10	6.08	22.3	8.21	82.1	NO
23	26 N-EtFOSA	526.1 > 168.9		1.79e4		6.33					NO
24	27 PFHxDA	813.1 > 768.6		9.74e2		6.45					NO
25	28 PFODA	913.1 > 868.8		9.74e2		6.70					NO
26	29 N-MeFOSE	616.1 > 58.9		4.17e4		6.43					NO
27	30 N-EtFOSE	630.1 > 58.9		3.44e4		6.60					NO
28	31 13C3-PFBA	216.1 > 171.8	2.78e4	3.25e4	0.790	1.44	1.43	10.7	13.5	108.4	NO
29	32 13C3-PFPeA	266. > 221.8	3.32e4	3.17e4	0.809	2.35	2.34	13.1	16.2	129.5	NO
30	33 13C3-PFBS	302. > 98.8	3.91e3	3.17e4	0.097	2.60	2.58	1.54	16.0	127.8	NO
31	Work Order 1701851	315 > 269.8	1.07e4	3.17e4	0.633	3.00	3.00	4.21	6.65	133.1	NO

70-130

Dataset: U:\Q4.PRO\results\180114M1\180114M1-11.qld

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Name: 180114M1_11, Date: 14-Jan-2018, Time: 15:11:29, ID: ICV180114M1-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

	# Name	Trace	Area	IS Area	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec	Recovery Out
32	35 13C4-PFHpA	367.2 > 321.8	2.80e4	3.17e4	0.651	3.56	3.54	11.0	17.0	135.7	NO
33	36 18O2-PFHxS	403.0 > 102.6	3.12e3	8.73e3	0.326	3.68	3.67	4.47	13.7	109.9	NO
34	37 13C2-6:2 FTS	429.1 > 408.9	6.49e3	3.70e4	0.171	4.00	3.98	2.19	12.9	102.8	NO
35	38 13C2-PFOA	414.9 > 369.7	4.09e4	3.70e4	0.903	4.07	4.06	13.8	15.3	122.2	NO
36	39 13C5-PFNA	468.2 > 422.9	3.05e4	3.21e4	0.844	4.54	4.53	11.9	14.1	112.5	NO
37	40 13C8-PFOSA	506.1 > 77.7	6.95e3	3.03e4	0.165	4.61	4.60	2.86	17.3	138.4	NO
38	41 13C8-PFOS	507.0 > 79.9	9.49e3	9.76e3	0.920	4.62	4.62	12.2	13.2	105.7	NO
39	42 13C2-PFDA	515.1 > 469.9	3.05e4	2.43e4	1.044	4.82	4.93	15.7	15.0	120.4	NO
40	43 13C2-8:2 FTS	529.1 > 508.7	3.84e3	3.17e4	0.087	4.89	4.87	1.51	17.5	139.8	NO
41	44 d3-N-MeFOSAA	573.3 > 419	1.00e4	3.03e4	0.227	5.08	5.08	4.13	18.2	145.5	NO
42	45 d5-N-EtFOSAA	589.3 > 419	1.16e4	3.03e4	0.313	5.27	5.26	4.80	15.3	122.4	NO
43	46 13C2-PFUDa	565 > 519.8	3.49e4	3.03e4	0.899	5.28	5.27	14.4	16.0	128.0	NO
44	47 13C2-PFDoA	615.0 > 569.7	1.87e4	3.03e4	0.645	5.60	5.58	7.72	12.0	95.7	NO
45	48 d3-N-MeFOSA	515.2 > 168.9	2.09e4	3.03e4	0.122	5.94	5.94	8.60	70.5	47.0	YES
46	49 13C2-PFTeDA	714.8 > 669.6	2.99e3	3.03e4	0.290	6.10	6.08	1.23	4.25	34.0	YES
47	50 d5-N-ETFOSA	531.1 > 168.9	1.79e4	3.03e4	0.131	6.34	6.34	7.37	56.1	37.4	YES
48	51 13C2-PFHxDA	815 > 769.7	9.74e2	3.03e4	0.377	6.45	6.44	0.401	1.06	21.3	YES
49	52 d7-N-MeFOSE	623.1 > 58.9	4.17e4	3.03e4	0.140	6.42	6.42	17.2	123	82.1	NO
50	53 d9-N-EtFOSE	639.2 > 58.8	3.44e4	3.03e4	0.127	6.57	6.57	14.2	112	74.6	NO
51	54 13C4-PFBA	217. > 171.8	3.25e4	3.25e4	1.000	1.44	1.43	12.5	12.5	100.0	NO
52	55 13C5-PFHxA	318 > 272.9	3.17e4	3.17e4	1.000	3.00	3.01	12.5	12.5	100.0	NO
53	56 13C3-PFHxS	401.9 > 79.9	8.73e3	8.73e3	1.000	3.68	3.67	12.5	12.5	100.0	NO
54	57 13C8-PFOA	421.3 > 376	3.70e4	3.70e4	1.000	4.07	4.06	12.5	12.5	100.0	NO
55	58 13C9-PFNA	472.2 > 426.9	3.21e4	3.21e4	1.000	4.54	4.53	12.5	12.5	100.0	NO
56	59 13C4-PFOS	503 > 79.9	9.76e3	9.76e3	1.000	4.63	4.62	12.5	12.5	100.0	NO
57	60 13C6-PFDA	519.1 > 473.7	2.43e4	2.43e4	1.000	4.94	4.93	12.5	12.5	100.0	NO
58	61 13C7-PFUDa	570.1 > 524.8	3.03e4	3.03e4	1.000	5.28	5.27	12.5	12.5	100.0	NO

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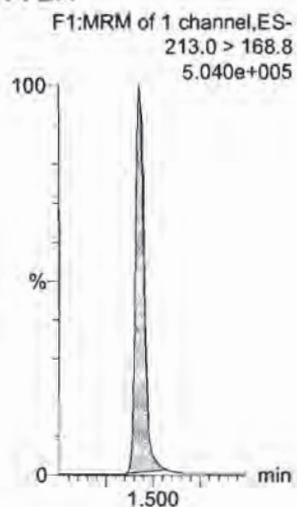
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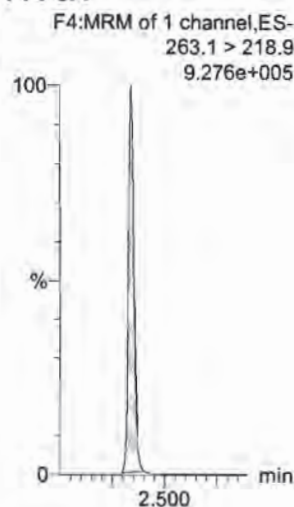
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Name: 180114M1_11, Date: 14-Jan-2018, Time: 15:11:29, ID: ICV180114M1-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

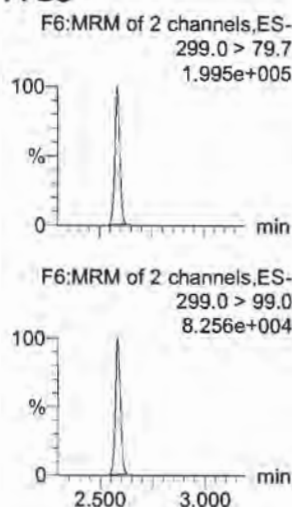
PFBA



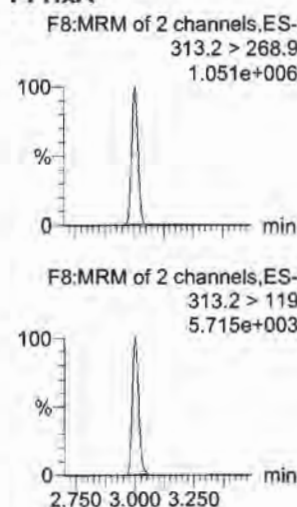
PFPeA



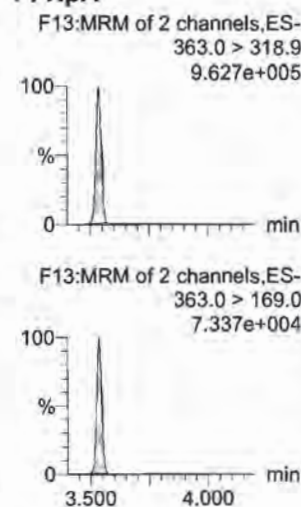
PFBS



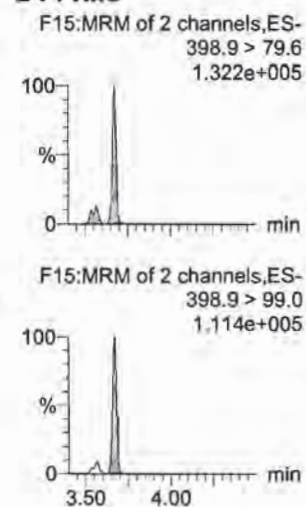
PFHxA



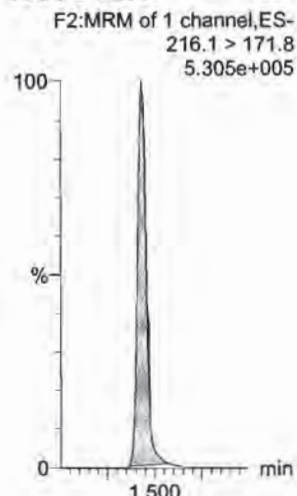
PFHpA



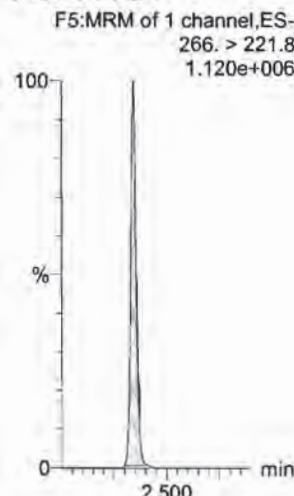
L-PFHxS



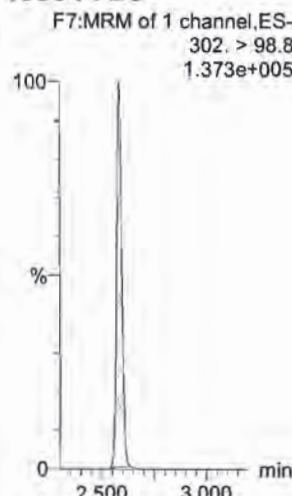
13C3-PFBA



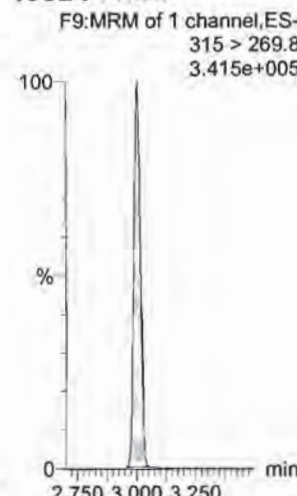
13C3-PFPeA



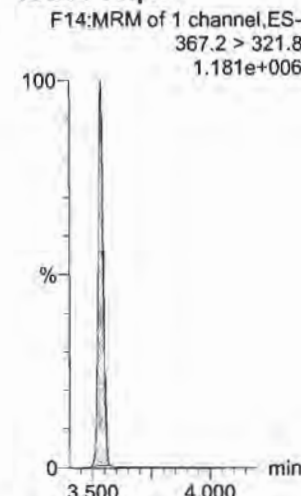
13C3-PFBS



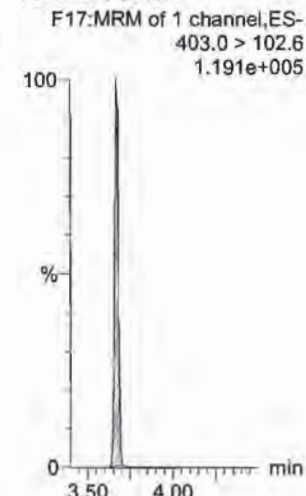
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

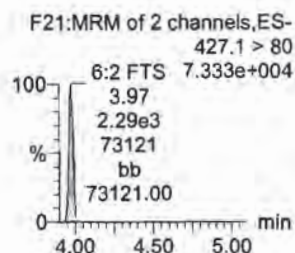
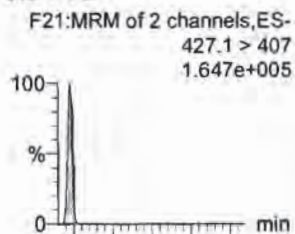


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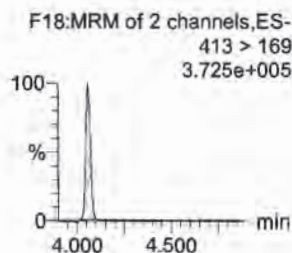
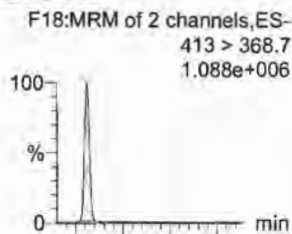
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Printed: Monday, January 15, 2018 15:11:46 Pacific Standard Time

Name: 180114M1_11, Date: 14-Jan-2018, Time: 15:11:29, ID: ICV180114M1-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

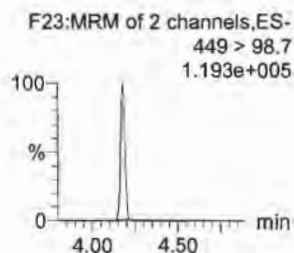
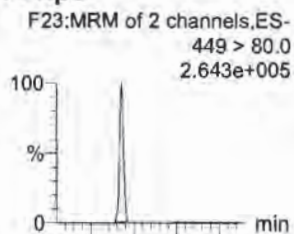
6:2 FTS



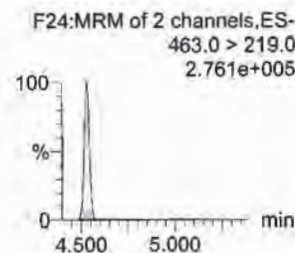
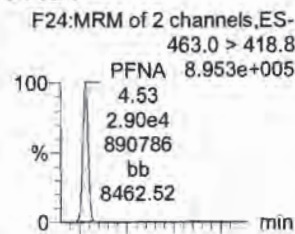
L-PFOA



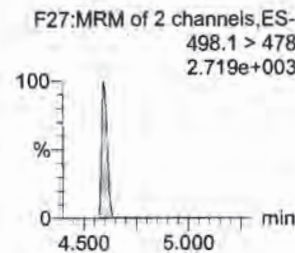
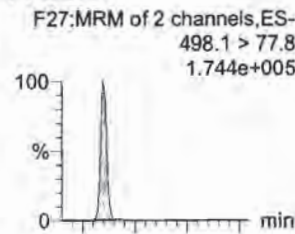
PFHpS



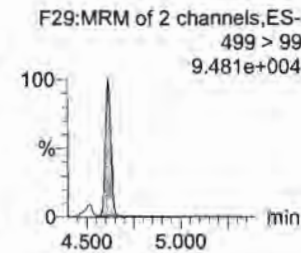
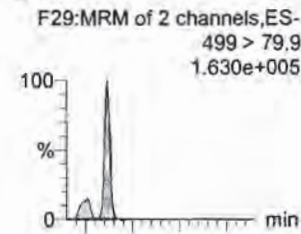
PFNA



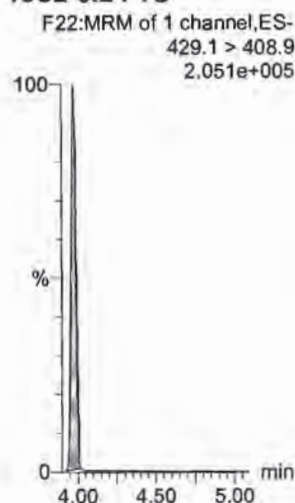
PFOSA



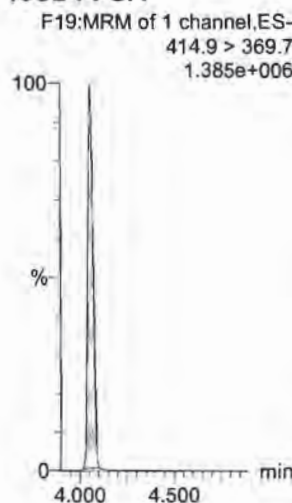
L-PFOS



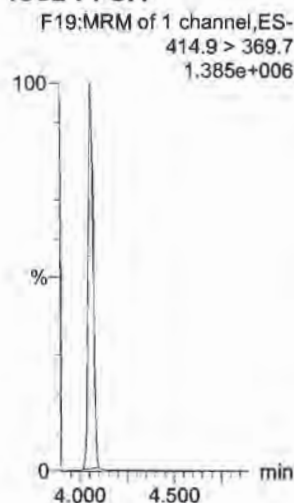
13C2-6:2 FTS



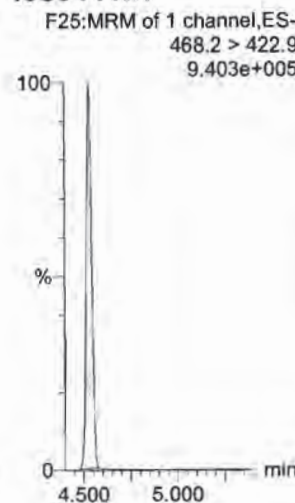
13C2-PFOA



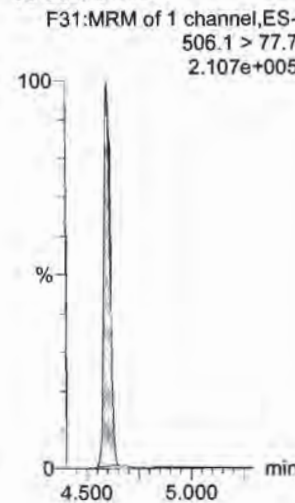
13C2-PFOA



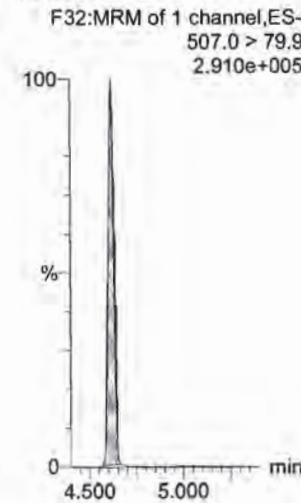
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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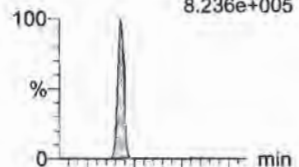
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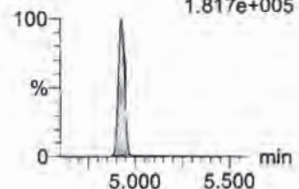
Name: 180114M1_11, Date: 14-Jan-2018, Time: 15:11:29, ID: ICV180114M1-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

PFDA

F34:MRM of 2 channels,ES-
513 > 468.8
8.236e+005

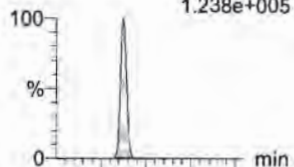


F34:MRM of 2 channels,ES-
513 > 219
1.817e+005

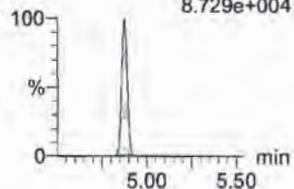


8:2 FTS

F39:MRM of 2 channels,ES-
527 > 506.9
1.238e+005

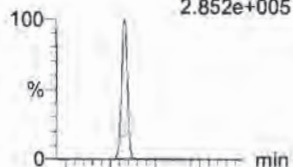


F39:MRM of 2 channels,ES-
527 > 80
8.729e+004

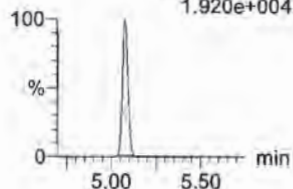


N-MeFOSAA

F44:MRM of 2 channels,ES-
570.1 > 419
2.852e+005

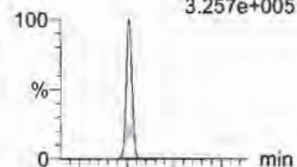


F44:MRM of 2 channels,ES-
570.1 > 483.0
1.920e+004

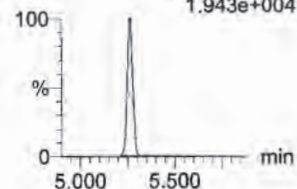


N-EtFOSAA

F47:MRM of 2 channels,ES-
584.2 > 419
3.257e+005

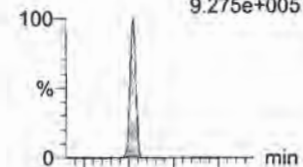


F47:MRM of 2 channels,ES-
584.2 > 483.0
1.943e+004

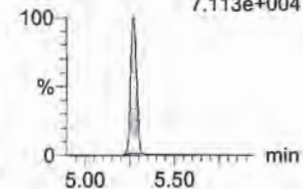


PFUdA

F42:MRM of 2 channels,ES-
563.0 > 518.9
9.275e+005

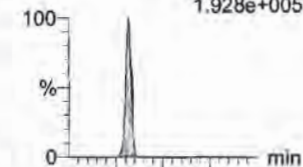


F42:MRM of 2 channels,ES-
563.0 > 269
7.113e+004

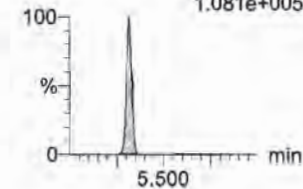


PFDS

F49:MRM of 2 channels,ES-
598.8 > 80
1.928e+005

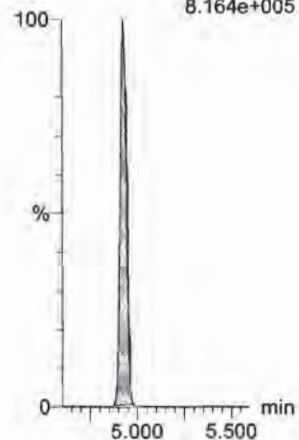


F49:MRM of 2 channels,ES-
598.8 > 98.7
1.081e+005



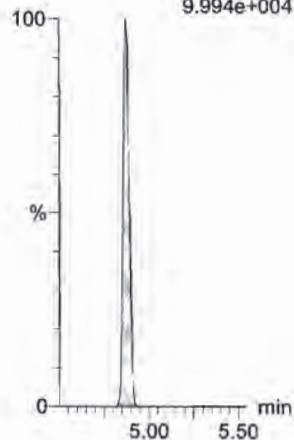
13C2-PFDA

F35:MRM of 1 channel,ES-
515.1 > 469.9
8.164e+005



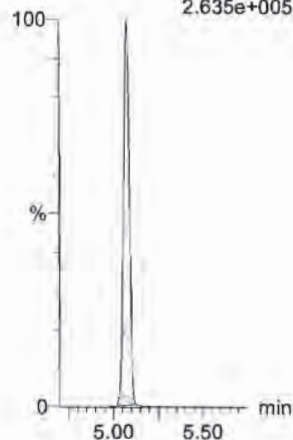
13C2-8:2 FTS

F40:MRM of 1 channel,ES-
529.1 > 508.7
9.994e+004



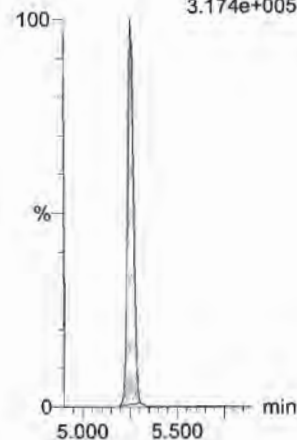
d3-N-MeFOSAA

F46:MRM of 1 channel,ES-
573.3 > 419
2.635e+005



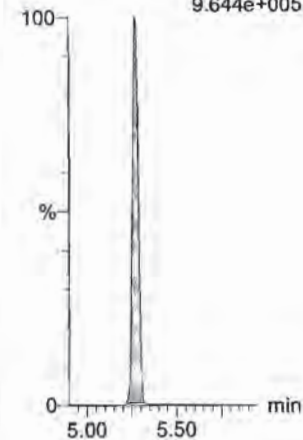
d5-N-EtFOSAA

F48:MRM of 1 channel,ES-
589.3 > 419
3.174e+005



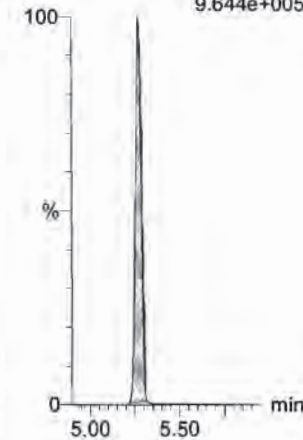
13C2-PFUdA

F43:MRM of 1 channel,ES-
565 > 519.8
9.644e+005



13C2-PFUdA

F43:MRM of 1 channel,ES-
565 > 519.8
9.644e+005



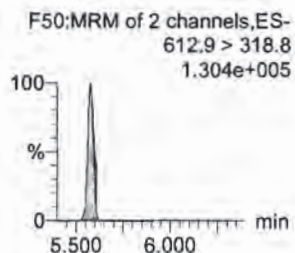
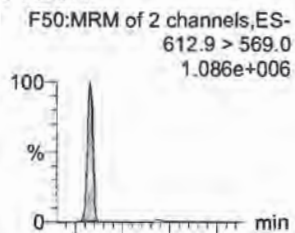
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Last Altered: Monday, January 15, 2018 15:09:12 Pacific Standard Time

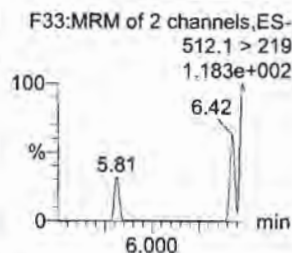
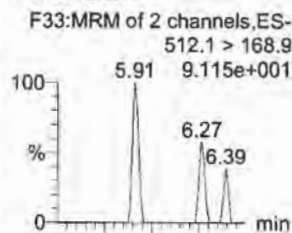
Printed: Monday, January 15, 2018 15:11:46 Pacific Standard Time

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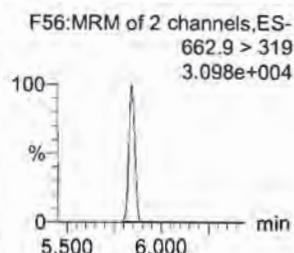
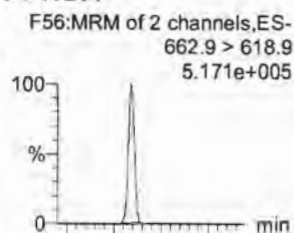
PFD_oA



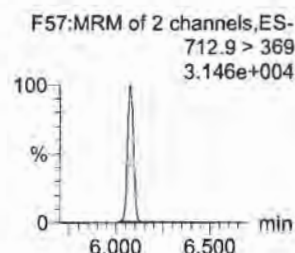
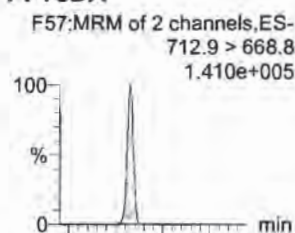
N-MeFOSA



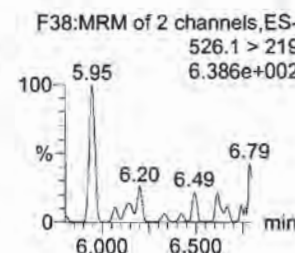
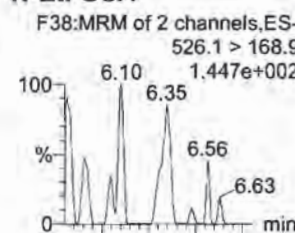
PFT_rDA



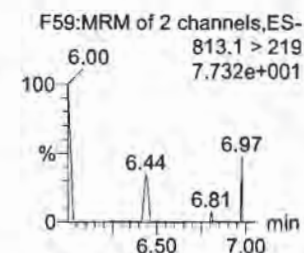
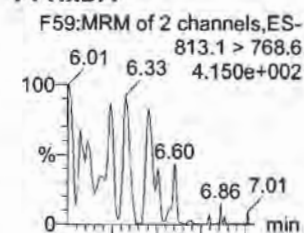
PFT_eDA



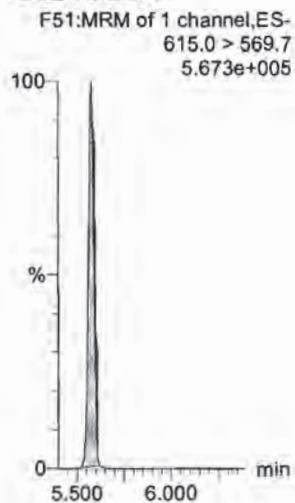
N-EtFOSA



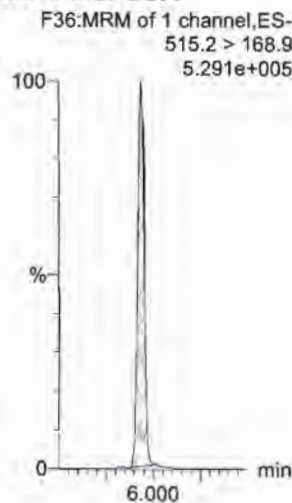
PFH_xDA



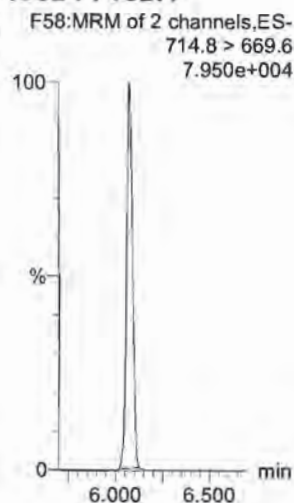
13C2-PFD_oA



d3-N-MeFOSA



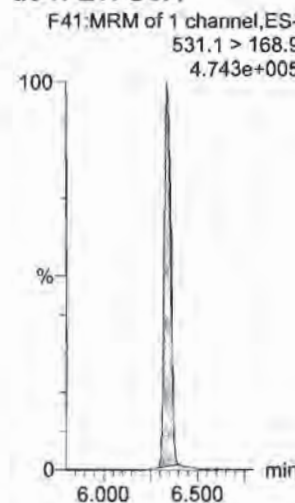
13C2-PFT_eDA



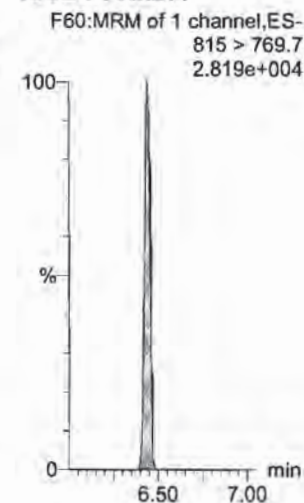
13C2-PFT_eDA



d5-N-ETFOSA



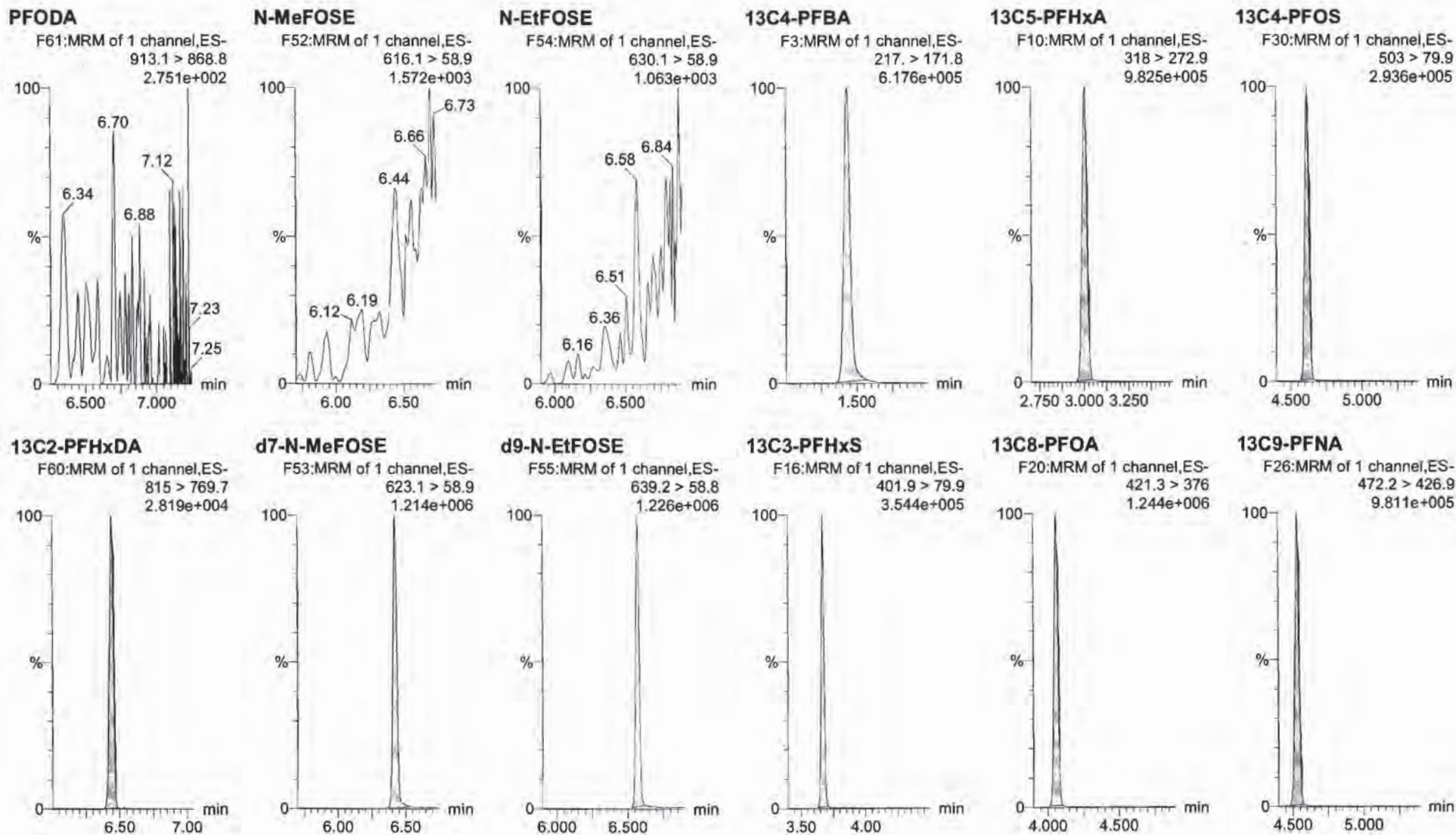
13C2-PFH_xDA



Dataset: U:\Q4.PRO\results\180114M1\180114M1-11.qld

Last Altered: Monday, January 15, 2018 15:09:12 Pacific Standard Time
Printed: Monday, January 15, 2018 15:11:46 Pacific Standard Time

Name: 180114M1_11, Date: 14-Jan-2018, Time: 15:11:29, ID: ICV180114M1-1 PFC ICV 17L1201, Description: PFC ICV 17L1201



Dataset: U:\Q4.PRO\results\180114M1\180114M1-11.qld

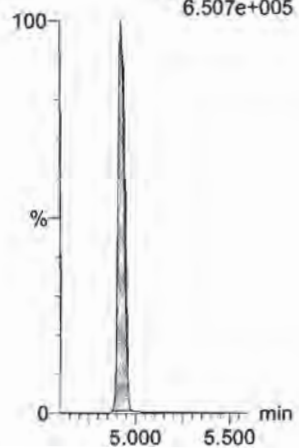
Last Altered: Monday, January 15, 2018 15:09:12 Pacific Standard Time

Printed: Monday, January 15, 2018 15:11:46 Pacific Standard Time

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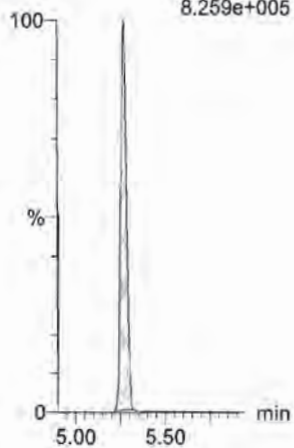
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
6.507e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
8.259e+005



Vista Analytical Laboratory

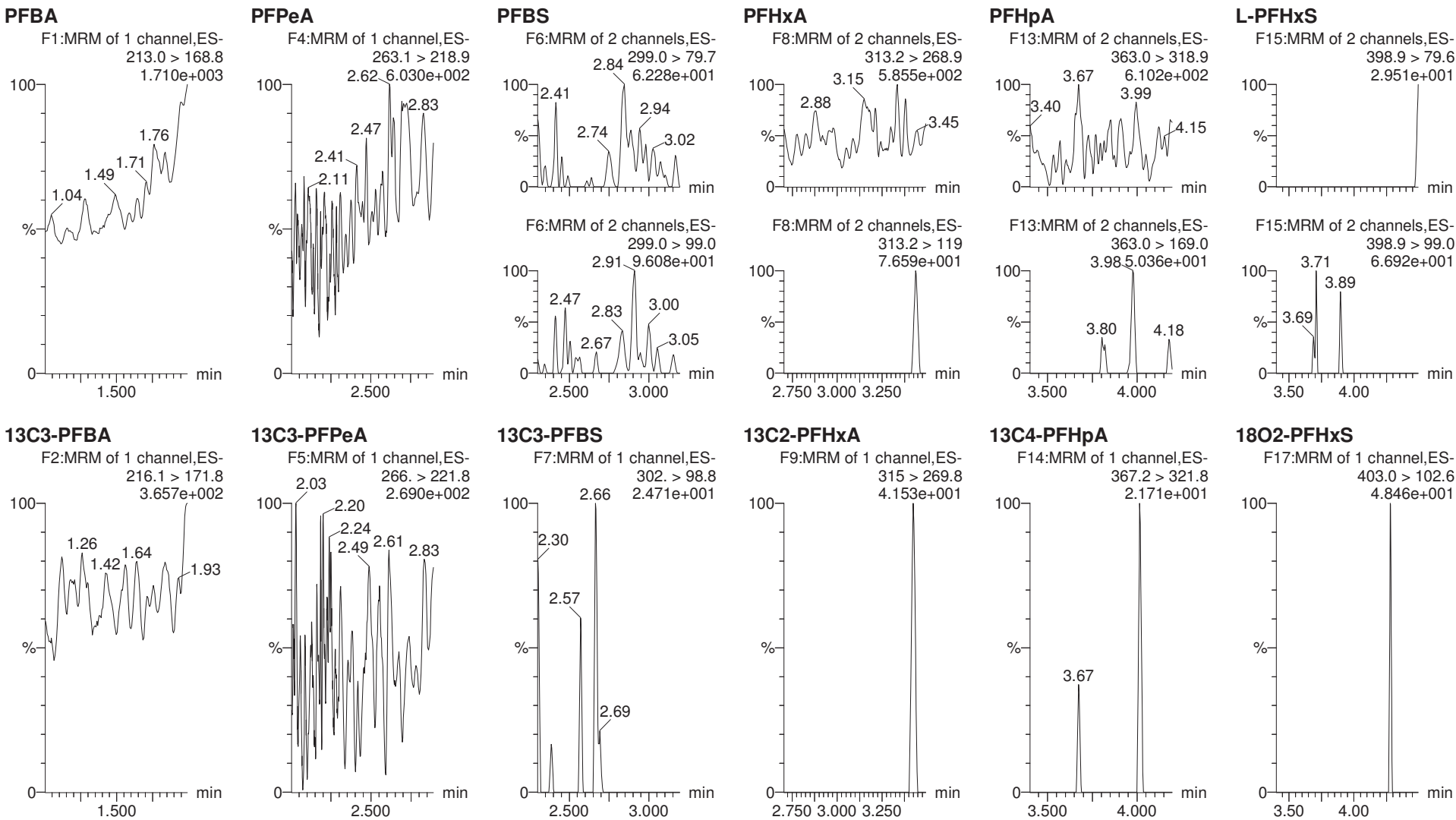
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Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_010818D.mdb 15 Jan 2018 12:58:53
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-14-18-FULL.cdb 15 Jan 2018 14:59:56

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA



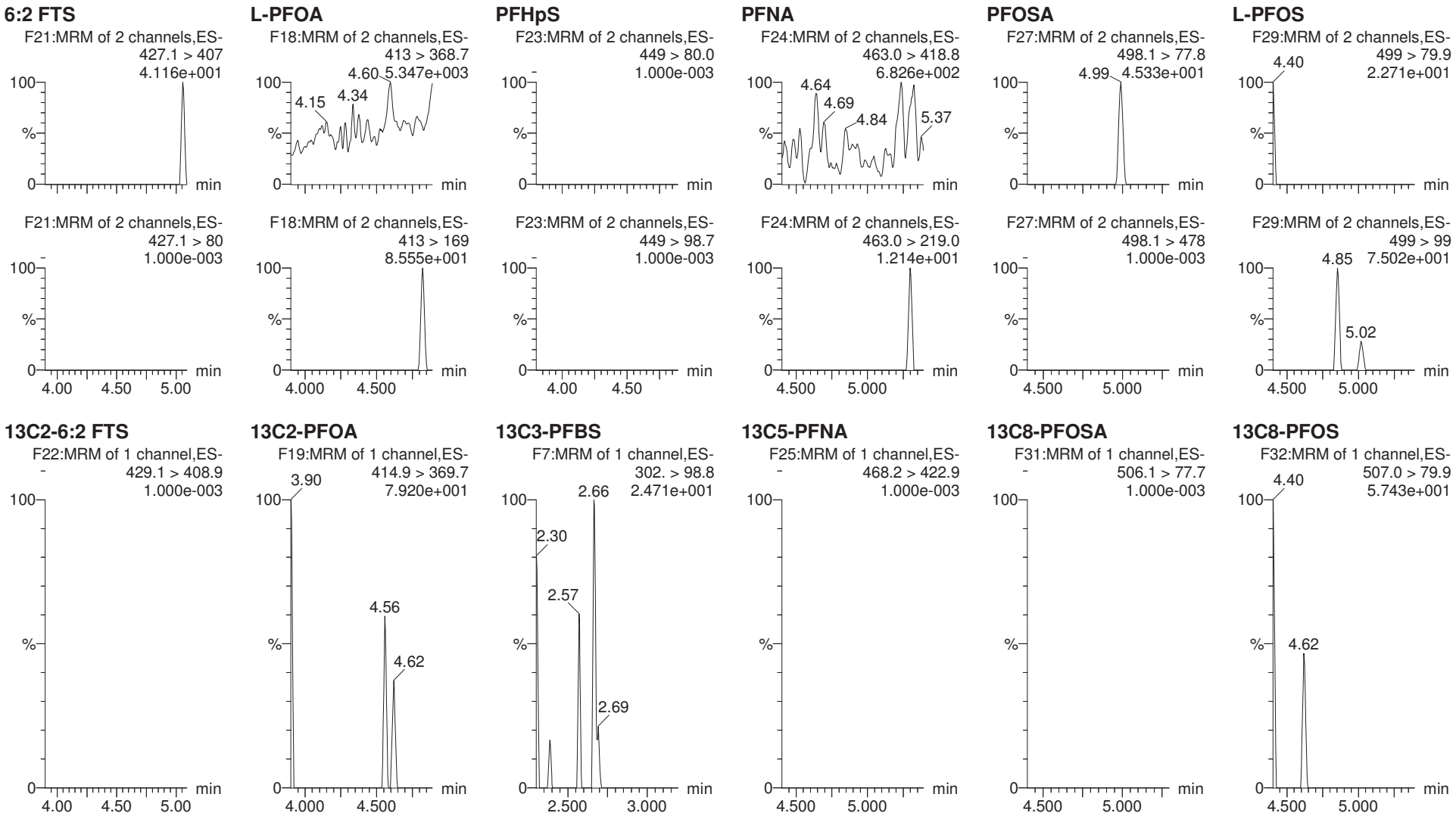
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

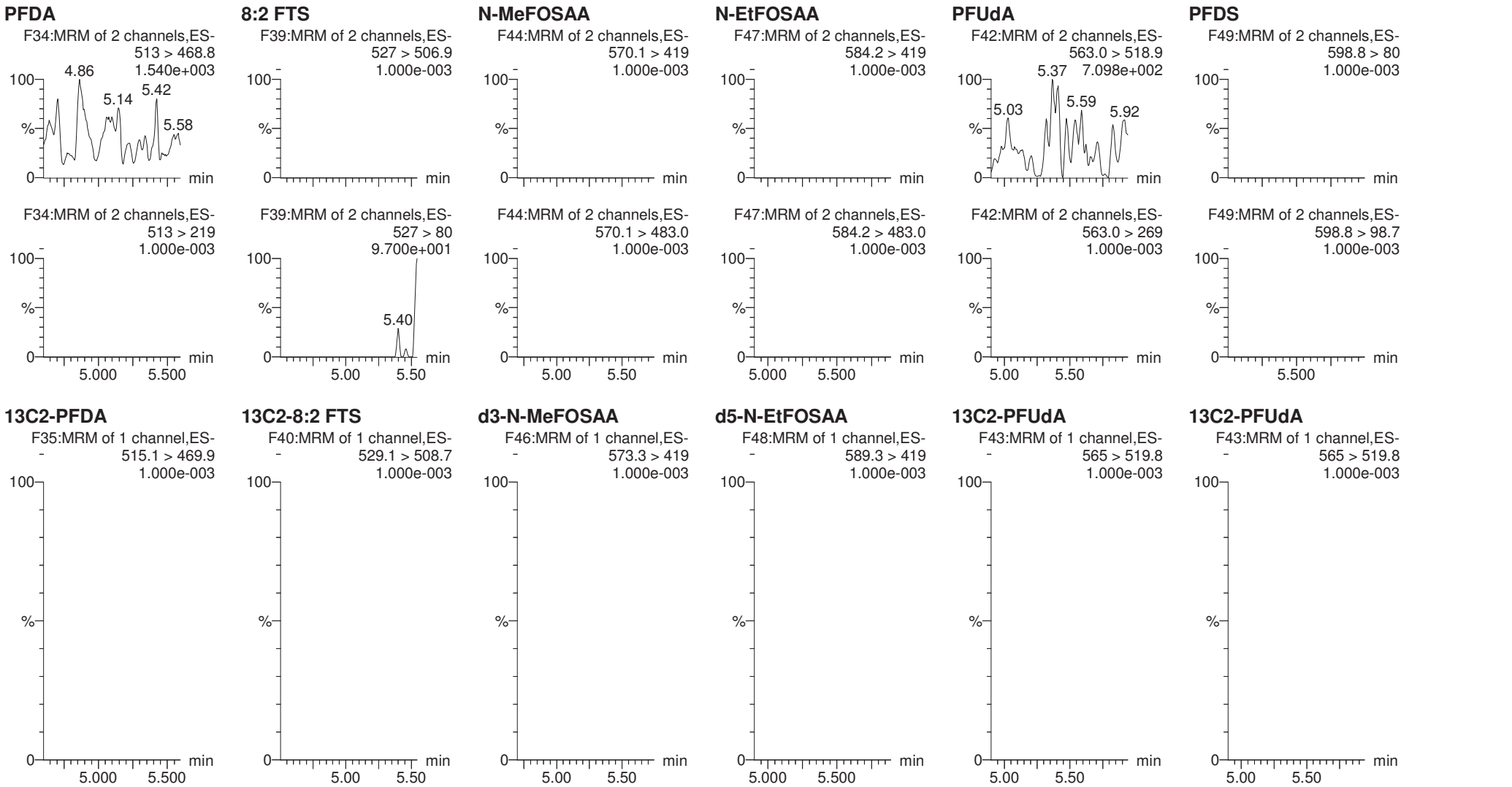
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Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time
Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA

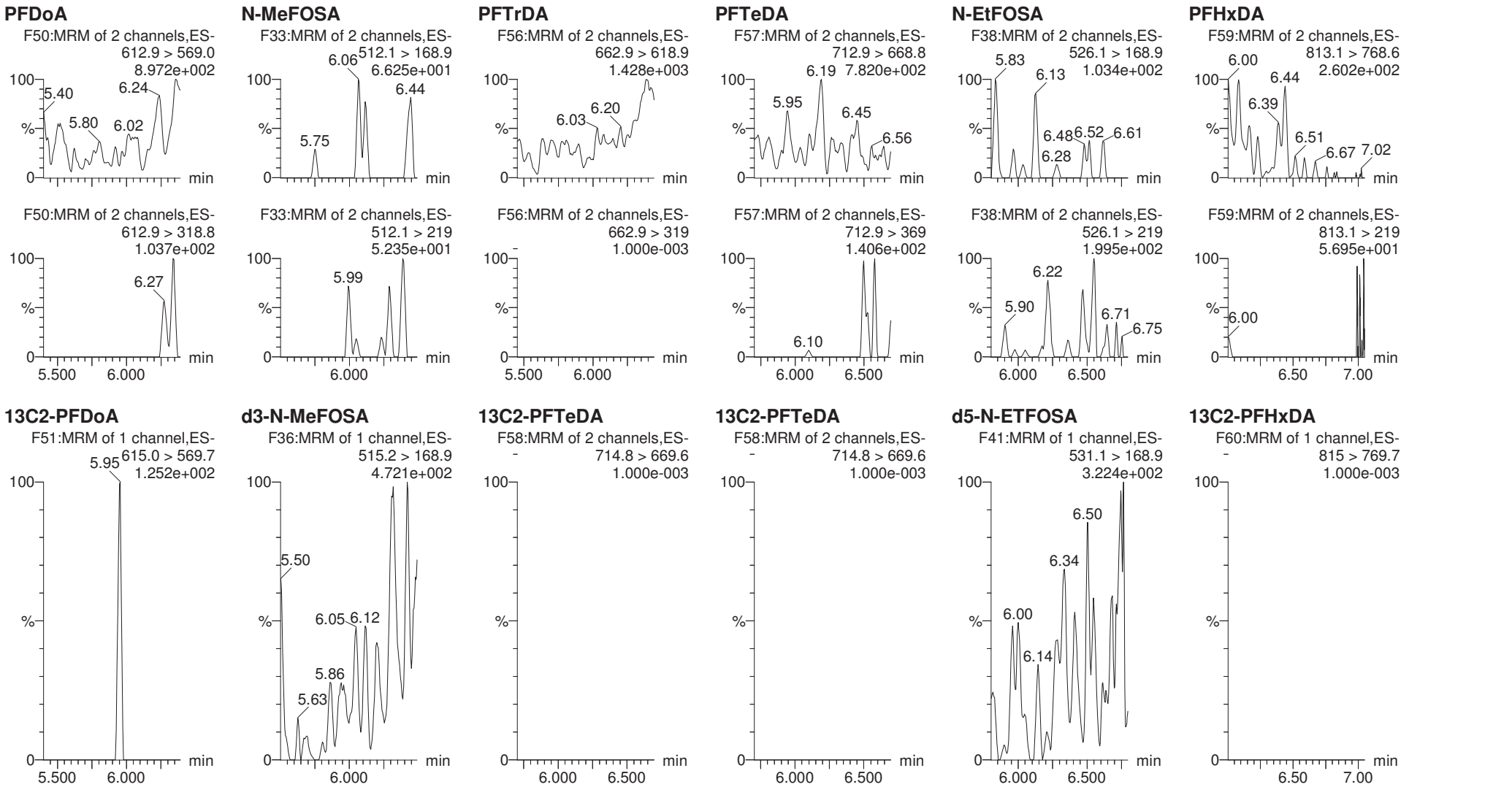


Vista Analytical Laboratory

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Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time
Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA



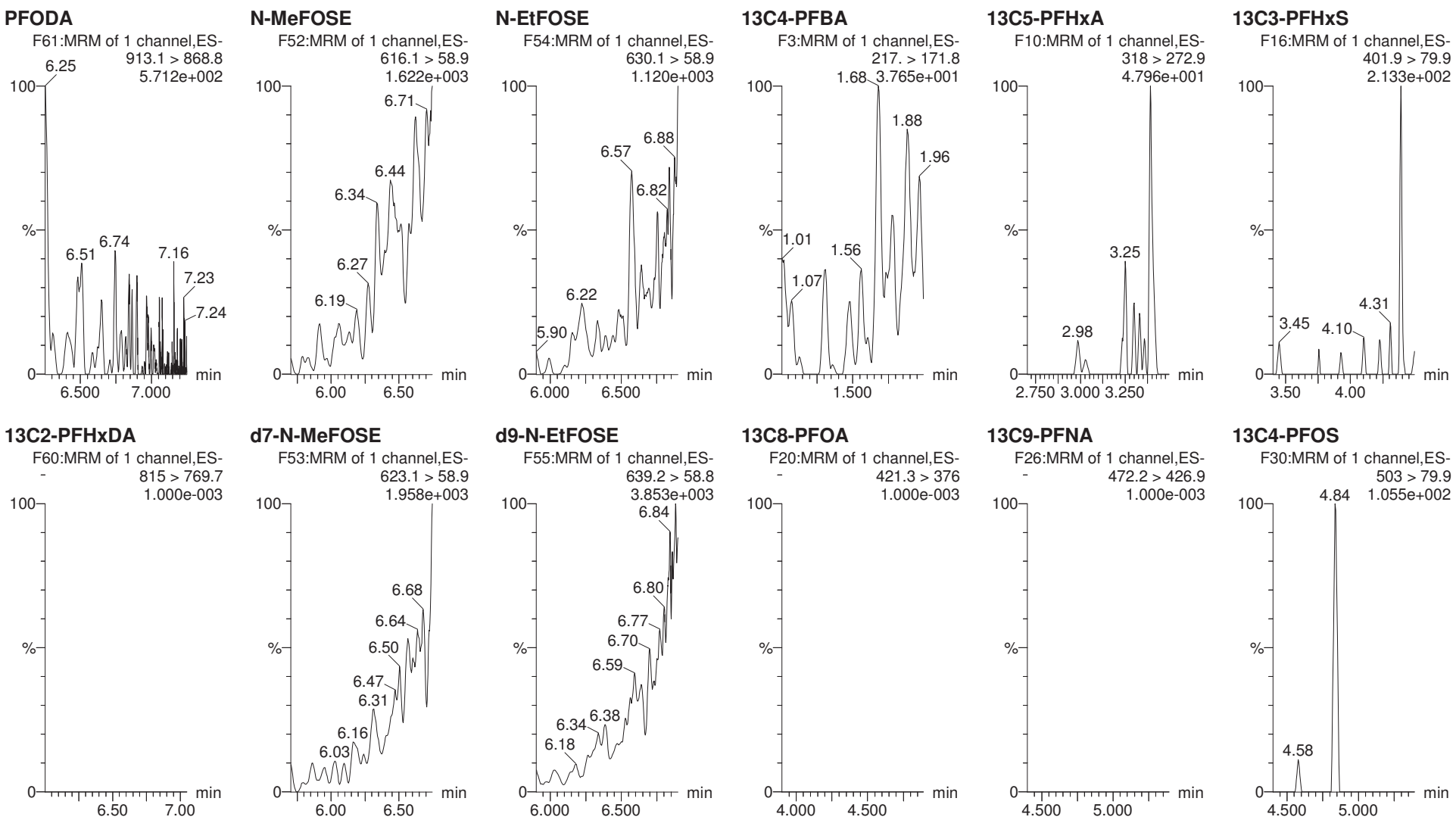
Vista Analytical Laboratory

Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

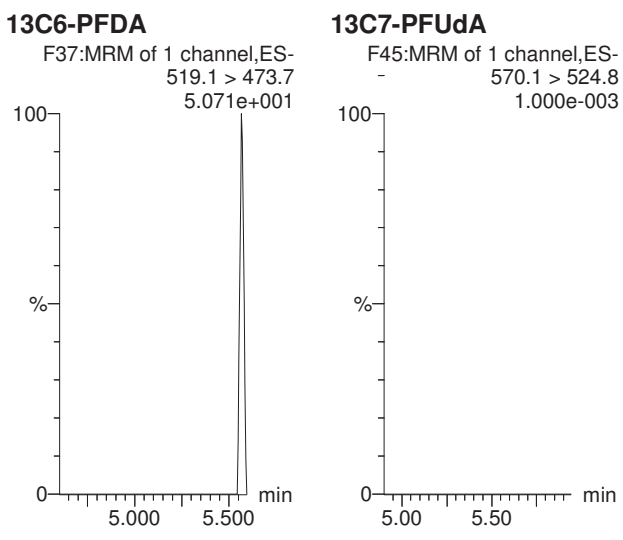
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Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 09:01:44 Pacific Standard Time
Printed: Tuesday, January 16, 2018 09:02:04 Pacific Standard Time

Name: 180114M1_9, Date: 14-Jan-2018, Time: 15:00:15, ID: IPA, Description: IPA



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:29:14 Pacific Standard Time

PFDS <70% in ICV.

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\IC18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Compound name: PFBA

Correlation coefficient: $r = 0.998579$, $r^2 = 0.997160$

Calibration curve: $1.33977 * x + -0.0328732$

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

DC
1/16/18

JHA 01/16/2018

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	1.53	169.362	8006.990	0.264	0.2	-11.2	NO	0.997	NO	bb
2	2 180115M2_2	Standard	0.500	1.53	462.377	8945.453	0.646	0.5	1.4	NO	0.997	NO	bb
3	3 180115M2_3	Standard	1.000	1.53	1135.743	11178.312	1.270	1.0	-2.8	NO	0.997	NO	bb
4	4 180115M2_4	Standard	2.000	1.53	2008.745	9860.501	2.546	1.9	-3.7	NO	0.997	NO	bb
5	5 180115M2_5	Standard	5.000	1.52	5607.313	10104.886	6.936	5.2	4.0	NO	0.997	NO	bb
6	6 180115M2_6	Standard	10.000	1.52	12518.734	10919.465	14.331	10.7	7.2	NO	0.997	NO	bb
7	7 180115M2_7	Standard	50.000	1.52	47957.504	9706.659	61.759	46.1	-7.8	NO	0.997	NO	bb
8	8 180115M2_8	Standard	100.000	1.52	99506.547	9008.640	138.071	103.1	3.1	NO	0.997	NO	bb

Compound name: PFPeA

Correlation coefficient: $r = 0.997990$, $r^2 = 0.995984$

Calibration curve: $1.15515 * x + -0.0327357$

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 180115M2_1	Standard	0.250	2.48	169.733	8868.418	0.239	0.2	-5.8	NO	0.996	NO	MM
2	2 180115M2_2	Standard	0.500	2.48	456.397	10441.303	0.546	0.5	0.3	NO	0.996	NO	MM
3	3 180115M2_3	Standard	1.000	2.48	1148.539	13027.811	1.102	1.0	-1.8	NO	0.996	NO	MM
4	4 180115M2_4	Standard	2.000	2.48	2044.792	11372.540	2.248	2.0	-1.3	NO	0.996	NO	MM
5	5 180115M2_5	Standard	5.000	2.48	5892.852	11971.679	6.153	5.4	7.1	NO	0.996	NO	MM
6	6 180115M2_6	Standard	10.000	2.48	12361.923	12510.149	12.352	10.7	7.2	NO	0.996	NO	MM
7	7 180115M2_7	Standard	50.000	2.48	46897.496	11201.616	52.333	45.3	-9.3	NO	0.996	NO	MM
8	8 180115M2_8	Standard	100.000	2.48	99353.172	10375.532	119.696	103.6	3.6	NO	0.996	NO	MM

Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:29:14 Pacific Standard Time

Compound name: PFBS

Coefficient of Determination: $R^2 = 0.996395$

Calibration curve: $0.00351371 * x^2 + 1.85665 * x + 0.254875$

Response type: Internal Std (Ref 33), 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 180115M2_1	Standard	0.250	2.75	57.475	1196.924	0.600	0.2	-25.6	NO	0.996	NO	MM
2	2 180115M2_2	Standard	0.500	2.75	97.312	1206.778	1.008	0.4	-18.9	NO	0.996	NO	bb
3	3 180115M2_3	Standard	1.000	2.75	267.604	1442.793	2.318	1.1	10.9	NO	0.996	NO	bb
4	4 180115M2_4	Standard	2.000	2.75	456.564	1290.825	4.421	2.2	11.7	NO	0.996	NO	bb
5	5 180115M2_5	Standard	5.000	2.74	1258.317	1432.762	10.978	5.7	14.3	NO	0.996	NO	bb
6	6 180115M2_6	Standard	10.000	2.75	2824.915	1624.717	21.734	11.3	13.3	NO	0.996	NO	bb
7	7 180115M2_7	Standard	50.000	2.75	9832.006	1307.205	94.017	46.4	-7.2	NO	0.996	NO	bb
8	8 180115M2_8	Standard	100.000	2.74	21516.695	1197.229	224.651	101.4	1.4	NO	0.996	NO	bb

Compound name: PFHxA

Correlation coefficient: $r = 0.996265$, $r^2 = 0.992544$

Calibration curve: $1.75438 * x + 0.0169924$

Response type: Internal Std (Ref 34), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	3.25	306.921	2798.348	0.548	0.3	21.2	NO	0.993	NO	bb
2	2 180115M2_2	Standard	0.500	3.25	548.713	3301.620	0.831	0.5	-7.2	NO	0.993	NO	bb
3	3 180115M2_3	Standard	1.000	3.25	1388.564	4246.745	1.635	0.9	-7.8	NO	0.993	NO	bb
4	4 180115M2_4	Standard	2.000	3.25	2429.710	3760.921	3.230	1.8	-8.4	NO	0.993	NO	bb
5	5 180115M2_5	Standard	5.000	3.25	7106.033	3739.436	9.501	5.4	8.1	NO	0.993	NO	bb
6	6 180115M2_6	Standard	10.000	3.25	14392.021	4073.186	17.667	10.1	0.6	NO	0.993	NO	bb
7	7 180115M2_7	Standard	50.000	3.25	53584.609	3489.034	76.790	43.8	-12.5	NO	0.993	NO	bb
8	8 180115M2_8	Standard	100.000	3.24	123063.164	3308.405	185.986	106.0	6.0	NO	0.993	NO	bb

Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:29:14 Pacific Standard Time

Compound name: PFHpA

Correlation coefficient: $r = 0.997692$, $r^2 = 0.995389$

Calibration curve: $1.49645 * x + -0.0592287$

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 180115M2_1	Standard	0.250	3.87	179.873	7169.426	0.314	0.2	-0.3	NO	0.995	NO	bb
2	2 180115M2_2	Standard	0.500	3.87	469.863	8300.460	0.708	0.5	2.5	NO	0.995	NO	bb
3	3 180115M2_3	Standard	1.000	3.87	1139.616	10064.894	1.415	1.0	-1.5	NO	0.995	NO	bb
4	4 180115M2_4	Standard	2.000	3.87	2080.912	8890.794	2.926	2.0	-0.3	NO	0.995	NO	bb
5	5 180115M2_5	Standard	5.000	3.87	5066.119	8790.349	7.204	4.9	-2.9	NO	0.995	NO	bb
6	6 180115M2_6	Standard	10.000	3.87	12529.151	9715.788	16.120	10.8	8.1	NO	0.995	NO	bb
7	7 180115M2_7	Standard	50.000	3.87	47028.797	8726.845	67.362	45.1	-9.9	NO	0.995	NO	bb
8	8 180115M2_8	Standard	100.000	3.86	101713.539	8149.912	156.004	104.3	4.3	NO	0.995	NO	bb

Compound name: L-PFHxS

Coefficient of Determination: $R^2 = 0.999726$

Calibration curve: $-0.0119577 * x^2 + 2.1128 * x + 0.0383417$

Response type: Internal Std (Ref 36), 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 180115M2_1	Standard	0.250	4.01	38.643	793.087	0.609	0.3	8.2	NO	1.000	NO	MM
2	2 180115M2_2	Standard	0.500	4.02	85.314	971.136	1.098	0.5	0.6	NO	1.000	NO	MM
3	3 180115M2_3	Standard	1.000	4.01	182.145	1035.130	2.200	1.0	2.9	NO	1.000	NO	MM
4	4 180115M2_4	Standard	2.000	4.01	349.074	1074.646	4.060	1.9	-3.8	NO	1.000	NO	MM
5	5 180115M2_5	Standard	5.000	4.01	873.617	1083.133	10.082	4.9	-2.2	NO	1.000	NO	MM
6	6 180115M2_6	Standard	10.000	4.01	1964.532	1211.424	20.271	10.2	1.6	NO	1.000	NO	MM
7	7 180115M2_7	Standard	50.000	4.01	6470.750	1067.766	75.751	50.0	-0.1	NO	1.000	NO	MM
8	8 180115M2_8	Standard	100.000	4.01	14751.116	1041.940	176.967			NO	1.000	NO	MMXI

Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:29:14 Pacific Standard Time

Compound name: 6:2 FTS

Coefficient of Determination: $R^2 = 0.995384$

Calibration curve: $-0.00485621 * x^2 + 2.92773 * x + -0.123035$

Response type: Internal Std (Ref 36), 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 180115M2_1	Standard	0.250	4.32	28.815	793.087	0.454	0.2	-21.1	NO	0.995	NO	MM
2	2 180115M2_2	Standard	0.500	4.34	118.251	971.136	1.522	0.6	12.5	NO	0.995	NO	bb
3	3 180115M2_3	Standard	1.000	4.34	221.274	1035.130	2.672	1.0	-4.4	NO	0.995	NO	bb
4	4 180115M2_4	Standard	2.000	4.33	430.245	1074.646	5.004	1.8	-12.2	NO	0.995	NO	bb
5	5 180115M2_5	Standard	5.000	4.32	1149.229	1083.133	13.263	4.6	-7.9	NO	0.995	NO	bb
6	6 180115M2_6	Standard	10.000	4.33	3333.318	1211.424	34.395	12.0	20.3	NO	0.995	NO	bb
7	7 180115M2_7	Standard	50.000	4.33	10895.729	1067.766	127.553	47.3	-5.4	NO	0.995	NO	bb
8	8 180115M2_8	Standard	100.000	4.32	20578.084	1041.940	246.872	101.4	1.4	NO	0.995	NO	bb

Compound name: L-PFOA

Correlation coefficient: $r = 0.997397$, $r^2 = 0.994801$

Calibration curve: $1.11967 * x + 0.355683$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	4.38	600.230	11129.100	0.674	0.3	13.8	NO	0.995	NO	bb
2	2 180115M2_2	Standard	0.500	4.39	831.124	12054.782	0.862	0.5	-9.6	NO	0.995	NO	bb
3	3 180115M2_3	Standard	1.000	4.39	1444.660	13949.129	1.295	0.8	-16.1	NO	0.995	NO	bb
4	4 180115M2_4	Standard	2.000	4.38	2614.963	13294.508	2.459	1.9	-6.1	NO	0.995	NO	bb
5	5 180115M2_5	Standard	5.000	4.38	6889.996	12417.951	6.936	5.9	17.5	NO	0.995	NO	bb
6	6 180115M2_6	Standard	10.000	4.39	14997.181	15251.905	12.291	10.7	6.6	NO	0.995	NO	bb
7	7 180115M2_7	Standard	50.000	4.38	52255.660	12829.036	50.915	45.2	-9.7	NO	0.995	NO	bb
8	8 180115M2_8	Standard	100.000	4.38	105739.719	11359.297	116.358	103.6	3.6	NO	0.995	NO	bb

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Compound name: PFHpS

Coefficient of Determination: $R^2 = 0.998980$

Calibration curve: $-0.00141138 * x^2 + 0.29869 * x + -0.030036$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	4.49	37.480	11129.100	0.042	0.2	-3.3	NO	0.999	NO	MM
2	2 180115M2_2	Standard	0.500	4.49	130.063	12054.782	0.135	0.6	10.7	NO	0.999	NO	bb
3	3 180115M2_3	Standard	1.000	4.49	279.276	13949.129	0.250	0.9	-5.7	NO	0.999	NO	bb
4	4 180115M2_4	Standard	2.000	4.49	558.214	13294.508	0.525	1.9	-6.3	NO	0.999	NO	bb
5	5 180115M2_5	Standard	5.000	4.48	1514.899	12417.951	1.525	5.3	6.8	NO	0.999	NO	bb
6	6 180115M2_6	Standard	10.000	4.49	3361.794	15251.905	2.755	9.8	-2.2	NO	0.999	NO	bb
7	7 180115M2_7	Standard	50.000	4.49	11679.672	12829.036	11.380	50.0	0.1	NO	0.999	NO	bb
8	8 180115M2_8	Standard	100.000	4.48	25926.199	11359.297	28.530			NO	0.999	NO	bbXI

Compound name: PFNA

Coefficient of Determination: $R^2 = 0.998251$

Calibration curve: $0.00123227 * x^2 + 1.35269 * x + -0.0256811$

Response type: Internal Std (Ref 39), 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 180115M2_1	Standard	0.250	4.82	259.860	8611.178	0.377	0.3	19.1	NO	0.998	NO	bb
2	2 180115M2_2	Standard	0.500	4.82	449.605	10629.969	0.529	0.4	-18.1	NO	0.998	NO	bb
3	3 180115M2_3	Standard	1.000	4.82	1316.261	11370.316	1.447	1.1	8.8	NO	0.998	NO	bb
4	4 180115M2_4	Standard	2.000	4.81	2082.001	11056.825	2.354	1.8	-12.2	NO	0.998	NO	bb
5	5 180115M2_5	Standard	5.000	4.81	6798.414	13849.589	6.136	4.5	-9.3	NO	0.998	NO	bb
6	6 180115M2_6	Standard	10.000	4.81	15373.284	12422.833	15.469	11.3	13.4	NO	0.998	NO	bb
7	7 180115M2_7	Standard	50.000	4.81	56579.699	10235.261	69.099	48.9	-2.2	NO	0.998	NO	bb
8	8 180115M2_8	Standard	100.000	4.81	119351.391	10065.815	148.214	100.4	0.4	NO	0.998	NO	bb

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Compound name: PFOSA

Correlation coefficient: $r = 0.999519$, $r^2 = 0.999039$

Calibration curve: $1.2051 * x + -0.0242098$

Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	4.87	37.636	2018.146	0.233	0.2	-14.6	NO	0.999	NO	MM
2	2 180115M2_2	Standard	0.500	4.88	105.176	2450.537	0.536	0.5	-6.9	NO	0.999	NO	bb
3	3 180115M2_3	Standard	1.000	4.88	323.306	3263.926	1.238	1.0	4.8	NO	0.999	NO	bb
4	4 180115M2_4	Standard	2.000	4.88	552.892	2580.329	2.678	2.2	12.1	NO	0.999	NO	bb
5	5 180115M2_5	Standard	5.000	4.87	1393.146	2747.783	6.338	5.3	5.6	NO	0.999	NO	bb
6	6 180115M2_6	Standard	10.000	4.88	3058.177	3176.006	12.036	10.0	0.1	NO	0.999	NO	bb
7	7 180115M2_7	Standard	50.000	4.88	11742.631	2461.930	59.621	49.5	-1.0	NO	0.999	NO	bb
8	8 180115M2_8	Standard	100.000	4.87	25960.203	1976.078	164.215	136.3	36.3	NO	0.999	NO	bbX

Compound name: L-PFOS

Coefficient of Determination: $R^2 = 0.997719$

Calibration curve: $0.000945797 * x^2 + 1.10838 * x + -0.0443788$

Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	4.89	39.696	2273.944	0.218	0.2	-5.3	NO	0.998	NO	MM
2	2 180115M2_2	Standard	0.500	4.90	100.584	2945.228	0.427	0.4	-15.0	NO	0.998	NO	MM
3	3 180115M2_3	Standard	1.000	4.89	310.652	3464.374	1.121	1.1	5.0	NO	0.998	NO	MM
4	4 180115M2_4	Standard	2.000	4.89	535.144	3222.043	2.076	1.9	-4.5	NO	0.998	NO	MM
5	5 180115M2_5	Standard	5.000	4.89	1476.891	2939.392	6.281	5.7	13.6	NO	0.998	NO	MM
6	6 180115M2_6	Standard	10.000	4.89	3408.097	3461.071	12.309	11.0	10.4	NO	0.998	NO	MM
7	7 180115M2_7	Standard	50.000	4.89	12781.024	2933.493	54.462	47.3	-5.5	NO	0.998	NO	MM
8	8 180115M2_8	Standard	100.000	4.89	23913.445	2455.447	121.737	101.1	1.1	NO	0.998	NO	MM

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Compound name: PFDA

Coefficient of Determination: $R^2 = 0.996672$

Calibration curve: $0.0014094 * x^2 + 1.42444 * x + 0.0195565$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	5.19	236.809	9117.220	0.325	0.2	-14.3	NO	0.997	NO	bb
2	2 180115M2_2	Standard	0.500	5.19	522.395	9259.429	0.705	0.5	-3.8	NO	0.997	NO	bb
3	3 180115M2_3	Standard	1.000	5.19	1297.286	10469.260	1.549	1.1	7.3	NO	0.997	NO	bb
4	4 180115M2_4	Standard	2.000	5.18	2358.456	11543.967	2.554	1.8	-11.2	NO	0.997	NO	bb
5	5 180115M2_5	Standard	5.000	5.18	6493.696	10095.664	8.040	5.6	12.0	NO	0.997	NO	bb
6	6 180115M2_6	Standard	10.000	5.19	13712.378	10322.235	16.605	11.5	15.1	NO	0.997	NO	bb
7	7 180115M2_7	Standard	50.000	5.19	49480.613	8868.471	69.742	46.8	-6.4	NO	0.997	NO	bb
8	8 180115M2_8	Standard	100.000	5.18	124944.242	9834.333	158.811	101.3	1.3	NO	0.997	NO	bb

Compound name: 8:2 FTS

Coefficient of Determination: $R^2 = 0.990883$

Calibration curve: $-0.00290289 * x^2 + 0.283311 * x + -0.0505687$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	5.16	13.774	9117.220	0.019	0.2	-1.7	NO	0.991	NO	MM
2	2 180115M2_2	Standard	0.500	5.16	45.840	9259.429	0.062	0.4	-20.3	NO	0.991	NO	MM
3	3 180115M2_3	Standard	1.000	5.16	258.452	10469.260	0.309	1.3	28.5	NO	0.991	NO	bb
4	4 180115M2_4	Standard	2.000	5.16	452.092	11543.967	0.490	1.9	-2.7	NO	0.991	NO	bb
5	5 180115M2_5	Standard	5.000	5.16	994.999	10095.664	1.232	4.8	-4.8	NO	0.991	NO	bb
6	6 180115M2_6	Standard	10.000	5.16	2080.582	10322.235	2.520	10.1	1.2	NO	0.991	NO	bb
7	7 180115M2_7	Standard	50.000	5.16	10637.392	8868.471	14.993			NO	0.991	YES	bbXI
8	8 180115M2_8	Standard	100.000	5.15	18031.459	9834.333	22.919			NO	0.991	YES	bbXI

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Compound name: N-MeFOSAA

Coefficient of Determination: $R^2 = 0.999579$

Calibration curve: $-0.00488709 * x^2 + 1.70404 * x + -0.0213461$

Response type: Internal Std (Ref 44), 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 180115M2_1	Standard	0.250	5.34	110.162	3668.057	0.375	0.2	-6.8	NO	1.000	NO	bb
2	2 180115M2_2	Standard	0.500	5.34	278.179	4068.198	0.855	0.5	3.0	NO	1.000	NO	bb
3	3 180115M2_3	Standard	1.000	5.34	608.335	4941.718	1.539	0.9	-8.2	NO	1.000	NO	bb
4	4 180115M2_4	Standard	2.000	5.33	1231.249	4259.577	3.613	2.1	7.3	NO	1.000	NO	bb
5	5 180115M2_5	Standard	5.000	5.33	3181.715	4700.651	8.461	5.1	1.0	NO	1.000	NO	bb
6	6 180115M2_6	Standard	10.000	5.34	6179.386	4734.263	16.316	9.9	-1.3	NO	1.000	NO	bb
7	7 180115M2_7	Standard	50.000	5.33	28100.633	4812.376	72.991	50.0	0.0	NO	1.000	NO	bb
8	8 180115M2_8	Standard	100.000	5.33	46974.879	4204.535	139.655	131.7	31.7	NO	1.000	NO	bbX

Compound name: N-EtFOSAA

Coefficient of Determination: $R^2 = 0.999053$

Calibration curve: $-0.0014328 * x^2 + 1.31318 * x + -0.0721789$

Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	5.49	100.263	4291.856	0.292	0.3	11.0	NO	0.999	NO	bb
2	2 180115M2_2	Standard	0.500	5.49	161.902	4807.261	0.421	0.4	-24.9	NO	0.999	NO	bb
3	3 180115M2_3	Standard	1.000	5.49	569.706	5925.357	1.202	1.0	-2.9	NO	0.999	NO	bb
4	4 180115M2_4	Standard	2.000	5.49	867.935	4489.890	2.416	1.9	-5.1	NO	0.999	NO	bb
5	5 180115M2_5	Standard	5.000	5.49	2512.091	5242.137	5.990	4.6	-7.2	NO	0.999	NO	bb
6	6 180115M2_6	Standard	10.000	5.49	6584.632	5935.848	13.866	10.7	7.4	NO	0.999	NO	bb
7	7 180115M2_7	Standard	50.000	5.49	21965.389	4444.999	61.770	49.8	-0.4	NO	0.999	NO	bb
8	8 180115M2_8	Standard	100.000	5.48	40613.773	4340.295	116.967	100.0	0.0	NO	0.999	NO	bb

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Compound name: PFUdACoefficient of Determination: $R^2 = 0.996917$ Calibration curve: $-0.00723799 * x^2 + 1.36957 * x + -0.252476$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	5.51	291.033	10659.157	0.341	0.4	73.8	NO	0.997	NO	bbX
2	2 180115M2_2	Standard	0.500	5.51	541.356	12827.074	0.528	0.6	14.3	NO	0.997	NO	bb
3	3 180115M2_3	Standard	1.000	5.51	1323.581	14368.888	1.151	1.0	3.1	NO	0.997	NO	bb
4	4 180115M2_4	Standard	2.000	5.50	1949.719	12801.493	1.904	1.6	-20.6	NO	0.997	NO	bb
5	5 180115M2_5	Standard	5.000	5.50	5686.633	11208.095	6.342	4.9	-1.1	NO	0.997	NO	bb
6	6 180115M2_6	Standard	10.000	5.51	14467.421	13602.793	13.295	10.5	4.7	NO	0.997	NO	bb
7	7 180115M2_7	Standard	50.000	5.50	48741.223	12174.631	50.044	49.9	-0.3	NO	0.997	NO	bb
8	8 180115M2_8	Standard	100.000	5.50	109631.352	10688.771	128.209			NO	0.997	NO	bbXI

Compound name: PFDSCoefficient of Determination: $R^2 = 0.995370$ Calibration curve: $-0.00111201 * x^2 + 0.354642 * x + -0.0526574$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	5.55	49.403	10659.157	0.058	0.3	24.9	NO	0.995	NO	MM
2	2 180115M2_2	Standard	0.500	5.56	81.719	12827.074	0.080	0.4	-25.3	NO	0.995	NO	MM
3	3 180115M2_3	Standard	1.000	5.55	298.787	14368.888	0.260	0.9	-11.6	NO	0.995	NO	bb
4	4 180115M2_4	Standard	2.000	5.55	698.640	12801.493	0.682	2.1	4.3	NO	0.995	NO	bb
5	5 180115M2_5	Standard	5.000	5.55	1750.839	11208.095	1.953	5.8	15.2	NO	0.995	NO	bb
6	6 180115M2_6	Standard	10.000	5.55	3408.681	13602.793	3.132	9.2	-7.5	NO	0.995	NO	bb
7	7 180115M2_7	Standard	50.000	5.55	14534.954	12174.631	14.923	50.1	0.2	NO	0.995	NO	bb
8	8 180115M2_8	Standard	100.000	5.55	29850.322	10688.771	34.909			NO	0.995	NO	bbXI

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Compound name: PFDaA

Coefficient of Determination: $R^2 = 0.996448$

Calibration curve: $0.00269229 * x^2 + 1.39884 * x + 0.292328$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	5.79	300.361	6851.029	0.548	0.2	-26.9	NO	0.996	NO	bd
2	2 180115M2_2	Standard	0.500	5.79	604.702	8538.500	0.885	0.4	-15.3	NO	0.996	NO	bd
3	3 180115M2_3	Standard	1.000	5.79	1422.547	10789.430	1.648	1.0	-3.3	NO	0.996	NO	bd
4	4 180115M2_4	Standard	2.000	5.78	2700.776	9022.085	3.742	2.5	22.7	NO	0.996	NO	bd
5	5 180115M2_5	Standard	5.000	5.78	7561.792	10734.802	8.805	6.0	20.3	NO	0.996	NO	bd
6	6 180115M2_6	Standard	10.000	5.78	15299.965	12215.312	15.657	10.8	7.6	NO	0.996	NO	bd
7	7 180115M2_7	Standard	50.000	5.78	57159.984	9999.913	71.451	46.7	-6.6	NO	0.996	NO	bb
8	8 180115M2_8	Standard	100.000	5.78	110208.867	8119.767	169.661	101.3	1.3	NO	0.996	NO	bd

Compound name: N-MeFOSA

Correlation coefficient: $r = 0.999161$, $r^2 = 0.998323$

Calibration curve: $1.1181 * x + -0.100317$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	1.250	5.84	138.791	15969.864	1.304	1.3	0.5	NO	0.998	NO	bb
2	2 180115M2_2	Standard	2.500	5.84	298.599	17622.953	2.542	2.4	-5.5	NO	0.998	NO	bb
3	3 180115M2_3	Standard	5.000	5.84	735.826	21395.508	5.159	4.7	-5.9	NO	0.998	NO	bb
4	4 180115M2_4	Standard	10.000	5.84	1273.874	18699.383	10.219	9.2	-7.7	NO	0.998	NO	bb
5	5 180115M2_5	Standard	25.000	5.84	3744.515	19396.660	28.957	26.0	4.0	NO	0.998	NO	bb
6	6 180115M2_6	Standard	50.000	5.84	8920.301	21606.223	61.929	55.5	11.0	NO	0.998	NO	bb
7	7 180115M2_7	Standard	250.000	5.84	31396.402	17688.914	266.238	238.2	-4.7	NO	0.998	NO	bb
8	8 180115M2_8	Standard	500.000	5.84	64370.148	17051.773	566.247	506.5	1.3	NO	0.998	NO	bb

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Compound name: PFTrDA

Coefficient of Determination: $R^2 = 0.997156$

Calibration curve: $-0.000208194 * x^2 + 2.13661 * x + 0.0644742$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	6.03	345.115	6851.029	0.630	0.3	5.8	NO	0.997	NO	bb
2	2 180115M2_2	Standard	0.500	6.03	831.761	8538.500	1.218	0.5	8.0	NO	0.997	NO	bb
3	3 180115M2_3	Standard	1.000	6.03	1617.529	10789.430	1.874	0.8	-15.3	NO	0.997	NO	bb
4	4 180115M2_4	Standard	2.000	6.03	3191.131	9022.085	4.421	2.0	2.0	NO	0.997	NO	bb
5	5 180115M2_5	Standard	5.000	6.03	7888.307	10734.802	9.185	4.3	-14.6	NO	0.997	NO	bb
6	6 180115M2_6	Standard	10.000	6.03	24356.207	12215.312	24.924	11.6	16.5	NO	0.997	NO	bb
7	7 180115M2_7	Standard	50.000	6.03	82605.594	9999.913	103.258	48.5	-2.9	NO	0.997	NO	bb
8	8 180115M2_8	Standard	100.000	6.03	138314.813	8119.767	212.929	100.6	0.6	NO	0.997	NO	bb

Compound name: PFTeDA

Coefficient of Determination: $R^2 = 0.990929$

Calibration curve: $-0.0220572 * x^2 + 3.53283 * x + -0.322211$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	6.24	230.708	3811.400	0.757	0.3	22.4	NO	0.991	NO	MM
2	2 180115M2_2	Standard	0.500	6.24	526.336	4625.902	1.422	0.5	-0.9	NO	0.991	NO	MM
3	3 180115M2_3	Standard	1.000	6.24	1174.005	5784.110	2.537	0.8	-18.7	NO	0.991	NO	MM
4	4 180115M2_4	Standard	2.000	6.23	2327.498	4166.997	6.982	2.1	4.7	NO	0.991	NO	bb
5	5 180115M2_5	Standard	5.000	6.23	5510.744	5054.189	13.629	4.1	-19.0	NO	0.991	NO	MM
6	6 180115M2_6	Standard	10.000	6.24	15163.117	5187.430	36.538	11.2	12.2	NO	0.991	NO	MM
7	7 180115M2_7	Standard	50.000	6.23	46221.027	4785.019	120.744	49.7	-0.6	NO	0.991	NO	bb
8	8 180115M2_8	Standard	100.000	6.23	113973.711	5518.160	258.179			NO	0.991	NO	bbXI

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Compound name: N-EtFOSA

Coefficient of Determination: $R^2 = 0.998672$

Calibration curve: $7.78779e-006 * x^2 + 1.00573 * x + -0.161262$

Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	1.250	6.21	150.663	23192.393	0.974	1.1	-9.7	NO	0.999	NO	bb
2	2 180115M2_2	Standard	2.500	6.20	406.969	25547.748	2.389	2.5	1.4	NO	0.999	NO	bb
3	3 180115M2_3	Standard	5.000	6.20	1002.338	31434.623	4.783	4.9	-1.7	NO	0.999	NO	bb
4	4 180115M2_4	Standard	10.000	6.20	1755.511	27705.471	9.505	9.6	-3.9	NO	0.999	NO	bb
5	5 180115M2_5	Standard	25.000	6.20	5156.592	28494.203	27.145	27.1	8.6	NO	0.999	NO	bb
6	6 180115M2_6	Standard	50.000	6.21	11703.195	32255.756	54.424	54.3	8.5	NO	0.999	NO	bb
7	7 180115M2_7	Standard	250.000	6.21	40516.031	25211.236	241.059	239.4	-4.2	NO	0.999	NO	bb
8	8 180115M2_8	Standard	500.000	6.20	83391.828	24552.484	509.471	504.8	1.0	NO	0.999	NO	bb

Compound name: PFHxDA

Coefficient of Determination: $R^2 = 0.994875$

Calibration curve: $-0.000963947 * x^2 + 0.816406 * x + 0.115618$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	6.54	123.810	2113.428	0.293	0.2	-13.1	NO	0.995	NO	bb
2	2 180115M2_2	Standard	0.500	6.54	258.296	2775.093	0.465	0.4	-14.3	NO	0.995	NO	bb
3	3 180115M2_3	Standard	1.000	6.54	613.721	3282.116	0.935	1.0	0.5	NO	0.995	NO	bb
4	4 180115M2_4	Standard	2.000	6.54	951.224	2733.865	1.740	2.0	-0.3	NO	0.995	NO	bb
5	5 180115M2_5	Standard	5.000	6.54	2968.312	2890.199	5.135	6.2	23.9	NO	0.995	NO	bb
6	6 180115M2_6	Standard	10.000	6.54	5757.014	3217.573	8.946	11.0	9.6	NO	0.995	NO	bb
7	7 180115M2_7	Standard	50.000	6.54	23373.615	3292.356	35.497	45.8	-8.4	NO	0.995	NO	bb
8	8 180115M2_8	Standard	100.000	6.54	44946.250	3057.260	73.507	102.2	2.2	NO	0.995	NO	bb

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Compound name: PFODA

Coefficient of Determination: $R^2 = 0.998411$

Calibration curve: $-0.00110371 * x^2 + 0.927917 * x + 0.0174073$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	0.250	6.77	115.014	2113.428	0.272	0.3	9.8	NO	0.998	NO	bb
2	2 180115M2_2	Standard	0.500	6.77	242.942	2775.093	0.438	0.5	-9.4	NO	0.998	NO	MM
3	3 180115M2_3	Standard	1.000	6.77	550.045	3282.116	0.838	0.9	-11.5	NO	0.998	NO	bb
4	4 180115M2_4	Standard	2.000	6.76	1100.954	2733.865	2.014	2.2	7.8	NO	0.998	NO	bb
5	5 180115M2_5	Standard	5.000	6.76	2821.314	2890.199	4.881	5.3	5.5	NO	0.998	NO	bb
6	6 180115M2_6	Standard	10.000	6.76	6417.821	3217.573	9.973	10.9	8.7	NO	0.998	NO	bb
7	7 180115M2_7	Standard	50.000	6.76	27476.373	3292.356	41.728	47.7	-4.7	NO	0.998	NO	bb
8	8 180115M2_8	Standard	100.000	6.76	50531.801	3057.260	82.642	101.2	1.2	NO	0.998	NO	bb

Compound name: N-MeFOSE

Coefficient of Determination: $R^2 = 0.995669$

Calibration curve: $-0.000576302 * x^2 + 1.20032 * x + -0.665296$

Response type: Internal Std (Ref 52), 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 180115M2_1	Standard	1.250	6.30	174.170	20888.145	1.251	1.6	27.8	NO	0.996	NO	bb
2	2 180115M2_2	Standard	2.500	6.30	360.986	26082.570	2.076	2.3	-8.5	NO	0.996	NO	bb
3	3 180115M2_3	Standard	5.000	6.31	977.036	31250.859	4.690	4.5	-10.6	NO	0.996	NO	bb
4	4 180115M2_4	Standard	10.000	6.30	2180.307	29842.697	10.959	9.7	-2.7	NO	0.996	NO	bb
5	5 180115M2_5	Standard	25.000	6.30	6234.112	30325.629	30.836	26.6	6.3	NO	0.996	NO	bd
6	6 180115M2_6	Standard	50.000	6.30	11465.369	35709.676	48.161	41.5	-17.0	NO	0.996	NO	bd
7	7 180115M2_7	Standard	250.000	6.31	46049.070	24759.139	278.982	267.3	6.9	NO	0.996	NO	bb
8	8 180115M2_8	Standard	500.000	6.30	86639.500	28975.107	448.520	489.1	-2.2	NO	0.996	NO	bb

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Compound name: N-EtFOSE

Coefficient of Determination: $R^2 = 0.999660$

Calibration curve: $0.00097229 * x^2 + 1.15972 * x + 0.350902$

Response type: Internal Std (Ref 53), 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 180115M2_1	Standard	1.250	6.45	222.976	22450.639	1.490	1.0	-21.5	NO	1.000	NO	bb
2	2 180115M2_2	Standard	2.500	6.46	541.090	21303.693	3.810	3.0	19.0	NO	1.000	NO	bb
3	3 180115M2_3	Standard	5.000	6.45	1251.249	31097.133	6.036	4.9	-2.4	NO	1.000	NO	bb
4	4 180115M2_4	Standard	10.000	6.45	2353.475	27869.063	12.667	10.5	5.3	NO	1.000	NO	bb
5	5 180115M2_5	Standard	25.000	6.45	5290.171	27858.053	28.485	23.8	-4.9	NO	1.000	NO	bb
6	6 180115M2_6	Standard	50.000	6.46	12232.546	28613.766	64.126	52.7	5.3	NO	1.000	NO	bd
7	7 180115M2_7	Standard	250.000	6.46	51195.125	22170.844	346.368	247.2	-1.1	NO	1.000	NO	bb
8	8 180115M2_8	Standard	500.000	6.45	111534.742	20270.486	825.348	501.0	0.2	NO	1.000	NO	bd

Compound name: 13C3-PFBA

Response Factor: 0.779165

RRF SD: 0.0334129, Relative SD: 4.2883

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	1.53	8006.990	10061.779	9.947	12.8	2.1	NO		NO	bb
2	2 180115M2_2	Standard	12.500	1.52	8945.453	11662.093	9.588	12.3	-1.6	NO		NO	bb
3	3 180115M2_3	Standard	12.500	1.52	11178.312	14677.296	9.520	12.2	-2.3	NO		NO	bb
4	4 180115M2_4	Standard	12.500	1.52	9860.501	12356.659	9.975	12.8	2.4	NO		NO	bb
5	5 180115M2_5	Standard	12.500	1.52	10104.886	13477.931	9.372	12.0	-3.8	NO		NO	bb
6	6 180115M2_6	Standard	12.500	1.52	10919.465	14699.104	9.286	11.9	-4.7	NO		NO	bb
7	7 180115M2_7	Standard	12.500	1.52	9706.659	11470.707	10.578	13.6	8.6	NO		NO	bb
8	8 180115M2_8	Standard	12.500	1.52	9008.640	11668.103	9.651	12.4	-0.9	NO		NO	bb

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Compound name: 13C3-PFPeA

Response Factor: 0.796717

RRF SD: 0.0707195, Relative SD: 8.87636

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	2.48	8868.418	12455.272	8.900	11.2	-10.6	NO		NO	bb
2	2 180115M2_2	Standard	12.500	2.48	10441.303	12561.499	10.390	13.0	4.3	NO		NO	bb
3	3 180115M2_3	Standard	12.500	2.48	13027.811	16767.305	9.712	12.2	-2.5	NO		NO	bb
4	4 180115M2_4	Standard	12.500	2.48	11372.540	14101.621	10.081	12.7	1.2	NO		NO	bb
5	5 180115M2_5	Standard	12.500	2.48	11971.679	15840.523	9.447	11.9	-5.1	NO		NO	bb
6	6 180115M2_6	Standard	12.500	2.48	12510.149	16157.200	9.678	12.1	-2.8	NO		NO	bb
7	7 180115M2_7	Standard	12.500	2.48	11201.616	11804.778	11.861	14.9	19.1	NO		NO	bb
8	8 180115M2_8	Standard	12.500	2.48	10375.532	13507.876	9.601	12.1	-3.6	NO		NO	bb

Compound name: 13C3-PFBS

Response Factor: 0.0950157

RRF SD: 0.00787595, Relative SD: 8.2891

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	2.75	1196.924	12455.272	1.201	12.6	1.1	NO		NO	bb
2	2 180115M2_2	Standard	12.500	2.75	1206.778	12561.499	1.201	12.6	1.1	NO		NO	bb
3	3 180115M2_3	Standard	12.500	2.75	1442.793	16767.305	1.076	11.3	-9.4	NO		NO	bb
4	4 180115M2_4	Standard	12.500	2.75	1290.825	14101.621	1.144	12.0	-3.7	NO		NO	bb
5	5 180115M2_5	Standard	12.500	2.75	1432.762	15840.523	1.131	11.9	-4.8	NO		NO	bb
6	6 180115M2_6	Standard	12.500	2.75	1624.717	16157.200	1.257	13.2	5.8	NO		NO	bb
7	7 180115M2_7	Standard	12.500	2.75	1307.205	11804.778	1.384	14.6	16.5	NO		NO	bb
8	8 180115M2_8	Standard	12.500	2.75	1197.229	13507.876	1.108	11.7	-6.7	NO		NO	bb

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Compound name: 13C2-PFHxA

Response Factor: 0.636292

RRF SD: 0.0537257, Relative SD: 8.44356

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	5.000	3.25	2798.348	12455.272	2.808	4.4	-11.7	NO		NO	bb
2	2 180115M2_2	Standard	5.000	3.25	3301.620	12561.499	3.285	5.2	3.3	NO		NO	bb
3	3 180115M2_3	Standard	5.000	3.25	4246.745	16767.305	3.166	5.0	-0.5	NO		NO	bb
4	4 180115M2_4	Standard	5.000	3.25	3760.921	14101.621	3.334	5.2	4.8	NO		NO	bb
5	5 180115M2_5	Standard	5.000	3.25	3739.436	15840.523	2.951	4.6	-7.2	NO		NO	bb
6	6 180115M2_6	Standard	5.000	3.25	4073.186	16157.200	3.151	5.0	-1.0	NO		NO	bb
7	7 180115M2_7	Standard	5.000	3.25	3489.034	11804.778	3.695	5.8	16.1	NO		NO	bb
8	8 180115M2_8	Standard	5.000	3.24	3308.405	13507.876	3.062	4.8	-3.8	NO		NO	bb

Compound name: 13C4-PFHpA

Response Factor: 0.620752

RRF SD: 0.0575853, Relative SD: 9.2767

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	3.87	7169.426	12455.272	7.195	11.6	-7.3	NO		NO	bb
2	2 180115M2_2	Standard	12.500	3.87	8300.460	12561.499	8.260	13.3	6.4	NO		NO	bb
3	3 180115M2_3	Standard	12.500	3.87	10064.894	16767.305	7.503	12.1	-3.3	NO		NO	bb
4	4 180115M2_4	Standard	12.500	3.87	8890.794	14101.621	7.881	12.7	1.6	NO		NO	bb
5	5 180115M2_5	Standard	12.500	3.87	8790.349	15840.523	6.937	11.2	-10.6	NO		NO	bb
6	6 180115M2_6	Standard	12.500	3.87	9715.788	16157.200	7.517	12.1	-3.1	NO		NO	bb
7	7 180115M2_7	Standard	12.500	3.87	8726.845	11804.778	9.241	14.9	19.1	NO		NO	bb
8	8 180115M2_8	Standard	12.500	3.86	8149.912	13507.876	7.542	12.1	-2.8	NO		NO	bb

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Compound name: 18O2-PFHxS

Response Factor: 0.335817

RRF SD: 0.0498507, Relative SD: 14.8446

Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.01	793.087	2804.372	3.535	10.5	-15.8	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.01	971.136	3149.166	3.855	11.5	-8.2	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.01	1035.130	3283.306	3.941	11.7	-6.1	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.01	1074.646	3088.549	4.349	13.0	3.6	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.01	1083.133	3535.805	3.829	11.4	-8.8	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.01	1211.424	3990.885	3.794	11.3	-9.6	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.01	1067.766	2610.740	5.112	15.2	21.8	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.01	1041.940	2521.238	5.166	15.4	23.1	NO		NO	bb

Compound name: 13C2-6:2 FTS

Response Factor: 0.192395

RRF SD: 0.0380277, Relative SD: 19.7655

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.33	1703.521	11387.326	1.870	9.7	-22.2	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.33	2145.071	12172.035	2.203	11.4	-8.4	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.33	2487.351	13726.202	2.265	11.8	-5.8	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.33	2144.726	13300.389	2.016	10.5	-16.2	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.33	2742.800	12814.540	2.675	13.9	11.2	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.33	2540.768	15285.250	2.078	10.8	-13.6	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.33	2945.466	11556.618	3.186	16.6	32.5	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.32	2820.117	11963.216	2.947	15.3	22.5	NO		NO	bb

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Compound name: 13C2-PFOA

Response Factor: 1.00125

RRF SD: 0.0485388, Relative SD: 4.84783

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.38	11129.100	11387.326	12.217	12.2	-2.4	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.39	12054.782	12172.035	12.380	12.4	-1.1	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.39	13949.129	13726.202	12.703	12.7	1.5	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.38	13294.508	13300.389	12.494	12.5	-0.2	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.38	12417.951	12814.540	12.113	12.1	-3.2	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.38	15251.905	15285.250	12.473	12.5	-0.3	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.38	12829.036	11556.618	13.876	13.9	10.9	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.38	11359.297	11963.216	11.869	11.9	-5.2	NO		NO	bb

Compound name: 13C5-PFNA

Response Factor: 0.810837

RRF SD: 0.0778338, Relative SD: 9.59919

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.81	8611.178	9887.708	10.886	13.4	7.4	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.82	10629.969	14541.915	9.137	11.3	-9.8	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.81	11370.316	15659.906	9.076	11.2	-10.5	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.81	11056.825	14165.005	9.757	12.0	-3.7	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.81	13849.589	14881.775	11.633	14.3	14.8	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.81	12422.833	16690.238	9.304	11.5	-8.2	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.81	10235.261	11566.101	11.062	13.6	9.1	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.81	10065.815	12301.464	10.228	12.6	0.9	NO		NO	bb

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Compound name: 13C8-PFOSA

Response Factor: 0.196454

RRF SD: 0.0326291, Relative SD: 16.609

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.88	2018.146	9597.051	2.629	13.4	7.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.88	2450.537	12232.438	2.504	12.7	2.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.88	3263.926	16108.975	2.533	12.9	3.1	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.88	2580.329	15359.841	2.100	10.7	-14.5	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.87	2747.783	14601.564	2.352	12.0	-4.2	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.88	3176.006	14430.306	2.751	14.0	12.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.88	2461.930	10068.811	3.056	15.6	24.5	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.87	1976.078	14359.005	1.720	8.8	-29.9	NO		NO	bb

Compound name: 13C8-PFOS

Response Factor: 0.861518

RRF SD: 0.080099, Relative SD: 9.29742

Response type: Internal Std (Ref 59), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.89	2273.944	3065.292	9.273	10.8	-13.9	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.89	2945.228	3701.104	9.947	11.5	-7.6	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.89	3464.374	4167.454	10.391	12.1	-3.5	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.89	3222.043	3259.616	12.356	14.3	14.7	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.89	2939.392	3538.393	10.384	12.1	-3.6	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.89	3461.071	3917.062	11.045	12.8	2.6	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.89	2933.493	3367.256	10.890	12.6	1.1	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.89	2455.447	2586.616	11.866	13.8	10.2	NO		NO	bb

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Compound name: 13C2-PFDA

Response Factor: 0.995958

RRF SD: 0.0416295, Relative SD: 4.17985

Response type: Internal Std (Ref 60), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	5.19	9117.220	8643.550	13.185	13.2	5.9	NO		NO	bb
2	2 180115M2_2	Standard	12.500	5.19	9259.429	9573.944	12.089	12.1	-2.9	NO		NO	bb
3	3 180115M2_3	Standard	12.500	5.19	10469.260	10839.729	12.073	12.1	-3.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	5.18	11543.967	11526.396	12.519	12.6	0.6	NO		NO	bb
5	5 180115M2_5	Standard	12.500	5.18	10095.664	10211.842	12.358	12.4	-0.7	NO		NO	bb
6	6 180115M2_6	Standard	12.500	5.19	10322.235	10477.224	12.315	12.4	-1.1	NO		NO	bb
7	7 180115M2_7	Standard	12.500	5.19	8868.471	9388.578	11.808	11.9	-5.2	NO		NO	bb
8	8 180115M2_8	Standard	12.500	5.18	9834.333	9278.257	13.249	13.3	6.4	NO		NO	bb

Compound name: 13C2-8:2 FTS

Response Factor: 0.102966

RRF SD: 0.0196885, Relative SD: 19.1214

Response type: Internal Std (Ref 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	5.16	1084.677	12455.272	1.089	10.6	-15.4	NO		NO	bb
2	2 180115M2_2	Standard	12.500	5.16	1447.292	12561.499	1.440	14.0	11.9	NO		NO	bb
3	3 180115M2_3	Standard	12.500	5.16	2016.216	16767.305	1.503	14.6	16.8	NO		NO	bb
4	4 180115M2_4	Standard	12.500	5.16	1733.439	14101.621	1.537	14.9	19.4	NO		NO	bb
5	5 180115M2_5	Standard	12.500	5.16	1179.393	15840.523	0.931	9.0	-27.7	NO		NO	bb
6	6 180115M2_6	Standard	12.500	5.16	1581.232	16157.200	1.223	11.9	-5.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	5.16	1661.151	11804.778	1.759	17.1	36.7	NO		NO	bbX
8	8 180115M2_8	Standard	12.500	5.16	1868.278	13507.876	1.729	16.8	34.3	NO		NO	bbX

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Compound name: d3-N-MeFOSAA

Response Factor: 0.339955

RRF SD: 0.0639138, Relative SD: 18.8007

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	5.33	3668.057	9597.051	4.778	14.1	12.4	NO		NO	bb
2	2 180115M2_2	Standard	12.500	5.33	4068.198	12232.438	4.157	12.2	-2.2	NO		NO	bb
3	3 180115M2_3	Standard	12.500	5.33	4941.718	16108.975	3.835	11.3	-9.8	NO		NO	bb
4	4 180115M2_4	Standard	12.500	5.33	4259.577	15359.841	3.466	10.2	-18.4	NO		NO	bb
5	5 180115M2_5	Standard	12.500	5.33	4700.651	14601.564	4.024	11.8	-5.3	NO		NO	bb
6	6 180115M2_6	Standard	12.500	5.33	4734.263	14430.306	4.101	12.1	-3.5	NO		NO	bb
7	7 180115M2_7	Standard	12.500	5.33	4812.376	10068.811	5.974	17.6	40.6	NO		NO	bb
8	8 180115M2_8	Standard	12.500	5.33	4204.535	14359.005	3.660	10.8	-13.9	NO		NO	bb

Compound name: d5-N-EtFOSAA

Response Factor: 0.376804

RRF SD: 0.0581665, Relative SD: 15.4368

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	5.49	4291.856	9597.051	5.590	14.8	18.7	NO		NO	bb
2	2 180115M2_2	Standard	12.500	5.49	4807.261	12232.438	4.912	13.0	4.3	NO		NO	bb
3	3 180115M2_3	Standard	12.500	5.49	5925.357	16108.975	4.598	12.2	-2.4	NO		NO	bb
4	4 180115M2_4	Standard	12.500	5.48	4489.890	15359.841	3.654	9.7	-22.4	NO		NO	bb
5	5 180115M2_5	Standard	12.500	5.48	5242.137	14601.564	4.488	11.9	-4.7	NO		NO	bb
6	6 180115M2_6	Standard	12.500	5.48	5935.848	14430.306	5.142	13.6	9.2	NO		NO	bb
7	7 180115M2_7	Standard	12.500	5.48	4444.999	10068.811	5.518	14.6	17.2	NO		NO	bb
8	8 180115M2_8	Standard	12.500	5.48	4340.295	14359.005	3.778	10.0	-19.8	NO		NO	bb

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Compound name: 13C2-PFUDa

Response Factor: 0.943561

RRF SD: 0.166868, Relative SD: 17.6849

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	5.51	10659.157	9597.051	13.883	14.7	17.7	NO		NO	bb
2	2 180115M2_2	Standard	12.500	5.51	12827.074	12232.438	13.108	13.9	11.1	NO		NO	bb
3	3 180115M2_3	Standard	12.500	5.51	14368.888	16108.975	11.150	11.8	-5.5	NO		NO	bb
4	4 180115M2_4	Standard	12.500	5.50	12801.493	15359.841	10.418	11.0	-11.7	NO		NO	bb
5	5 180115M2_5	Standard	12.500	5.50	11208.095	14601.564	9.595	10.2	-18.6	NO		NO	bb
6	6 180115M2_6	Standard	12.500	5.51	13602.793	14430.306	11.783	12.5	-0.1	NO		NO	bb
7	7 180115M2_7	Standard	12.500	5.50	12174.631	10068.811	15.114	16.0	28.1	NO		NO	bb
8	8 180115M2_8	Standard	12.500	5.50	10688.771	14359.005	9.305	9.9	-21.1	NO		NO	bb

Compound name: 13C2-PFDoA

Response Factor: 0.726172

RRF SD: 0.138899, Relative SD: 19.1275

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	5.79	6851.029	9597.051	8.923	12.3	-1.7	NO		NO	bb
2	2 180115M2_2	Standard	12.500	5.79	8538.500	12232.438	8.725	12.0	-3.9	NO		NO	MM
3	3 180115M2_3	Standard	12.500	5.79	10789.430	16108.975	8.372	11.5	-7.8	NO		NO	bb
4	4 180115M2_4	Standard	12.500	5.78	9022.085	15359.841	7.342	10.1	-19.1	NO		NO	bb
5	5 180115M2_5	Standard	12.500	5.78	10734.802	14601.564	9.190	12.7	1.2	NO		NO	bb
6	6 180115M2_6	Standard	12.500	5.78	12215.312	14430.306	10.581	14.6	16.6	NO		NO	bb
7	7 180115M2_7	Standard	12.500	5.78	9999.913	10068.811	12.414	17.1	36.8	NO		NO	bb
8	8 180115M2_8	Standard	12.500	5.78	8119.767	14359.005	7.069	9.7	-22.1	NO		NO	bb

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Compound name: d3-N-MeFOSA

Response Factor: 0.118962

RRF SD: 0.0169862, Relative SD: 14.2787

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	150.000	5.86	15969.864	9597.051	20.800	174.9	16.6	NO		NO	bb
2	2 180115M2_2	Standard	150.000	5.86	17622.953	12232.438	18.008	151.4	0.9	NO		NO	bb
3	3 180115M2_3	Standard	150.000	5.86	21395.508	16108.975	16.602	139.6	-7.0	NO		NO	bb
4	4 180115M2_4	Standard	150.000	5.86	18699.383	15359.841	15.218	127.9	-14.7	NO		NO	bb
5	5 180115M2_5	Standard	150.000	5.86	19396.660	14601.564	16.605	139.6	-6.9	NO		NO	bb
6	6 180115M2_6	Standard	150.000	5.86	21606.223	14430.306	18.716	157.3	4.9	NO		NO	bb
7	7 180115M2_7	Standard	150.000	5.86	17688.914	10068.811	21.960	184.6	23.1	NO		NO	bb
8	8 180115M2_8	Standard	150.000	5.86	17051.773	14359.005	14.844	124.8	-16.8	NO		NO	bb

Compound name: 13C2-PFTeDA

Response Factor: 0.371352

RRF SD: 0.056833, Relative SD: 15.3043

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	6.24	3811.400	9597.051	4.964	13.4	6.9	NO		NO	bb
2	2 180115M2_2	Standard	12.500	6.24	4625.902	12232.438	4.727	12.7	1.8	NO		NO	bb
3	3 180115M2_3	Standard	12.500	6.24	5784.110	16108.975	4.488	12.1	-3.3	NO		NO	bb
4	4 180115M2_4	Standard	12.500	6.23	4166.997	15359.841	3.391	9.1	-26.9	NO		NO	MM
5	5 180115M2_5	Standard	12.500	6.23	5054.189	14601.564	4.327	11.7	-6.8	NO		NO	bb
6	6 180115M2_6	Standard	12.500	6.24	5187.430	14430.306	4.494	12.1	-3.2	NO		NO	MM
7	7 180115M2_7	Standard	12.500	6.23	4785.019	10068.811	5.940	16.0	28.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	6.23	5518.160	14359.005	4.804	12.9	3.5	NO		NO	bb

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Compound name: d5-N-ETFOSA

Response Factor: 0.17355

RRF SD: 0.0236433, Relative SD: 13.6233

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	150.000	6.21	23192.393	9597.051	30.208	174.1	16.0	NO		NO	bb
2	2 180115M2_2	Standard	150.000	6.22	25547.748	12232.438	26.107	150.4	0.3	NO		NO	bb
3	3 180115M2_3	Standard	150.000	6.21	31434.623	16108.975	24.392	140.5	-6.3	NO		NO	bb
4	4 180115M2_4	Standard	150.000	6.21	27705.471	15359.841	22.547	129.9	-13.4	NO		NO	bb
5	5 180115M2_5	Standard	150.000	6.21	28494.203	14601.564	24.393	140.6	-6.3	NO		NO	bb
6	6 180115M2_6	Standard	150.000	6.22	32255.756	14430.306	27.941	161.0	7.3	NO		NO	bb
7	7 180115M2_7	Standard	150.000	6.22	25211.236	10068.811	31.299	180.3	20.2	NO		NO	bb
8	8 180115M2_8	Standard	150.000	6.21	24552.484	14359.005	21.374	123.2	-17.9	NO		NO	bb

Compound name: 13C2-PFHxDA

Response Factor: 0.559258

RRF SD: 0.111637, Relative SD: 19.9617

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	5.000	6.54	2113.428	9597.051	2.753	4.9	-1.6	NO		NO	MM
2	2 180115M2_2	Standard	5.000	6.54	2775.093	12232.438	2.836	5.1	1.4	NO		NO	bb
3	3 180115M2_3	Standard	5.000	6.54	3282.116	16108.975	2.547	4.6	-8.9	NO		NO	MM
4	4 180115M2_4	Standard	5.000	6.54	2733.865	15359.841	2.225	4.0	-20.4	NO		NO	MM
5	5 180115M2_5	Standard	5.000	6.54	2890.199	14601.564	2.474	4.4	-11.5	NO		NO	bb
6	6 180115M2_6	Standard	5.000	6.54	3217.573	14430.306	2.787	5.0	-0.3	NO		NO	bb
7	7 180115M2_7	Standard	5.000	6.54	3292.356	10068.811	4.087	7.3	46.2	NO		NO	MM
8	8 180115M2_8	Standard	5.000	6.54	3057.260	14359.005	2.661	4.8	-4.8	NO		NO	bb

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Printed: Tuesday, January 16, 2018 10:29:14 Pacific Standard Time

Compound name: d7-N-MeFOSE

Response Factor: 0.179375

RRF SD: 0.0175828, Relative SD: 9.80226

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	150.000	6.29	20888.145	9597.051	27.206	151.7	1.1	NO		NO	bb
2	2 180115M2_2	Standard	150.000	6.29	26082.570	12232.438	26.653	148.6	-0.9	NO		NO	bb
3	3 180115M2_3	Standard	150.000	6.29	31250.859	16108.975	24.250	135.2	-9.9	NO		NO	bb
4	4 180115M2_4	Standard	150.000	6.29	29842.697	15359.841	24.286	135.4	-9.7	NO		NO	bb
5	5 180115M2_5	Standard	150.000	6.29	30325.629	14601.564	25.961	144.7	-3.5	NO		NO	bb
6	6 180115M2_6	Standard	150.000	6.29	35709.676	14430.306	30.933	172.4	15.0	NO		NO	bb
7	7 180115M2_7	Standard	150.000	6.29	24759.139	10068.811	30.737	171.4	14.2	NO		NO	bb
8	8 180115M2_8	Standard	150.000	6.29	28975.107	14359.005	25.224	140.6	-6.3	NO		NO	bb

Compound name: d9-N-EtFOSE

Response Factor: 0.159689

RRF SD: 0.0235867, Relative SD: 14.7704

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	150.000	6.44	22450.639	9597.051	29.242	183.1	22.1	NO		NO	bd
2	2 180115M2_2	Standard	150.000	6.45	21303.693	12232.438	21.770	136.3	-9.1	NO		NO	bb
3	3 180115M2_3	Standard	150.000	6.44	31097.133	16108.975	24.130	151.1	0.7	NO		NO	bb
4	4 180115M2_4	Standard	150.000	6.44	27869.063	15359.841	22.680	142.0	-5.3	NO		NO	bb
5	5 180115M2_5	Standard	150.000	6.44	27858.053	14601.564	23.849	149.3	-0.4	NO		NO	bb
6	6 180115M2_6	Standard	150.000	6.44	28613.766	14430.306	24.786	155.2	3.5	NO		NO	bb
7	7 180115M2_7	Standard	150.000	6.45	22170.844	10068.811	27.524	172.4	14.9	NO		NO	bb
8	8 180115M2_8	Standard	150.000	6.44	20270.486	14359.005	17.646	110.5	-26.3	NO		NO	bb

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Compound name: 13C4-PFBA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 54), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	1.52	10061.779	10061.779	12.500	12.5	0.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	1.52	11662.093	11662.093	12.500	12.5	0.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	1.52	14677.296	14677.296	12.500	12.5	0.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	1.52	12356.659	12356.659	12.500	12.5	0.0	NO		NO	bb
5	5 180115M2_5	Standard	12.500	1.52	13477.931	13477.931	12.500	12.5	0.0	NO		NO	bb
6	6 180115M2_6	Standard	12.500	1.52	14699.104	14699.104	12.500	12.5	0.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	1.52	11470.707	11470.707	12.500	12.5	0.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	1.52	11668.103	11668.103	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 55), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	3.25	12455.272	12455.272	12.500	12.5	0.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	3.25	12561.499	12561.499	12.500	12.5	0.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	3.25	16767.305	16767.305	12.500	12.5	0.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	3.25	14101.621	14101.621	12.500	12.5	0.0	NO		NO	bb
5	5 180115M2_5	Standard	12.500	3.24	15840.523	15840.523	12.500	12.5	0.0	NO		NO	bb
6	6 180115M2_6	Standard	12.500	3.25	16157.200	16157.200	12.500	12.5	0.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	3.25	11804.778	11804.778	12.500	12.5	0.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	3.24	13507.876	13507.876	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C3-PFHxS

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 56), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.01	2804.372	2804.372	12.500	12.5	0.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.01	3149.166	3149.166	12.500	12.5	0.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.01	3283.306	3283.306	12.500	12.5	0.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.01	3088.549	3088.549	12.500	12.5	0.0	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.01	3535.805	3535.805	12.500	12.5	0.0	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.01	3990.885	3990.885	12.500	12.5	0.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.01	2610.740	2610.740	12.500	12.5	0.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.01	2521.238	2521.238	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C8-PFOA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 57), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.38	11387.326	11387.326	12.500	12.5	0.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.39	12172.035	12172.035	12.500	12.5	0.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.39	13726.202	13726.202	12.500	12.5	0.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.38	13300.389	13300.389	12.500	12.5	0.0	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.38	12814.540	12814.540	12.500	12.5	0.0	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.39	15285.250	15285.250	12.500	12.5	0.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.38	11556.618	11556.618	12.500	12.5	0.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.38	11963.216	11963.216	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C9-PFNA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 58), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.81	9887.708	9887.708	12.500	12.5	0.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.82	14541.915	14541.915	12.500	12.5	0.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.81	15659.906	15659.906	12.500	12.5	0.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.81	14165.005	14165.005	12.500	12.5	0.0	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.81	14881.775	14881.775	12.500	12.5	0.0	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.81	16690.238	16690.238	12.500	12.5	0.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.81	11566.101	11566.101	12.500	12.5	0.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.81	12301.464	12301.464	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 59), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	4.89	3065.292	3065.292	12.500	12.5	0.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	4.89	3701.104	3701.104	12.500	12.5	0.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	4.89	4167.454	4167.454	12.500	12.5	0.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	4.89	3259.616	3259.616	12.500	12.5	0.0	NO		NO	bb
5	5 180115M2_5	Standard	12.500	4.89	3538.393	3538.393	12.500	12.5	0.0	NO		NO	bb
6	6 180115M2_6	Standard	12.500	4.89	3917.062	3917.062	12.500	12.5	0.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	4.89	3367.256	3367.256	12.500	12.5	0.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	4.89	2586.616	2586.616	12.500	12.5	0.0	NO		NO	bb

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Compound name: 13C6-PFDA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 60), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	5.19	8643.550	8643.550	12.500	12.5	0.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	5.19	9573.944	9573.944	12.500	12.5	0.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	5.19	10839.729	10839.729	12.500	12.5	0.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	5.18	11526.396	11526.396	12.500	12.5	0.0	NO		NO	bb
5	5 180115M2_5	Standard	12.500	5.18	10211.842	10211.842	12.500	12.5	0.0	NO		NO	bb
6	6 180115M2_6	Standard	12.500	5.19	10477.224	10477.224	12.500	12.5	0.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	5.19	9388.578	9388.578	12.500	12.5	0.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	5.18	9278.257	9278.257	12.500	12.5	0.0	NO		NO	bb

Compound name: 13C7-PFUDa

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 61), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 180115M2_1	Standard	12.500	5.51	9597.051	9597.051	12.500	12.5	0.0	NO		NO	bb
2	2 180115M2_2	Standard	12.500	5.51	12232.438	12232.438	12.500	12.5	0.0	NO		NO	bb
3	3 180115M2_3	Standard	12.500	5.51	16108.975	16108.975	12.500	12.5	0.0	NO		NO	bb
4	4 180115M2_4	Standard	12.500	5.50	15359.841	15359.841	12.500	12.5	0.0	NO		NO	bb
5	5 180115M2_5	Standard	12.500	5.50	14601.564	14601.564	12.500	12.5	0.0	NO		NO	bb
6	6 180115M2_6	Standard	12.500	5.51	14430.306	14430.306	12.500	12.5	0.0	NO		NO	bb
7	7 180115M2_7	Standard	12.500	5.50	10068.811	10068.811	12.500	12.5	0.0	NO		NO	bb
8	8 180115M2_8	Standard	12.500	5.50	14359.005	14359.005	12.500	12.5	0.0	NO		NO	bb

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Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_1, Date: 16-Jan-2018, Time: 00:14:07, ID: ST180115M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

	# Name	CoD	CoD Flag	%RSD
1	1 PFBA	0.9972	NO	
2	2 PFPeA	0.9960	NO	
3	3 PFBS	0.9964	NO	
4	4 PFHxA	0.9925	NO	
5	5 PFHpA	0.9954	NO	
6	6 L-PFHxS	0.9997	NO	
7	8 6:2 FTS	0.9954	NO	
8	9 L-PFOA	0.9948	NO	
9	11 PFHpS	0.9990	NO	
10	12 PFNA	0.9983	NO	
11	13 PFOSA	0.9990	NO	
12	14 L-PFOS	0.9977	NO	
13	16 PFDA	0.9967	NO	
14	17 8:2 FTS	0.9909	NO	
15	18 N-MeFOSAA	0.9996	NO	
16	19 N-EtFOSAA	0.9991	NO	
17	20 PFUdA	0.9969	NO	
18	21 PFDS	0.9954	NO	
19	22 PFDoA	0.9964	NO	
20	23 N-MeFOSA	0.9983	NO	
21	24 PFTrDA	0.9972	NO	
22	25 PFTeDA	0.9909	NO	
23	26 N-EtFOSA	0.9987	NO	
24	27 PFHxDA	0.9949	NO	
25	28 PFODA	0.9984	NO	
26	29 N-MeFOSE	0.9957	NO	
27	30 N-EtFOSE	0.9997	NO	
28	31 13C3-PFBA		NO	4.288
29	32 13C3-PFPeA		NO	8.876
30	33 13C3-PFBS		NO	8.289
31	34 13C3-PFHxA		NO	8.444

Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

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Name: 180115M2_1, Date: 16-Jan-2018, Time: 00:14:07, ID: ST180115M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

	# Name	CoD	CoD Flag	%RSD
32	35 13C4-PFHpA		NO	9.277
33	36 18O2-PFHxS		NO	14.845
34	37 13C2-6:2 FTS		NO	19.765
35	38 13C2-PFOA		NO	4.848
36	39 13C5-PFNA		NO	9.599
37	40 13C8-PFOSA		NO	16.609
38	41 13C8-PFOS		NO	9.297
39	42 13C2-PFDA		NO	4.180
40	43 13C2-8:2 FTS		NO	19.121
41	44 d3-N-MeFOSAA		NO	18.801
42	45 d5-N-EtFOSAA		NO	15.437
43	46 13C2-PFUDa		NO	17.685
44	47 13C2-PFDoA		NO	19.128
45	48 d3-N-MeFOSA		NO	14.279
46	49 13C2-PFTeDA		NO	15.304
47	50 d5-N-ETFOSA		NO	13.623
48	51 13C2-PFHxDA		NO	19.962
49	52 d7-N-MeFOSE		NO	9.802
50	53 d9-N-EtFOSE		NO	14.770
51	54 13C4-PFBA		NO	0.000
52	55 13C5-PFHxA		NO	0.000
53	56 13C3-PFHxS		NO	0.000
54	57 13C8-PFOA		NO	0.000
55	58 13C9-PFNA		NO	0.000
56	59 13C4-PFOS		NO	0.000
57	60 13C6-PFDA		NO	0.000
58	61 13C7-PFUDa		NO	0.000

Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

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Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

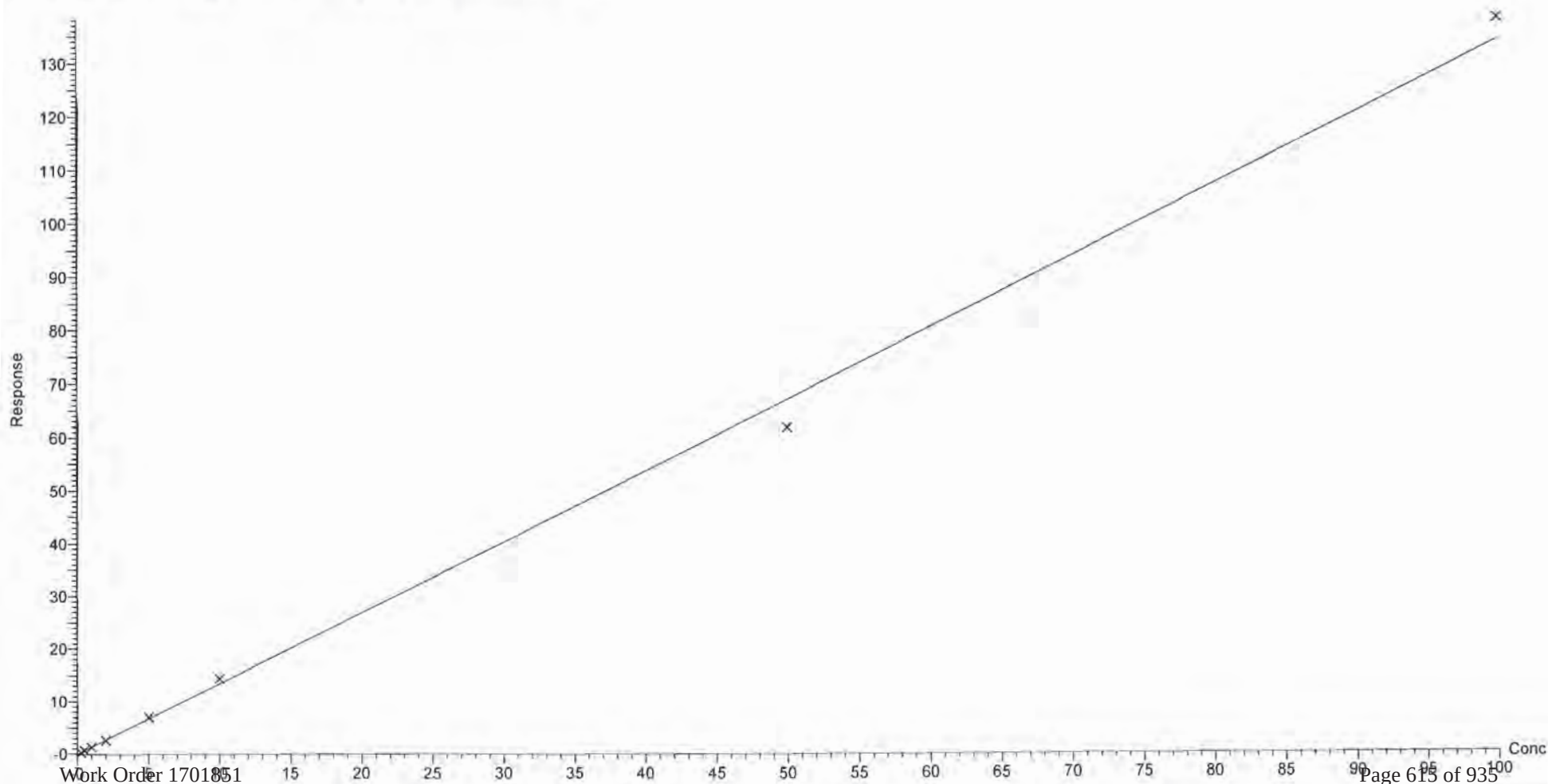
Compound name: PFBA

Correlation coefficient: $r = 0.998579$, $r^2 = 0.997160$

Calibration curve: $1.33977 * x + -0.0328732$

Response type: Internal Std (Ref 31), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

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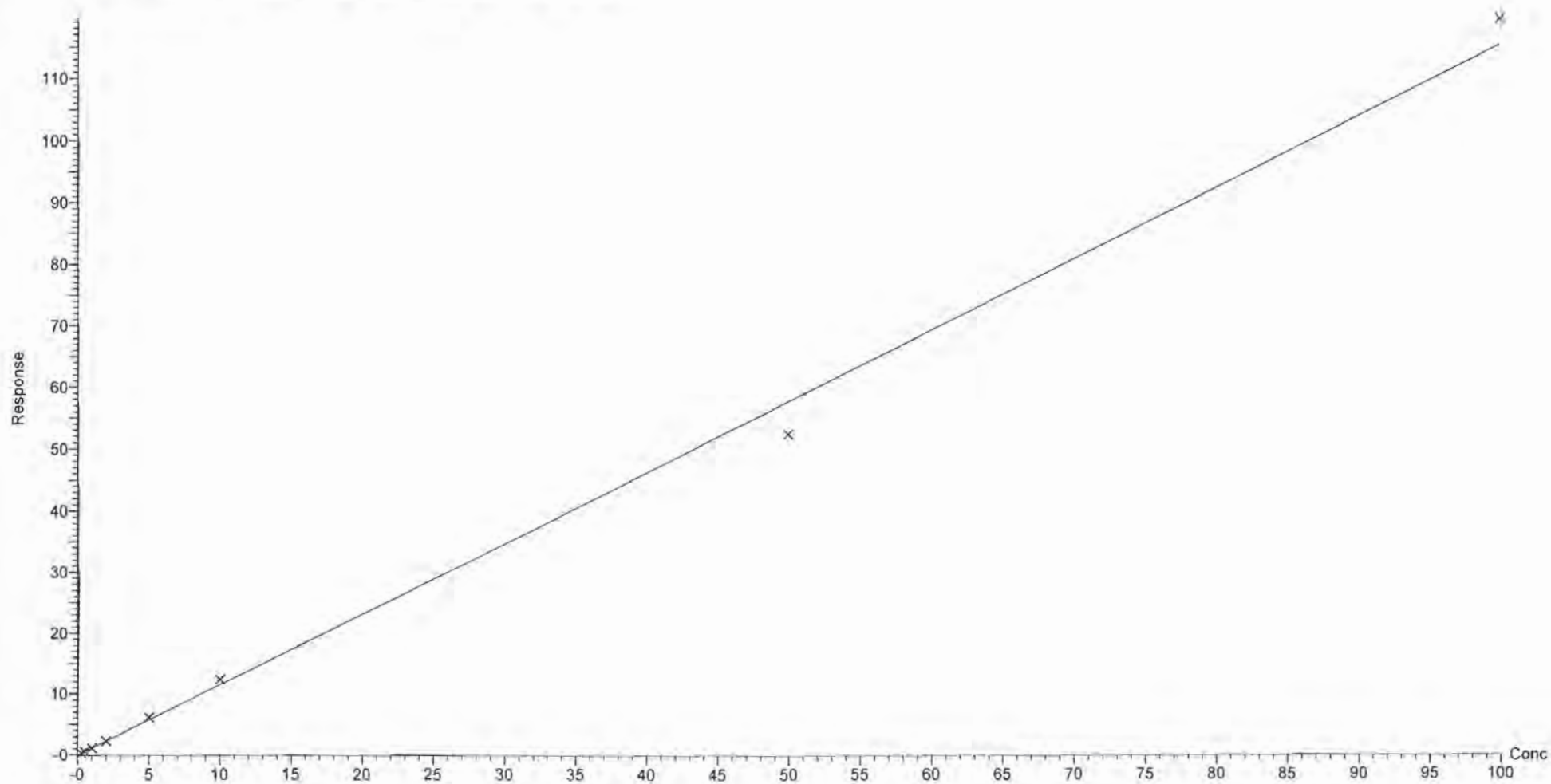
Compound name: PFPeA

Correlation coefficient: $r = 0.997990$, $r^2 = 0.995984$

Calibration curve: $1.15515 * x + -0.0327357$

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\180115M2\180115M2-CRV.qld

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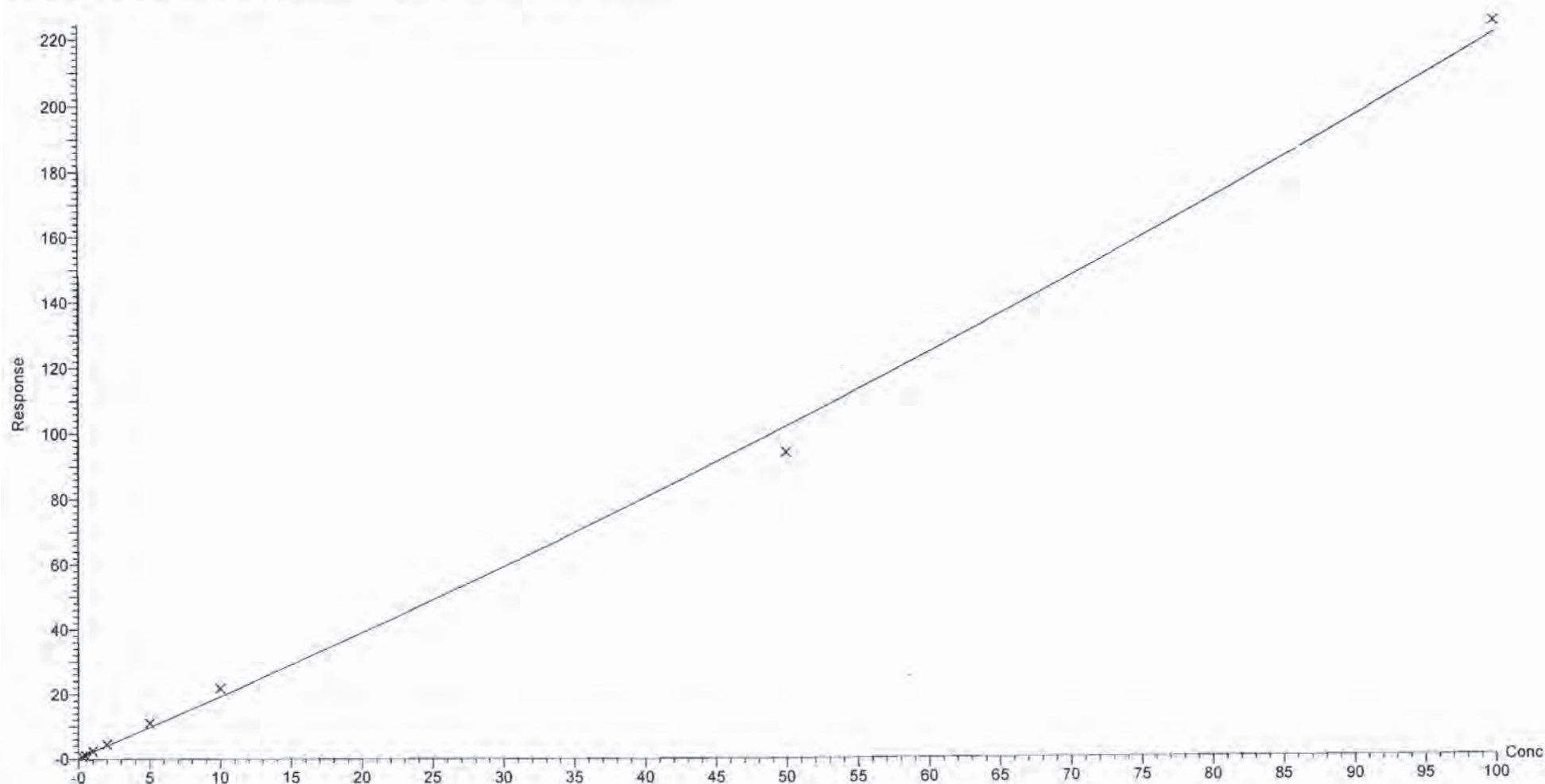
Compound name: PFBS

Coefficient of Determination: $R^2 = 0.996395$

Calibration curve: $0.00351371 * x^2 + 1.85665 * x + 0.254875$

Response type: Internal Std (Ref 33), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



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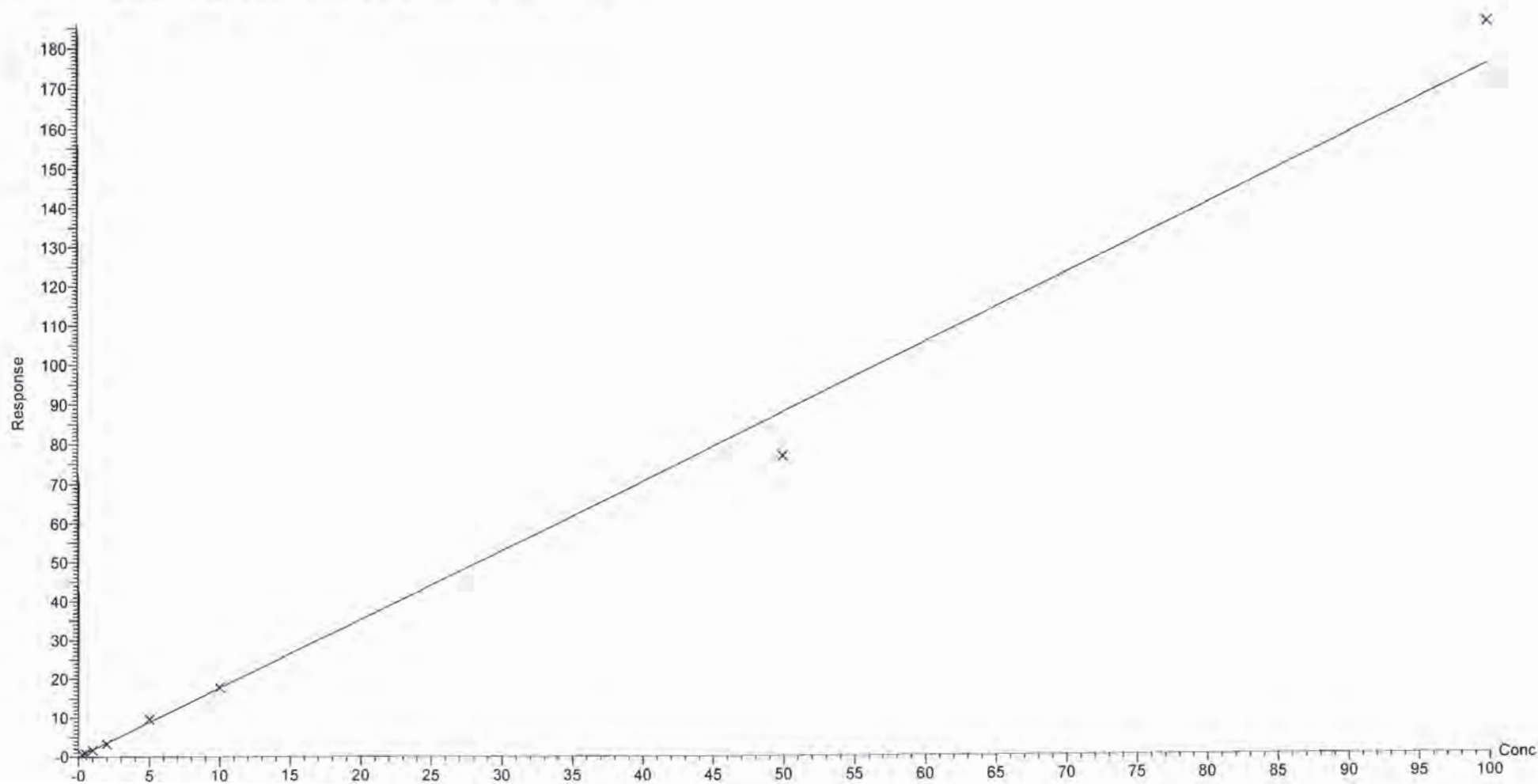
Compound name: PFHxA

Correlation coefficient: $r = 0.996265$, $r^2 = 0.992544$

Calibration curve: $1.75438 * x + 0.0169924$

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\180115M2\180115M2-CRV.qld

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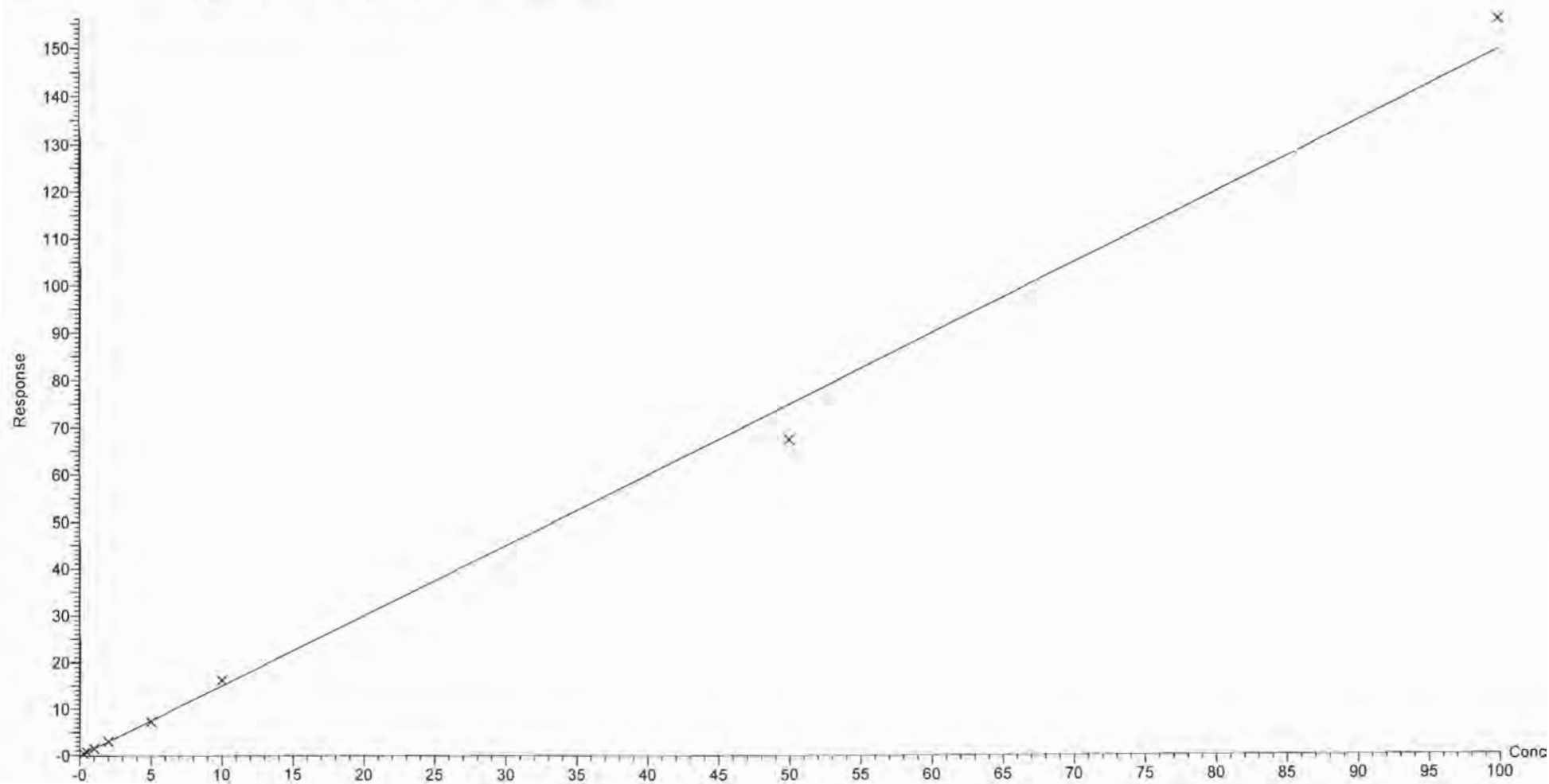
Compound name: PFHpA

Correlation coefficient: $r = 0.997692$, $r^2 = 0.995389$

Calibration curve: $1.49645 * x + -0.0592287$

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\180115M2\180115M2-CRV.qld

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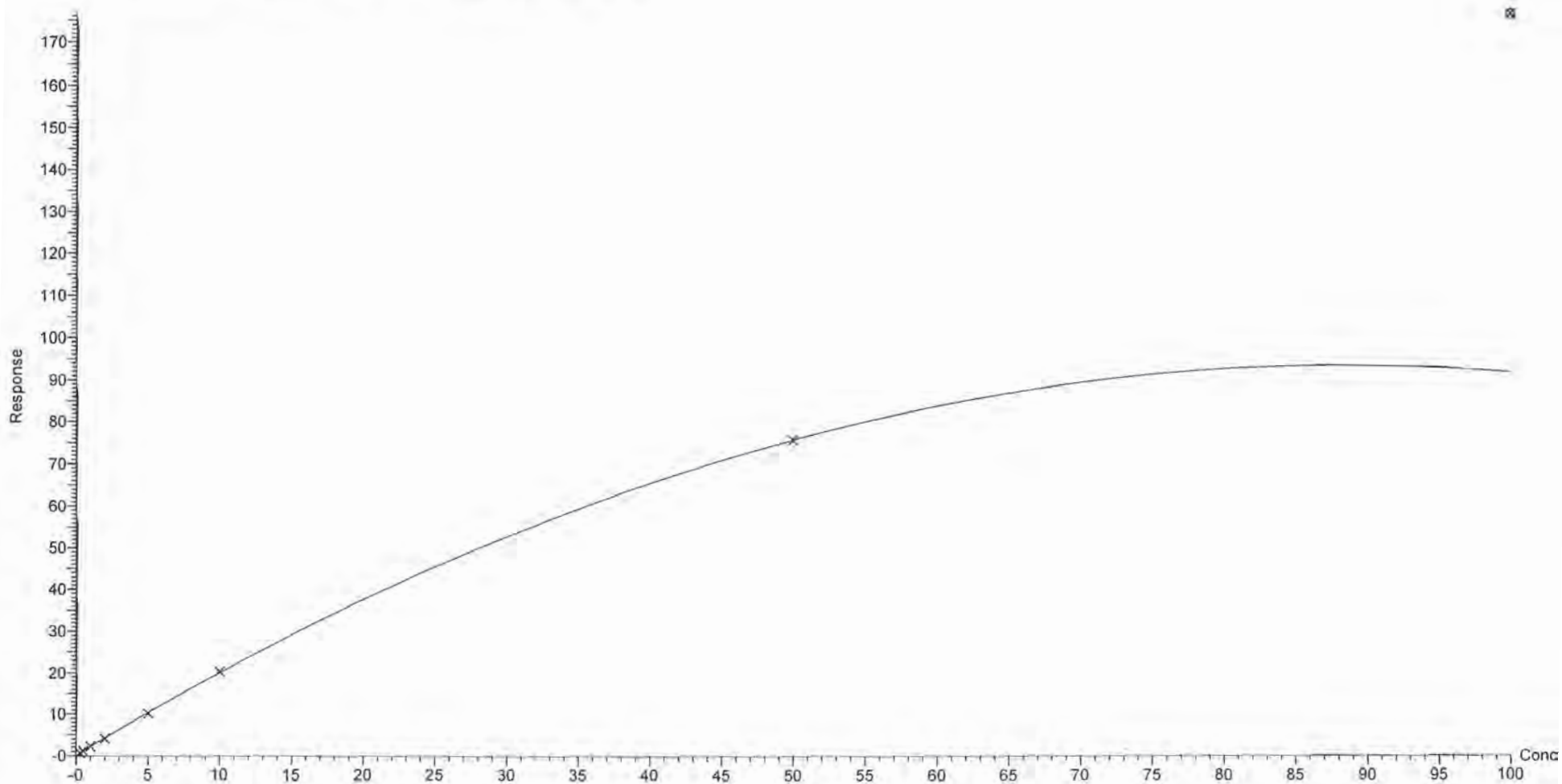
Compound name: L-PFHxS

Coefficient of Determination: $R^2 = 0.999726$

Calibration curve: $-0.0119577 * x^2 + 2.1128 * x + 0.0383417$

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



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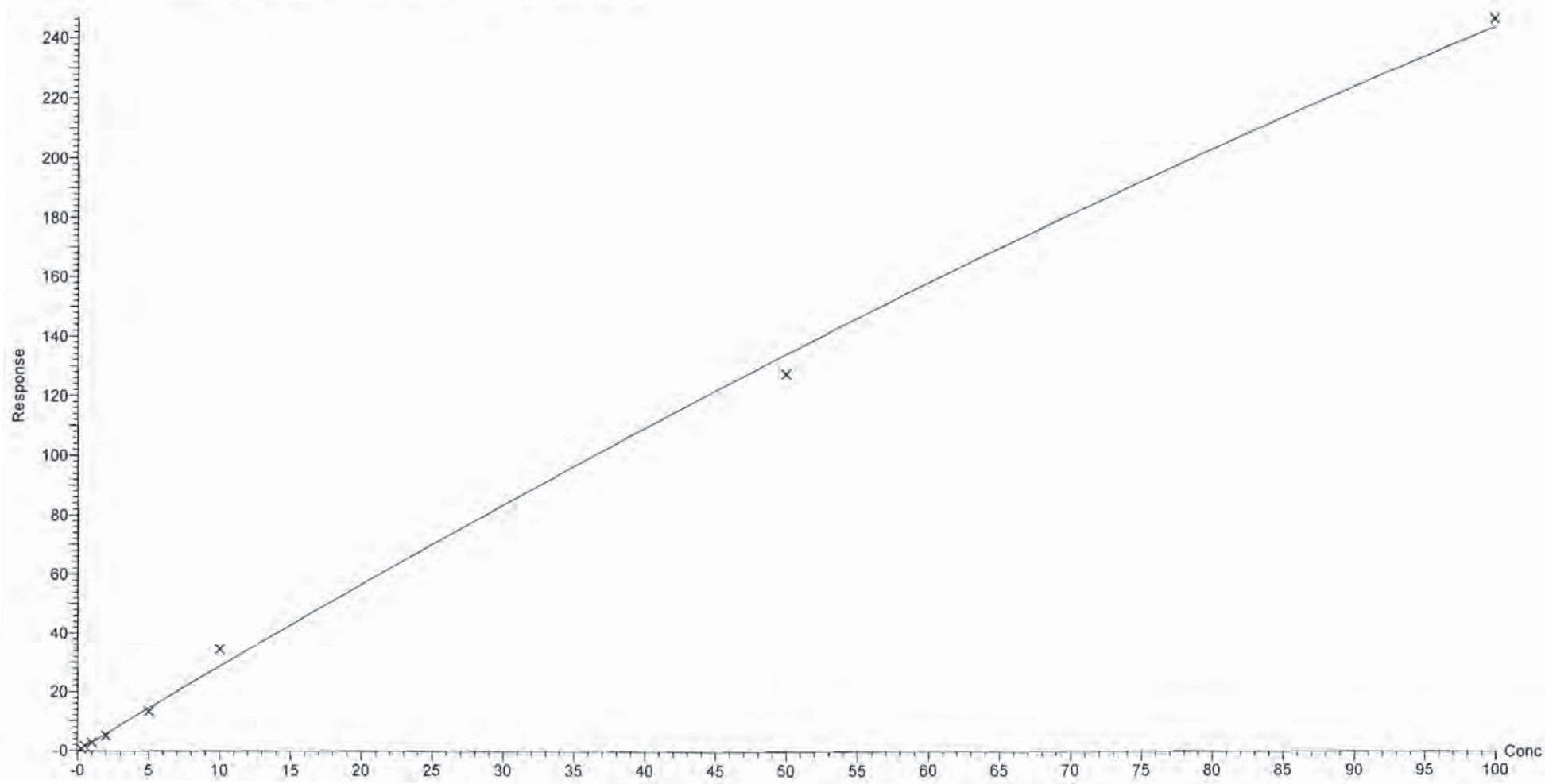
Compound name: 6:2 FTS

Coefficient of Determination: $R^2 = 0.995384$

Calibration curve: $-0.00485621 * x^2 + 2.92773 * x + -0.123035$

Response type: Internal Std (Ref 36), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

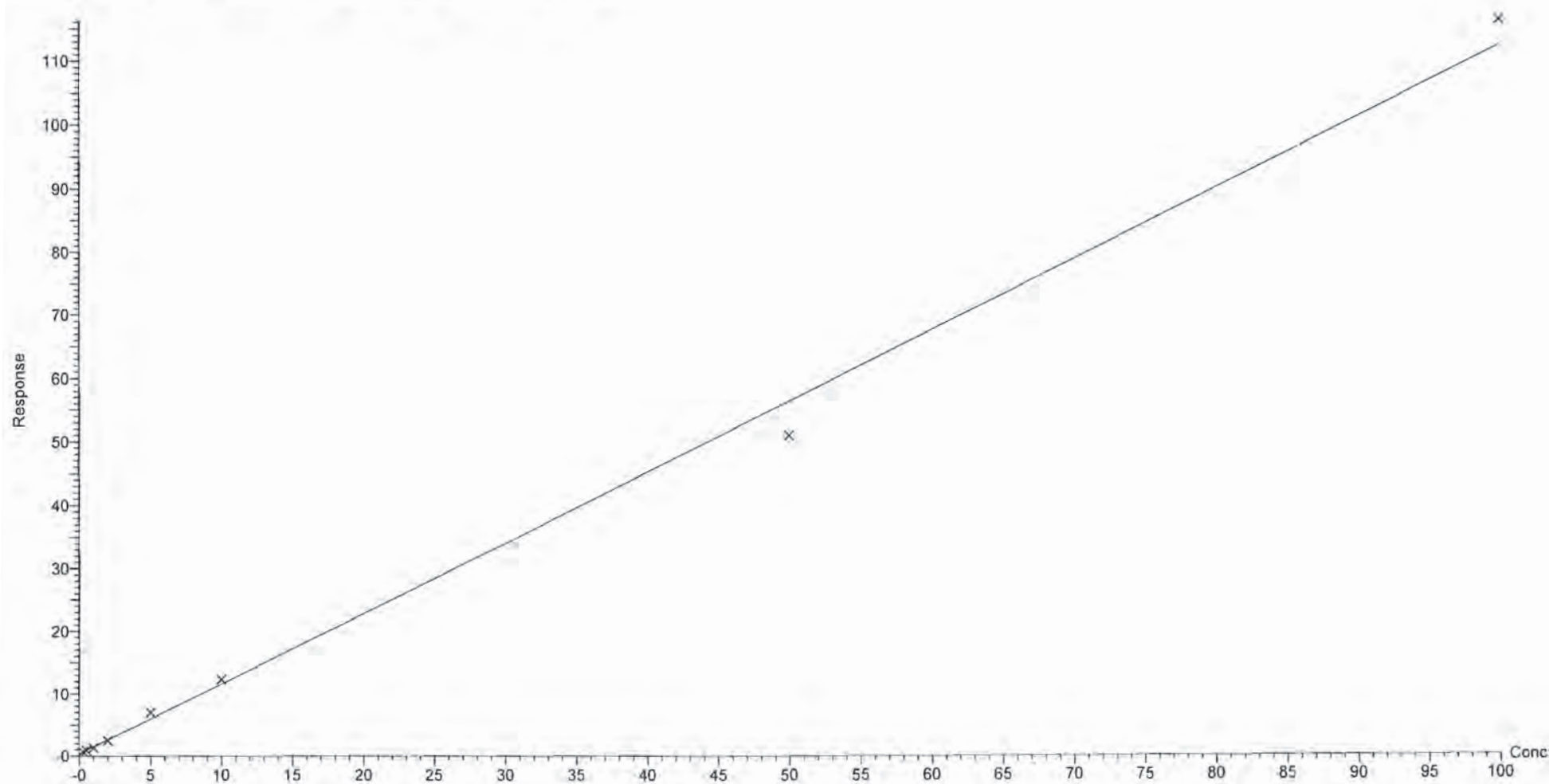
Compound name: L-PFOA

Correlation coefficient: $r = 0.997397$, $r^2 = 0.994801$

Calibration curve: $1.11967 * x + 0.355683$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

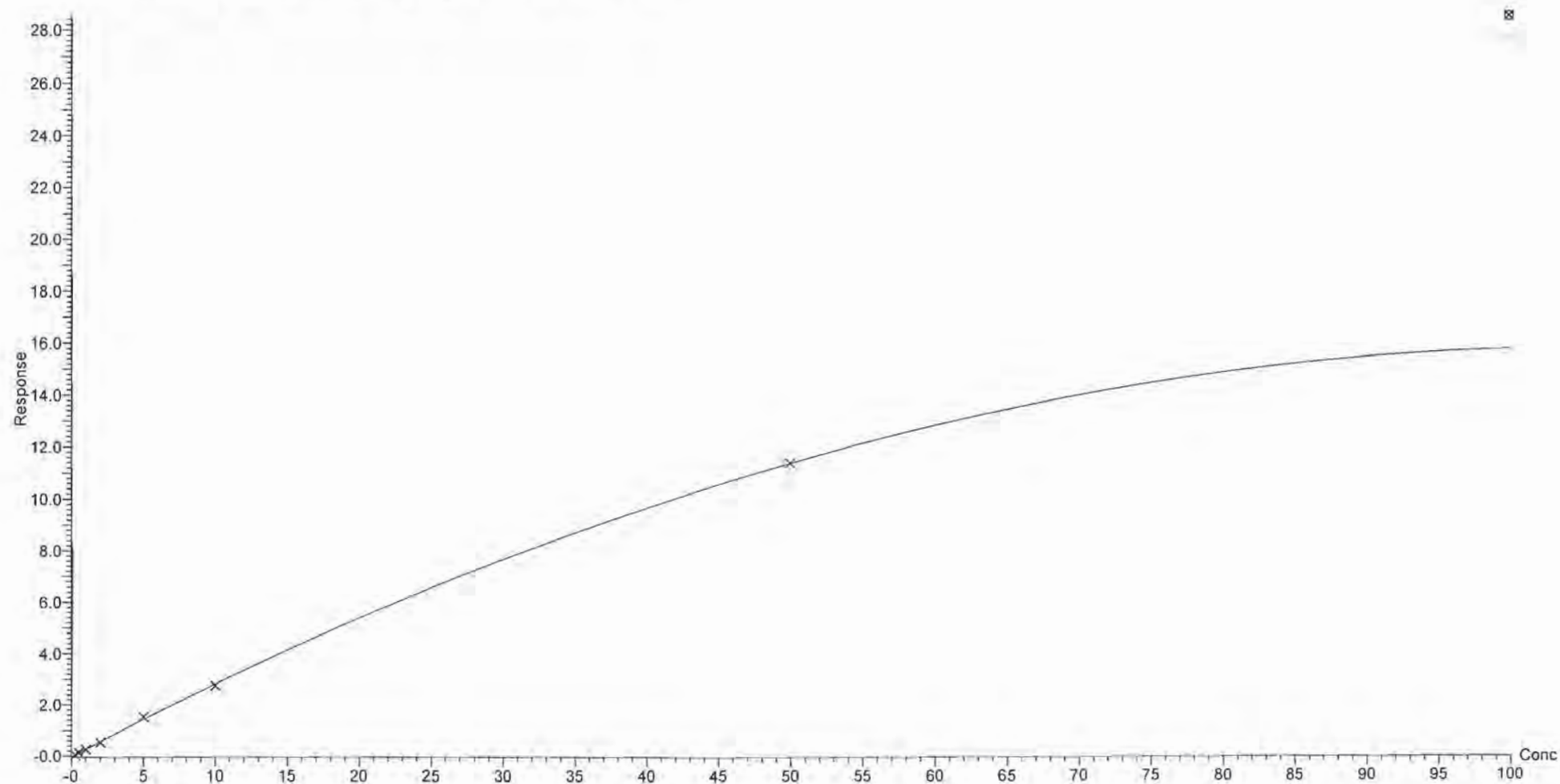
Compound name: PFHpS

Coefficient of Determination: $R^2 = 0.998980$

Calibration curve: $-0.00141138 * x^2 + 0.29869 * x + -0.030036$

Response type: Internal Std (Ref 38), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

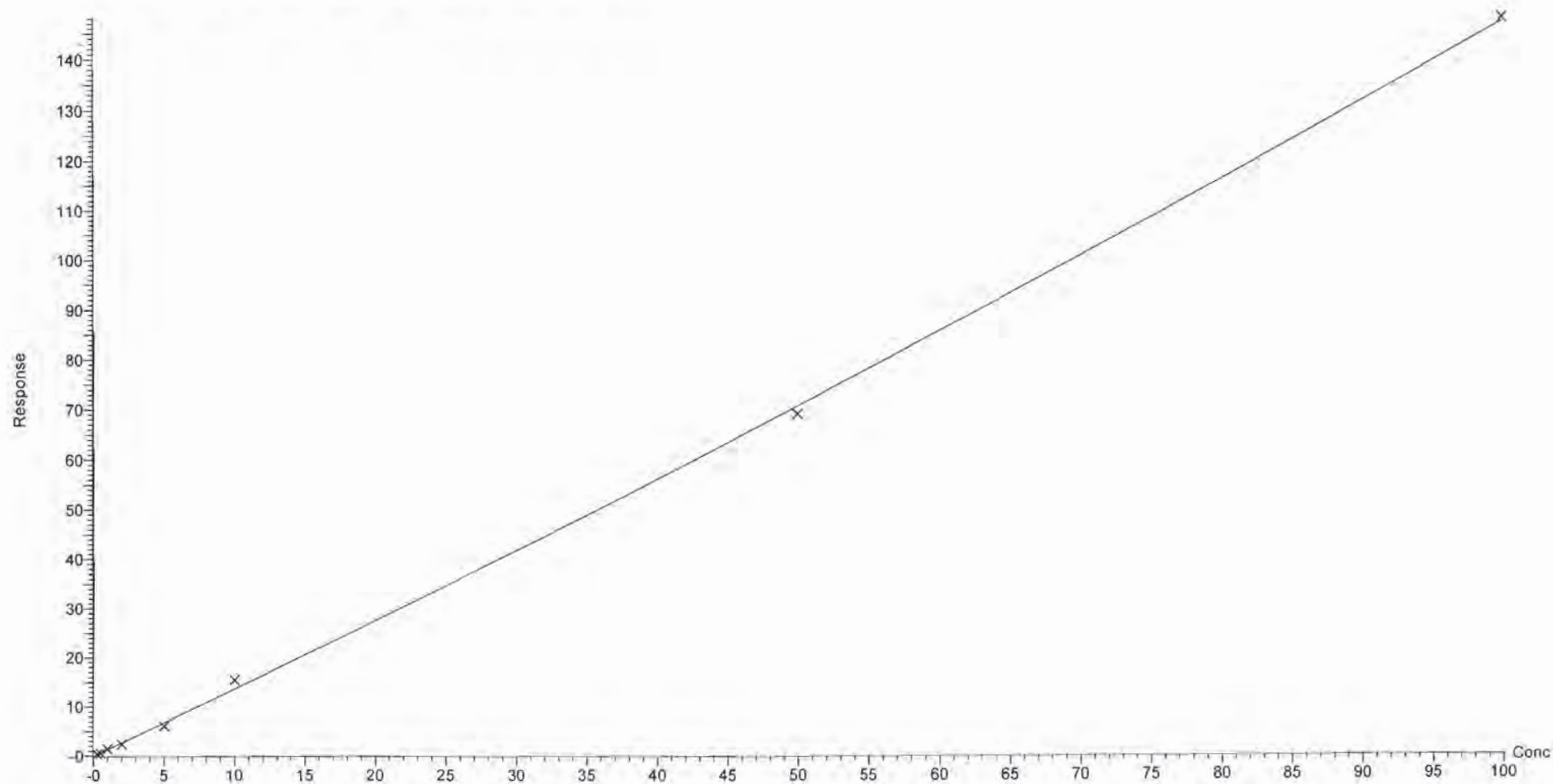
Compound name: PFNA

Coefficient of Determination: $R^2 = 0.998251$

Calibration curve: $0.00123227 * x^2 + 1.35269 * x + -0.0256811$

Response type: Internal Std (Ref 39), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

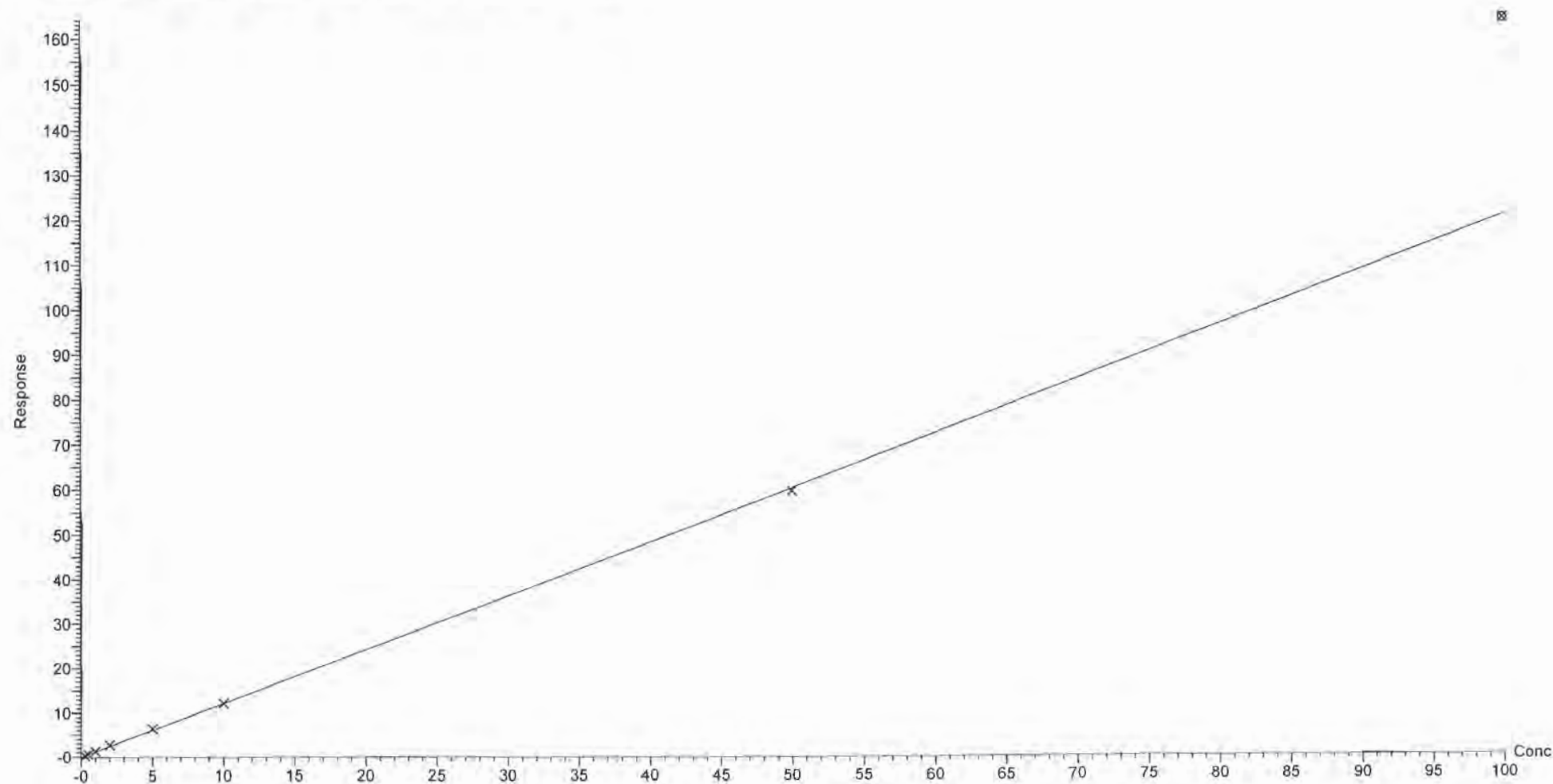
Compound name: PFOSA

Correlation coefficient: $r = 0.999519$, $r^2 = 0.999039$

Calibration curve: $1.2051 * x + -0.0242098$

Response type: Internal Std (Ref 40), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

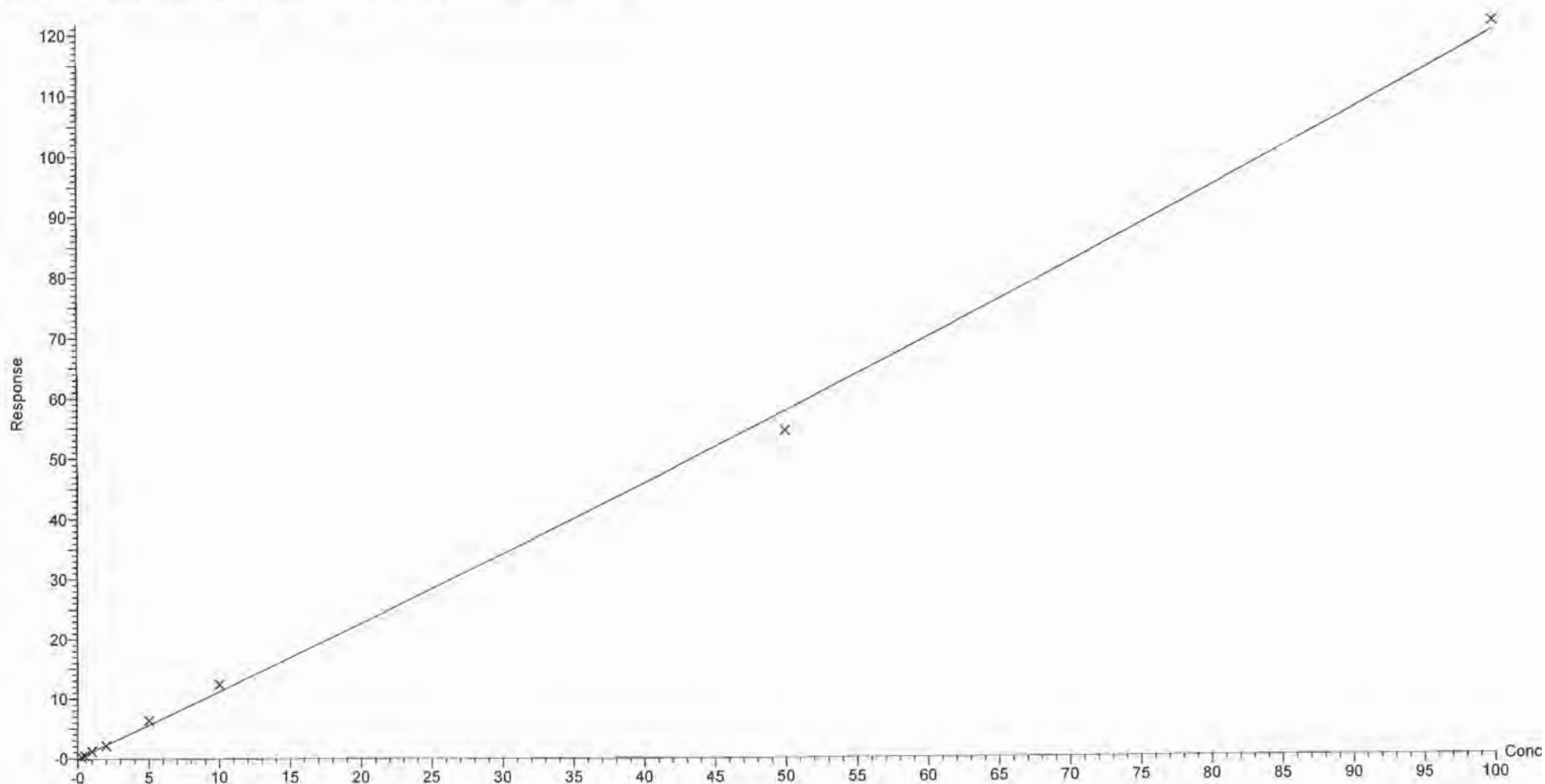
Compound name: L-PFOS

Coefficient of Determination: $R^2 = 0.997719$

Calibration curve: $0.000945797 * x^2 + 1.10838 * x + -0.0443788$

Response type: Internal Std (Ref 41), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4,PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

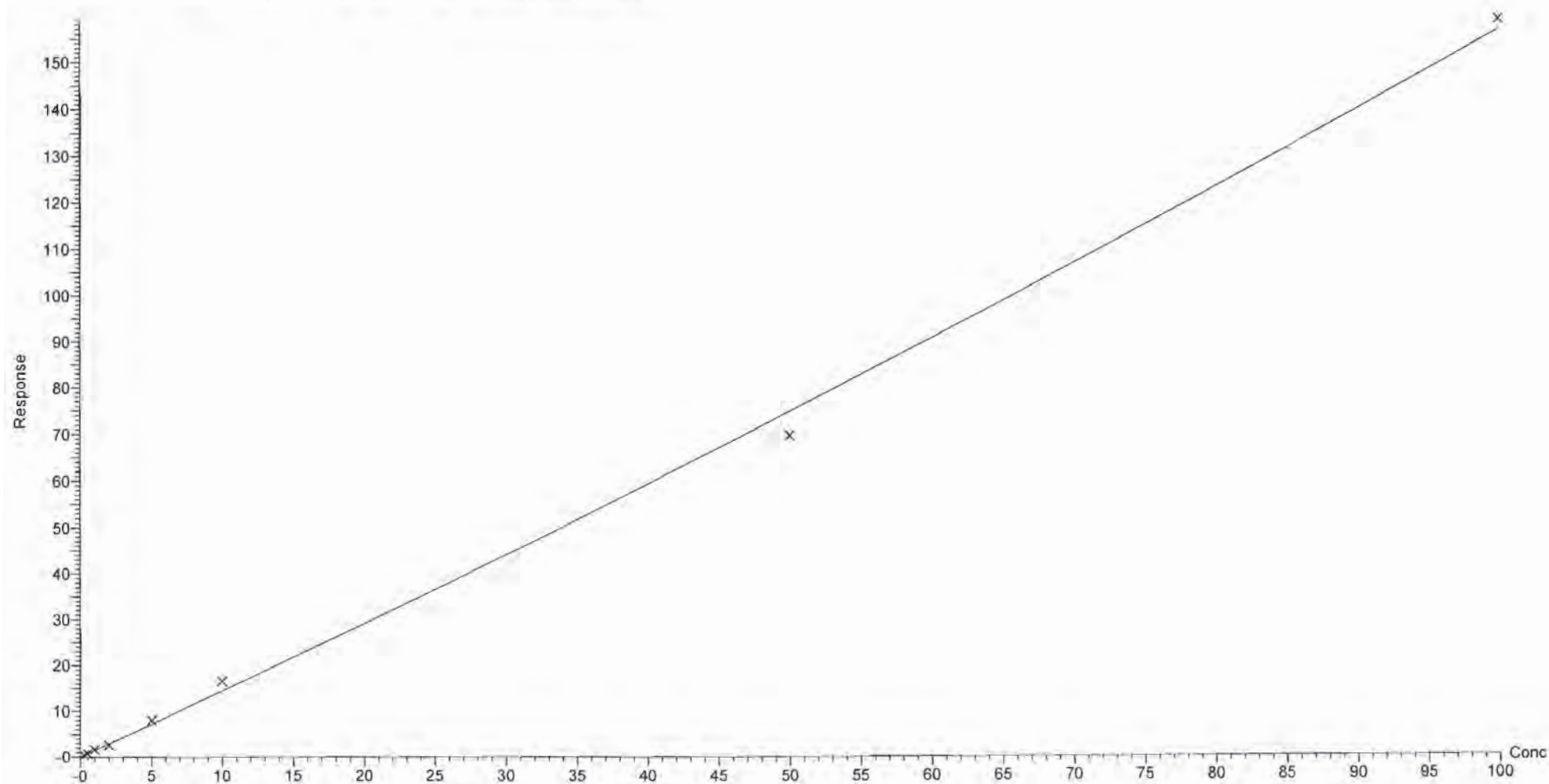
Compound name: PFDA

Coefficient of Determination: $R^2 = 0.996672$

Calibration curve: $0.0014094 * x^2 + 1.42444 * x + 0.0195565$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

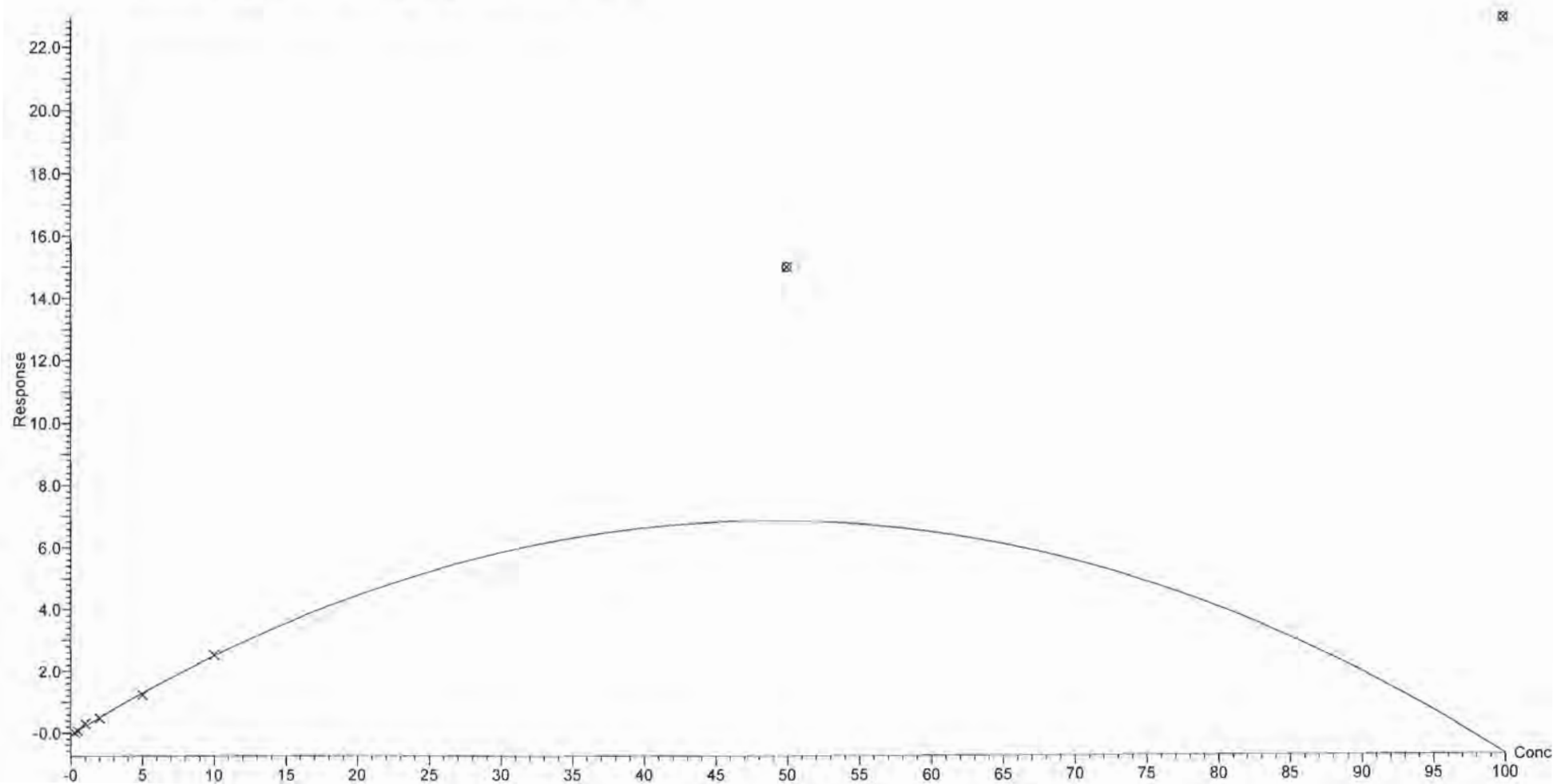
Compound name: 8:2 FTS

Coefficient of Determination: $R^2 = 0.990883$

Calibration curve: $-0.00290289 * x^2 + 0.283311 * x + -0.0505687$

Response type: Internal Std (Ref 42), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

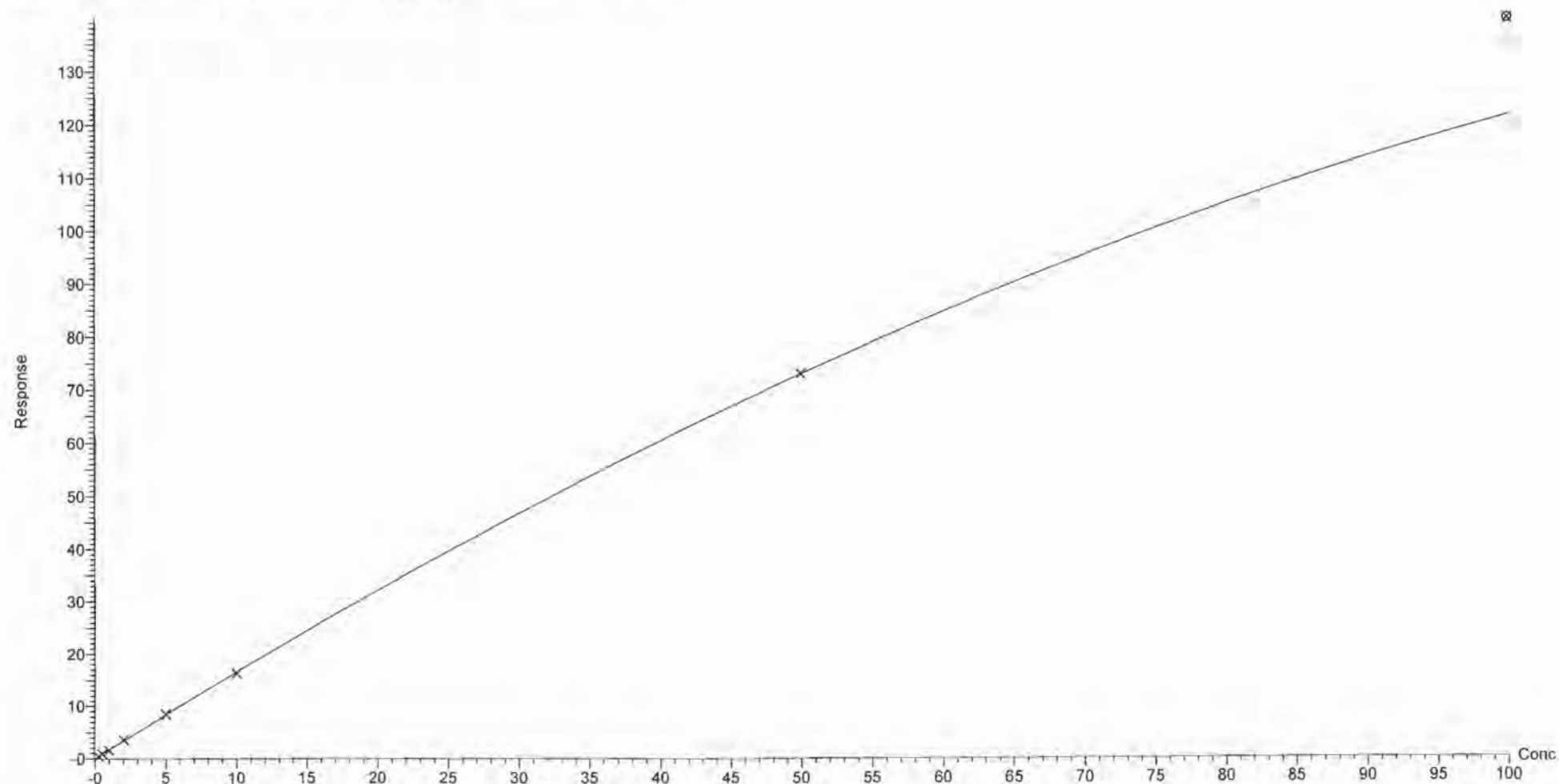
Compound name: N-MeFOSAA

Coefficient of Determination: $R^2 = 0.999579$

Calibration curve: $-0.00488709 * x^2 + 1.70404 * x + -0.0213461$

Response type: Internal Std (Ref 44), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

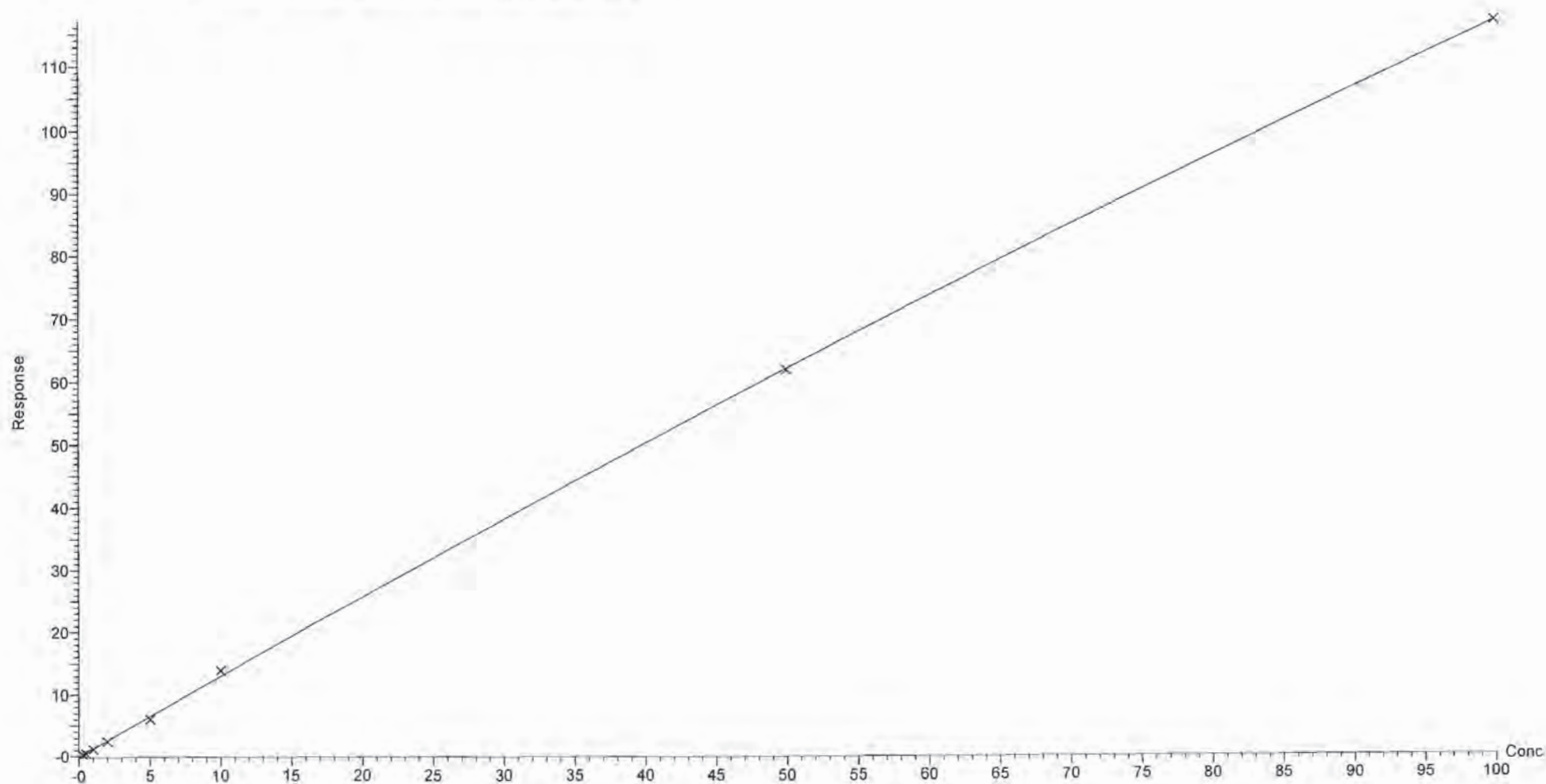
Compound name: N-EtFOSAA

Coefficient of Determination: $R^2 = 0.999053$

Calibration curve: $-0.0014328 * x^2 + 1.31318 * x + -0.0721789$

Response type: Internal Std (Ref 45), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

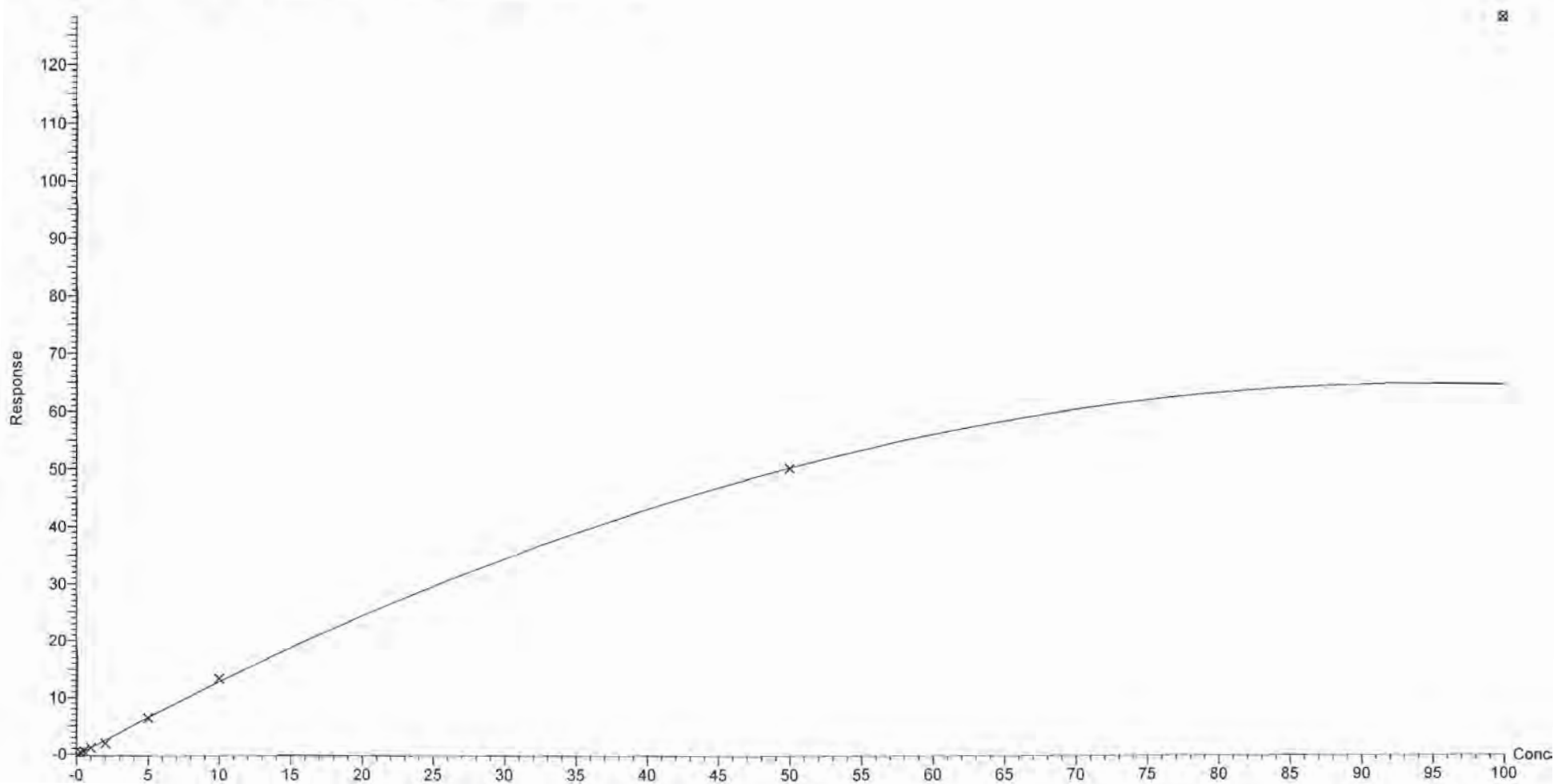
Compound name: PFUdA

Coefficient of Determination: $R^2 = 0.996917$

Calibration curve: $-0.00723799 * x^2 + 1.36957 * x + -0.252476$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

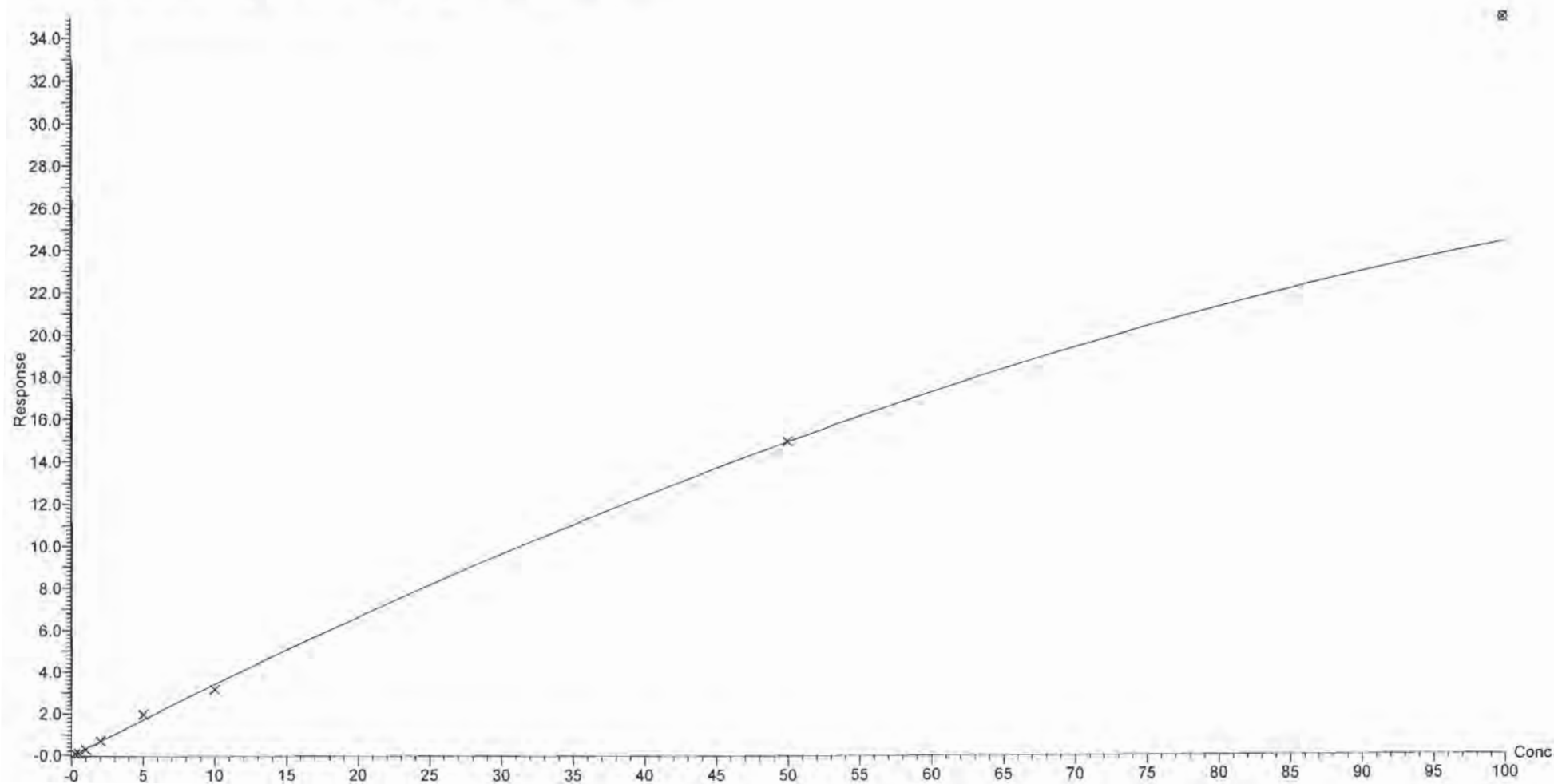
Compound name: PFDS

Coefficient of Determination: $R^2 = 0.995370$

Calibration curve: $-0.00111201 * x^2 + 0.354642 * x + -0.0526574$

Response type: Internal Std (Ref 46), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

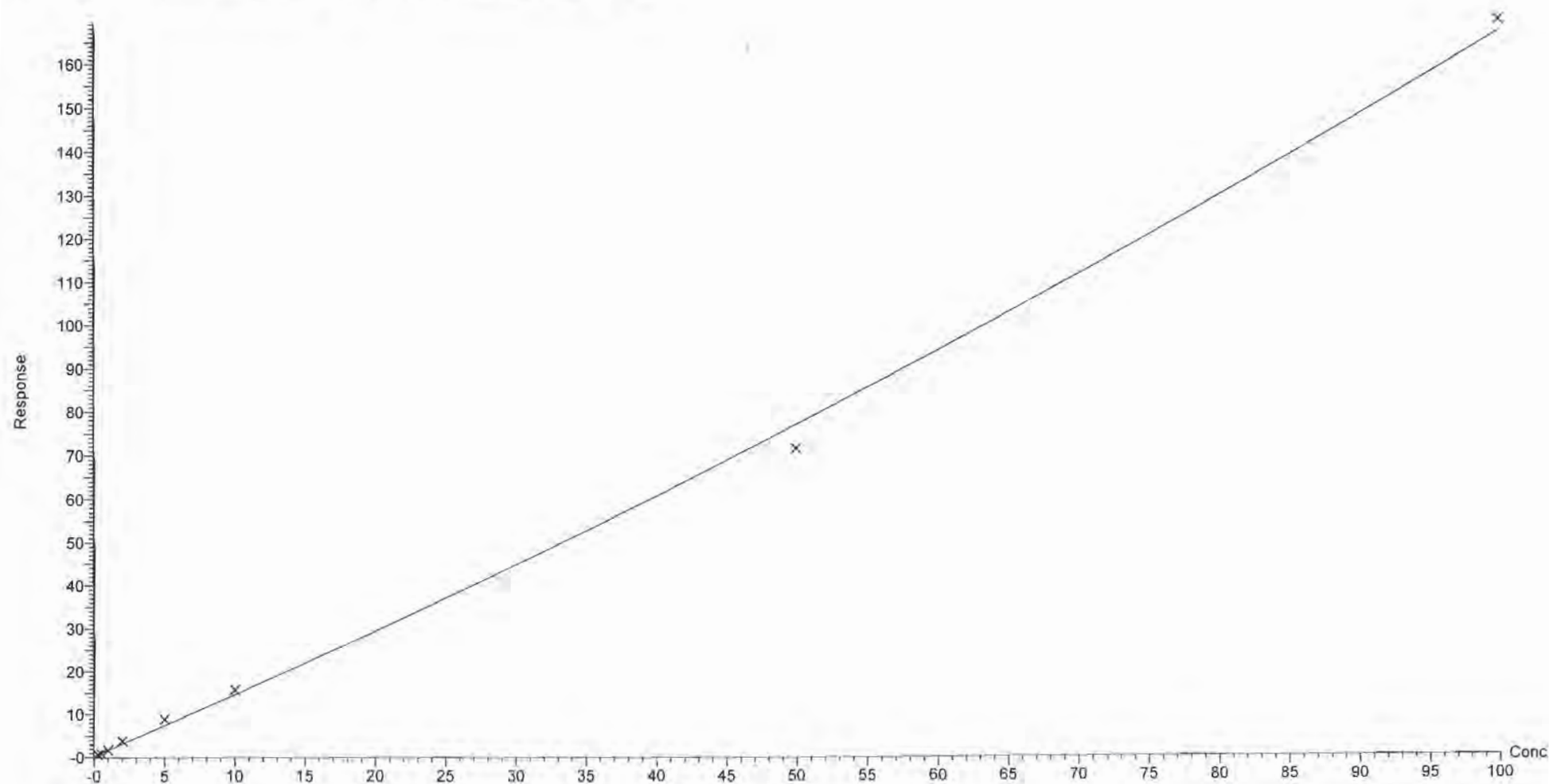
Compound name: PFDoA

Coefficient of Determination: $R^2 = 0.996448$

Calibration curve: $0.00269229 * x^2 + 1.39884 * x + 0.292328$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

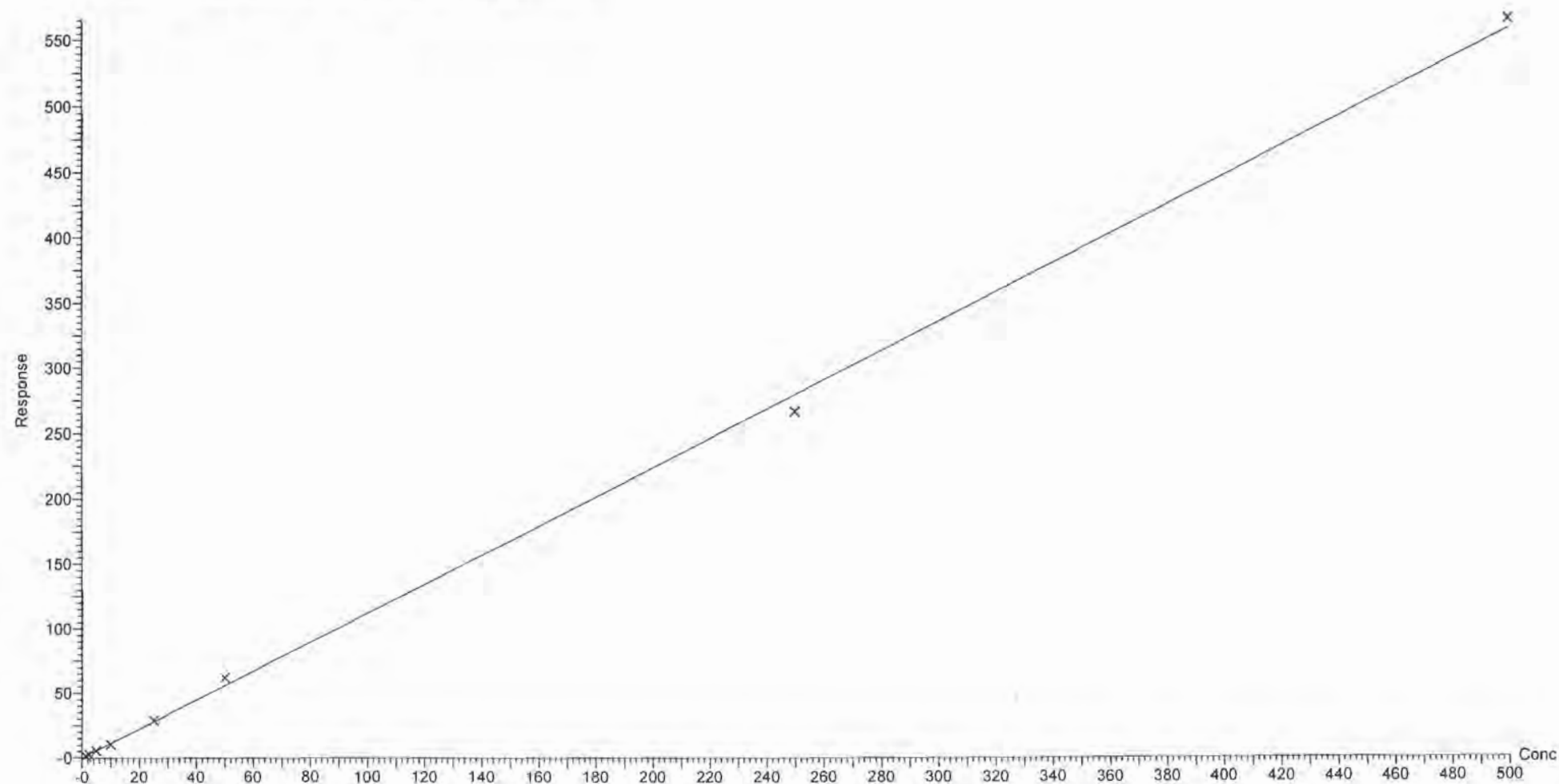
Compound name: N-MeFOSA

Correlation coefficient: $r = 0.999161$, $r^2 = 0.998323$

Calibration curve: $1.1181 * x + -0.100317$

Response type: Internal Std (Ref 48), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

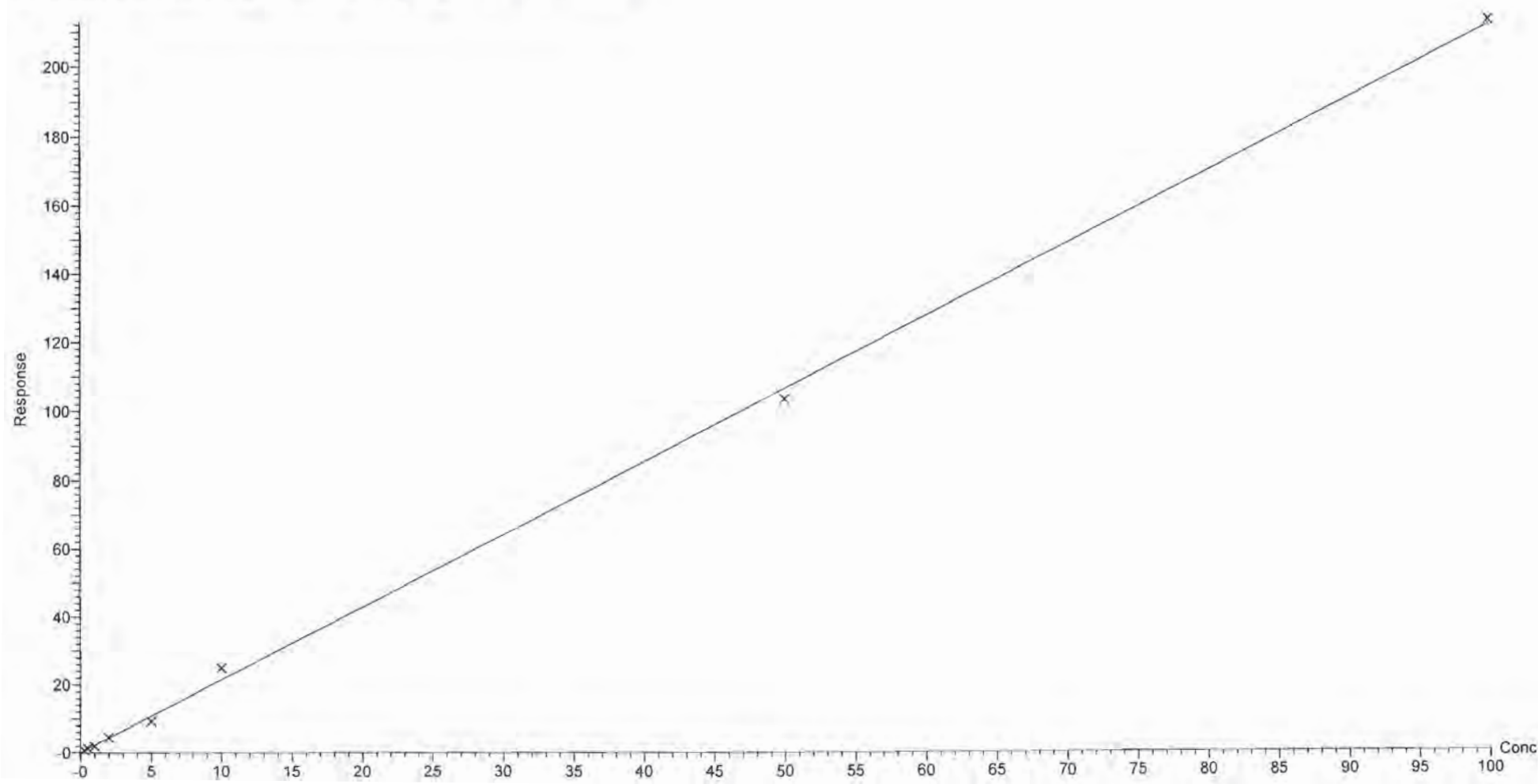
Compound name: PFTTrDA

Coefficient of Determination: $R^2 = 0.997156$

Calibration curve: $-0.000208194 * x^2 + 2.13661 * x + 0.0644742$

Response type: Internal Std (Ref 47), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

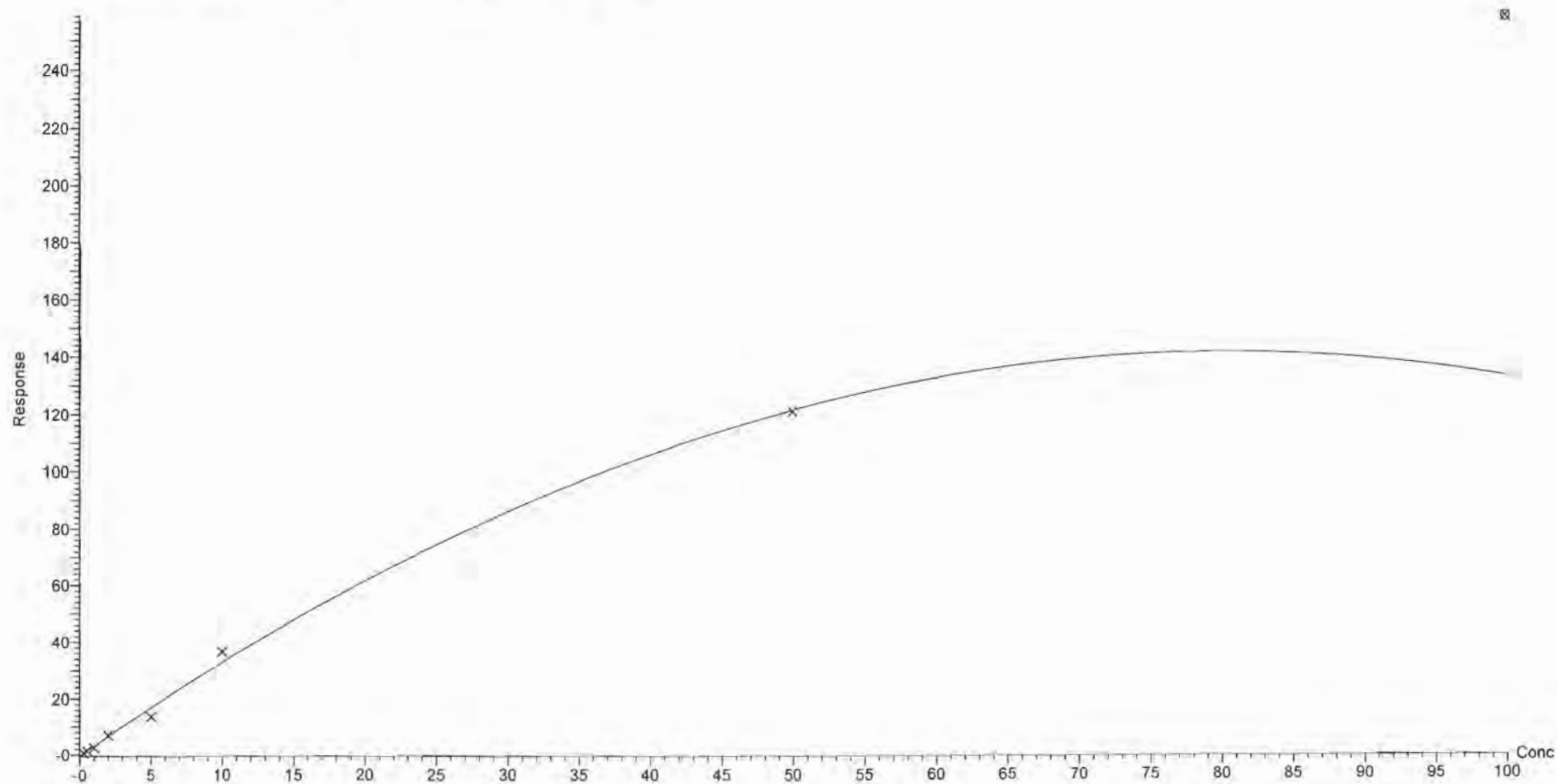
Compound name: PFTeDA

Coefficient of Determination: $R^2 = 0.990929$

Calibration curve: $-0.0220572 * x^2 + 3.53283 * x + -0.322211$

Response type: Internal Std (Ref 49), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

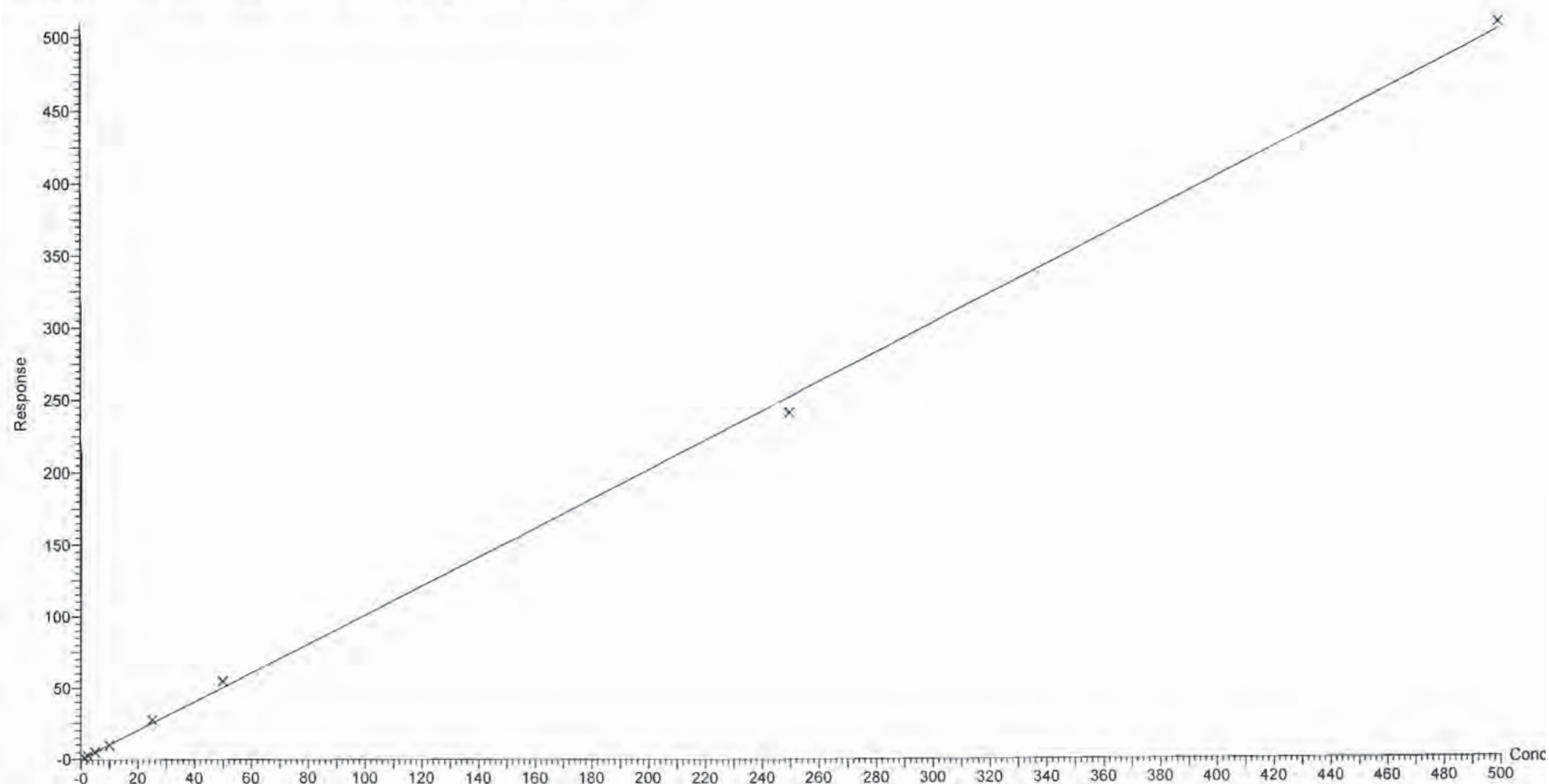
Compound name: N-EtFOSA

Coefficient of Determination: $R^2 = 0.998672$

Calibration curve: $7.78779e-006 * x^2 + 1.00573 * x - 0.161262$

Response type: Internal Std (Ref 50), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

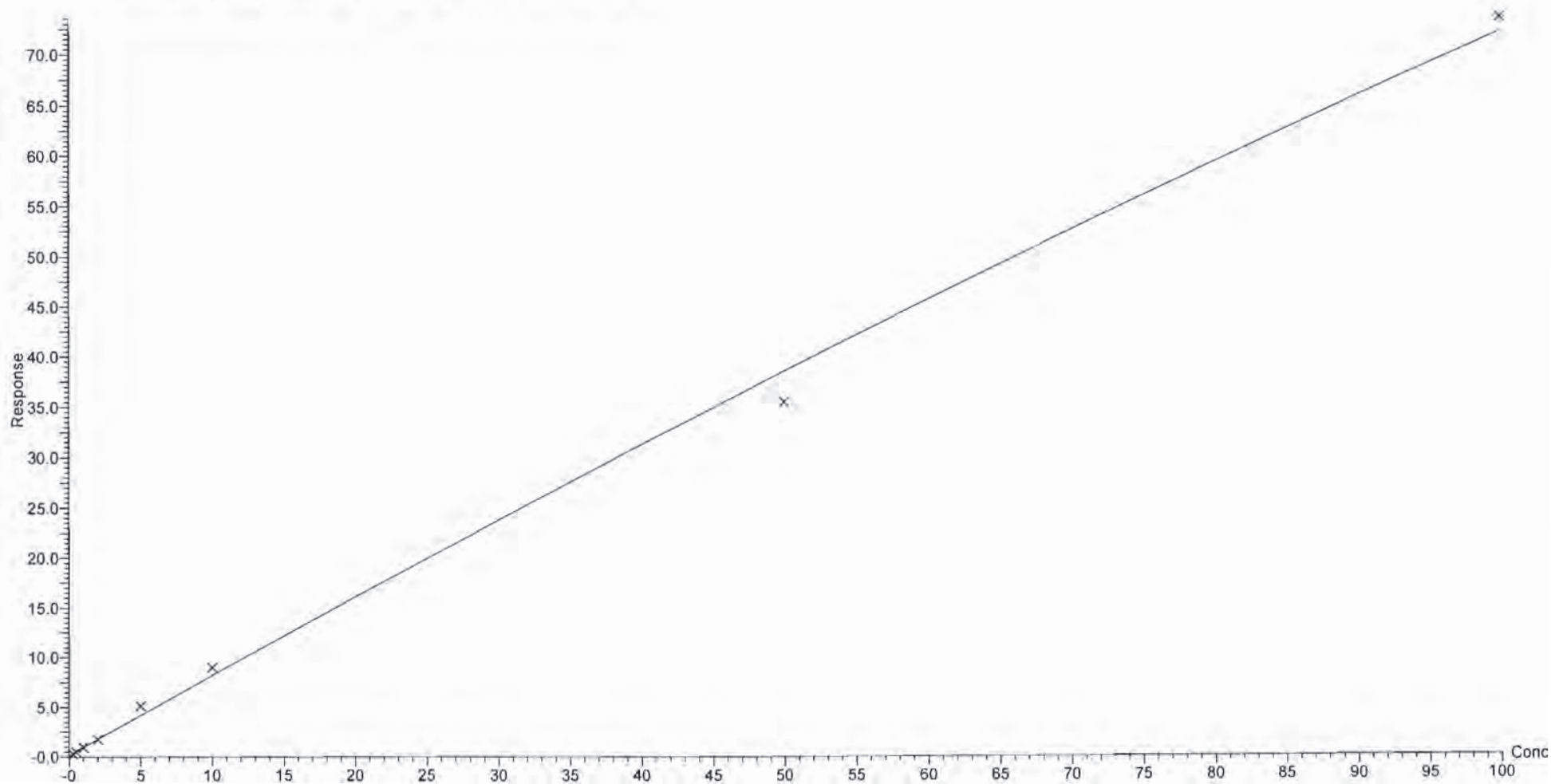
Compound name: PFHxDA

Coefficient of Determination: $R^2 = 0.994875$

Calibration curve: $-0.000963947 * x^2 + 0.816406 * x + 0.115618$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

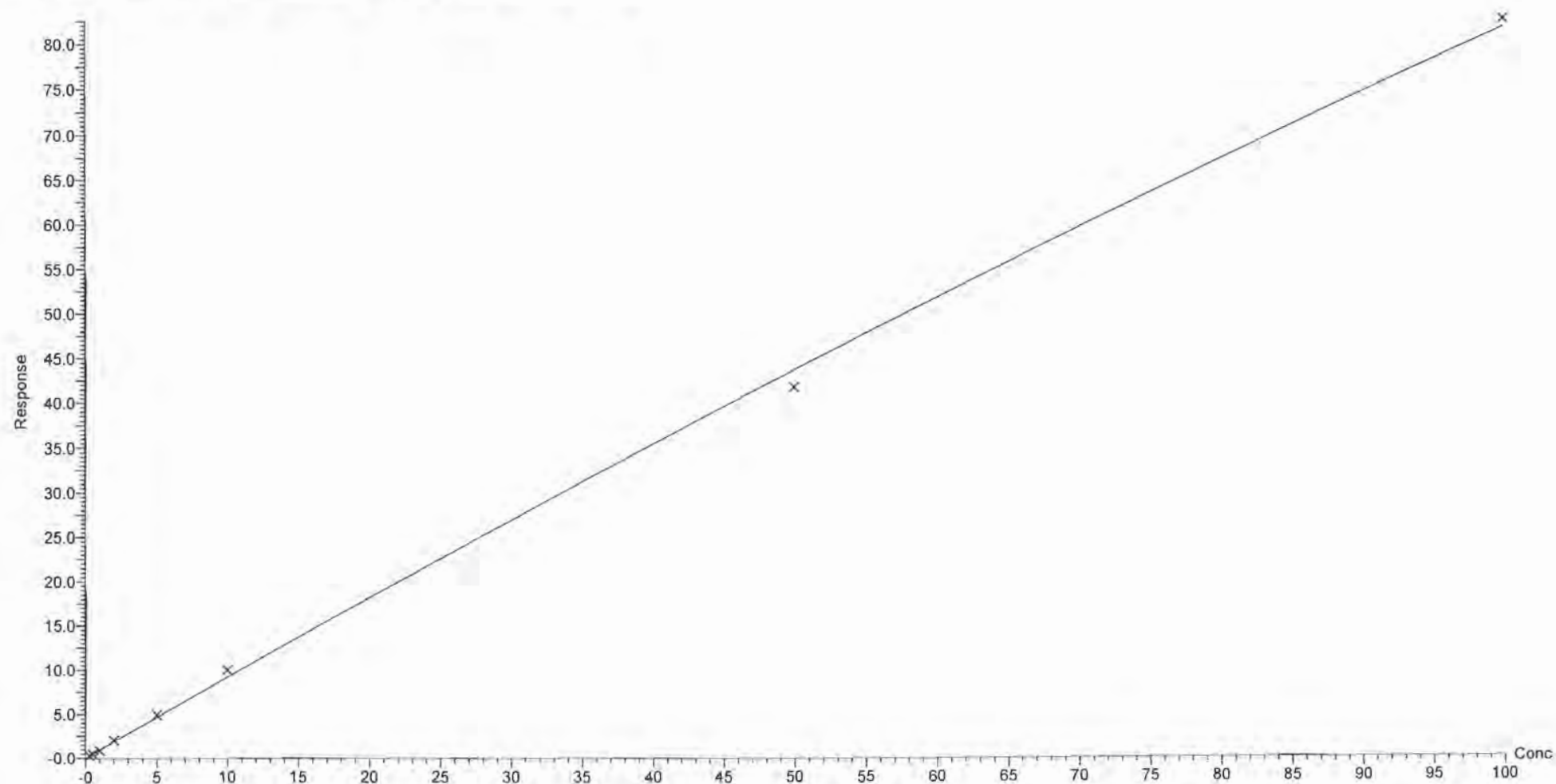
Compound name: PFODA

Coefficient of Determination: $R^2 = 0.998411$

Calibration curve: $-0.00110371 \cdot x^2 + 0.927917 \cdot x + 0.0174073$

Response type: Internal Std (Ref 51), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

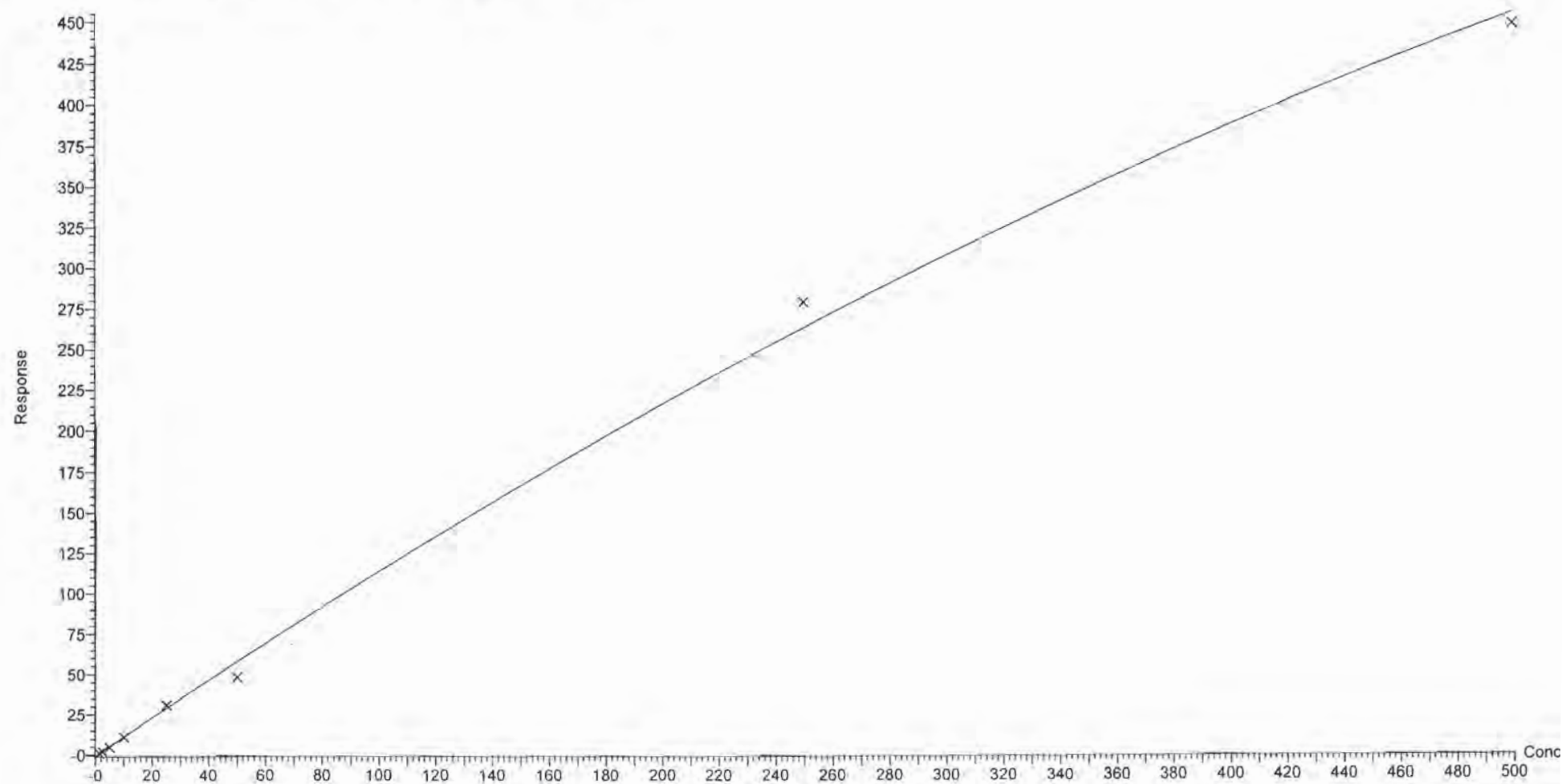
Compound name: N-MeFOSE

Coefficient of Determination: $R^2 = 0.995669$

Calibration curve: $-0.000576302 * x^2 + 1.20032 * x + -0.665296$

Response type: Internal Std (Ref 52), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 10:22:57 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:24:35 Pacific Standard Time

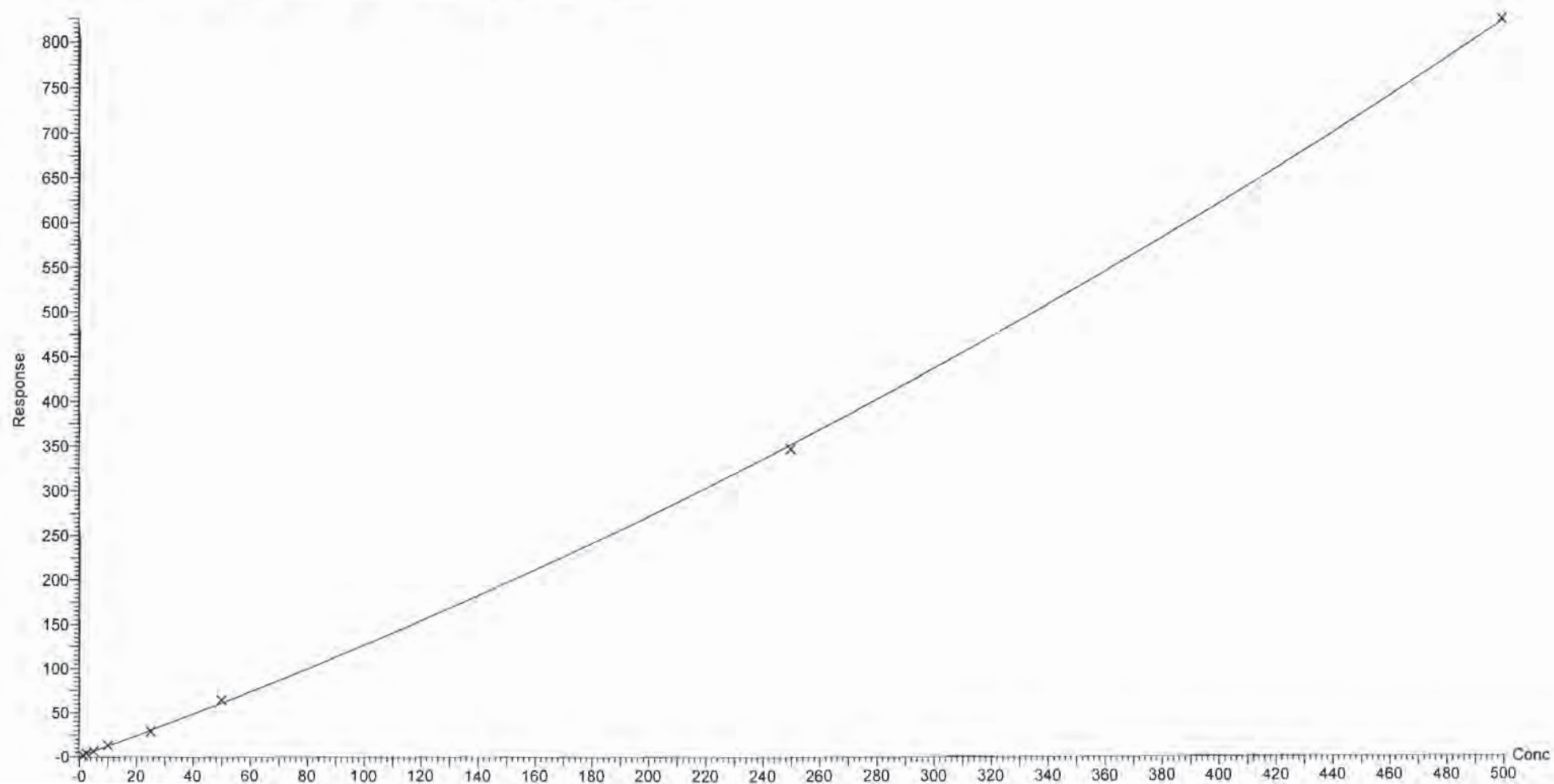
Compound name: N-EtFOSE

Coefficient of Determination: $R^2 = 0.999660$

Calibration curve: $0.00097229 * x^2 + 1.15972 * x + 0.350902$

Response type: Internal Std (Ref 53), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: Untitled

Last Altered: Tuesday, January 16, 2018 10:06:30 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:09:05 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 09:37:18

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	180115M2_1	ST180115M2-1 PFC CS-2 17L2606	16-Jan-18	00:14:07
2	180115M2_2	ST180115M2-2 PFC CS-1 17L2607	16-Jan-18	00:25:32
3	180115M2_3	ST180115M2-3 PFC CS0 17L2608	16-Jan-18	00:37:02
4	180115M2_4	ST180115M2-4 PFC CS1 17L2609	16-Jan-18	00:48:46
5	180115M2_5	ST180115M2-5 PFC CS2 17L2610	16-Jan-18	01:00:17
6	180115M2_6	ST180115M2-6 PFC CS3 17L2611	16-Jan-18	01:11:44
7	180115M2_7	ST180115M2-7 PFC CS4 17L1208	16-Jan-18	01:23:11
8	180115M2_8	ST180115M2-8 PFC CS5 17L2613	16-Jan-18	01:34:38
9	180115M2_9	IPA	16-Jan-18	01:46:05
10	180115M2_10	ICV180115M2-1 PFC ICV 17L1201	16-Jan-18	01:57:31
11	180115M2_11	IPA	16-Jan-18	02:08:58

Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

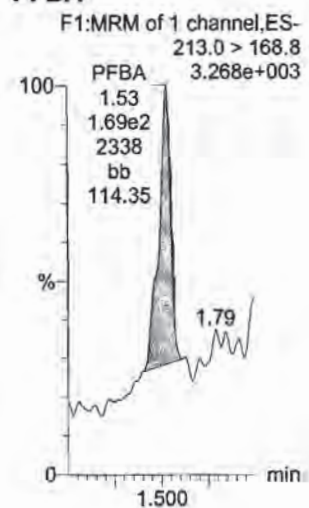
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

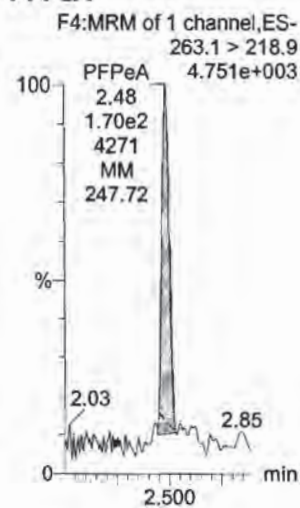
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 09:37:18

Name: 180115M2_1, Date: 16-Jan-2018, Time: 00:14:07, ID: ST180115M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

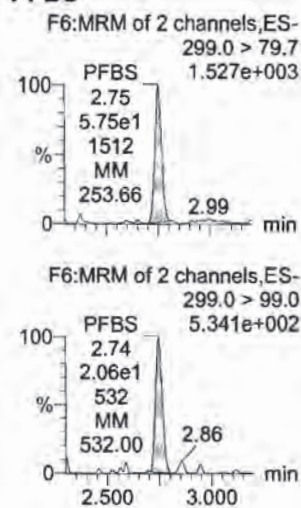
PFBA



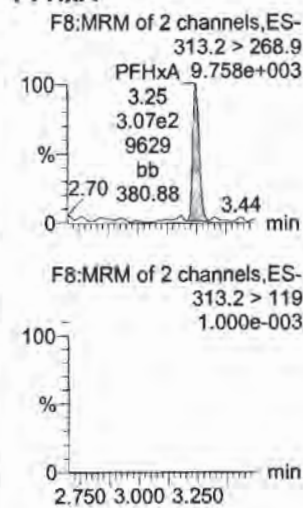
PFPeA



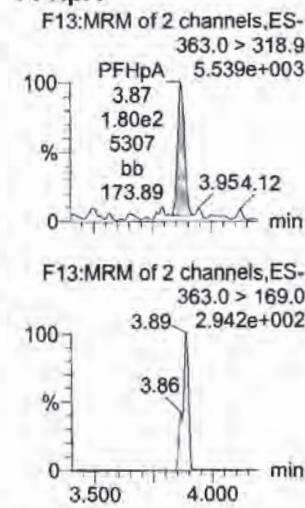
PFBS



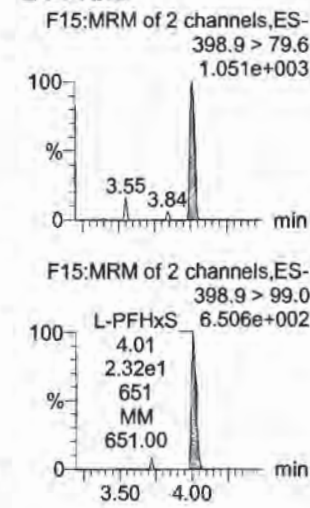
PFHxA



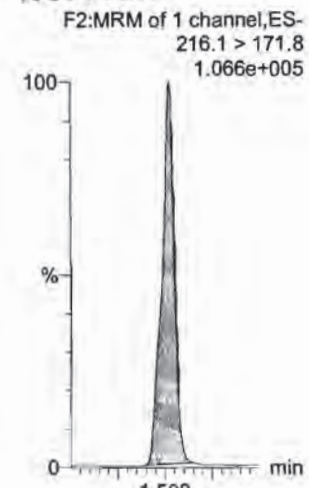
PFHpA



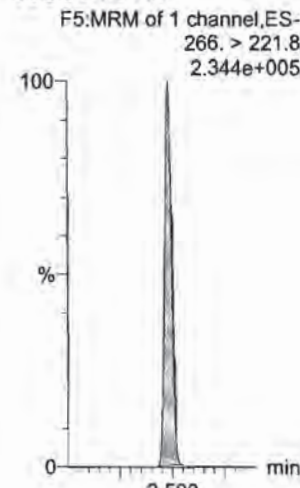
L-PFHxS



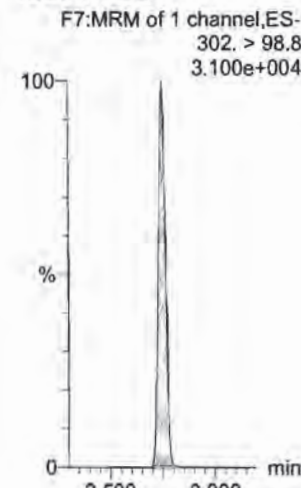
13C3-PFBA



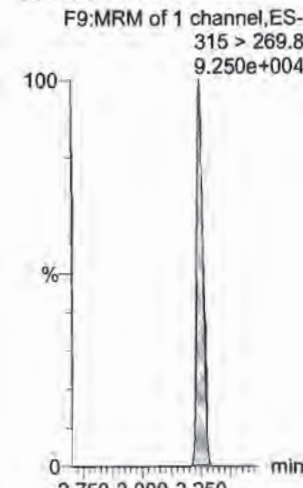
13C3-PFPeA



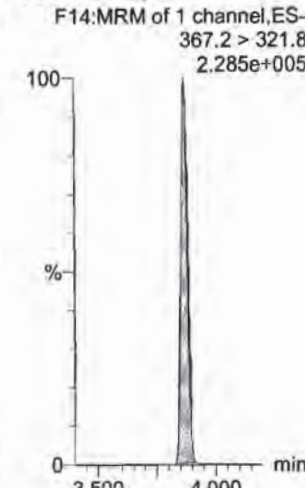
13C3-PFBS



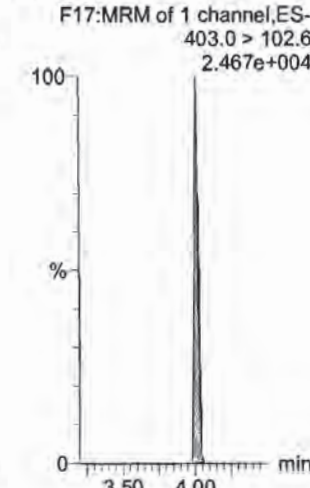
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



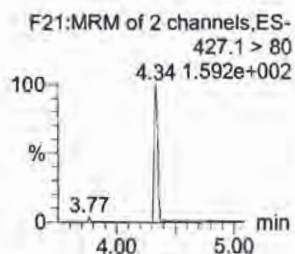
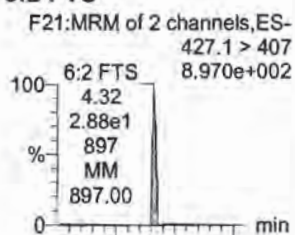
Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

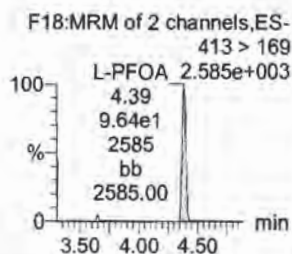
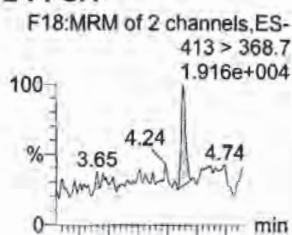
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_1, Date: 16-Jan-2018, Time: 00:14:07, ID: ST180115M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

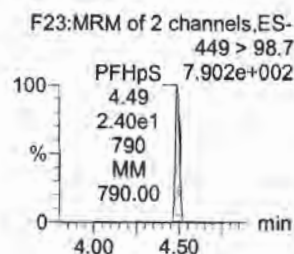
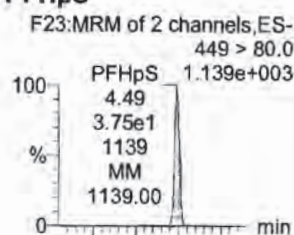
6:2 FTS



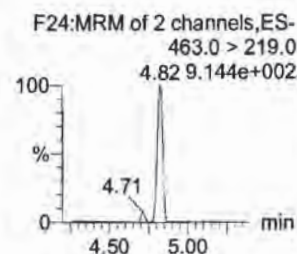
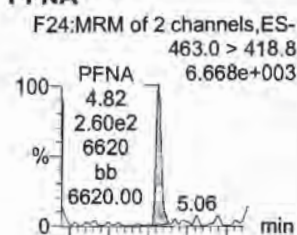
L-PFOA



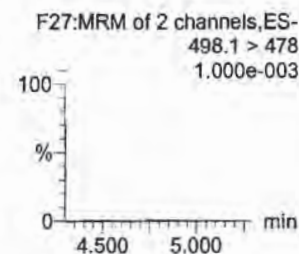
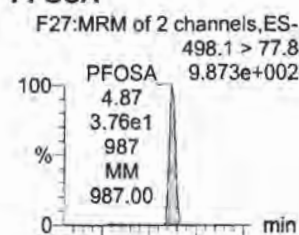
PFHpS



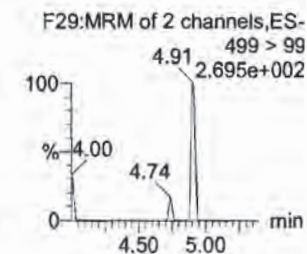
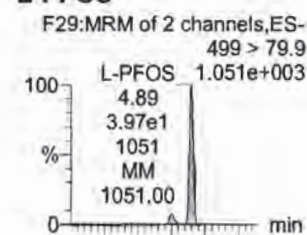
PFNA



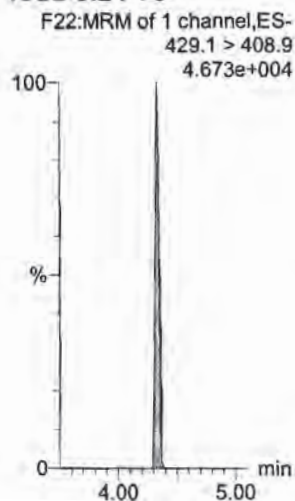
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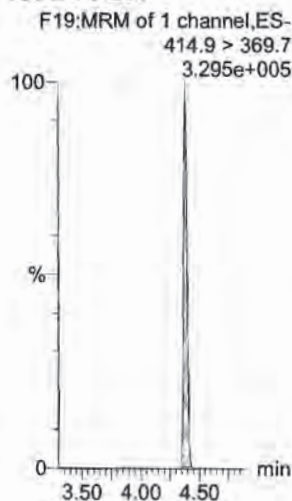
L-PFOS



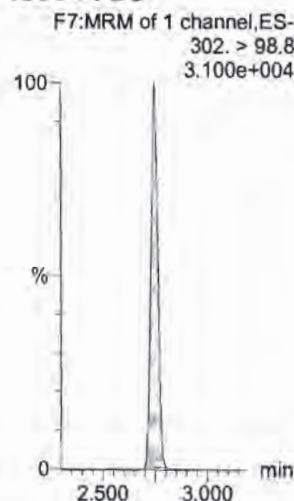
13C2-6:2 FTS



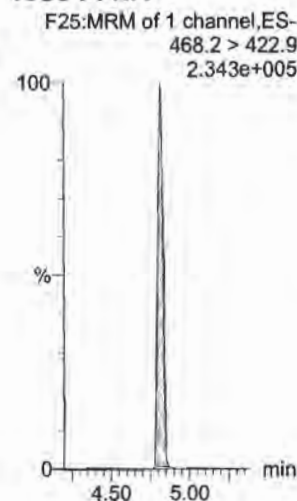
13C2-PFOA



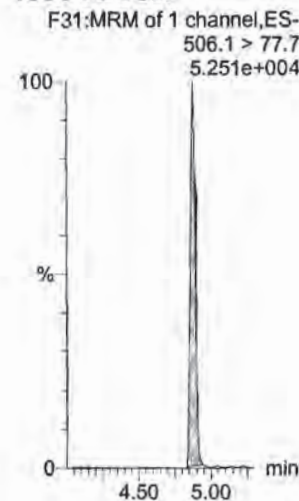
13C3-PFBS



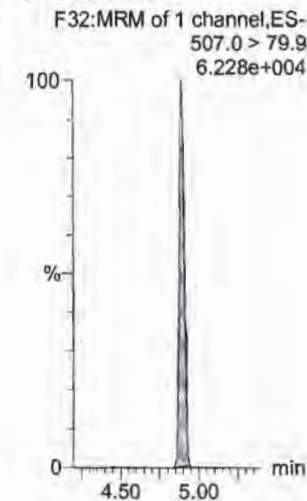
13C5-PFNA



13C8-PFOSA



13C8-PFOS



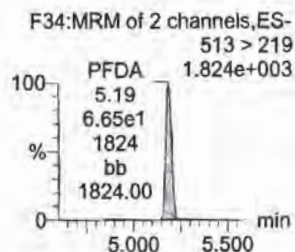
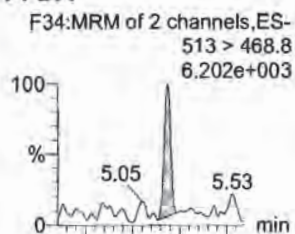
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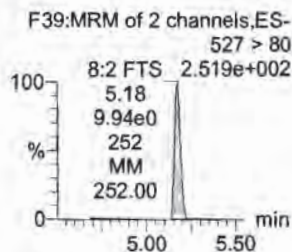
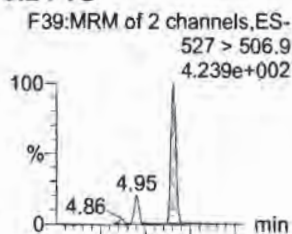
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Name: 180115M2_1, Date: 16-Jan-2018, Time: 00:14:07, ID: ST180115M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

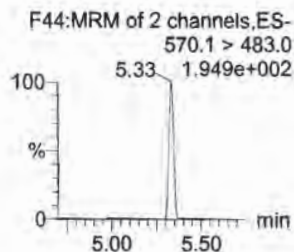
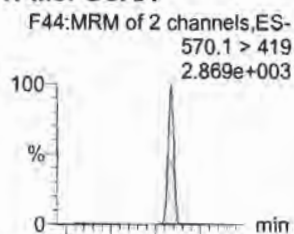
PFDA



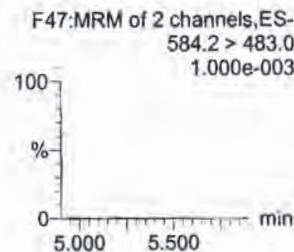
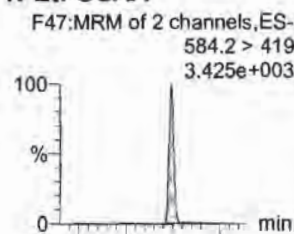
8:2 FTS



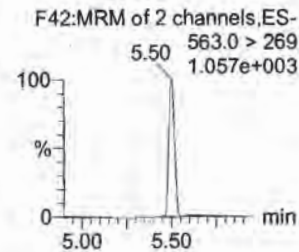
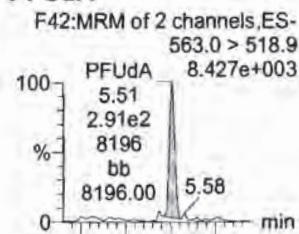
N-MeFOSAA



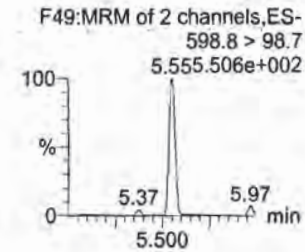
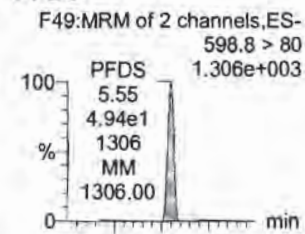
N-EtFOSAA



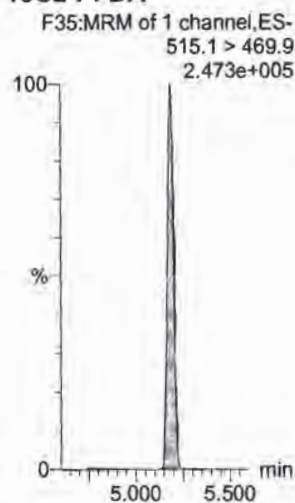
PFUdA



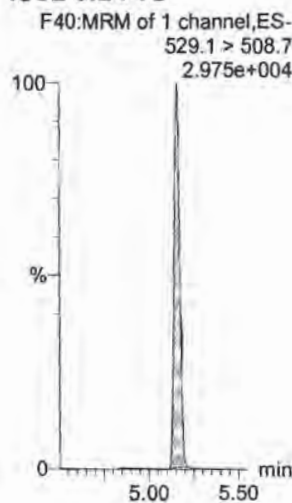
PFDS



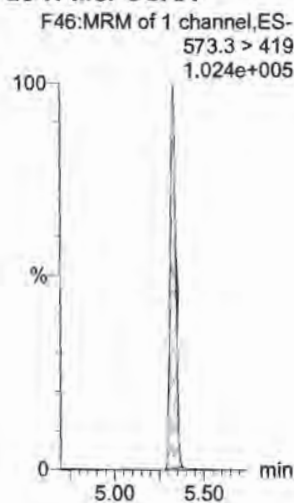
13C2-PFDA



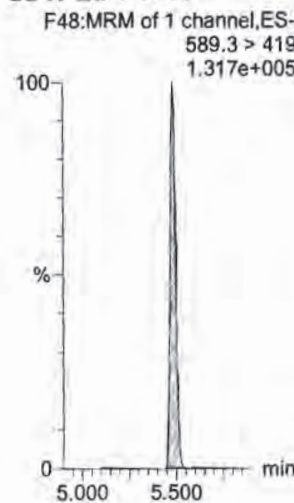
13C2-8:2 FTS



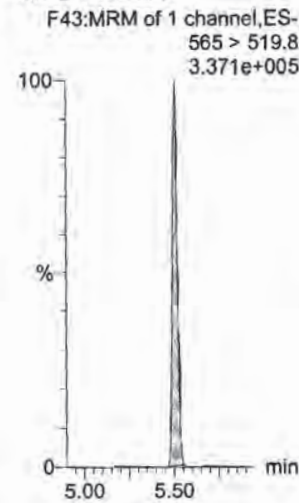
d3-N-MeFOSAA



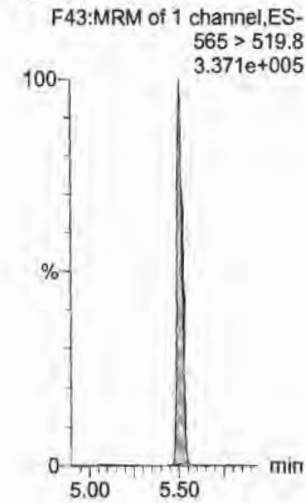
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



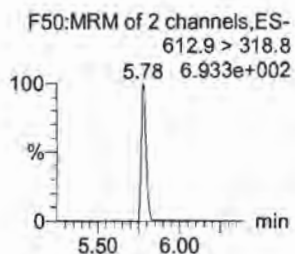
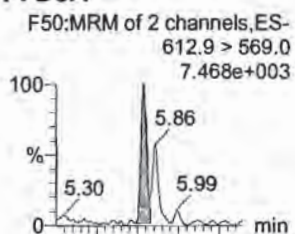
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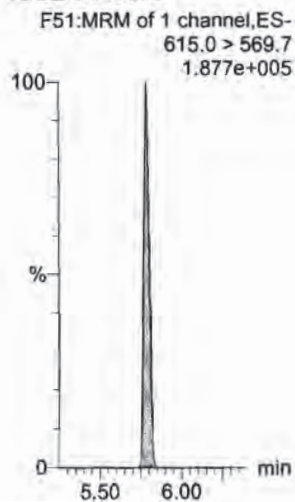
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Name: 180115M2_1, Date: 16-Jan-2018, Time: 00:14:07, ID: ST180115M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

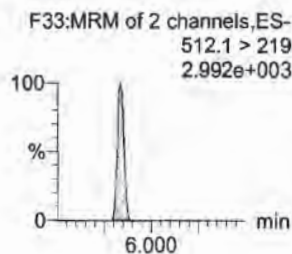
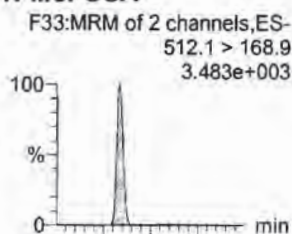
PFDaA



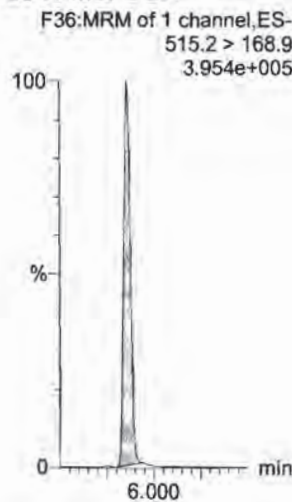
13C2-PFDaA



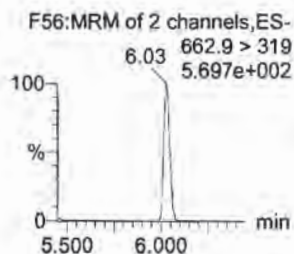
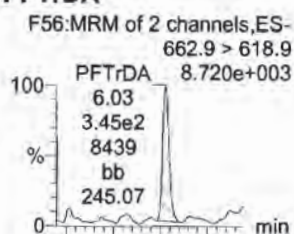
N-MeFOSA



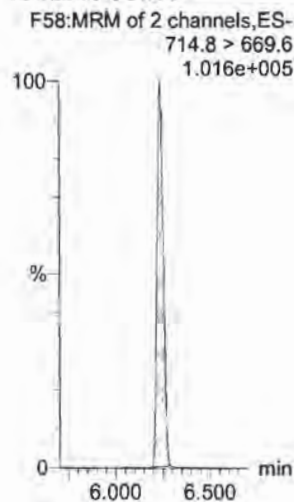
d3-N-MeFOSA



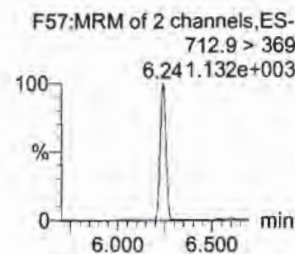
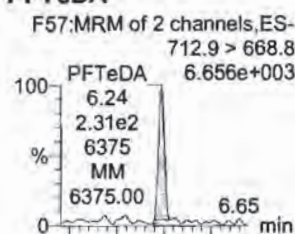
PFTTrDA



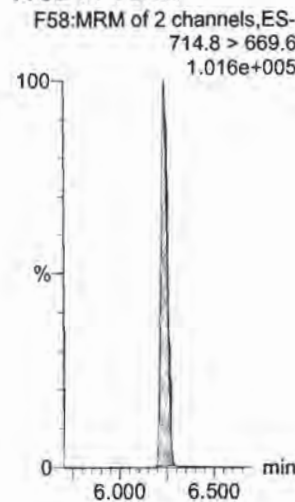
13C2-PFTTrDA



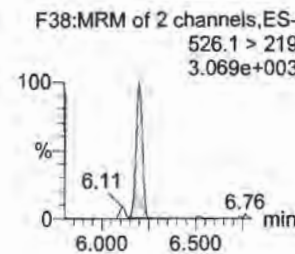
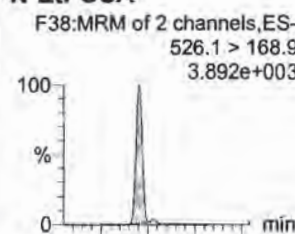
PFTTeDA



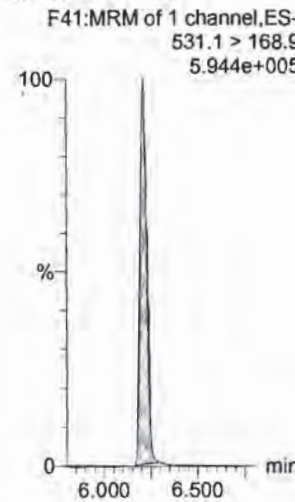
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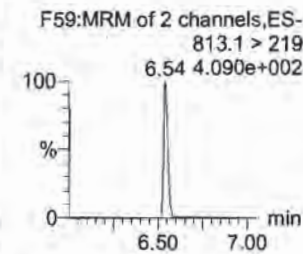
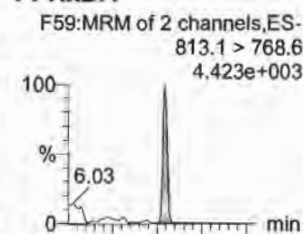
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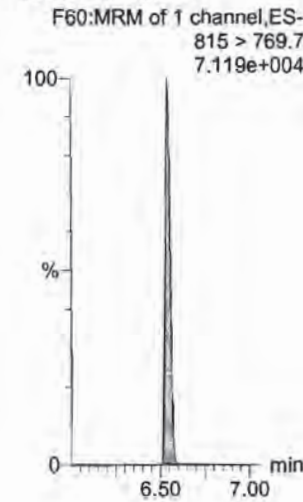
d5-N-ETFOSA



PFHxDA



13C2-PFHxDA



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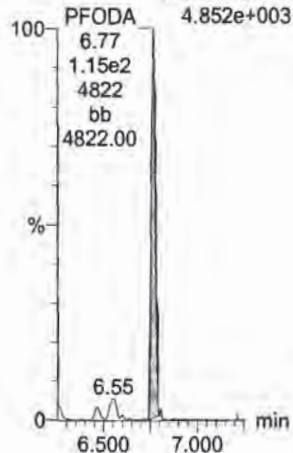
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Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_1, Date: 16-Jan-2018, Time: 00:14:07, ID: ST180115M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

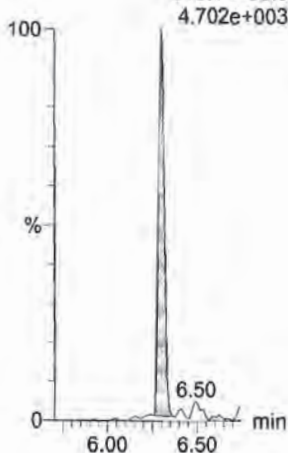
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
4.852e+003



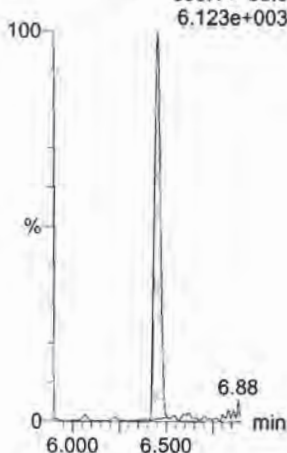
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
4.702e+003



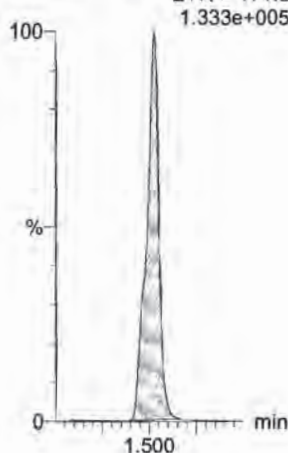
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
6.123e+003



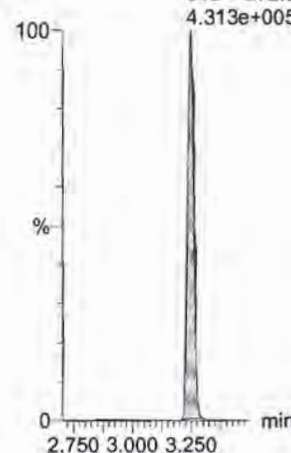
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.333e+005



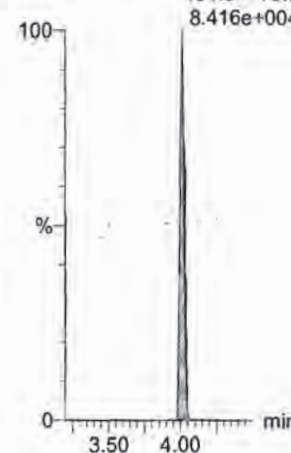
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
4.313e+005



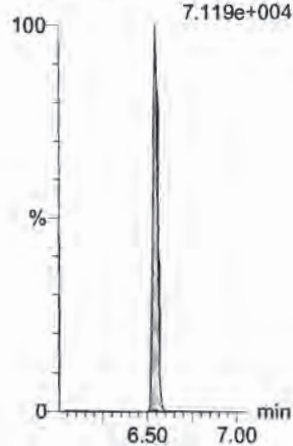
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
8.416e+004



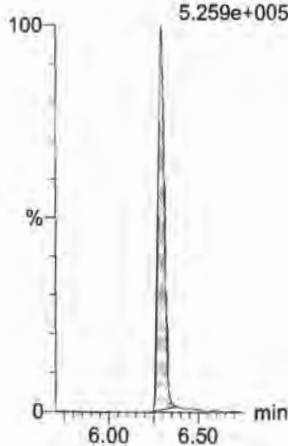
13C2-PFHxDa

F60:MRM of 1 channel,ES-
815 > 769.7
7.119e+004



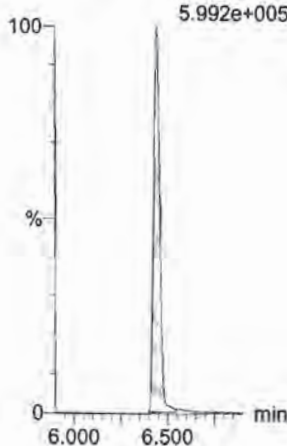
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
5.259e+005



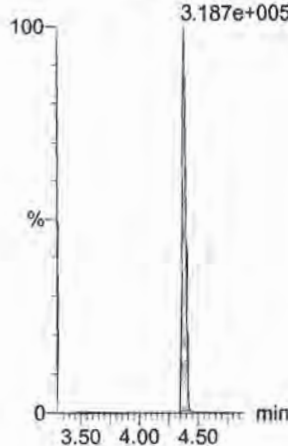
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
5.992e+005



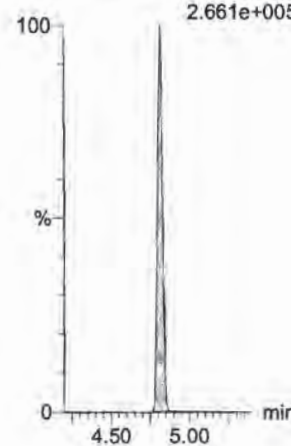
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.187e+005



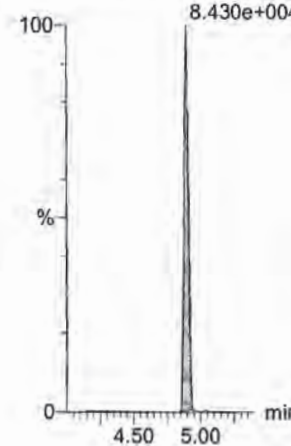
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
2.661e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
8.430e+004



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

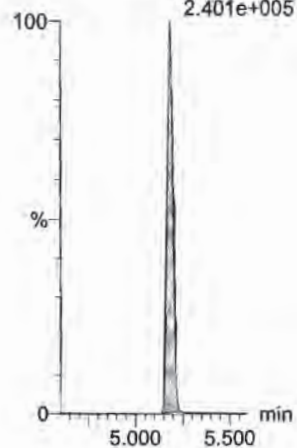
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Name: 180115M2_1, Date: 16-Jan-2018, Time: 00:14:07, ID: ST180115M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

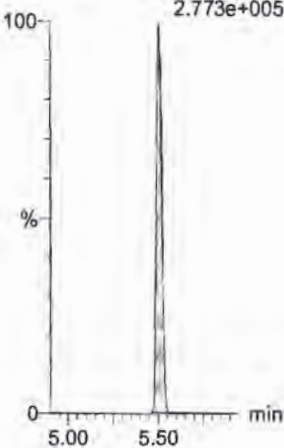
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.401e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-
570.1 > 524.8
2.773e+005



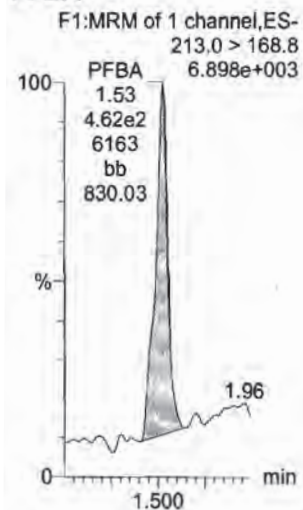
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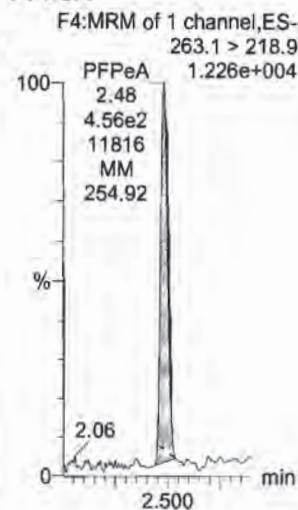
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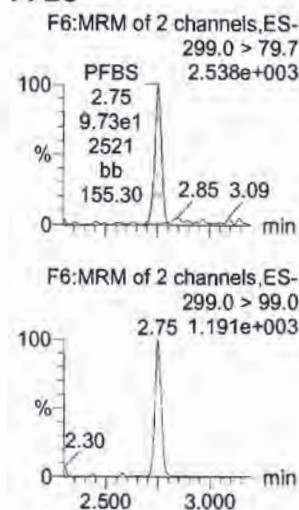
PFBA



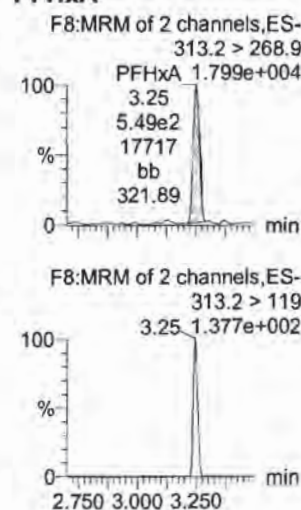
PFPeA



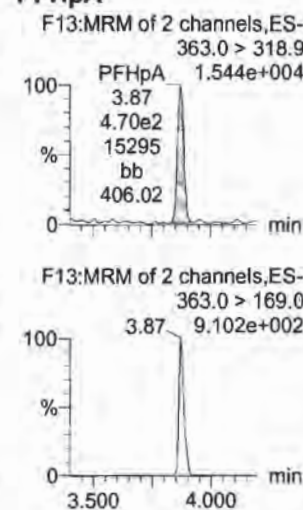
PFBS



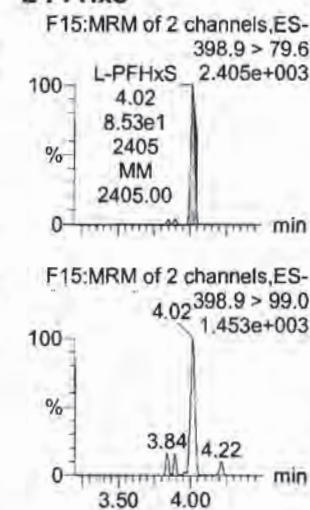
PFHxA



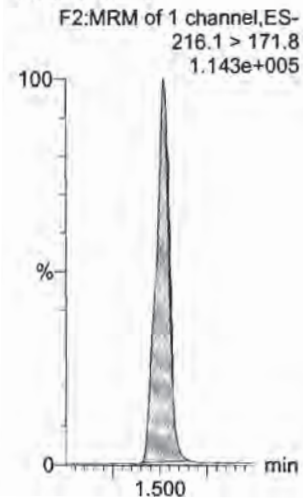
PFHpA



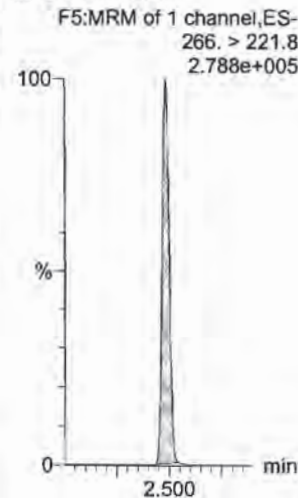
L-PFHxS



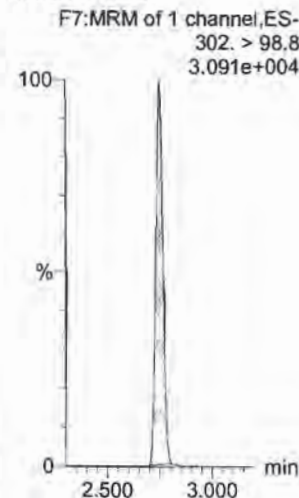
13C3-PFBA



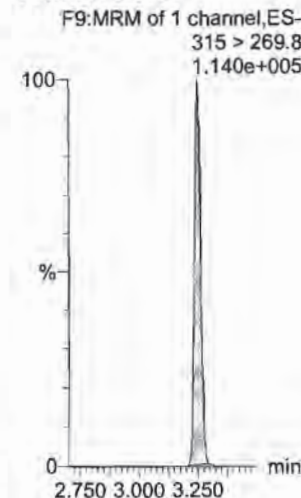
13C3-PFPeA



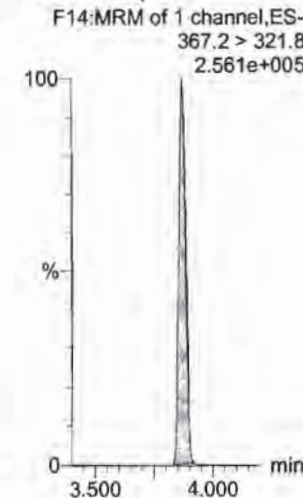
13C3-PFBS



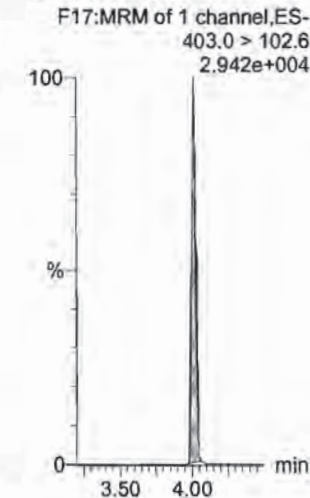
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

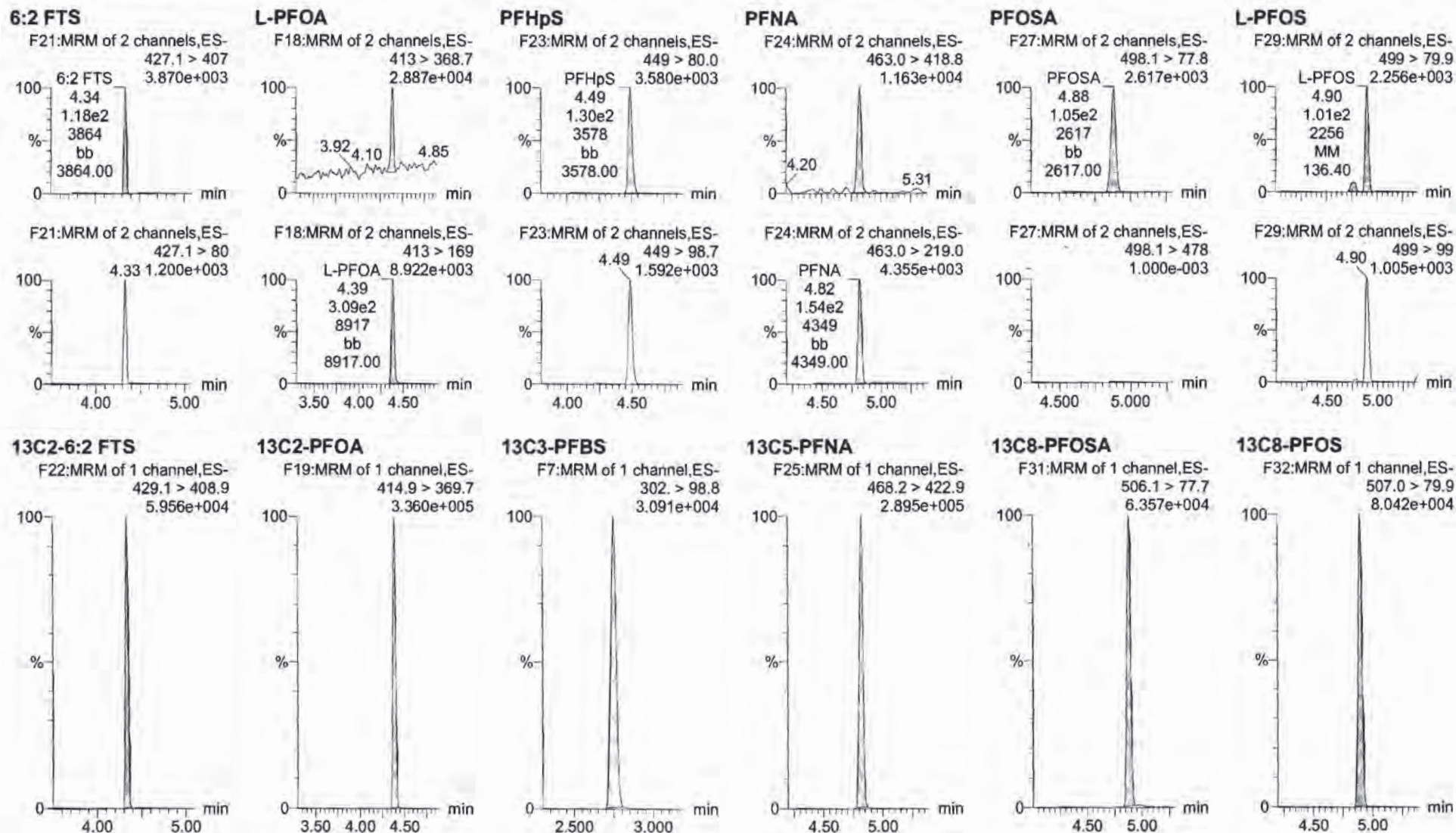


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Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_2, Date: 16-Jan-2018, Time: 00:25:32, ID: ST180115M2-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607



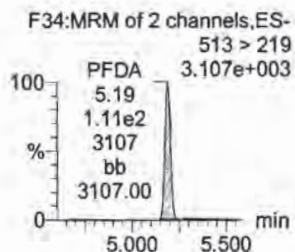
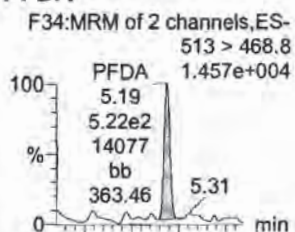
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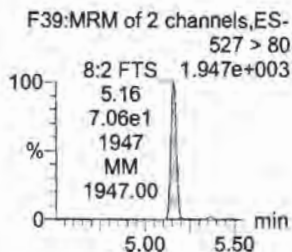
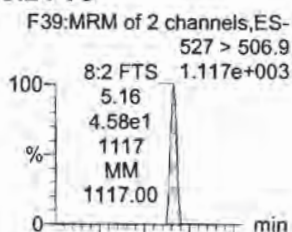
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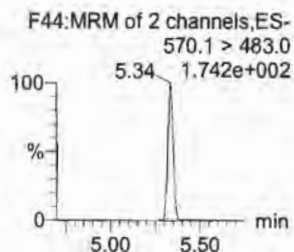
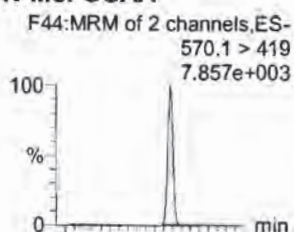
PFDA



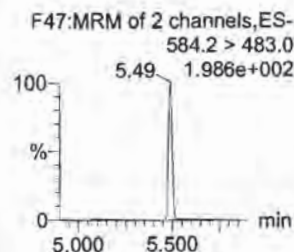
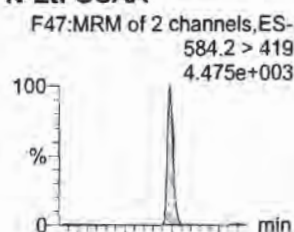
8:2 FTS



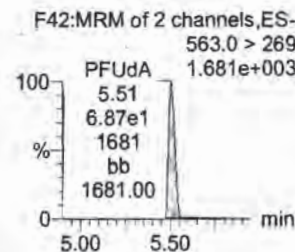
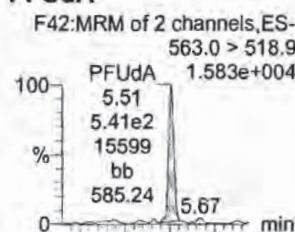
N-MeFOSAA



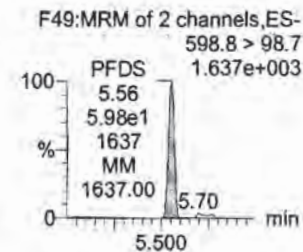
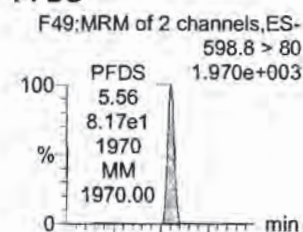
N-EtFOSAA



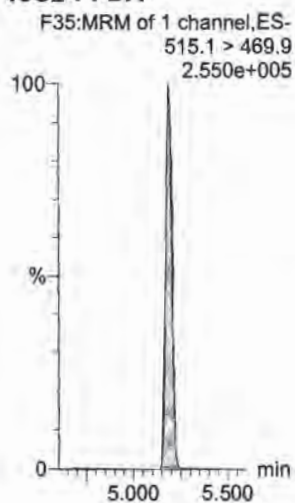
PFUdA



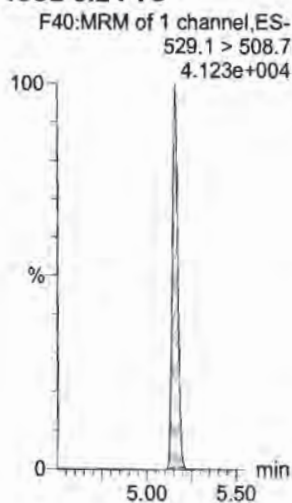
PFDS



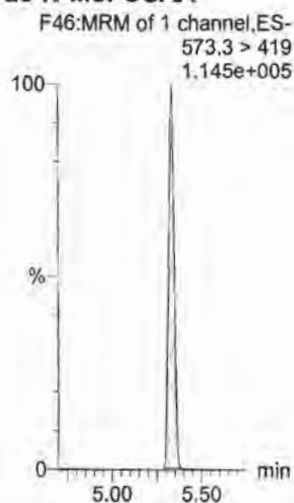
13C2-PFDA



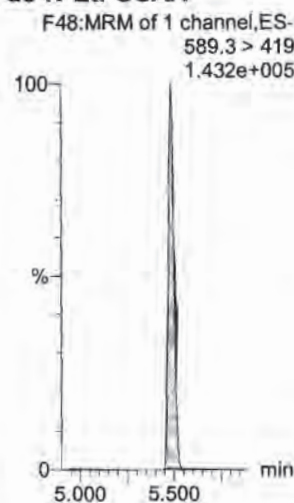
13C2-8:2 FTS



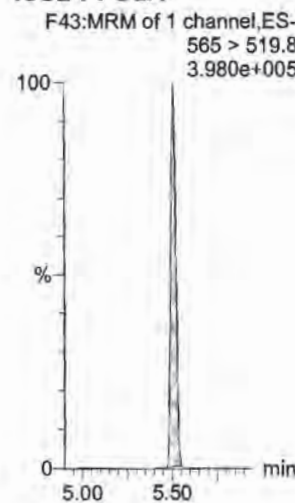
d3-N-MeFOSAA



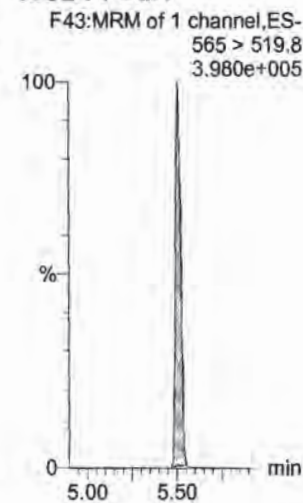
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA

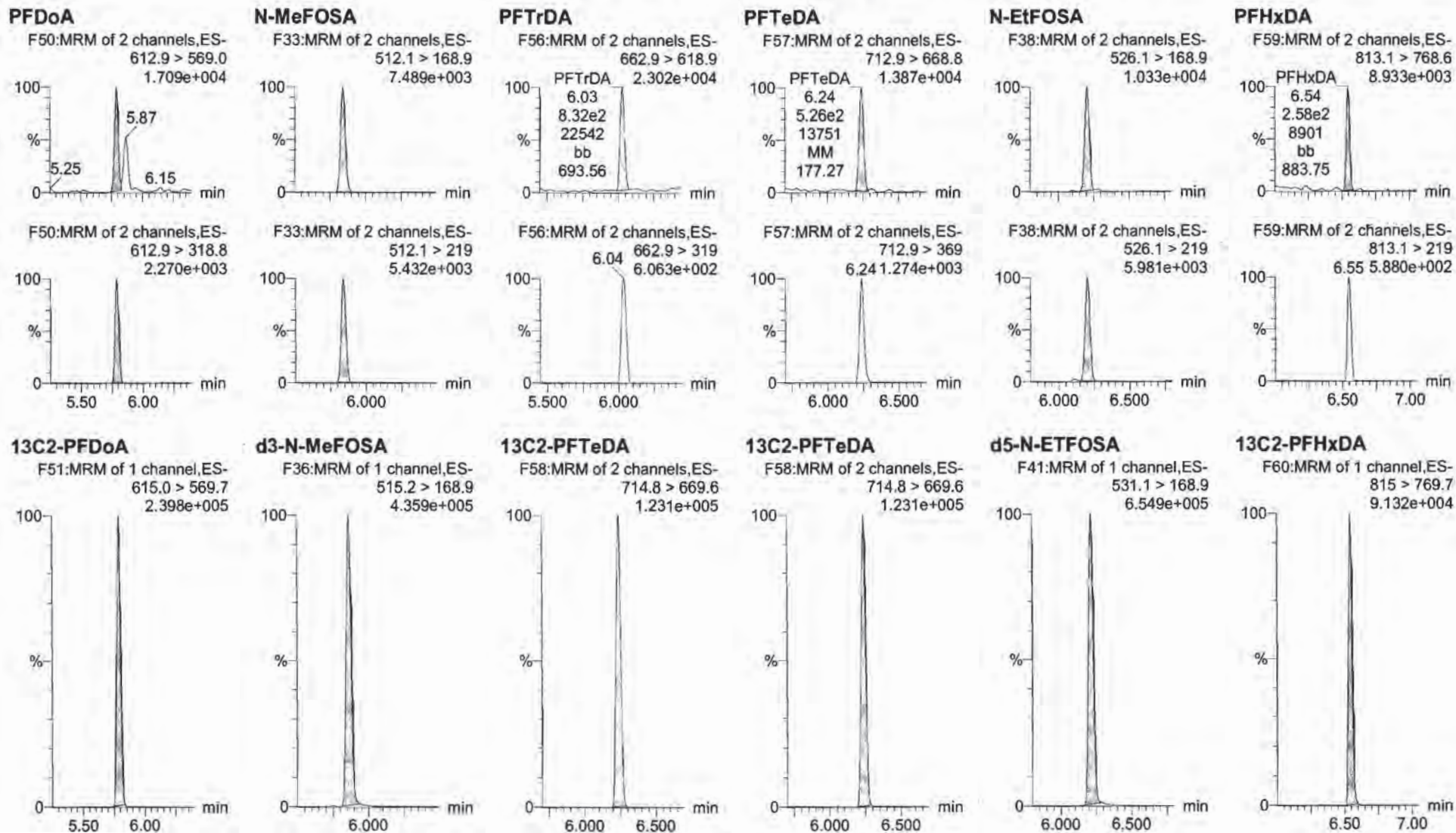


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Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_2, Date: 16-Jan-2018, Time: 00:25:32, ID: ST180115M2-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

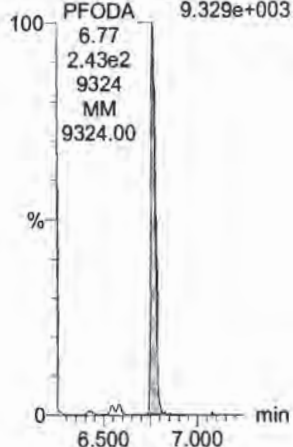
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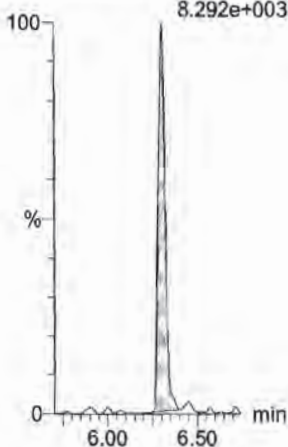
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
9.329e+003



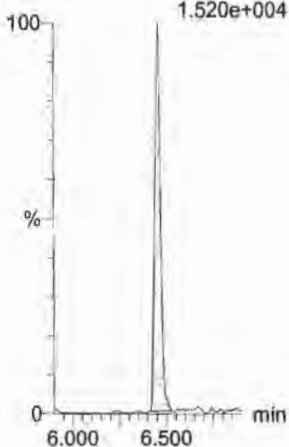
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
8.292e+003



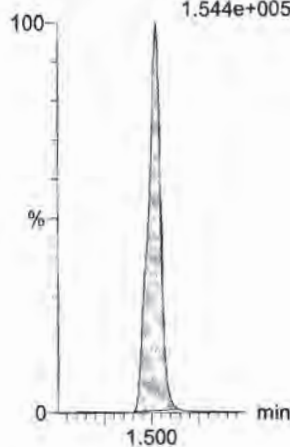
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
1.520e+004



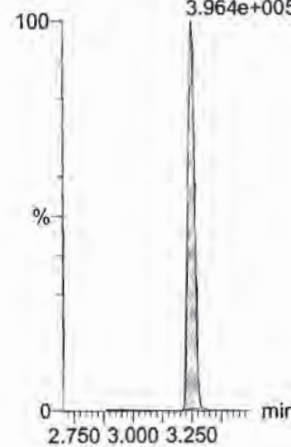
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.544e+005



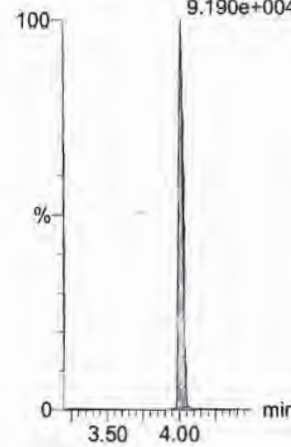
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
3.964e+005



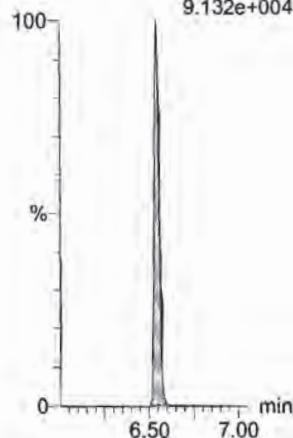
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
9.190e+004



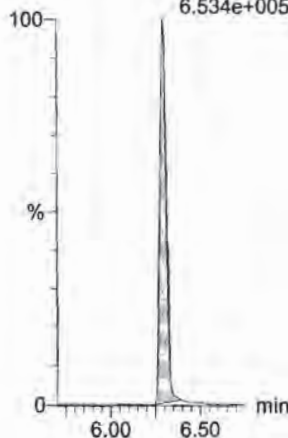
13C2-PFHxDa

F60:MRM of 1 channel,ES-
815 > 769.7
9.132e+004



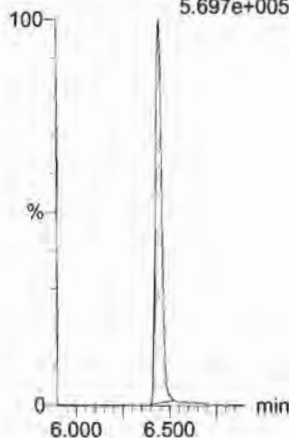
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
6.534e+005



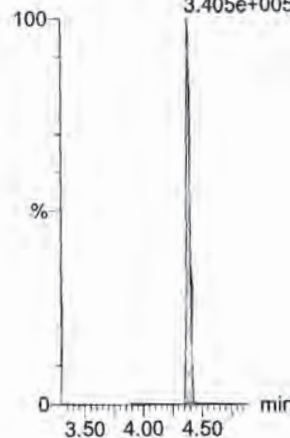
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
5.697e+005



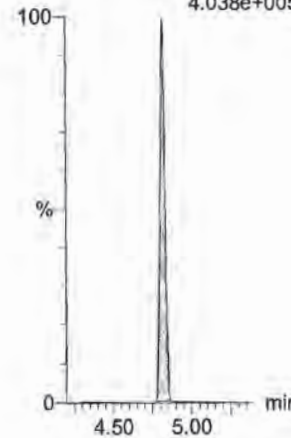
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.405e+005



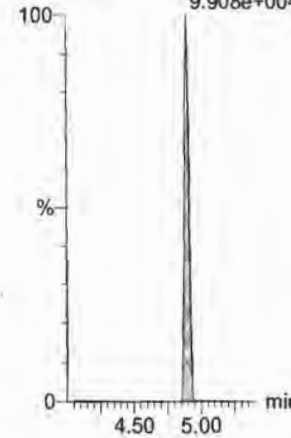
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
4.038e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
9.908e+004



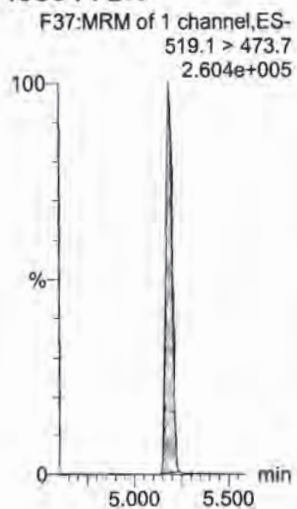
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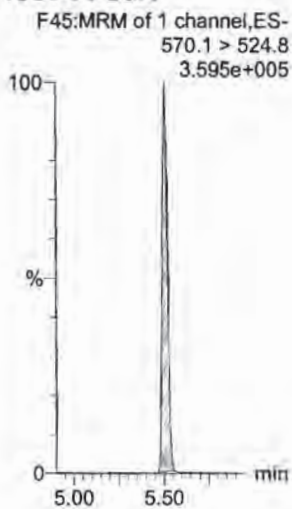
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Name: 180115M2_2, Date: 16-Jan-2018, Time: 00:25:32, ID: ST180115M2-2 PFC CS-1 17L2607, Description: PFC CS-1 17L2607

13C6-PFDA



13C7-PFUDa



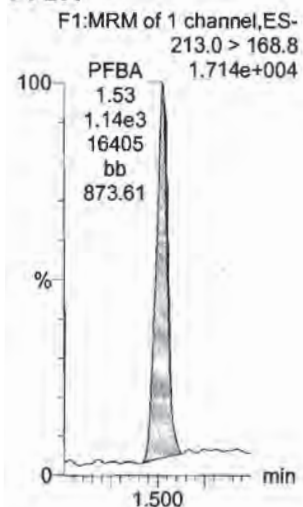
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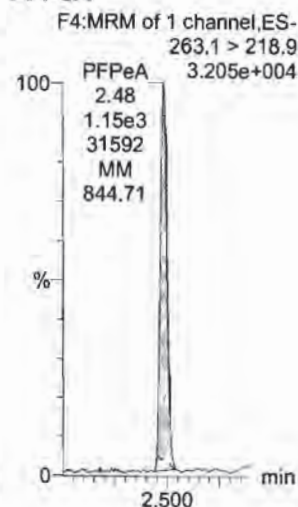
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

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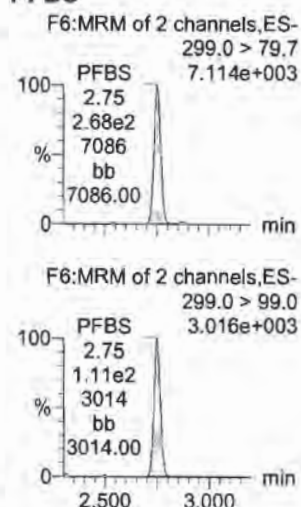
PFBA



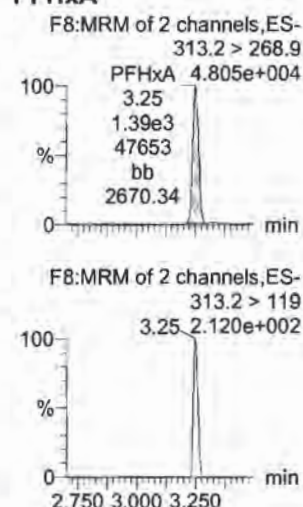
PFPeA



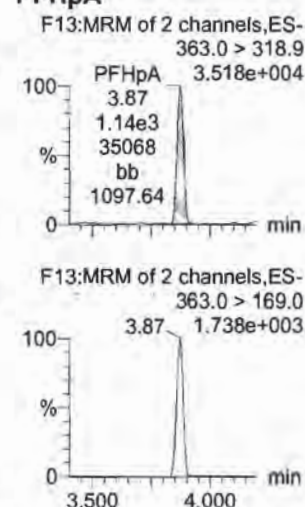
PFBS



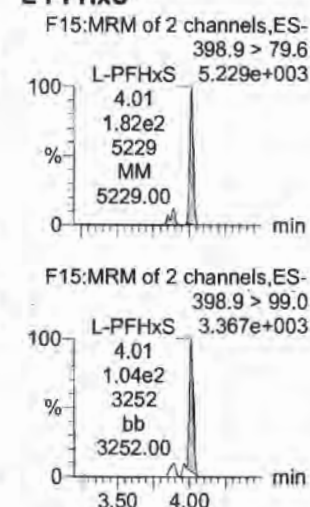
PFHxA



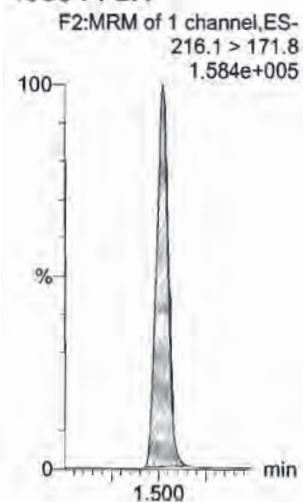
PFHpA



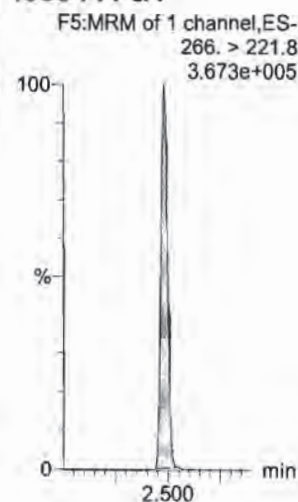
L-PFHxS



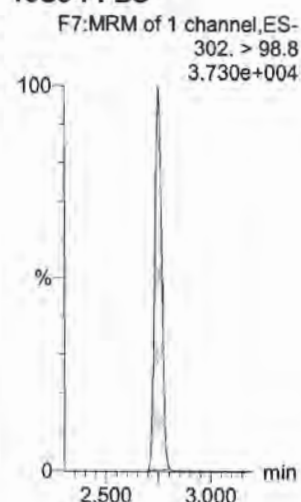
13C3-PFBA



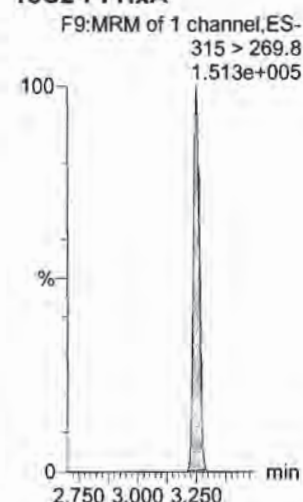
13C3-PFPeA



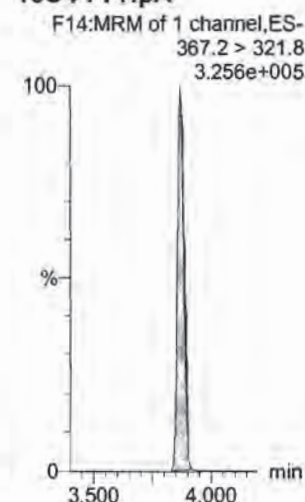
13C3-PFBS



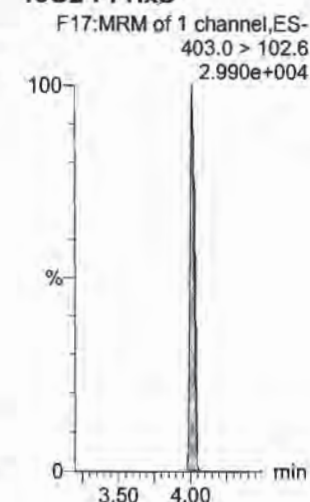
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



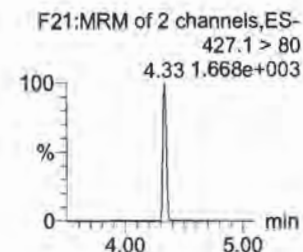
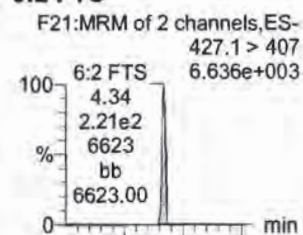
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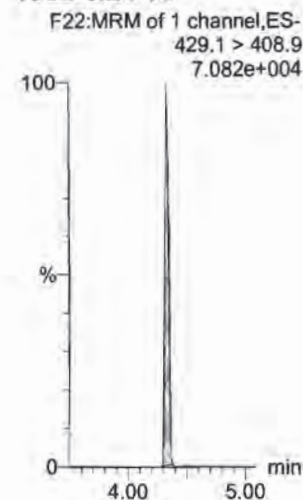
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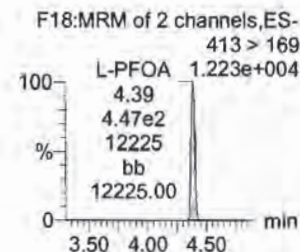
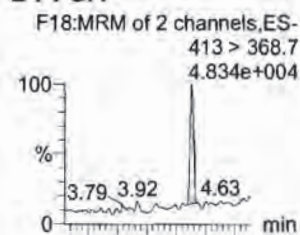
6:2 FTS



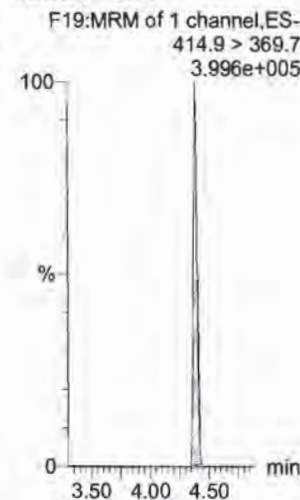
13C2-6:2 FTS



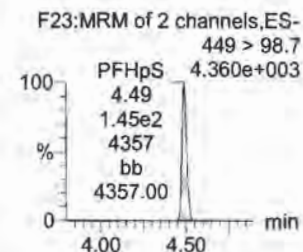
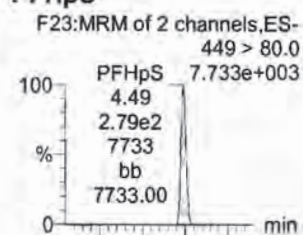
L-PFOA



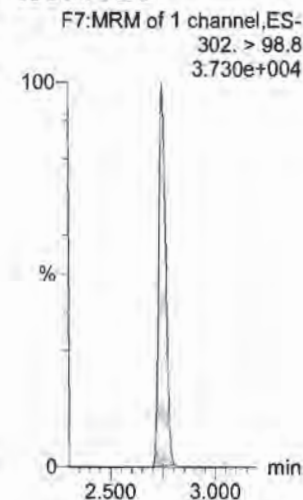
13C2-PFOA



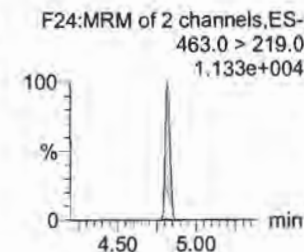
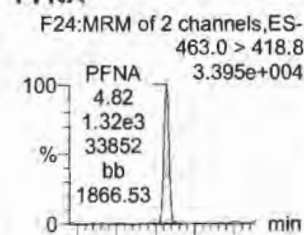
PFHpS



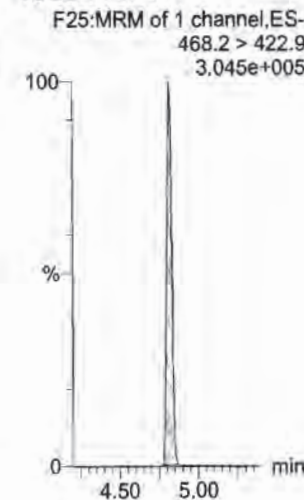
13C3-PFBS



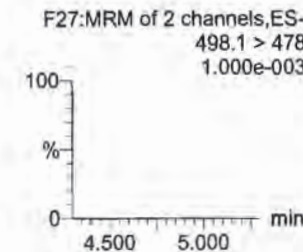
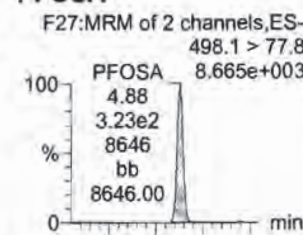
PFNA



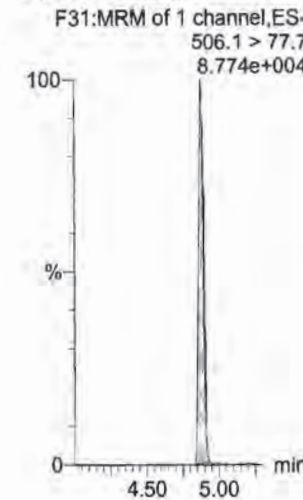
13C5-PFNA



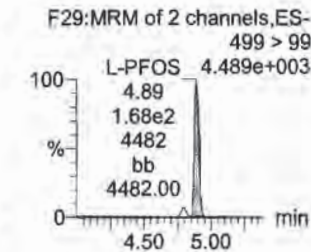
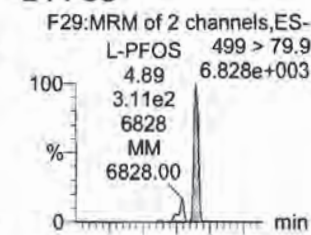
PFOSA



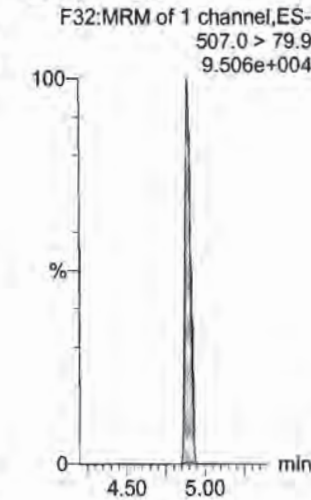
13C8-PFOSA



L-PFOS



13C8-PFOS

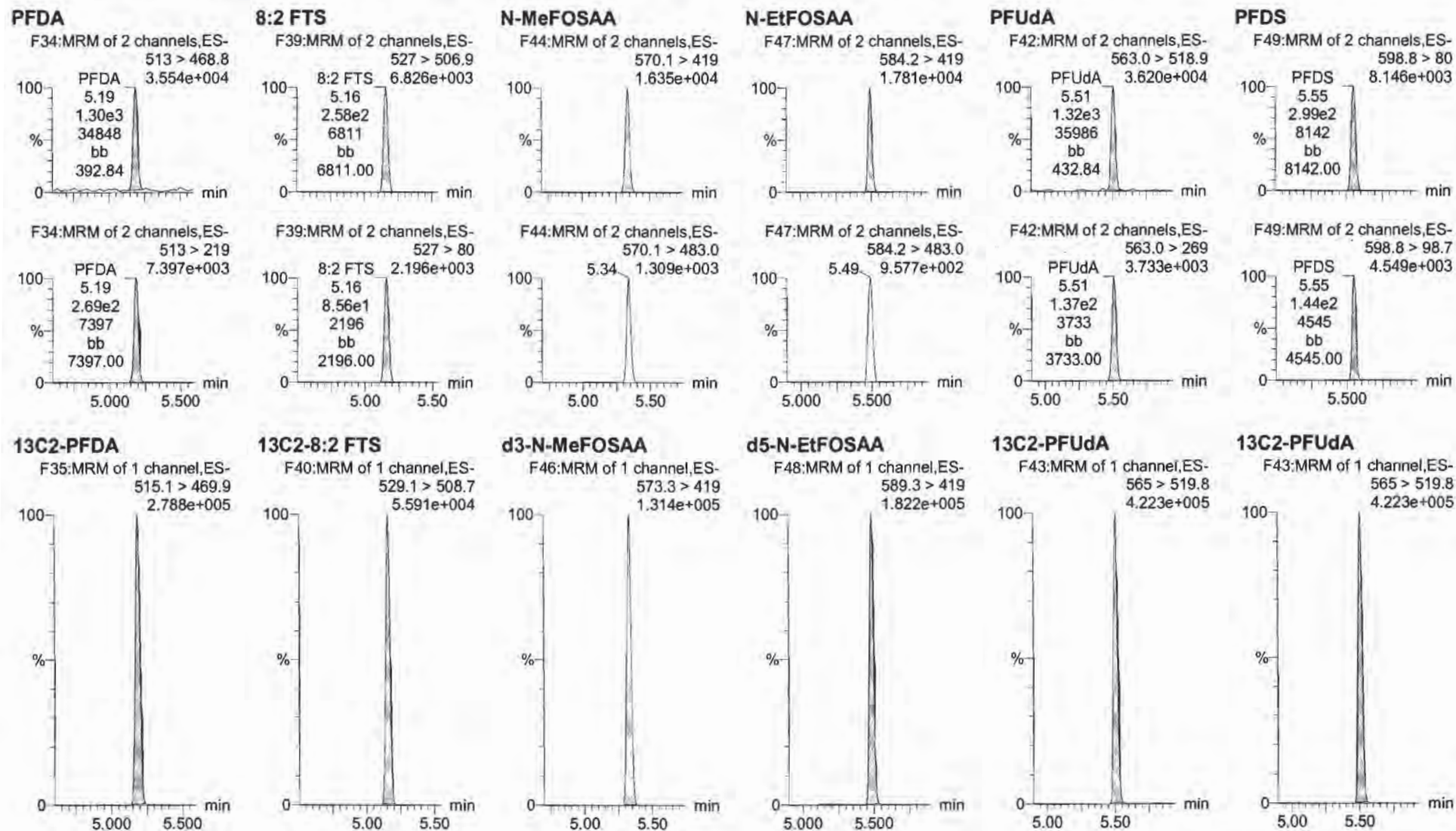


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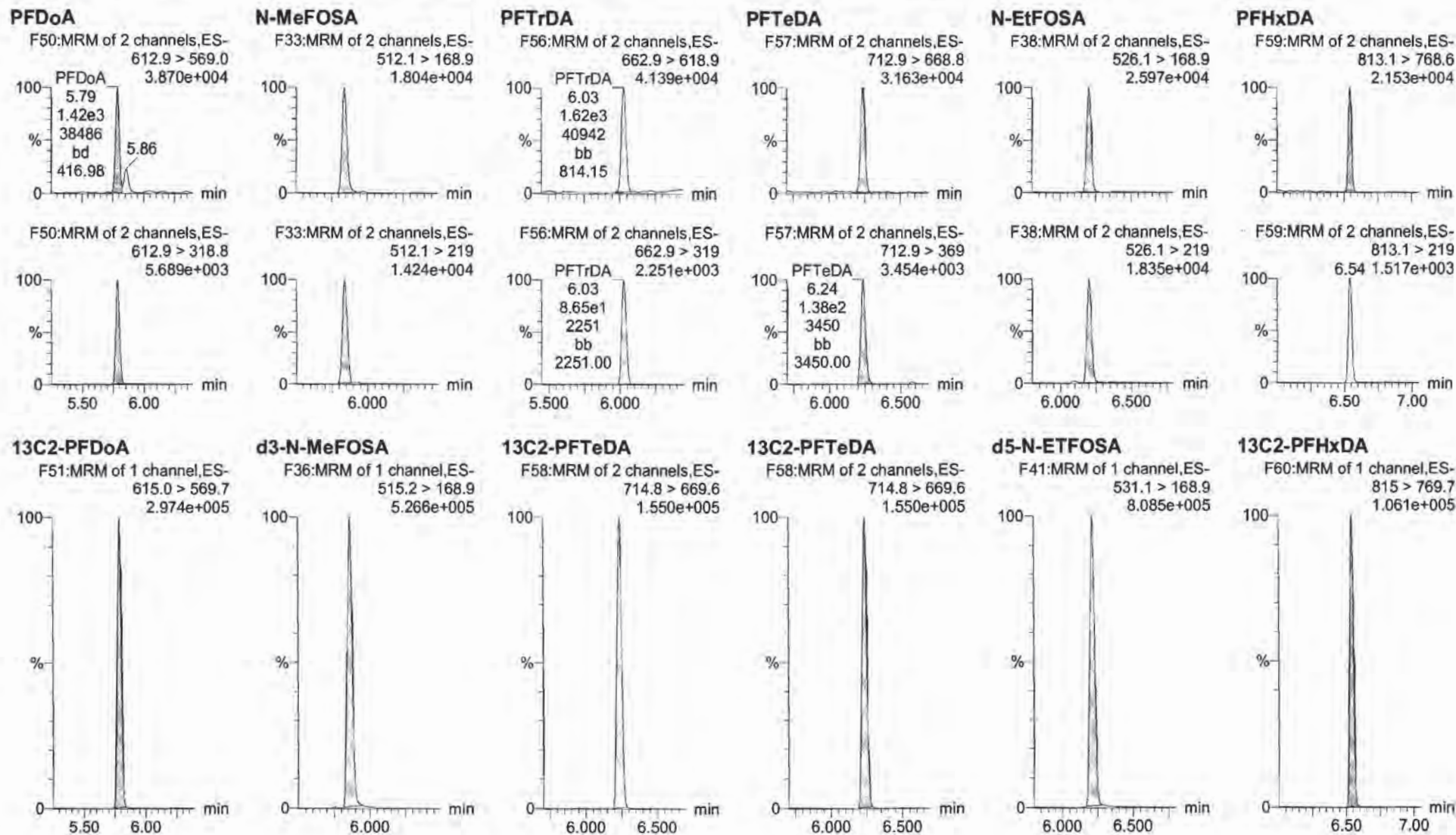


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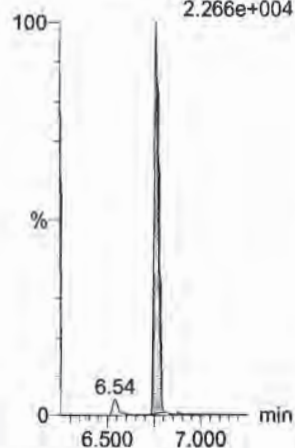
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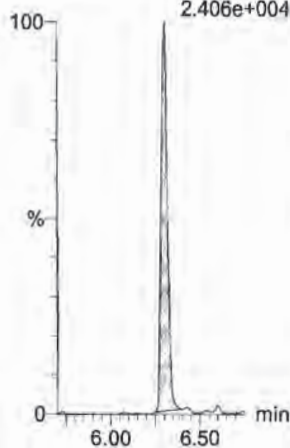
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
2.266e+004



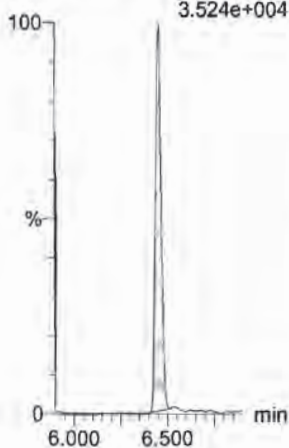
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
2.406e+004



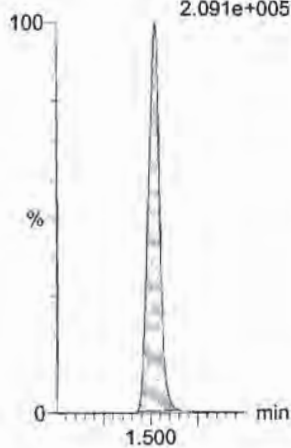
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
3.524e+004



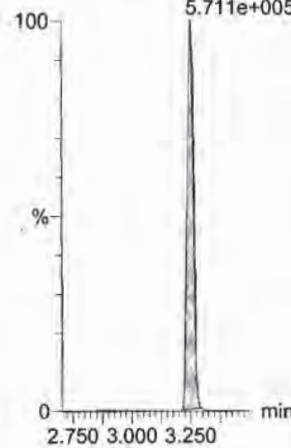
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
2.091e+005



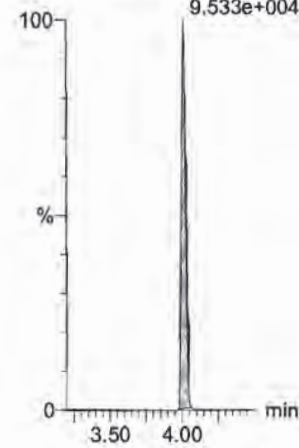
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
5.711e+005



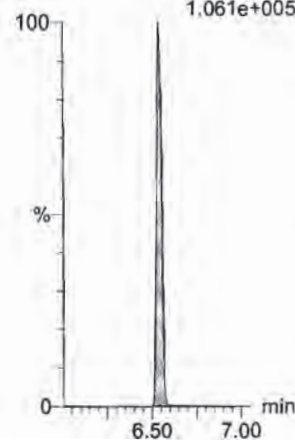
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
9.533e+004



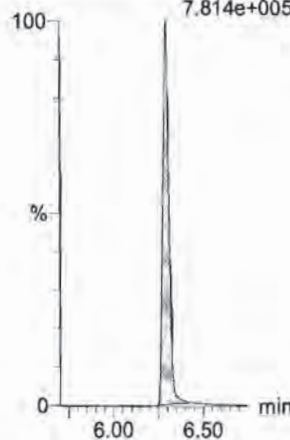
13C2-PFHxDa

F60:MRM of 1 channel,ES-
815 > 769.7
1.061e+005



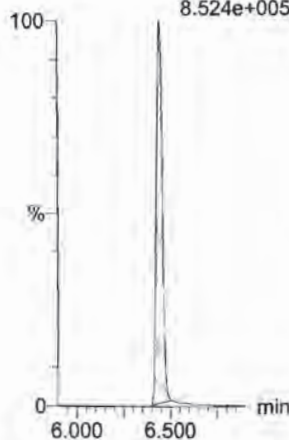
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
7.814e+005



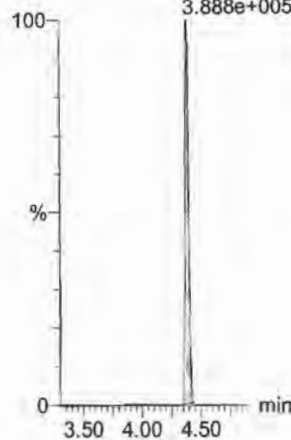
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
8.524e+005



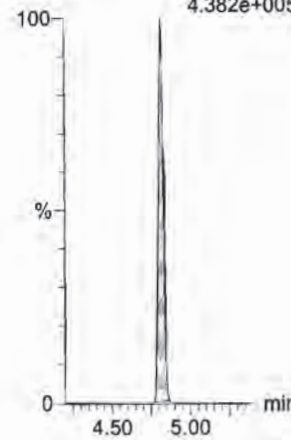
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.888e+005



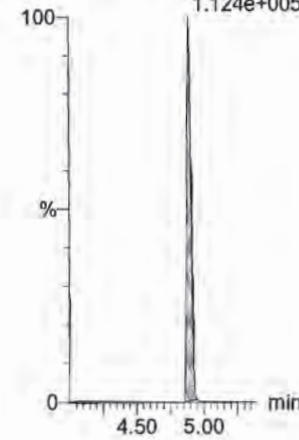
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
4.382e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
1.124e+005



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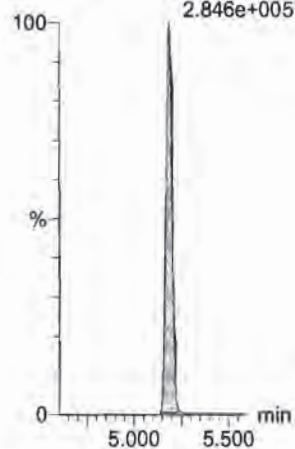
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Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_3, Date: 16-Jan-2018, Time: 00:37:02, ID: ST180115M2-3 PFC CS0 17L2608, Description: PFC CS0 17L2608

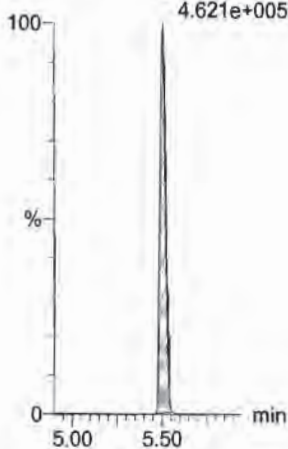
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.846e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
4.621e+005

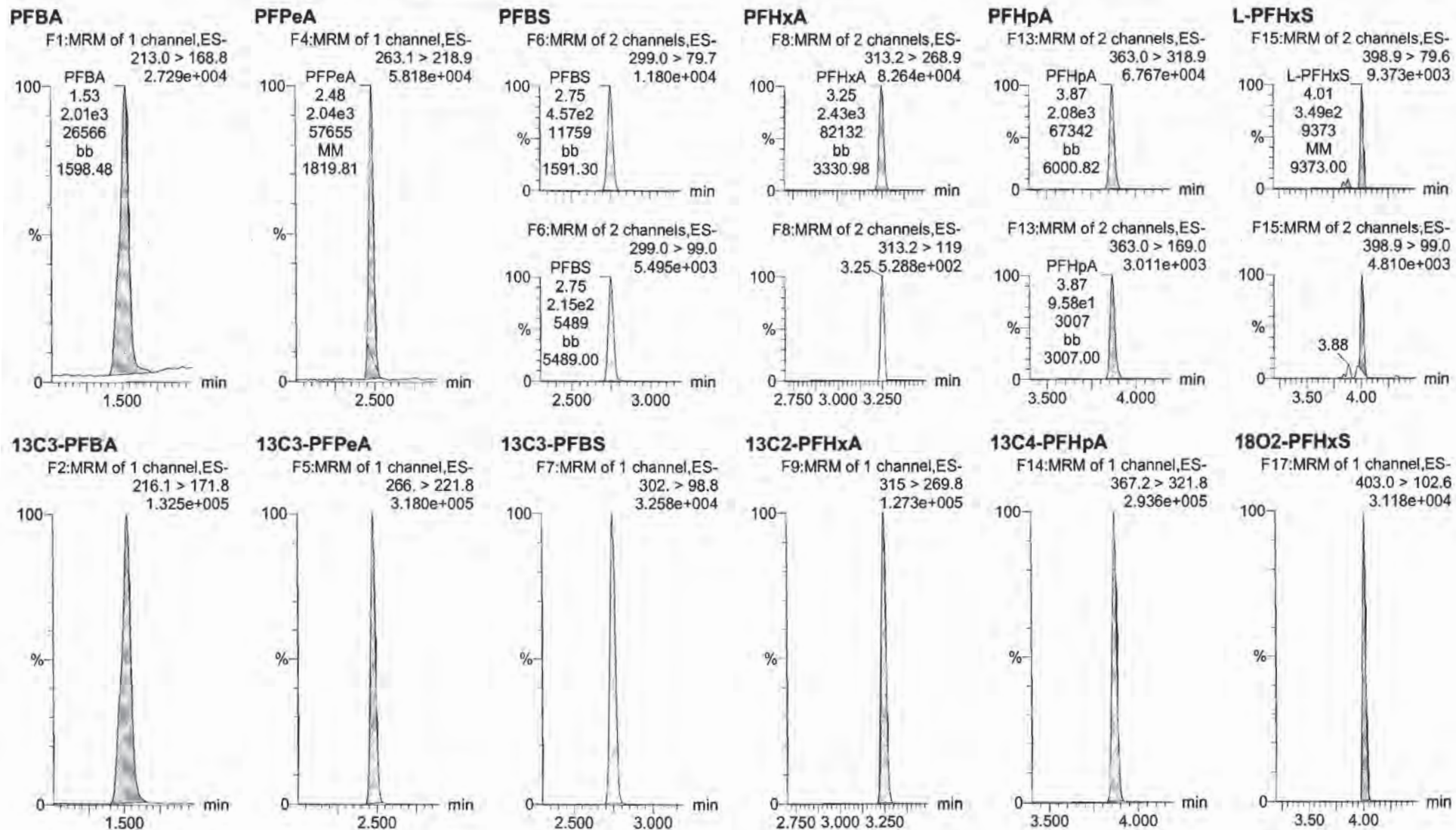


Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_4, Date: 16-Jan-2018, Time: 00:48:46, ID: ST180115M2-4 PFC CS1 17L2609, Description: PFC CS1 17L2609

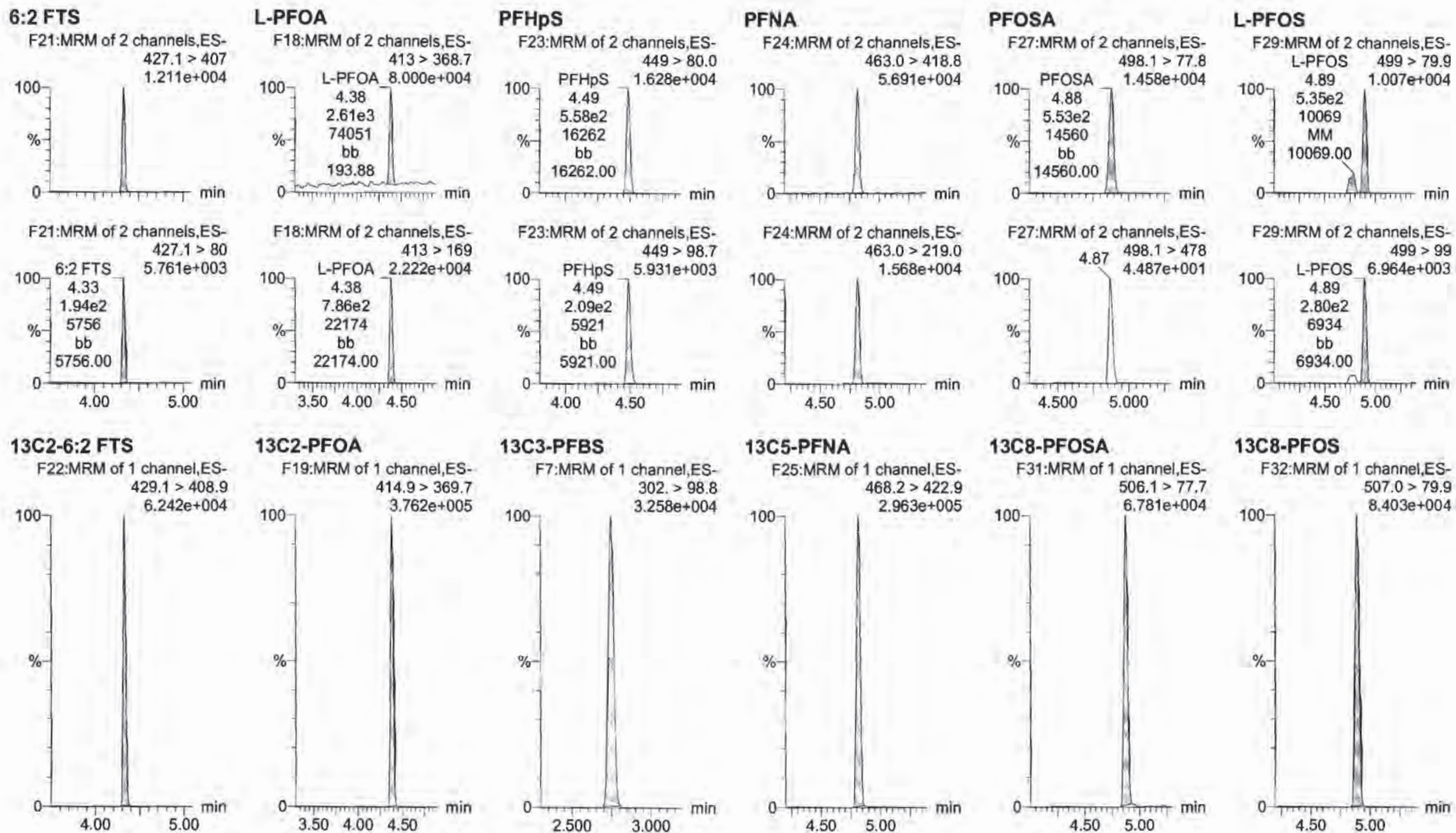


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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_4, Date: 16-Jan-2018, Time: 00:48:46, ID: ST180115M2-4 PFC CS1 17L2609, Description: PFC CS1 17L2609

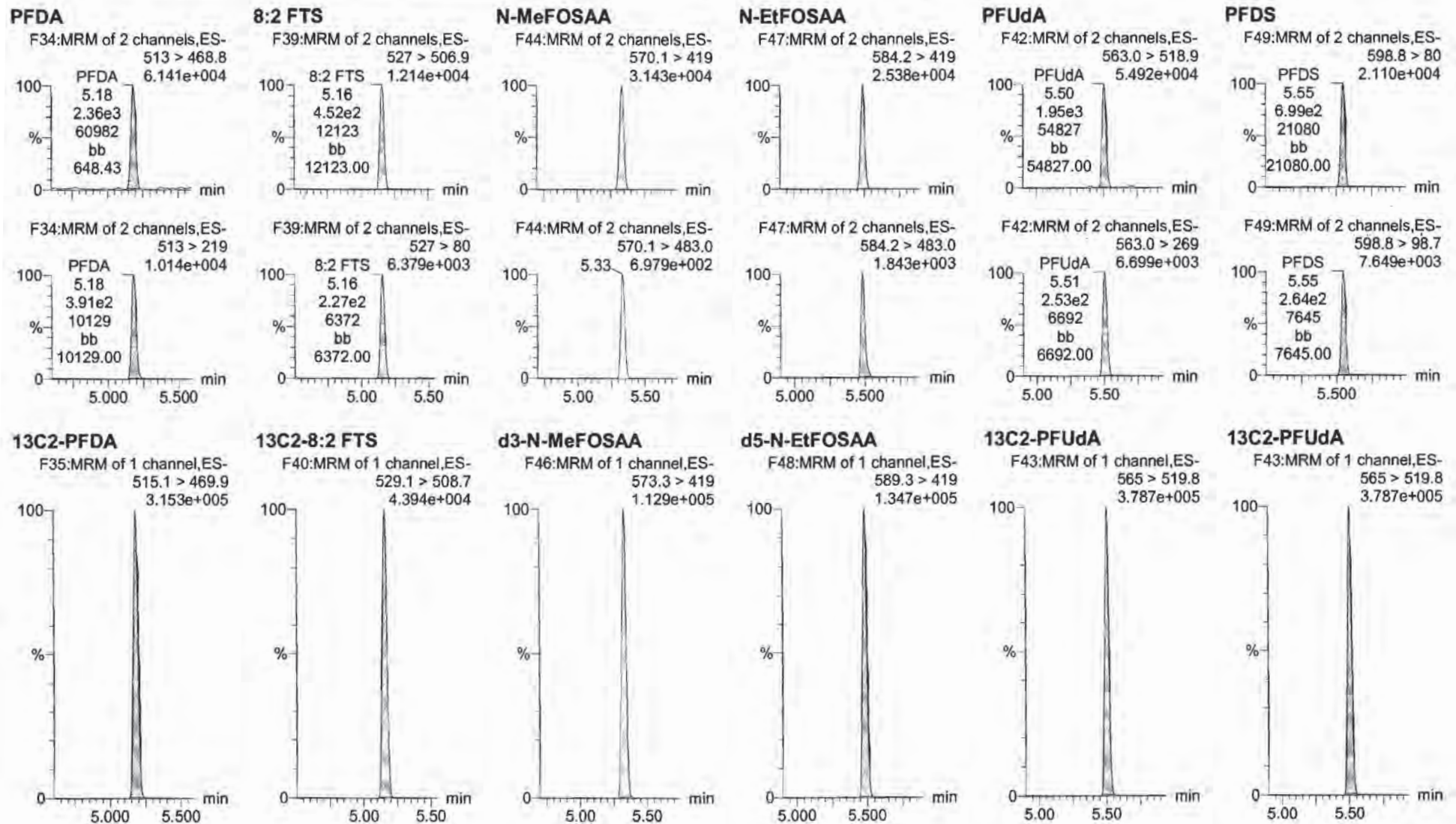


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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_4, Date: 16-Jan-2018, Time: 00:48:46, ID: ST180115M2-4 PFC CS1 17L2609, Description: PFC CS1 17L2609



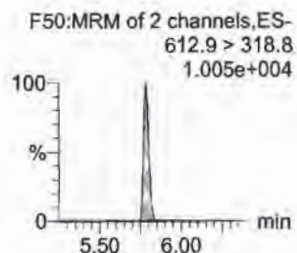
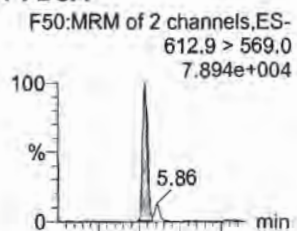
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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

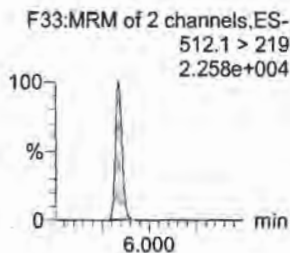
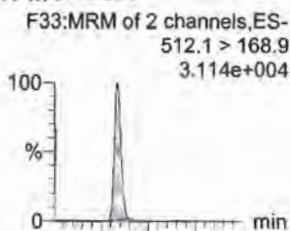
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_4, Date: 16-Jan-2018, Time: 00:48:46, ID: ST180115M2-4 PFC CS1 17L2609, Description: PFC CS1 17L2609

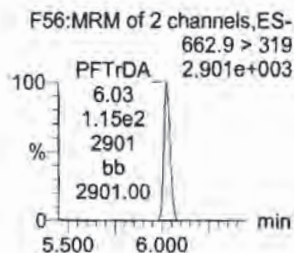
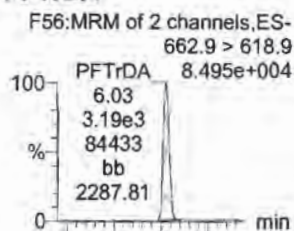
PFDaA



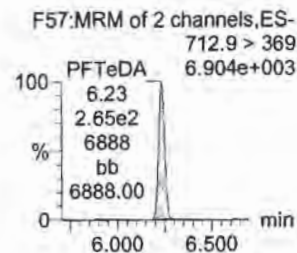
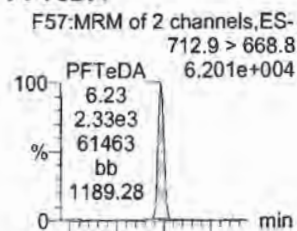
N-MeFOSA



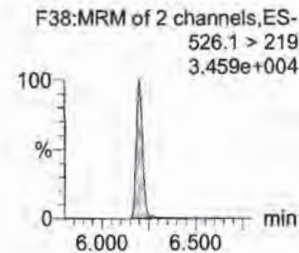
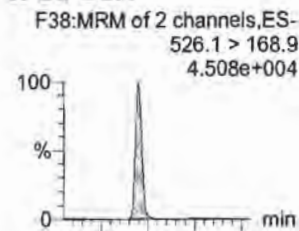
PFTTrDA



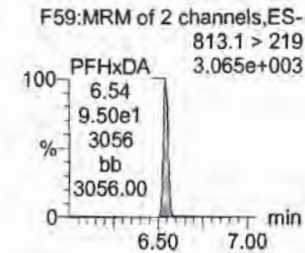
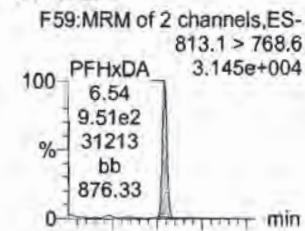
PFTeDA



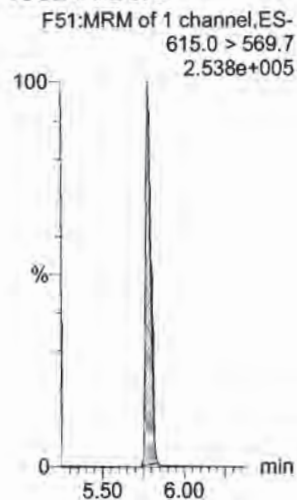
N-EtFOSA



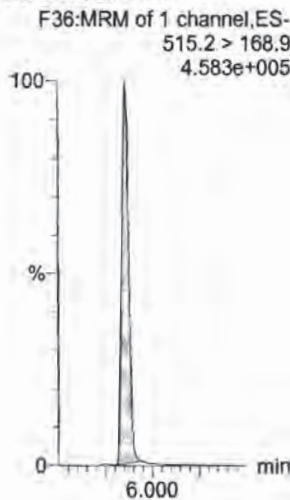
PFHxDA



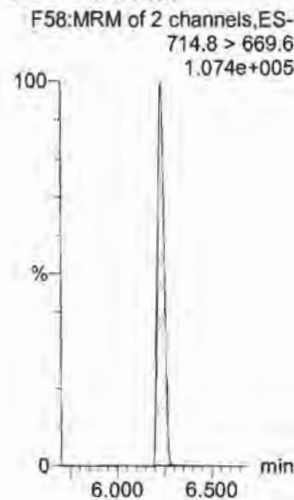
13C2-PFDaA



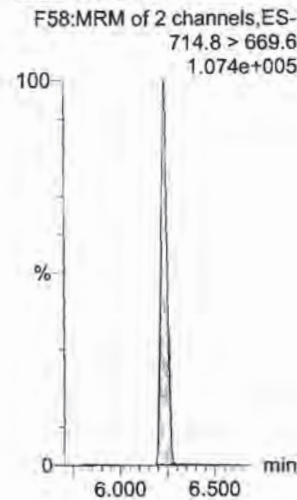
d3-N-MeFOSA



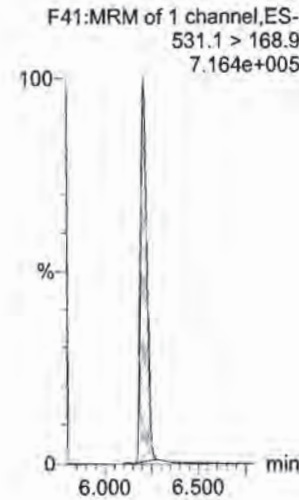
13C2-PFTeDA



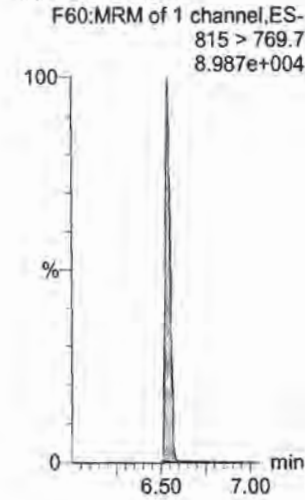
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

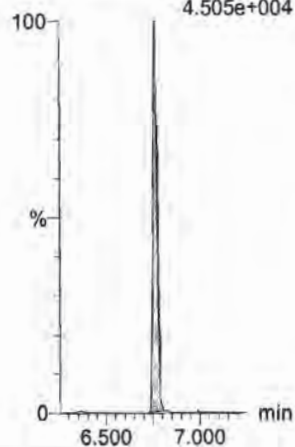
Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_4, Date: 16-Jan-2018, Time: 00:48:46, ID: ST180115M2-4 PFC CS1 17L2609, Description: PFC CS1 17L2609

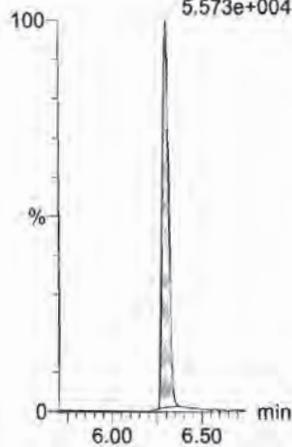
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
4.505e+004



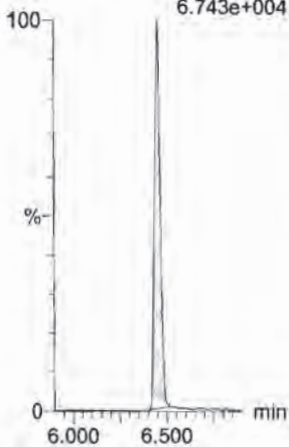
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
5.573e+004



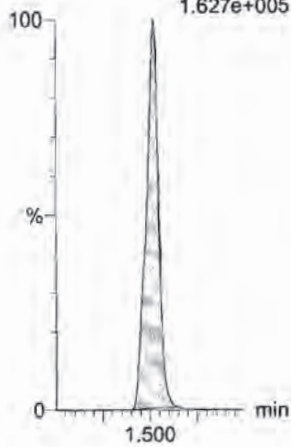
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
6.743e+004



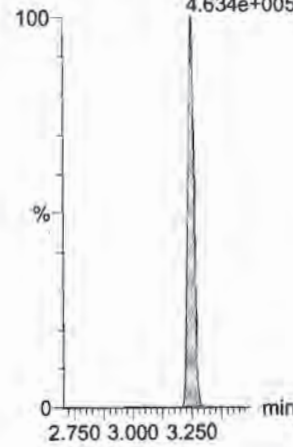
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.627e+005



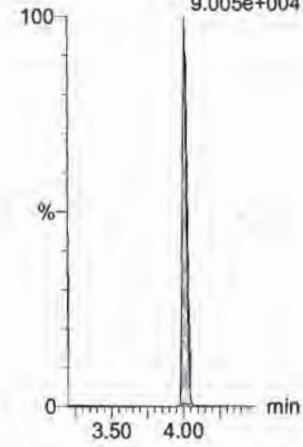
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
4.634e+005



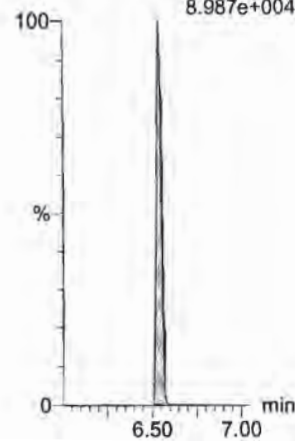
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
9.005e+004



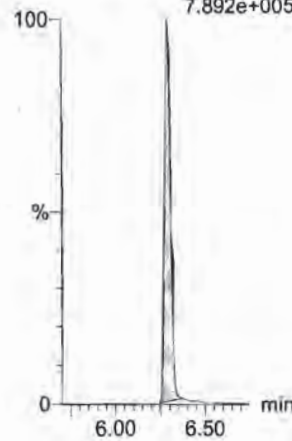
13C2-PFHxDa

F60:MRM of 1 channel,ES-
815 > 769.7
8.987e+004



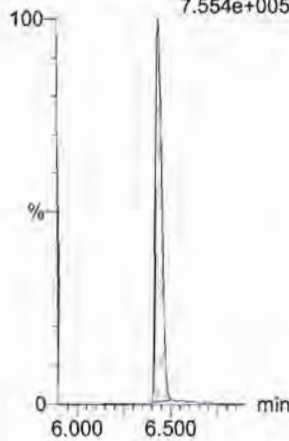
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
7.892e+005



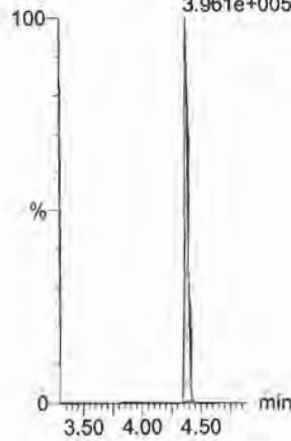
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
7.554e+005



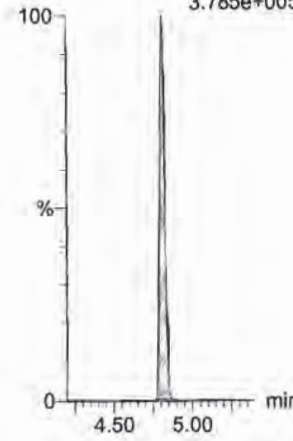
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.961e+005



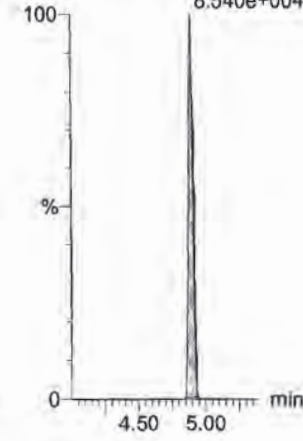
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
3.785e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
8.540e+004



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

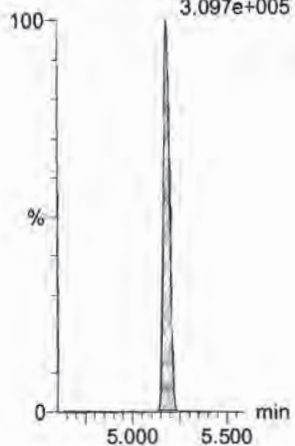
Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_4, Date: 16-Jan-2018, Time: 00:48:46, ID: ST180115M2-4 PFC CS1 17L2609, Description: PFC CS1 17L2609

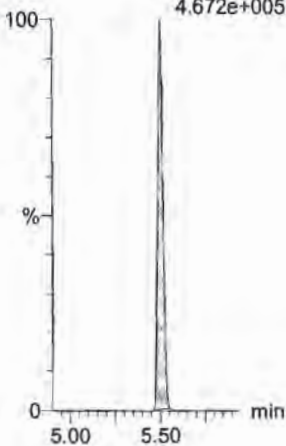
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
3.097e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-
570.1 > 524.8
4.672e+005



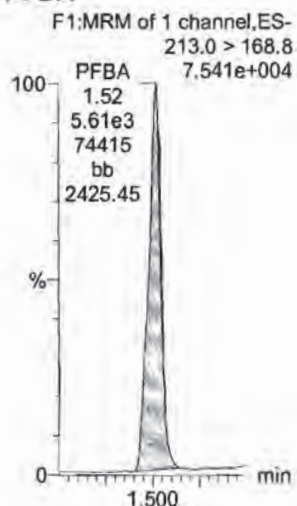
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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

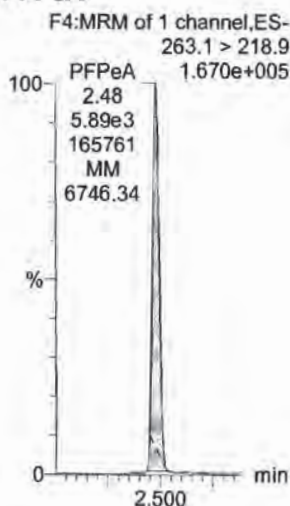
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_5, Date: 16-Jan-2018, Time: 01:00:17, ID: ST180115M2-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

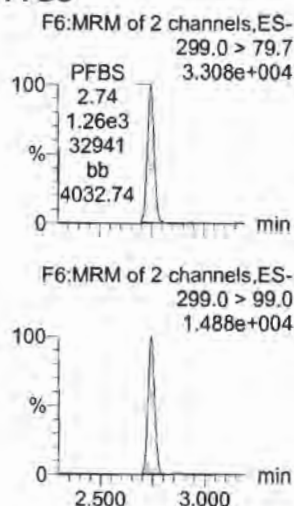
PFBA



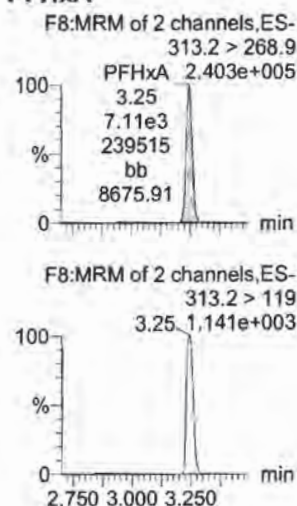
PFPeA



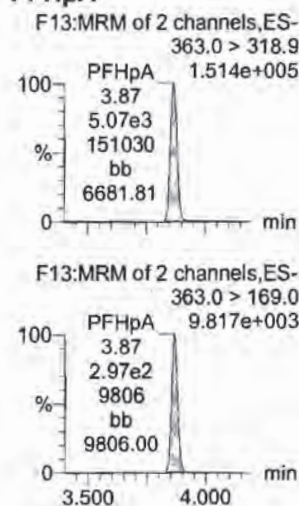
PFBS



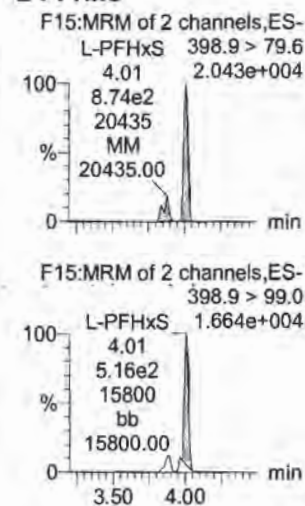
PFHxA



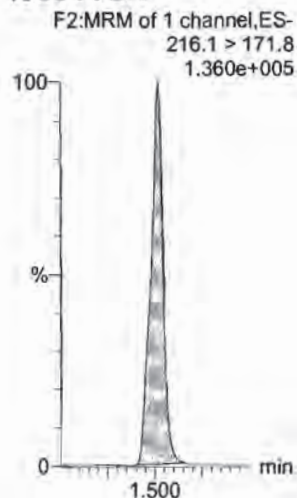
PFHpA



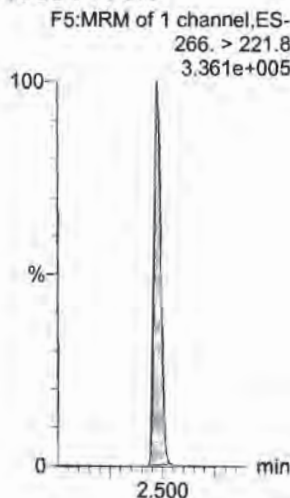
L-PFHxS



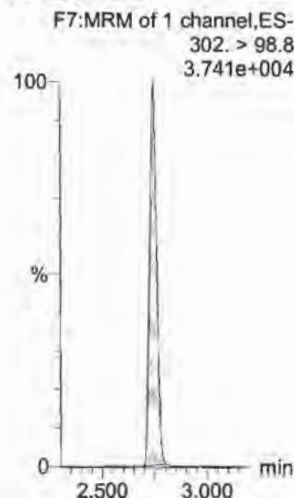
13C3-PFBA



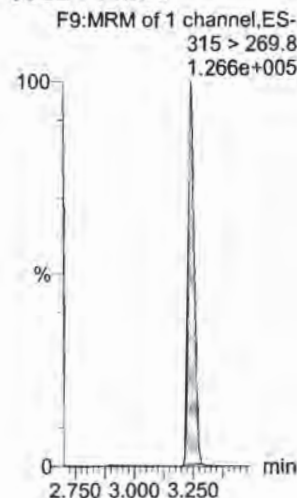
13C3-PFPeA



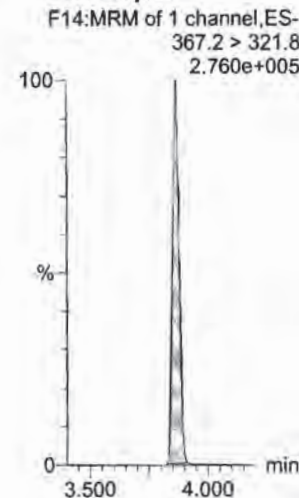
13C3-PFBS



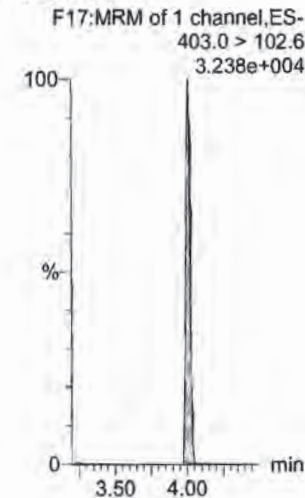
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



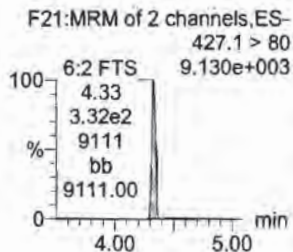
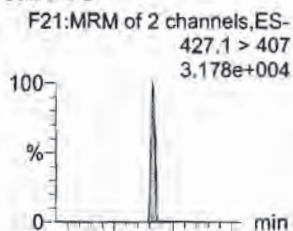
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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

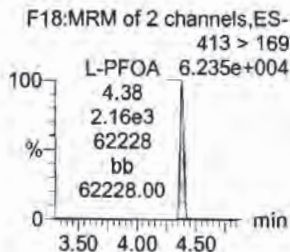
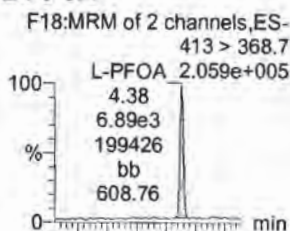
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_5, Date: 16-Jan-2018, Time: 01:00:17, ID: ST180115M2-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

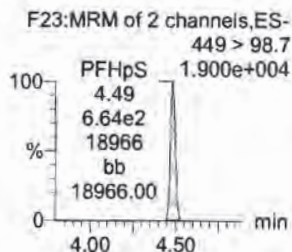
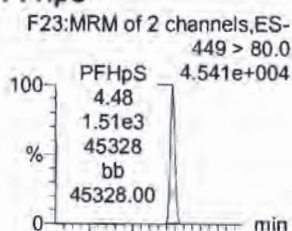
6:2 FTS



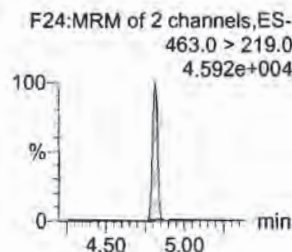
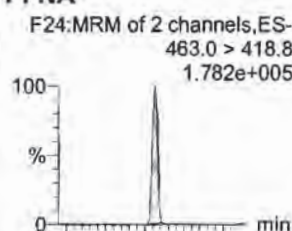
L-PFOA



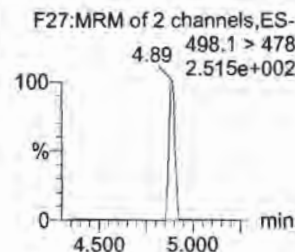
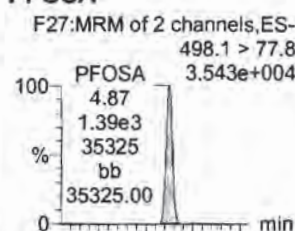
PFHpS



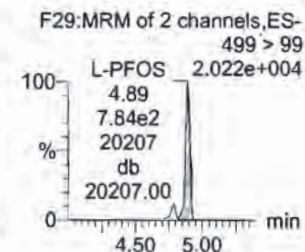
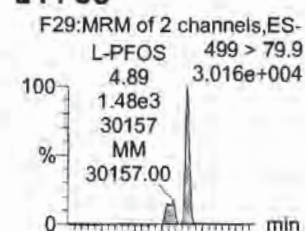
PFNA



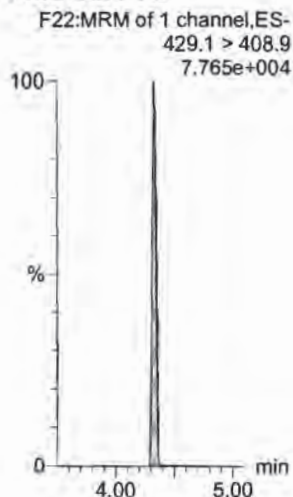
PFOSA



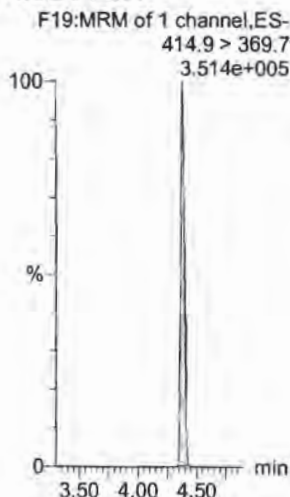
L-PFOS



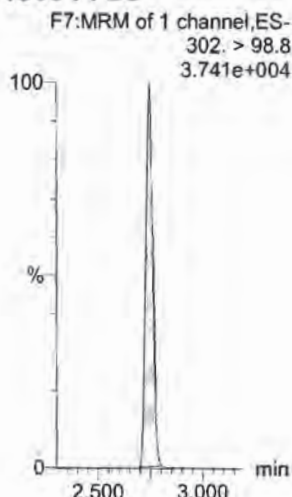
13C2-6:2 FTS



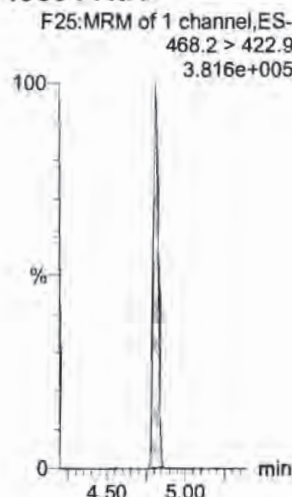
13C2-PFOA



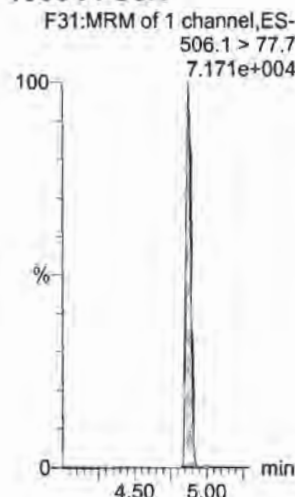
13C3-PFBS



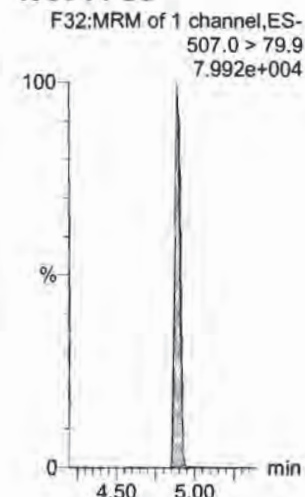
13C5-PFNA



13C8-PFOSA



13C8-PFOS

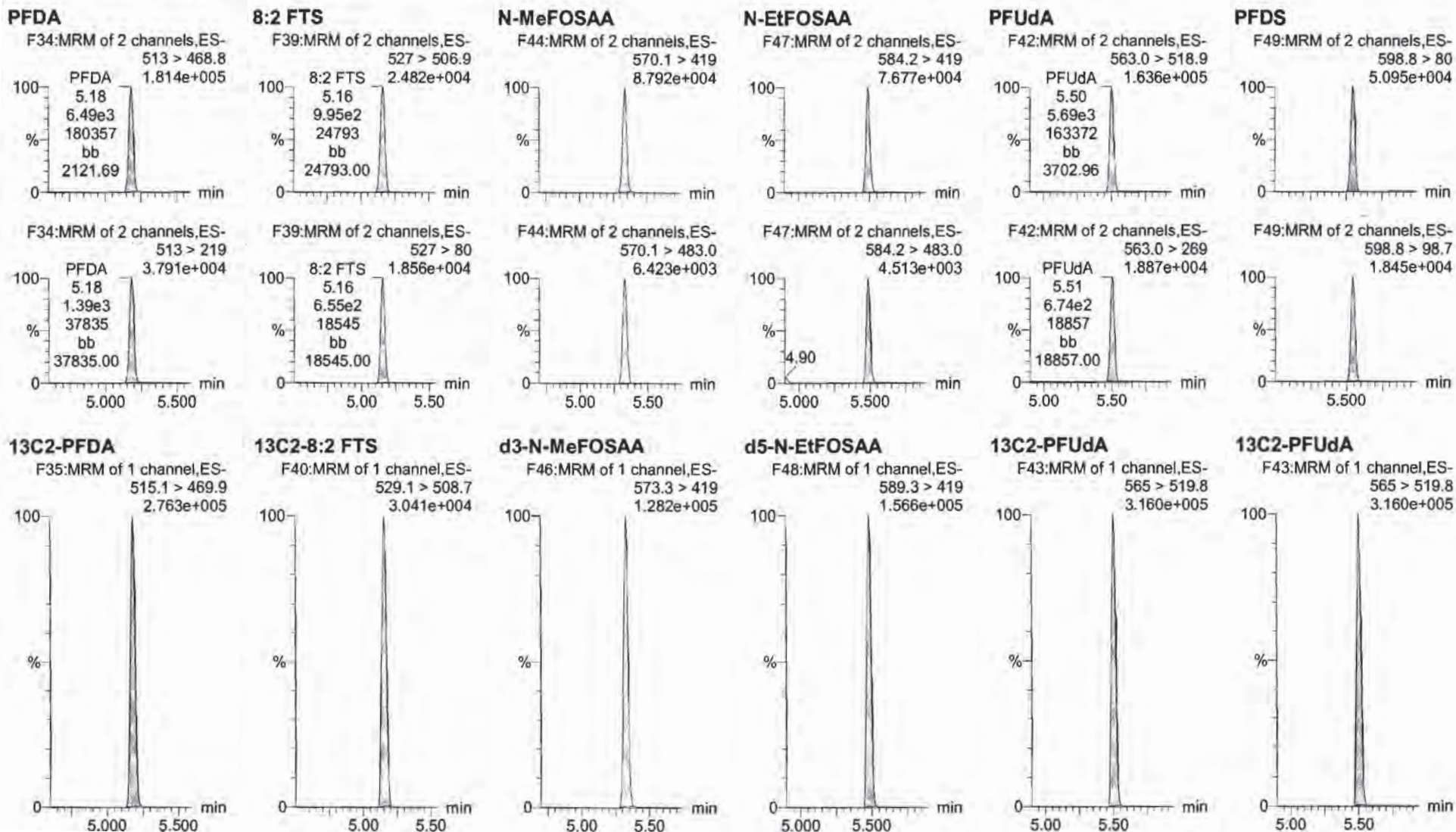


Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

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Name: 180115M2_5, Date: 16-Jan-2018, Time: 01:00:17, ID: ST180115M2-5 PFC CS2 17L2610, Description: PFC CS2 17L2610



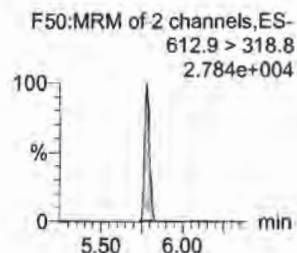
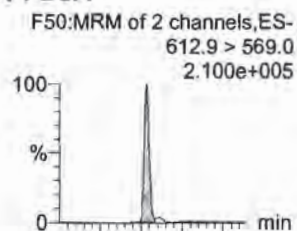
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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

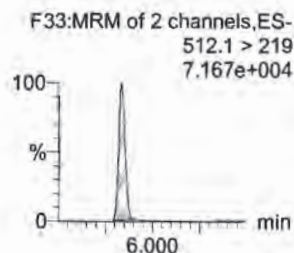
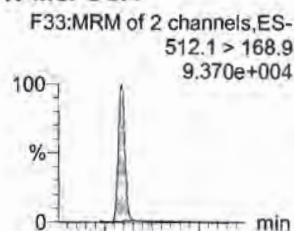
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Name: 180115M2_5, Date: 16-Jan-2018, Time: 01:00:17, ID: ST180115M2-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

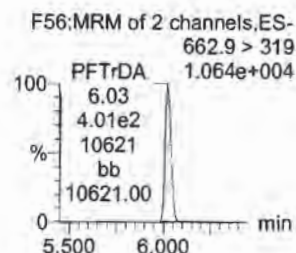
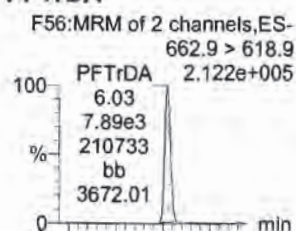
PFDaA



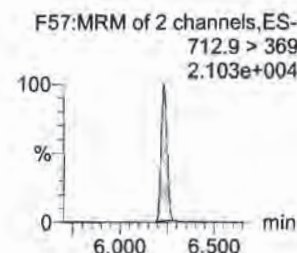
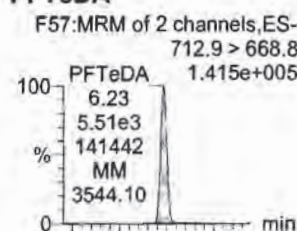
N-MeFOSA



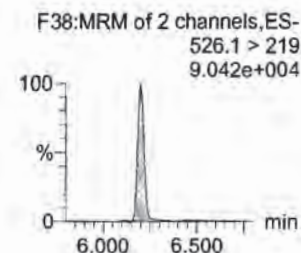
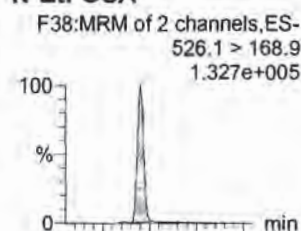
PFTeDA



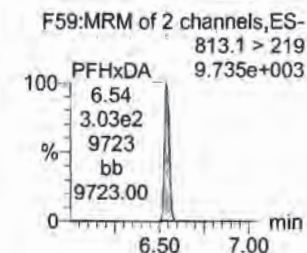
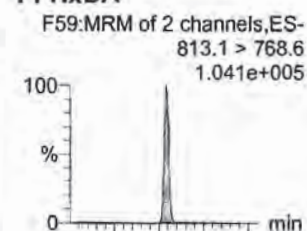
PFTeDA



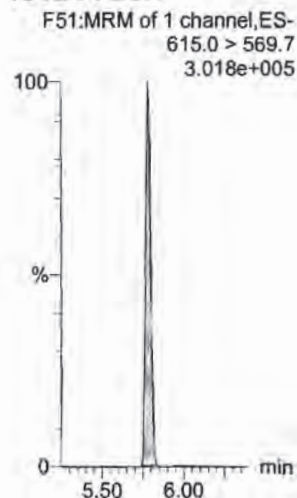
N-EtFOSA



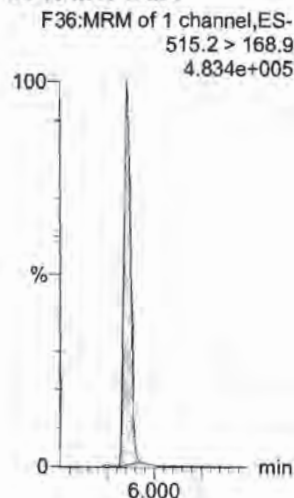
PFHxDA



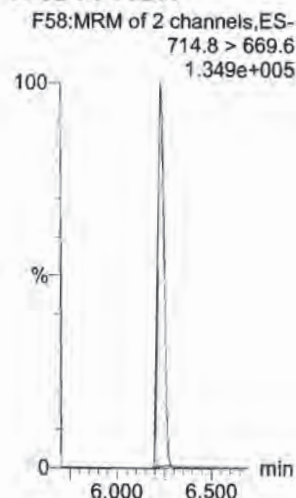
13C2-PFDaA



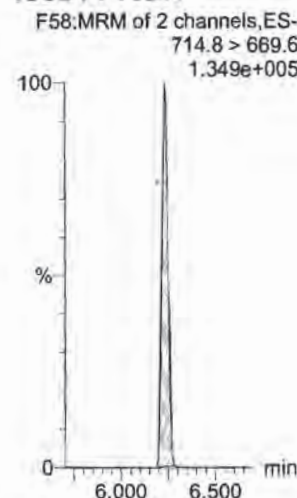
d3-N-MeFOSA



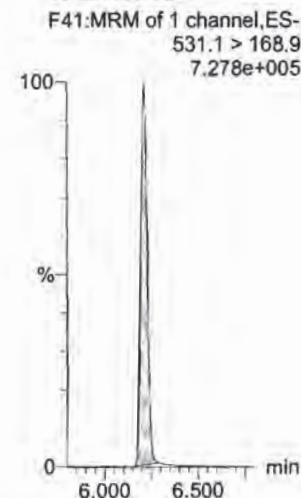
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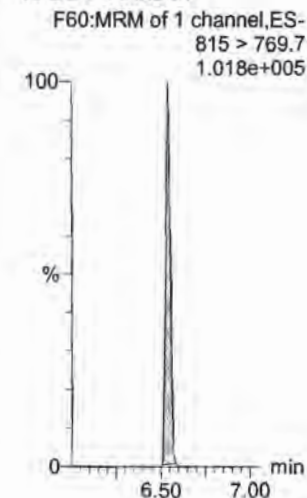
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



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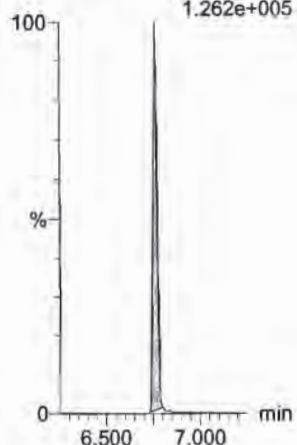
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Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_5, Date: 16-Jan-2018, Time: 01:00:17, ID: ST180115M2-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

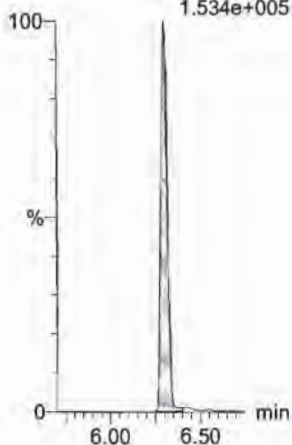
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
1.262e+005



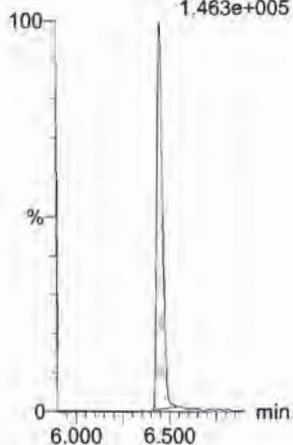
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
1.534e+005



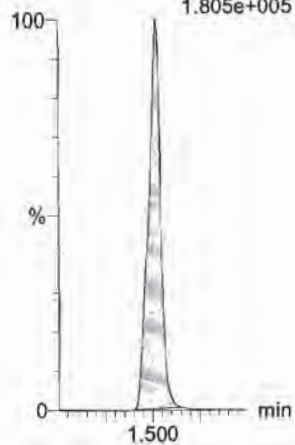
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
1.463e+005



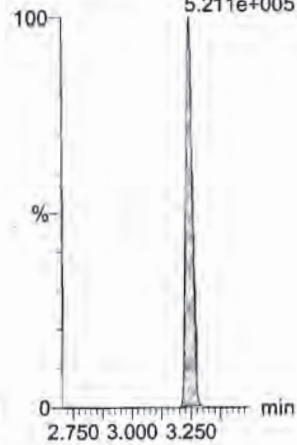
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.805e+005



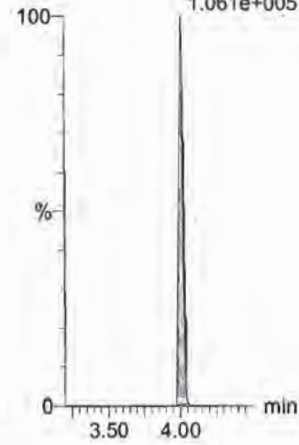
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
5.211e+005



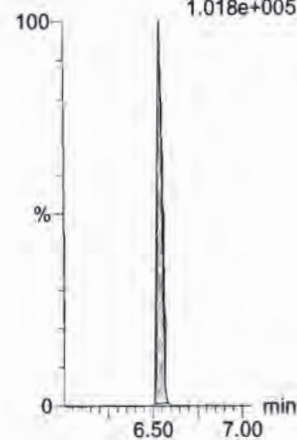
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
1.061e+005



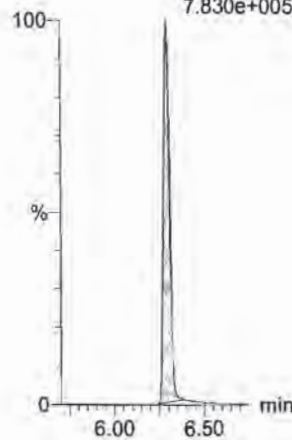
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
1.018e+005



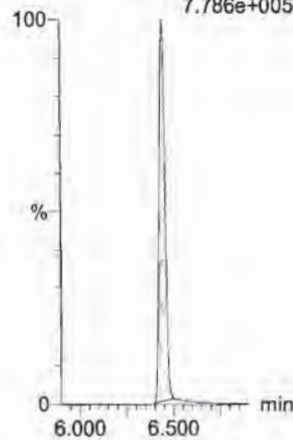
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
7.830e+005



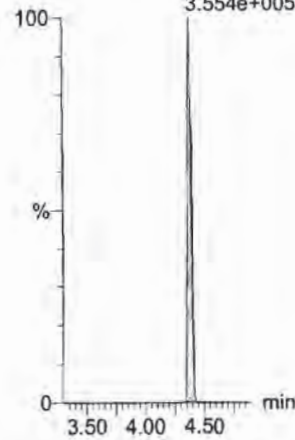
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
7.786e+005



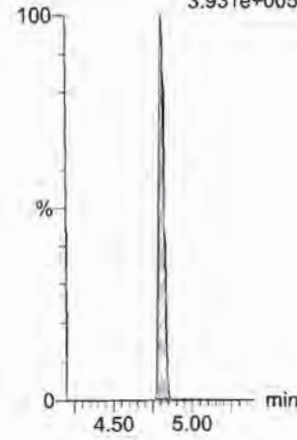
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.554e+005



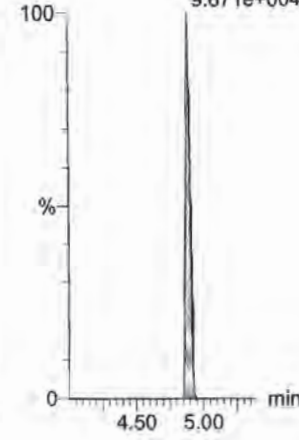
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
3.931e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
9.671e+004



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

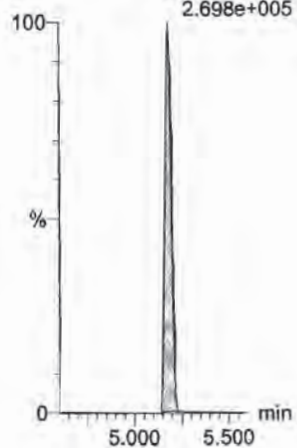
Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_5, Date: 16-Jan-2018, Time: 01:00:17, ID: ST180115M2-5 PFC CS2 17L2610, Description: PFC CS2 17L2610

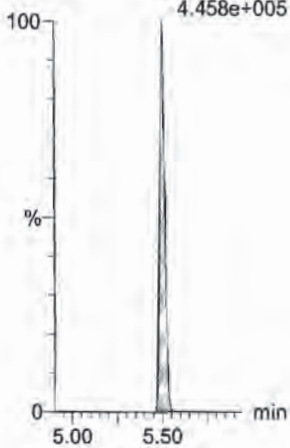
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.698e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
4.458e+005



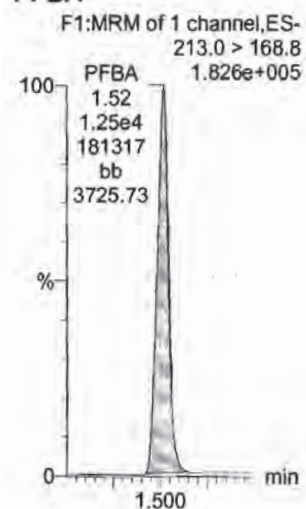
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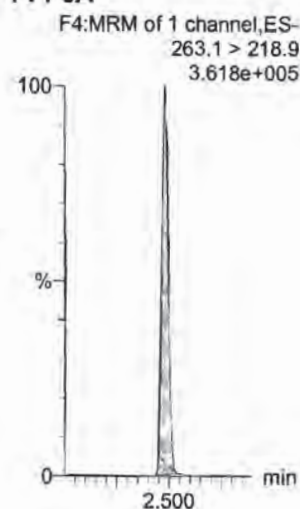
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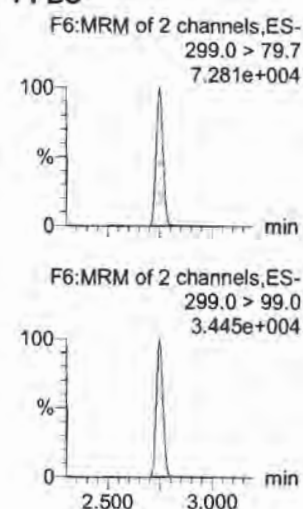
PFBA



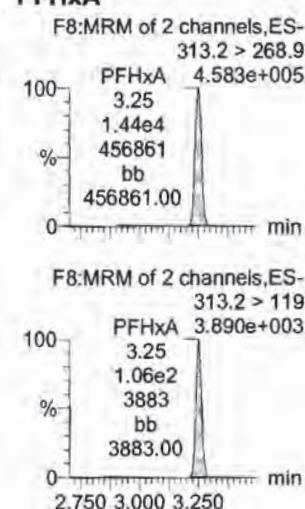
PFPeA



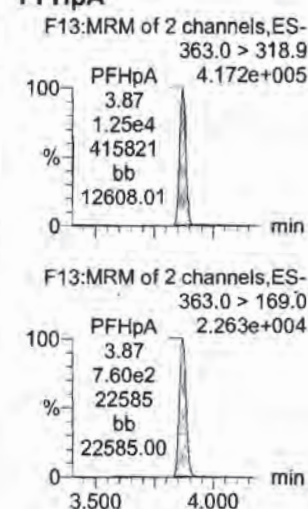
PFBS



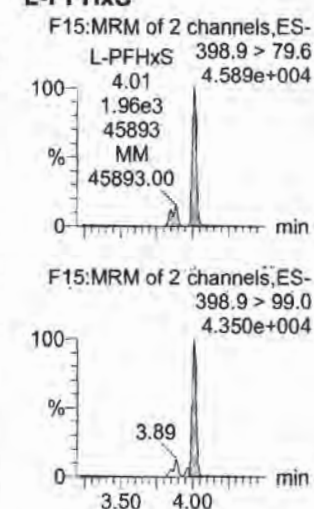
PFHxA



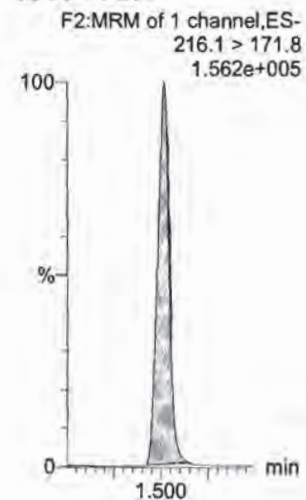
PFHpA



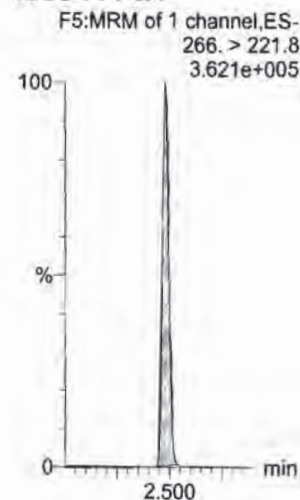
L-PFHxS



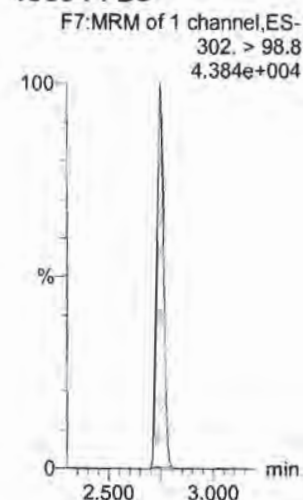
13C3-PFBA



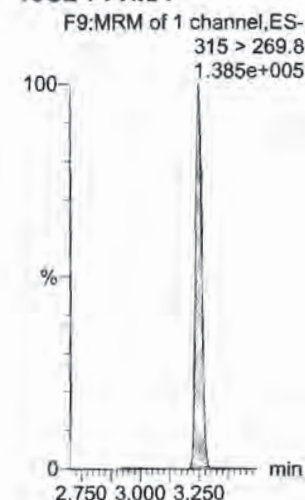
13C3-PFPeA



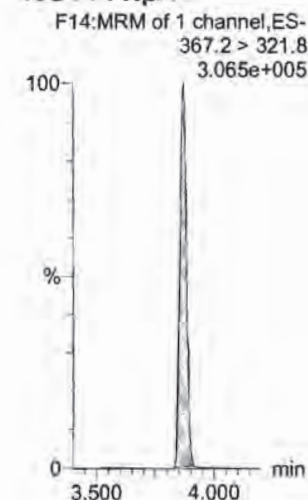
13C3-PFBS



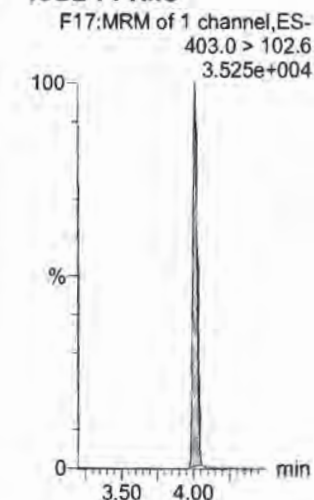
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

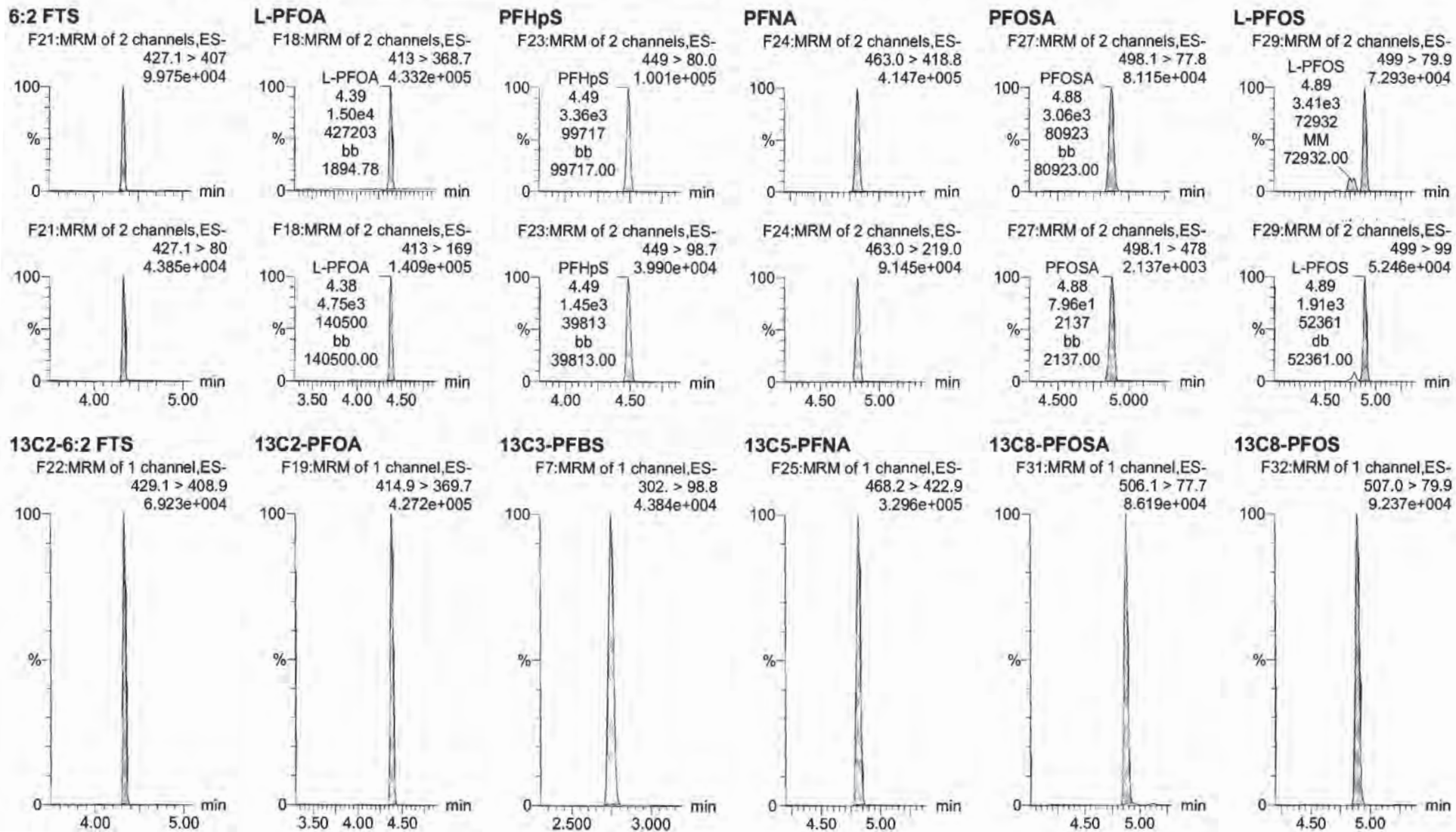


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Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_6, Date: 16-Jan-2018, Time: 01:11:44, ID: ST180115M2-6 PFC CS3 17L2611, Description: PFC CS3 17L2611



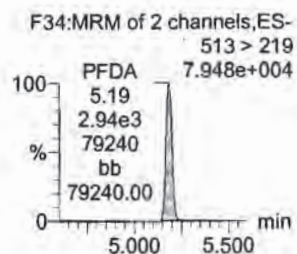
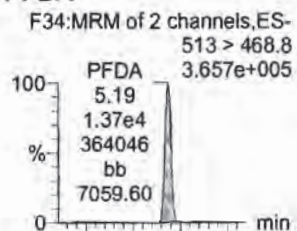
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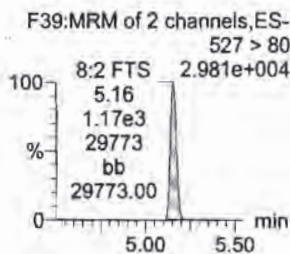
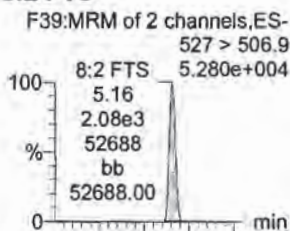
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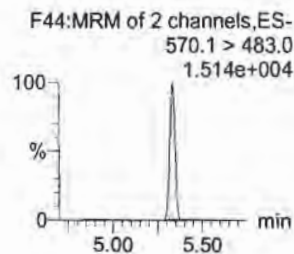
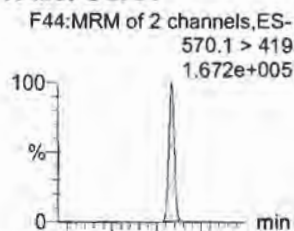
PFDA



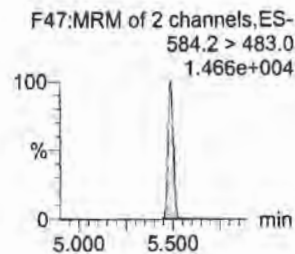
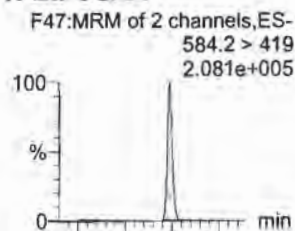
8:2 FTS



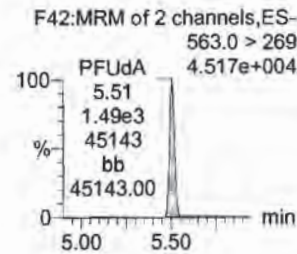
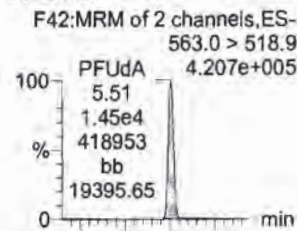
N-MeFOSAA



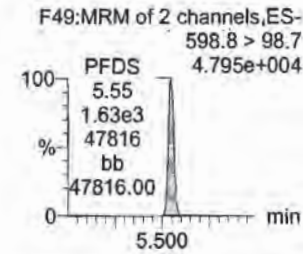
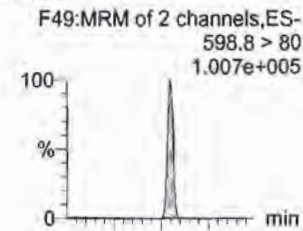
N-EtFOSAA



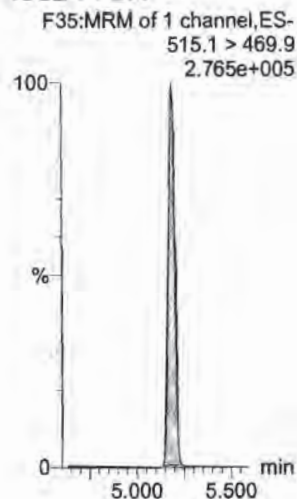
PFUdA



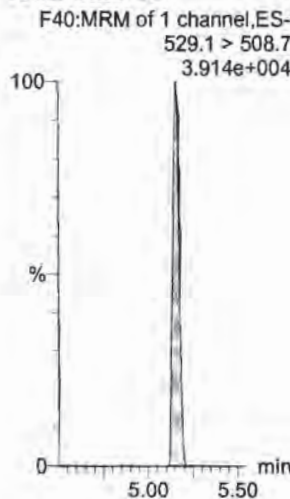
PFDS



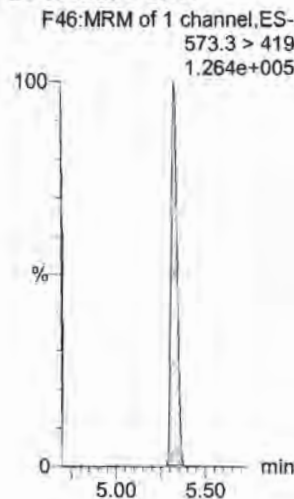
13C2-PFDA



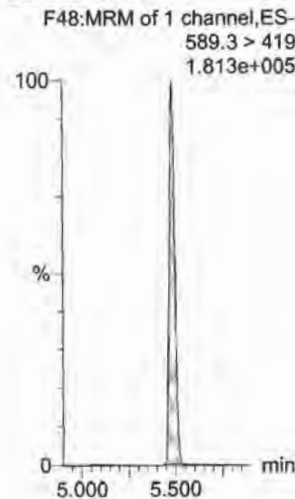
13C2-8:2 FTS



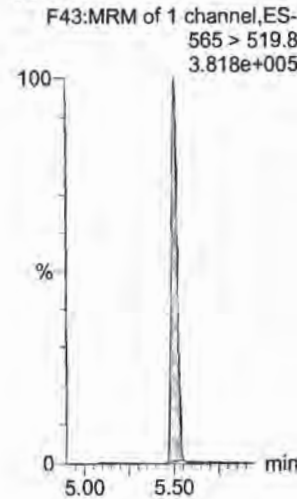
d3-N-MeFOSAA



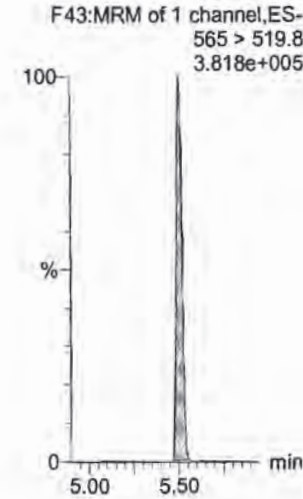
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



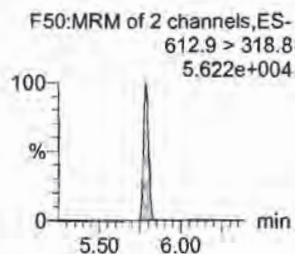
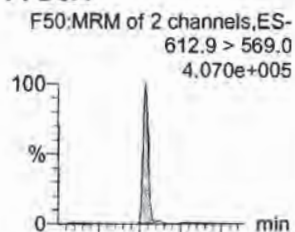
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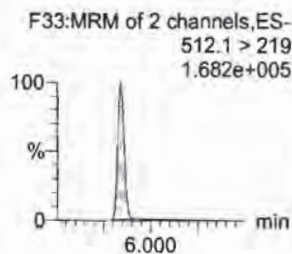
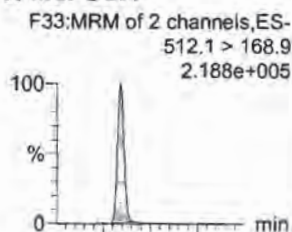
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Name: 180115M2_6, Date: 16-Jan-2018, Time: 01:11:44, ID: ST180115M2-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

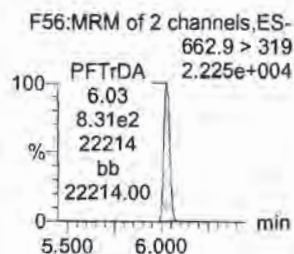
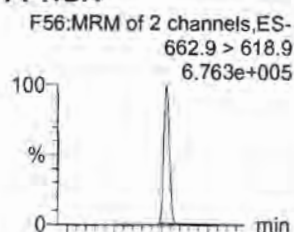
PFDaA



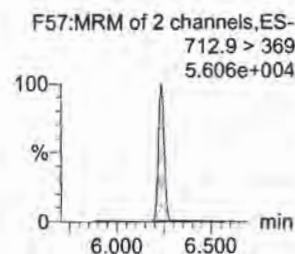
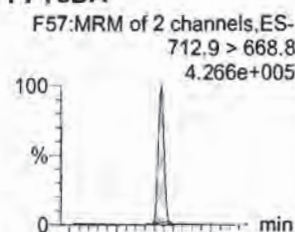
N-MeFOSA



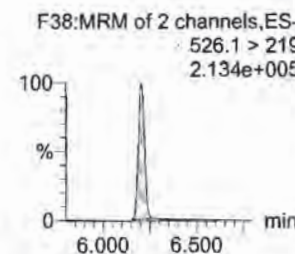
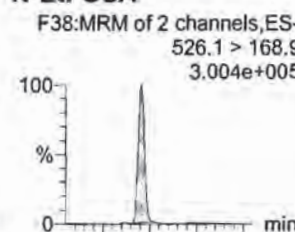
PFTTrDA



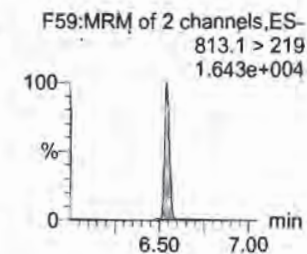
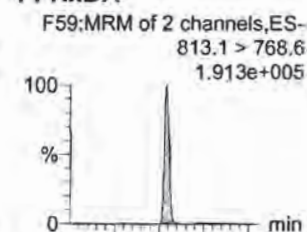
PFTeDA



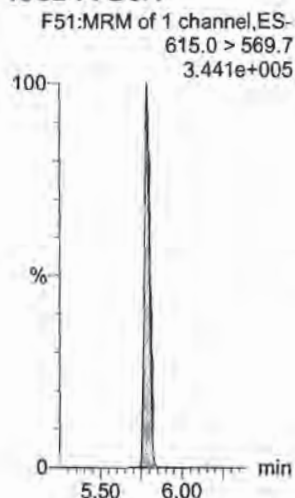
N-EtFOSA



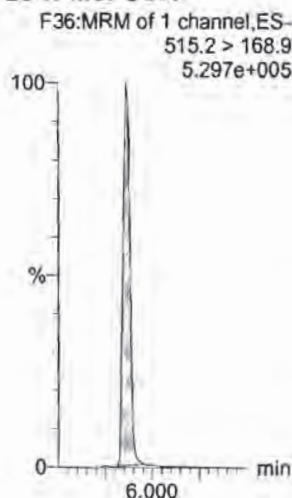
PFHxDA



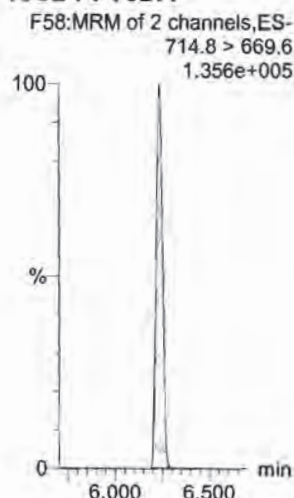
13C2-PFDaA



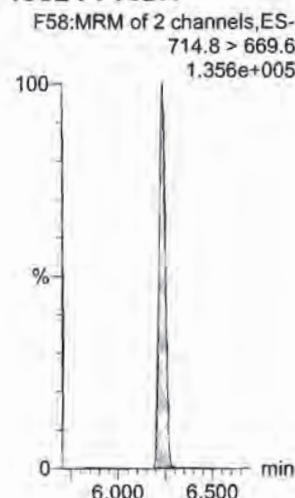
d3-N-MeFOSA



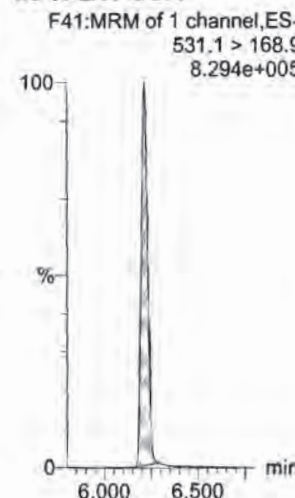
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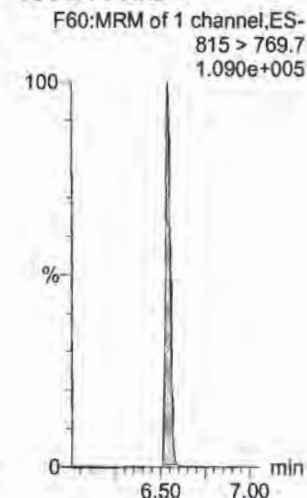
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d5-N-ETFOSA



13C2-PFHxDA



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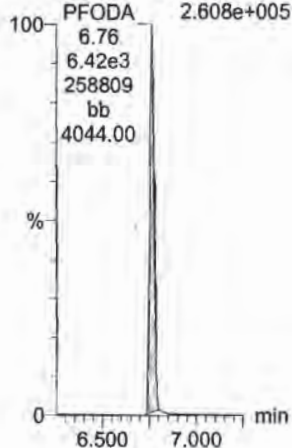
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Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_6, Date: 16-Jan-2018, Time: 01:11:44, ID: ST180115M2-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

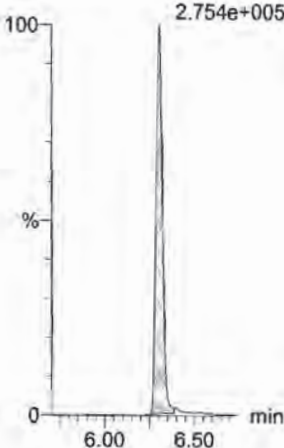
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
2.608e+005



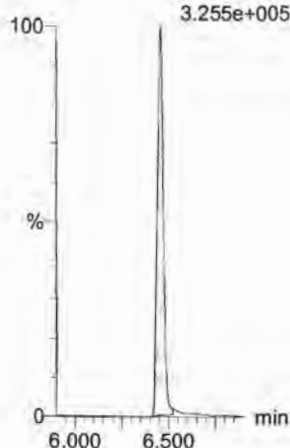
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
2.754e+005



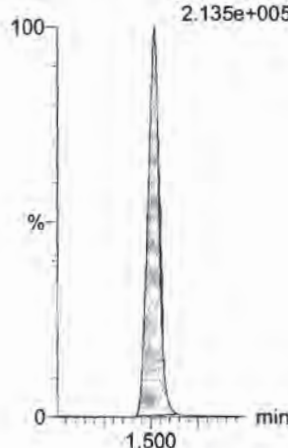
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
3.255e+005



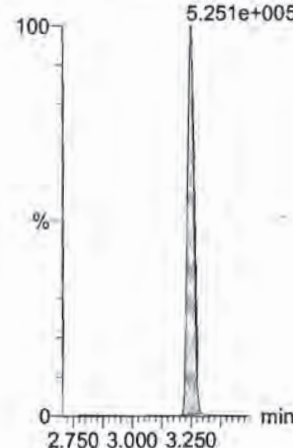
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
2.135e+005



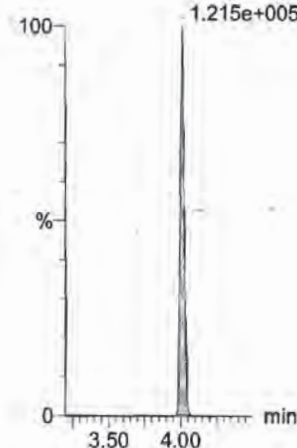
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
5.251e+005



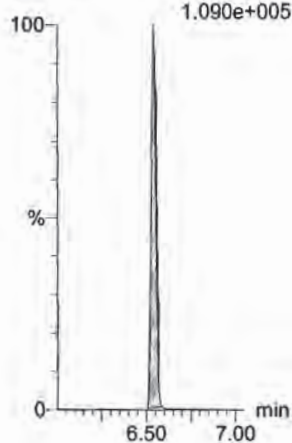
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
1.215e+005



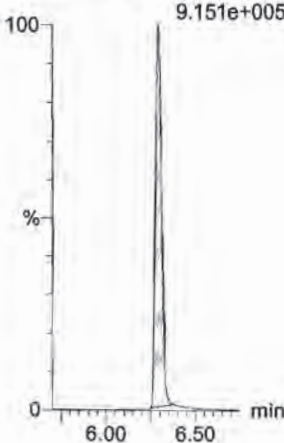
13C2-PFHxD

F60:MRM of 1 channel,ES-
815 > 769.7
1.090e+005



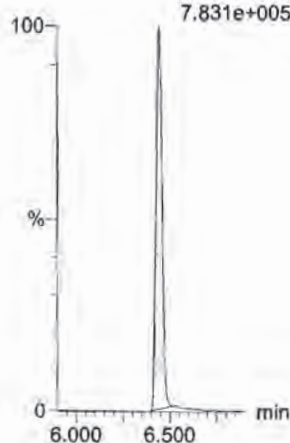
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
9.151e+005



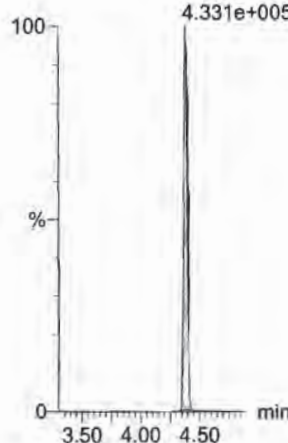
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
7.831e+005



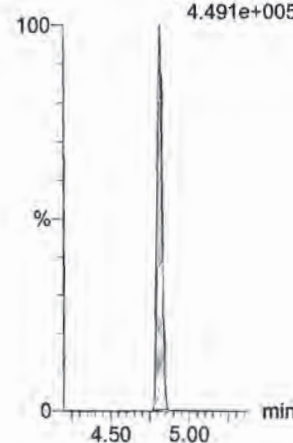
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
4.331e+005



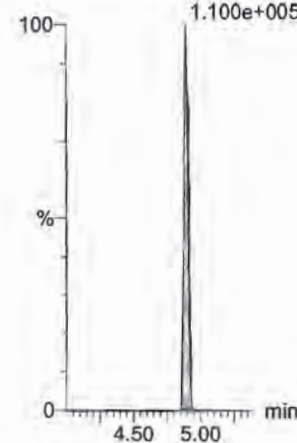
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
4.491e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
1.100e+005



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

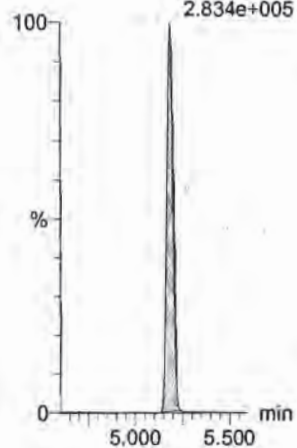
Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_6, Date: 16-Jan-2018, Time: 01:11:44, ID: ST180115M2-6 PFC CS3 17L2611, Description: PFC CS3 17L2611

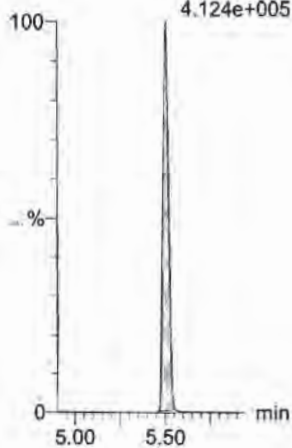
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.834e+005



13C7-PFUdA

F45:MRM of 1 channel,ES-
570.1 > 524.8
4.124e+005



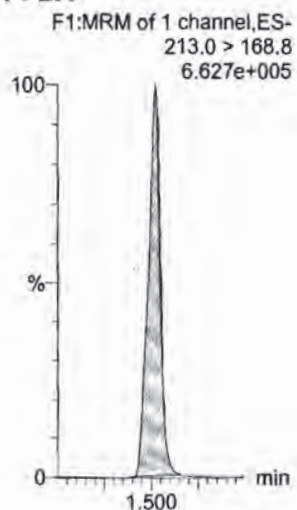
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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

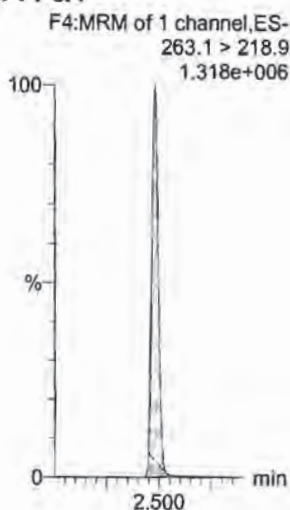
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_7, Date: 16-Jan-2018, Time: 01:23:11, ID: ST180115M2-7 PFC CS4 17L1208, Description: PFC CS4 17L1208

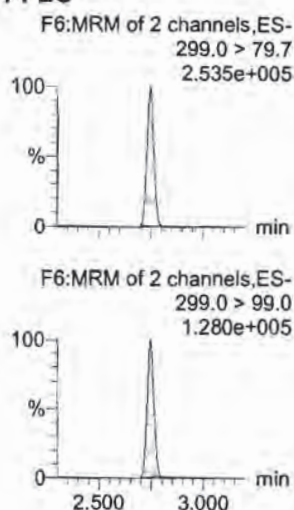
PFBA



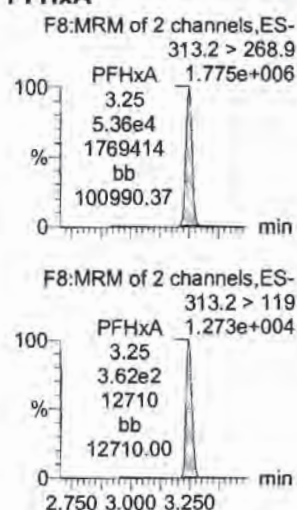
PFPeA



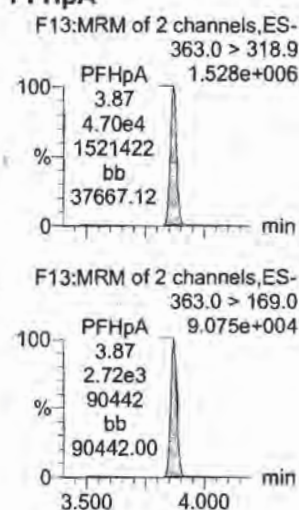
PFBS



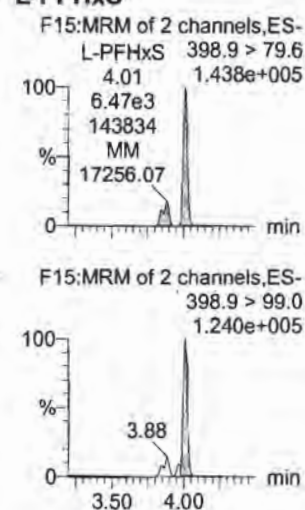
PFHxA



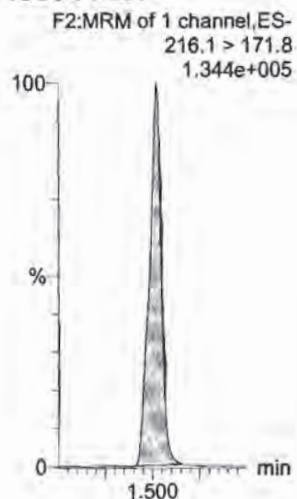
PFHpA



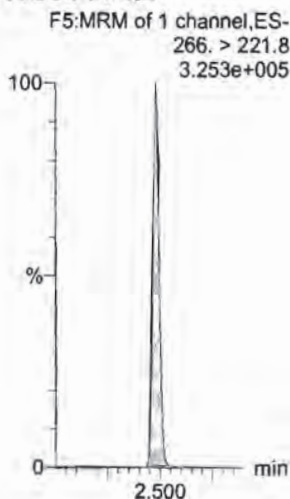
L-PFHxS



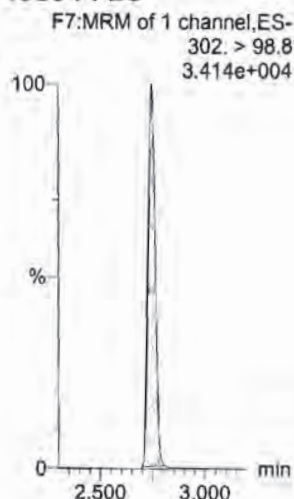
13C3-PFBA



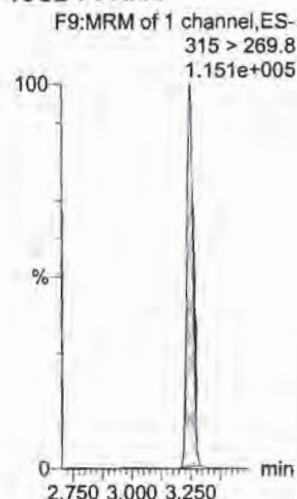
13C3-PFPeA



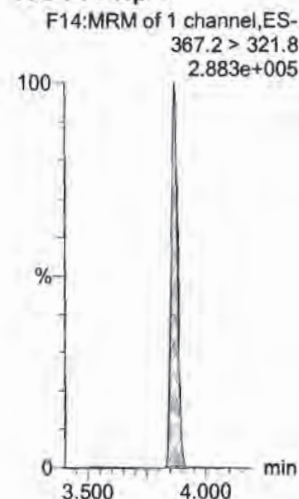
13C3-PFBS



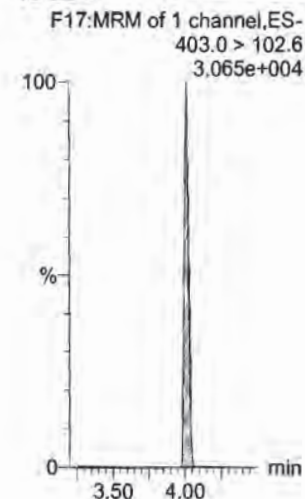
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS

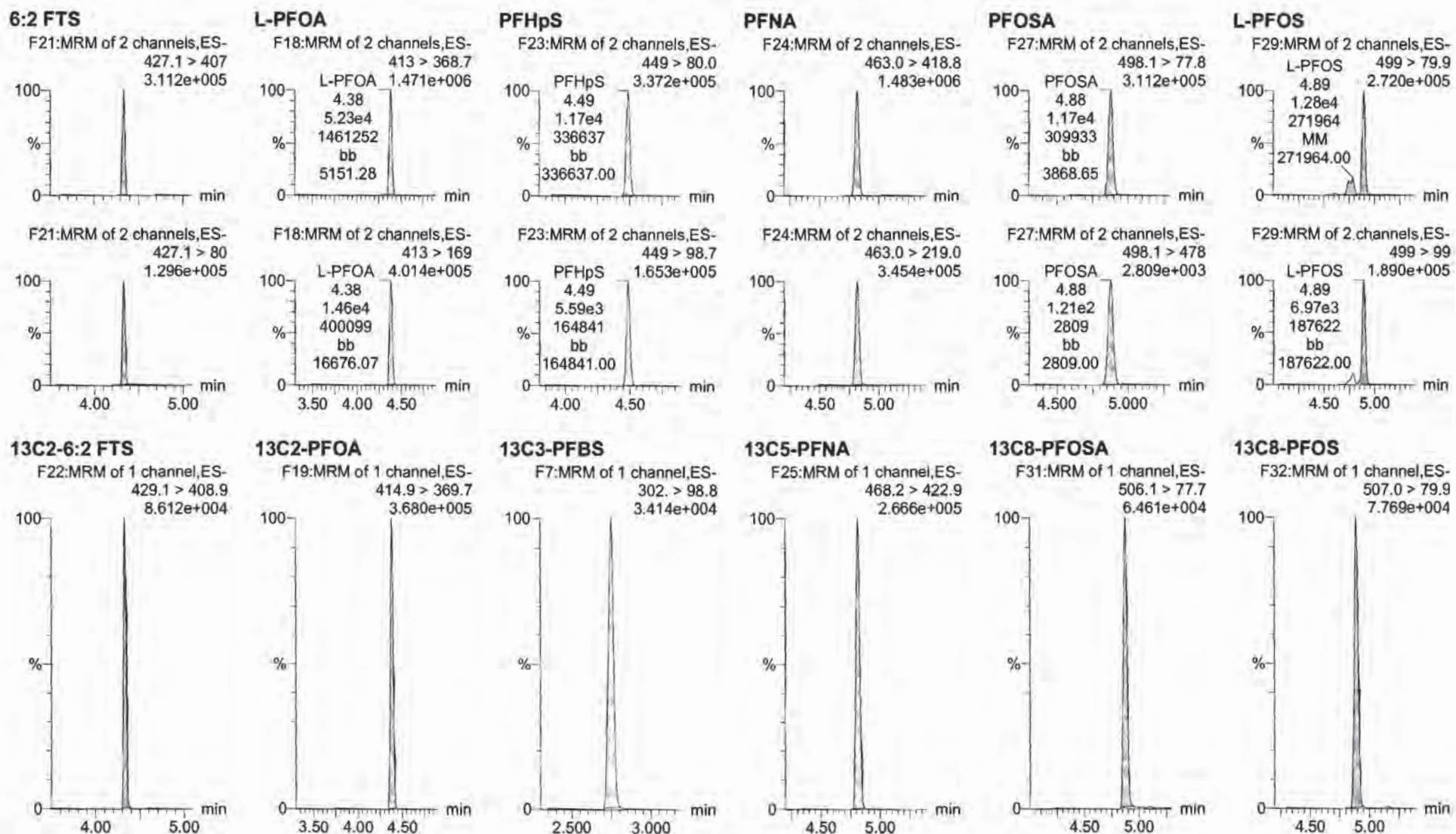


Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_7, Date: 16-Jan-2018, Time: 01:23:11, ID: ST180115M2-7 PFC CS4 17L1208, Description: PFC CS4 17L1208



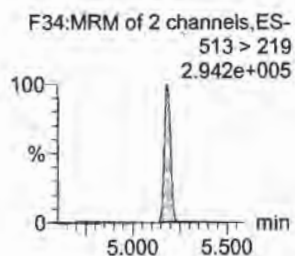
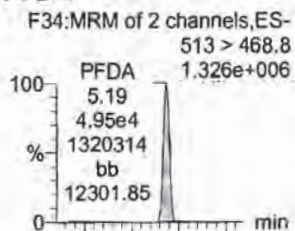
Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

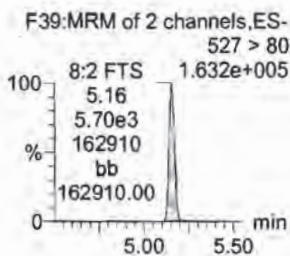
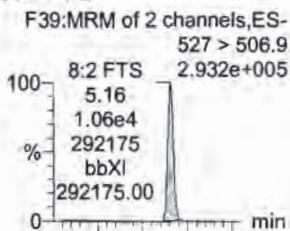
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_7, Date: 16-Jan-2018, Time: 01:23:11, ID: ST180115M2-7 PFC CS4 17L1208, Description: PFC CS4 17L1208

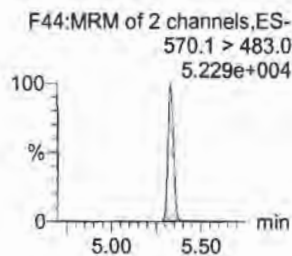
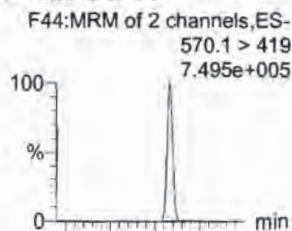
PFDA



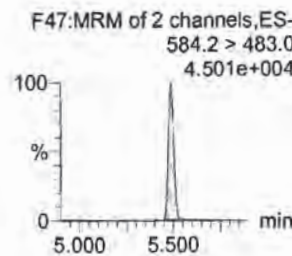
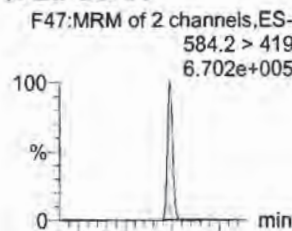
8:2 FTS



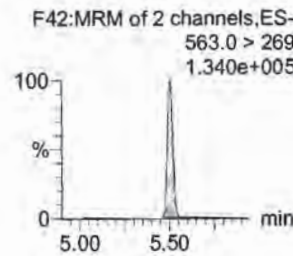
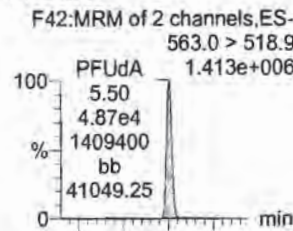
N-MeFOSAA



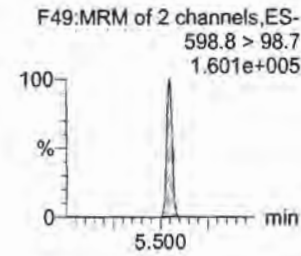
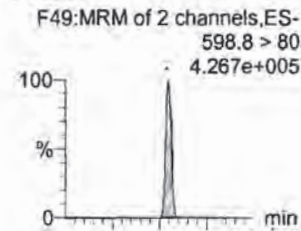
N-EtFOSAA



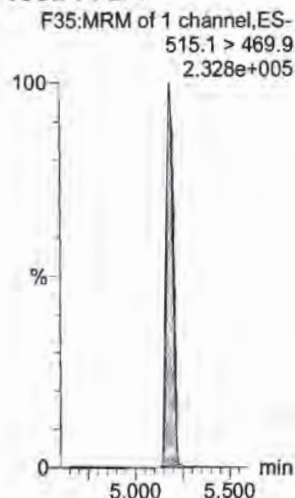
PFUdA



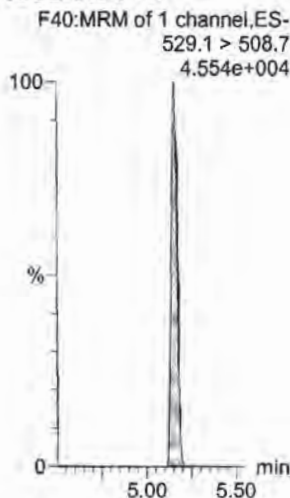
PFDS



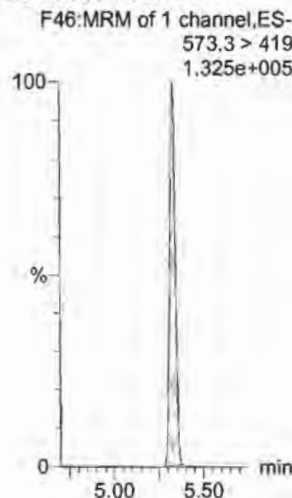
13C2-PFDA



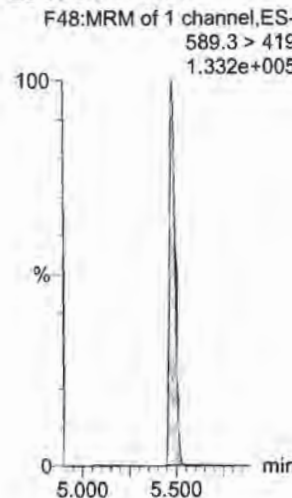
13C2-8:2 FTS



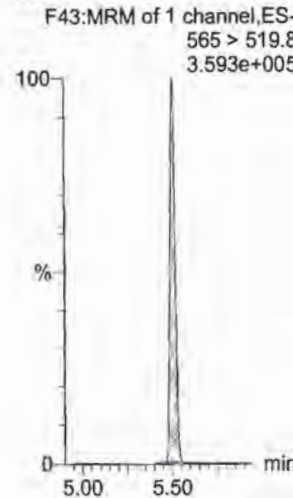
d3-N-MeFOSAA



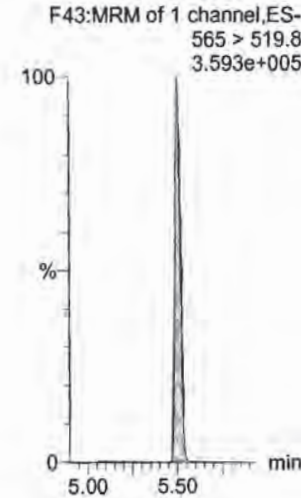
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

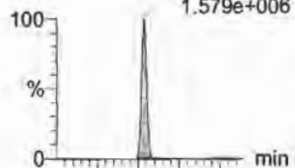
Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

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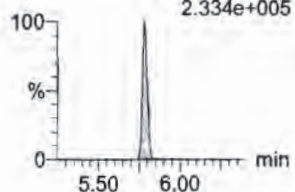
Name: 180115M2_7, Date: 16-Jan-2018, Time: 01:23:11, ID: ST180115M2-7 PFC CS4 17L1208, Description: PFC CS4 17L1208

PFDaA

F50:MRM of 2 channels,ES-
612.9 > 569.0
1.579e+006



F50:MRM of 2 channels,ES-
612.9 > 318.8
2.334e+005

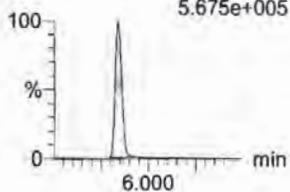


N-MeFOSA

F33:MRM of 2 channels,ES-
512.1 > 168.9
7.708e+005



F33:MRM of 2 channels,ES-
512.1 > 219
5.675e+005

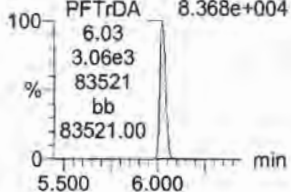


PFTTrDA

F56:MRM of 2 channels,ES-
662.9 > 618.9
2.273e+006

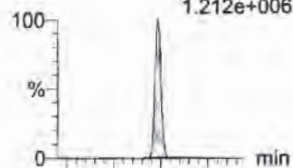


F56:MRM of 2 channels,ES-
662.9 > 319
8.368e+004

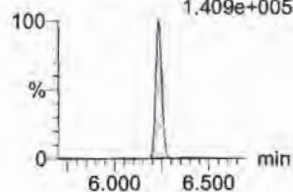


PFTeDA

F57:MRM of 2 channels,ES-
712.9 > 668.8
1.212e+006

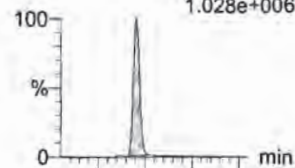


F57:MRM of 2 channels,ES-
712.9 > 369
1.409e+005

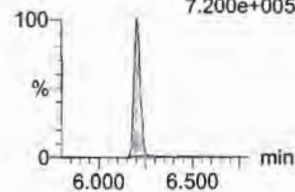


N-EtFOSA

F38:MRM of 2 channels,ES-
526.1 > 168.9
1.028e+006

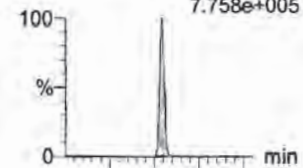


F38:MRM of 2 channels,ES-
526.1 > 219
7.200e+005

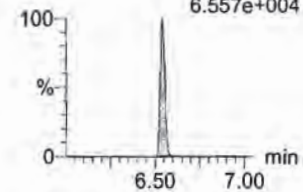


PFHxDA

F59:MRM of 2 channels,ES-
813.1 > 768.6
7.758e+005

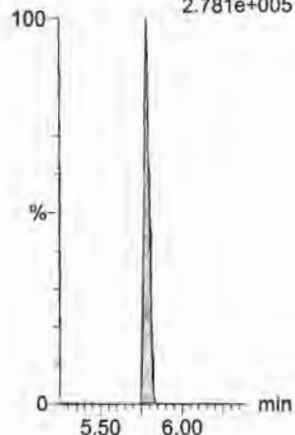


F59:MRM of 2 channels,ES-
813.1 > 219
6.557e+004



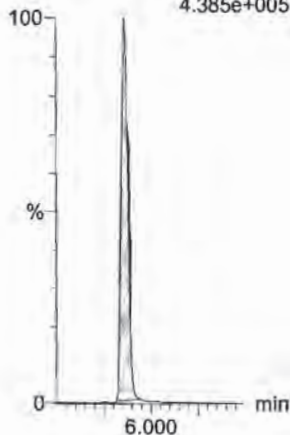
13C2-PFDaA

F51:MRM of 1 channel,ES-
615.0 > 569.7
2.781e+005



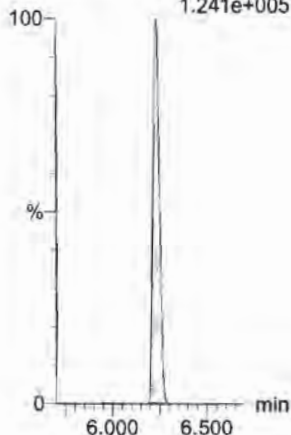
d3-N-MeFOSA

F36:MRM of 1 channel,ES-
515.2 > 168.9
4.385e+005



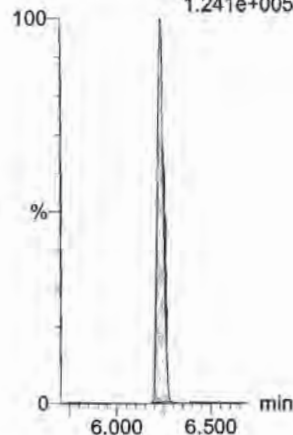
13C2-PFTeDA

F58:MRM of 2 channels,ES-
714.8 > 669.6
1.241e+005



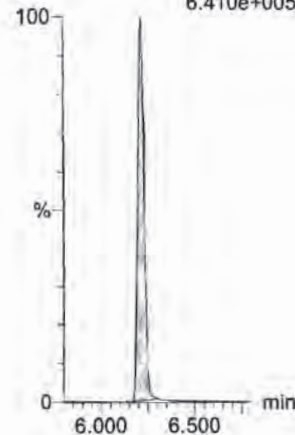
13C2-PFTeDA

F58:MRM of 2 channels,ES-
714.8 > 669.6
1.241e+005



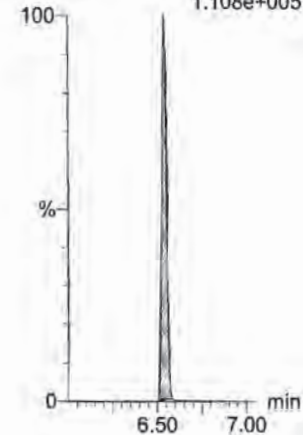
d5-N-ETFOSA

F41:MRM of 1 channel,ES-
531.1 > 168.9
6.410e+005



13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
1.108e+005



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

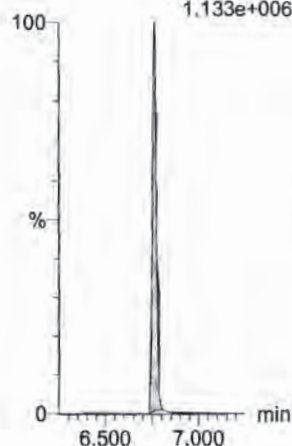
Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_7, Date: 16-Jan-2018, Time: 01:23:11, ID: ST180115M2-7 PFC CS4 17L1208, Description: PFC CS4 17L1208

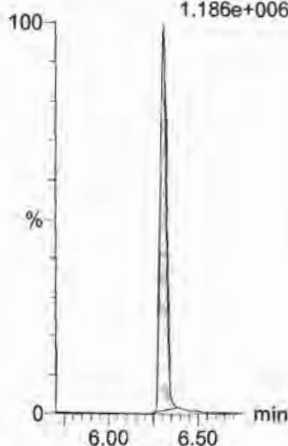
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
1.133e+006



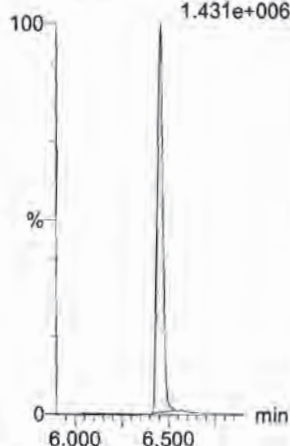
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
1.186e+006



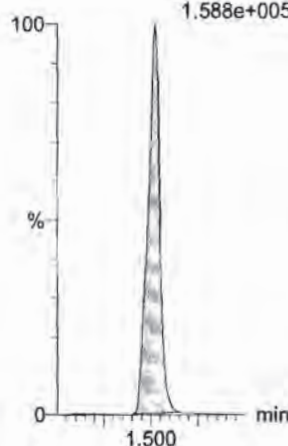
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
1.431e+006



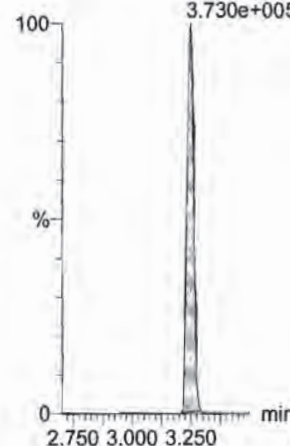
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.588e+005



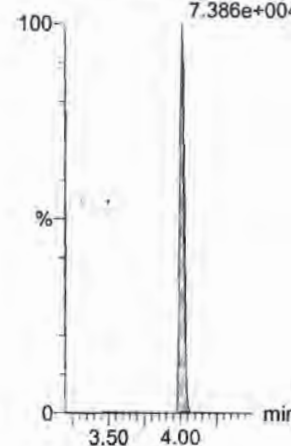
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
3.730e+005



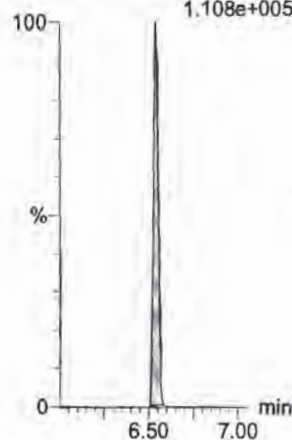
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
7.386e+004



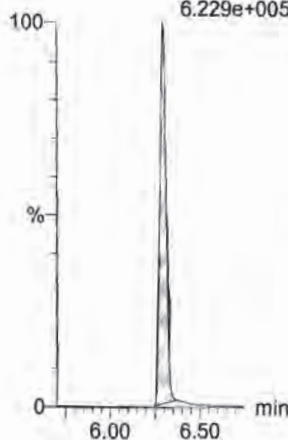
13C2-PFHxDA

F60:MRM of 1 channel,ES-
815 > 769.7
1.108e+005



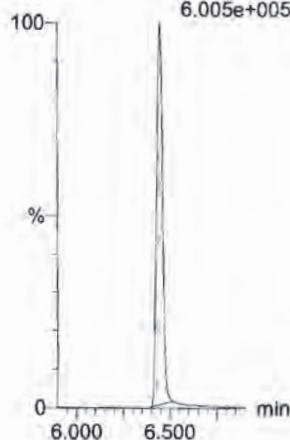
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
6.229e+005



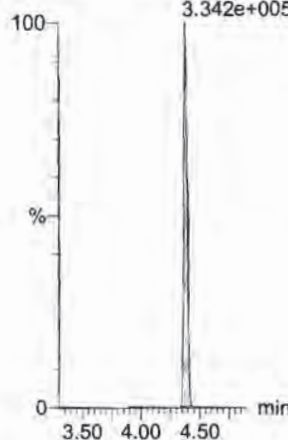
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
6.005e+005



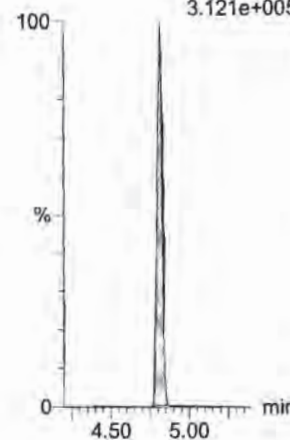
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.342e+005



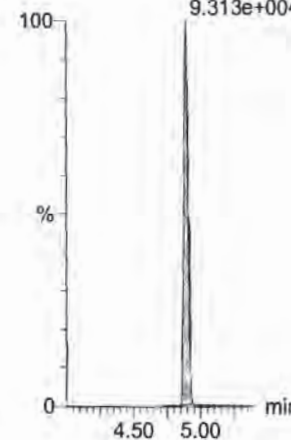
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
3.121e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
9.313e+004



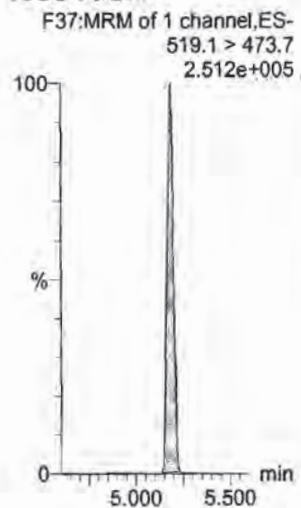
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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

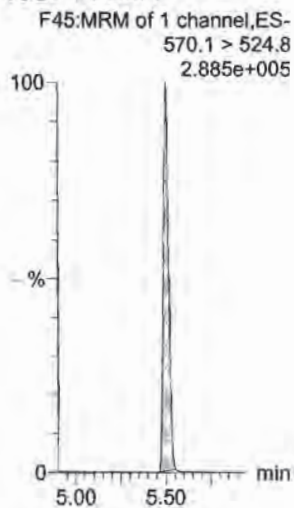
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_7, Date: 16-Jan-2018, Time: 01:23:11, ID: ST180115M2-7 PFC CS4 17L1208, Description: PFC CS4 17L1208

13C6-PFDA



13C7-PFUDA



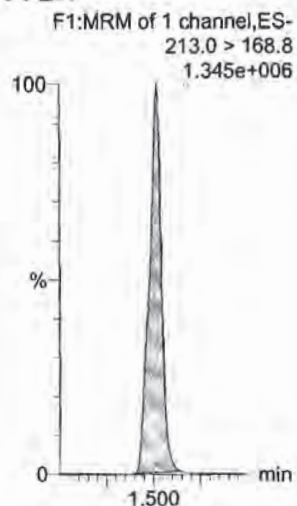
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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

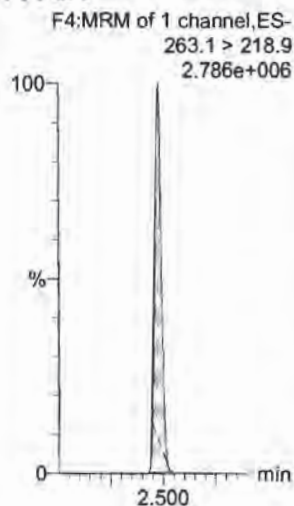
Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_8, Date: 16-Jan-2018, Time: 01:34:38, ID: ST180115M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

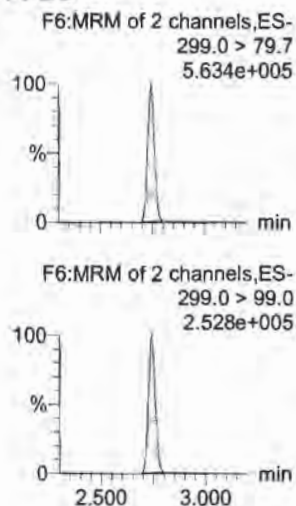
PFBA



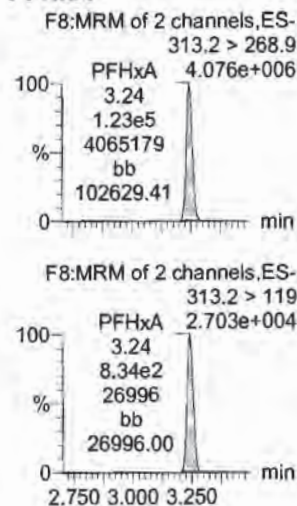
PFPeA



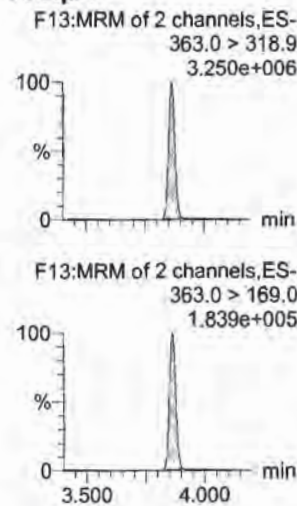
PFBS



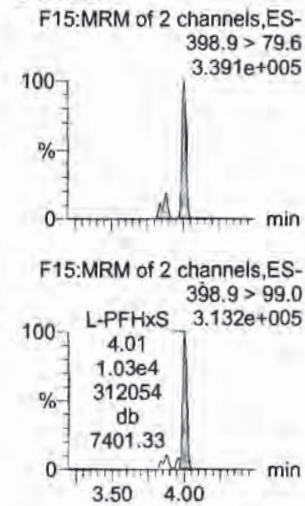
PFHxA



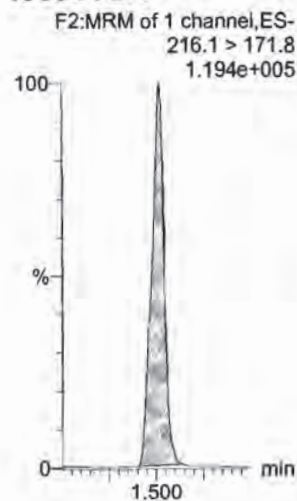
PFHpA



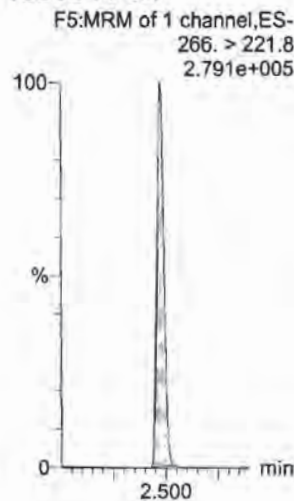
L-PFHxS



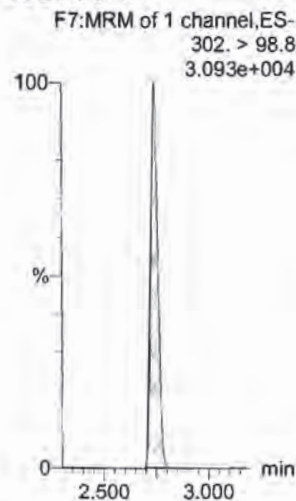
13C3-PFBA



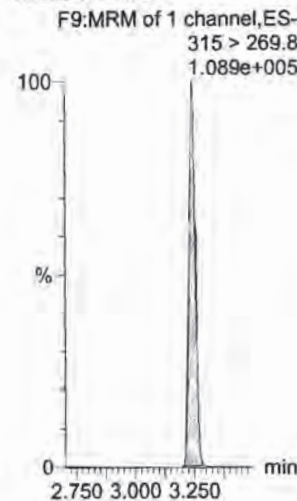
13C3-PFPeA



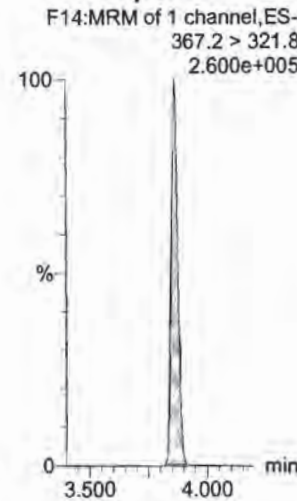
13C3-PFBS



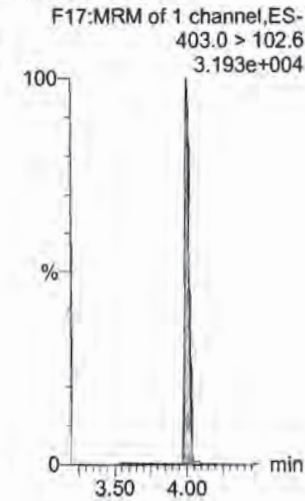
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



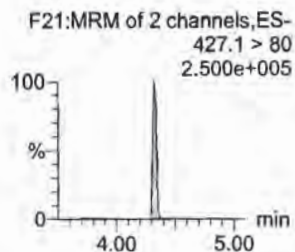
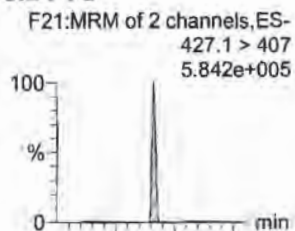
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Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

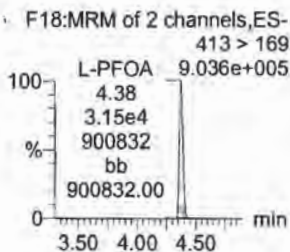
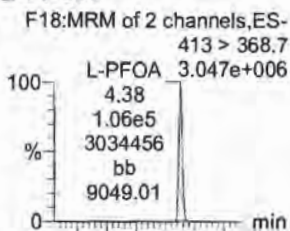
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Name: 180115M2_8, Date: 16-Jan-2018, Time: 01:34:38, ID: ST180115M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

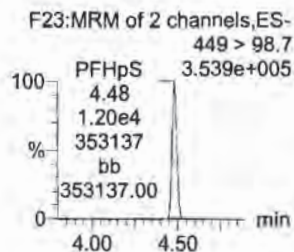
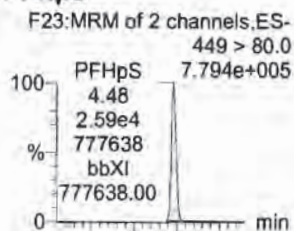
6:2 FTS



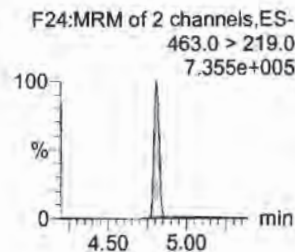
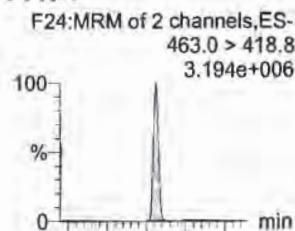
L-PFOA



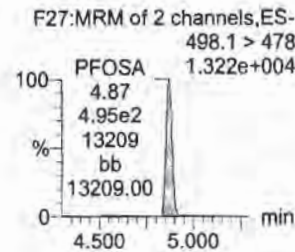
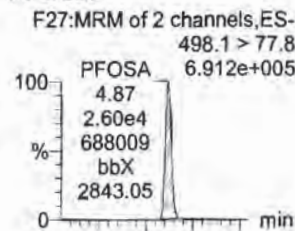
PFHpS



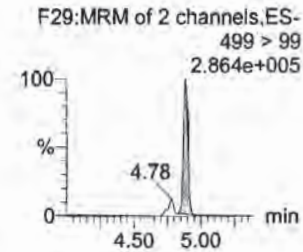
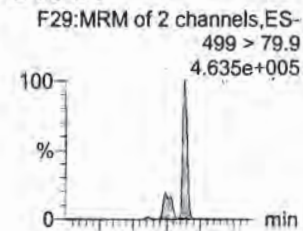
PFNA



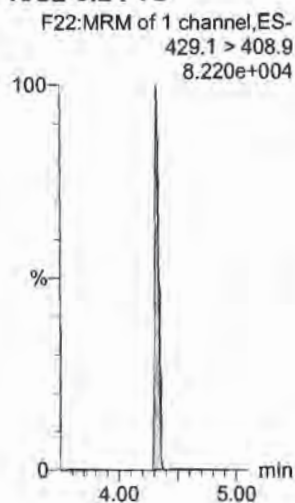
PFOSA



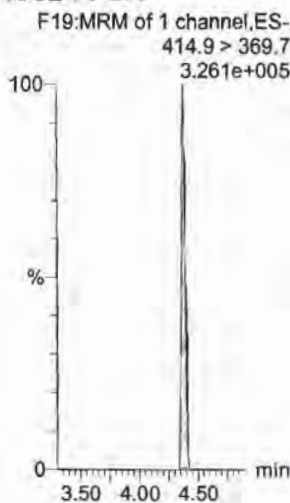
L-PFOS



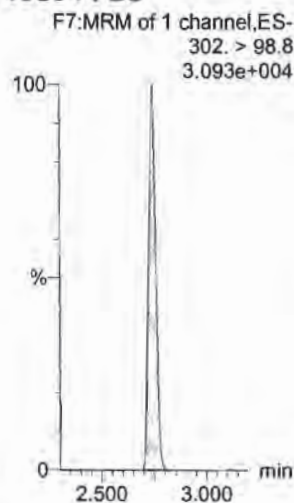
13C2-6:2 FTS



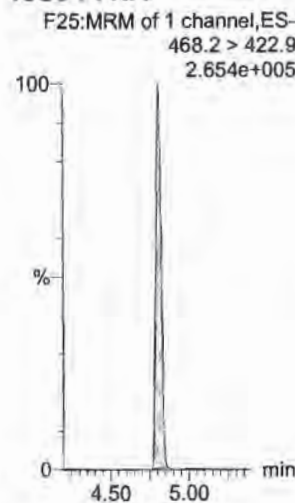
13C2-PFOA



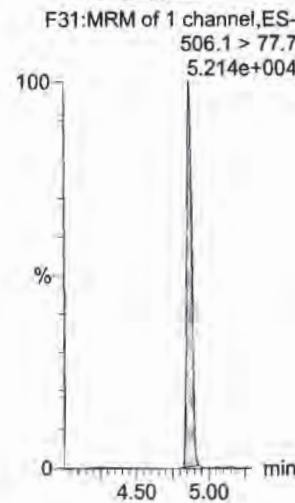
13C3-PFBS



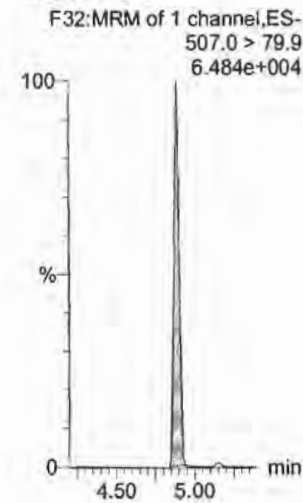
13C5-PFNA



13C8-PFOSA



13C8-PFOS



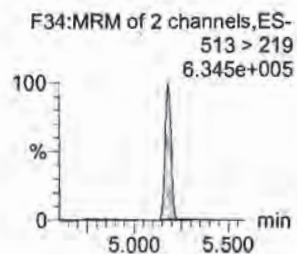
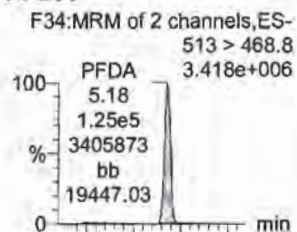
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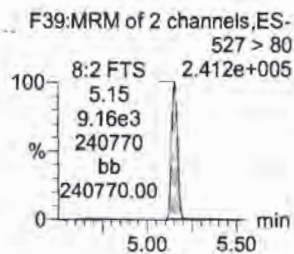
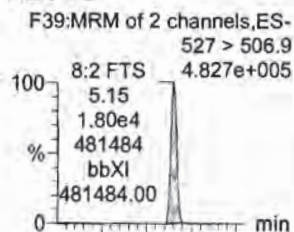
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Name: 180115M2_8, Date: 16-Jan-2018, Time: 01:34:38, ID: ST180115M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

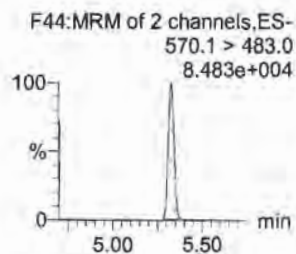
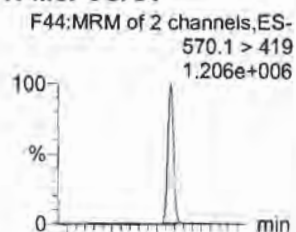
PFDA



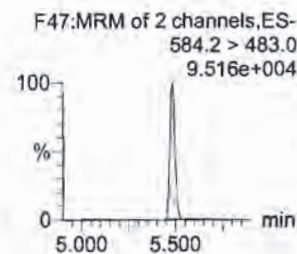
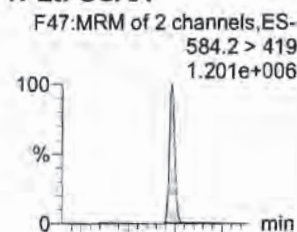
8:2 FTS



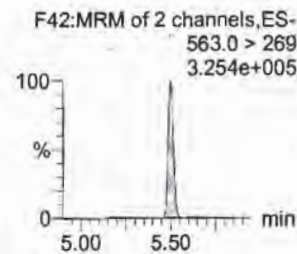
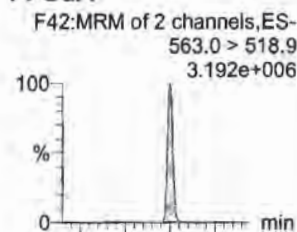
N-MeFOSAA



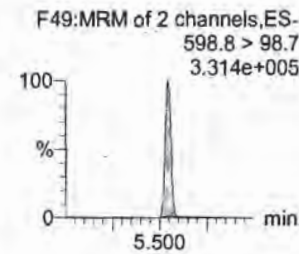
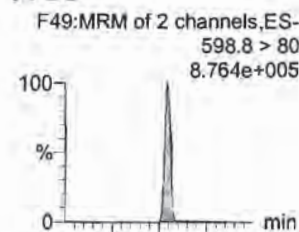
N-EtFOSAA



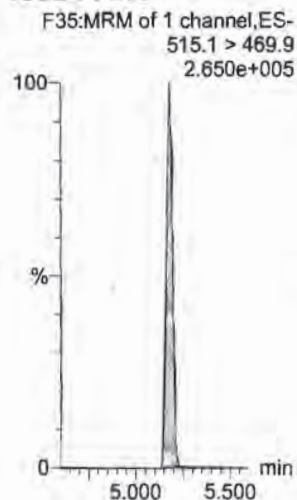
PFUdA



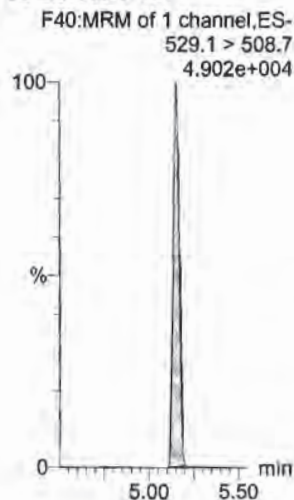
PFDS



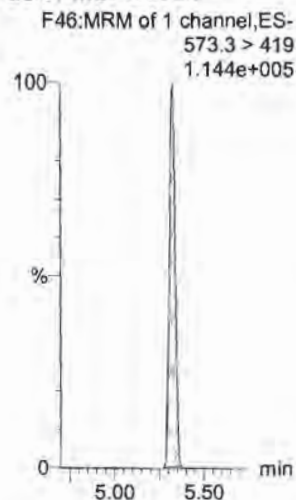
13C2-PFDA



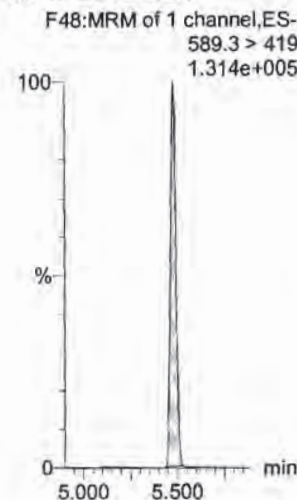
13C2-8:2 FTS



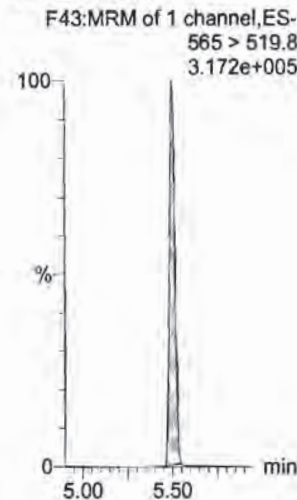
d3-N-MeFOSAA



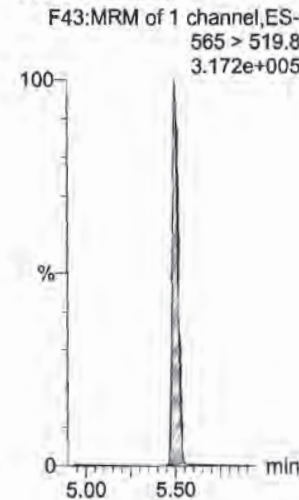
d5-N-EtFOSAA



13C2-PFUdA



13C2-PFUdA



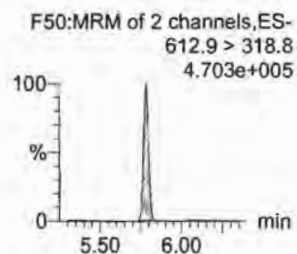
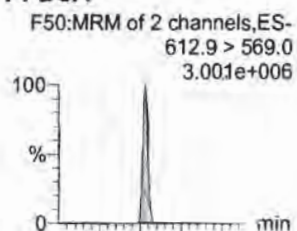
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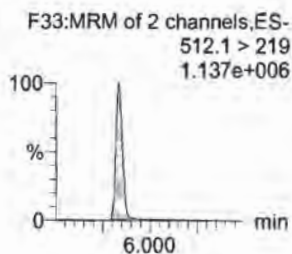
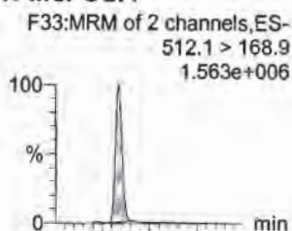
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Name: 180115M2_8, Date: 16-Jan-2018, Time: 01:34:38, ID: ST180115M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

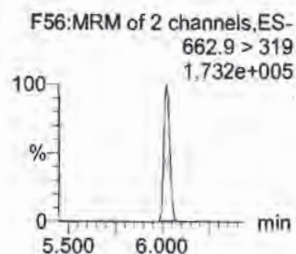
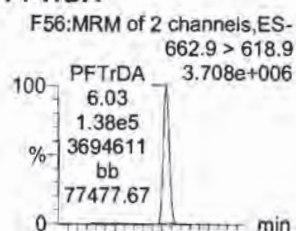
PFDaA



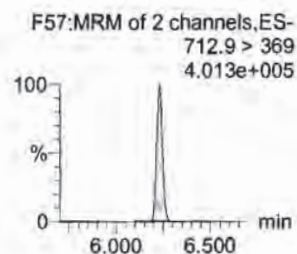
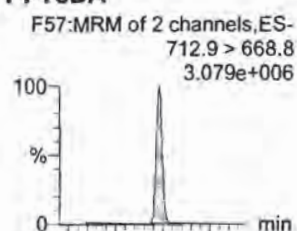
N-MeFOSA



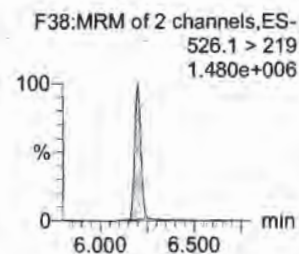
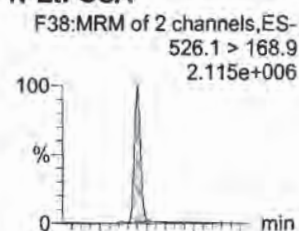
PFTrDA



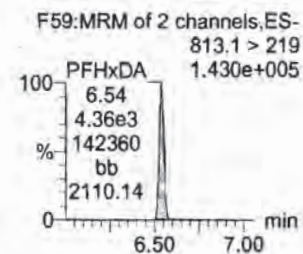
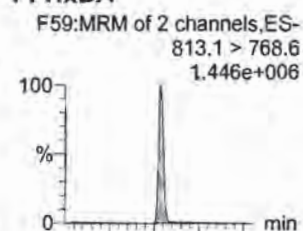
PFTeDA



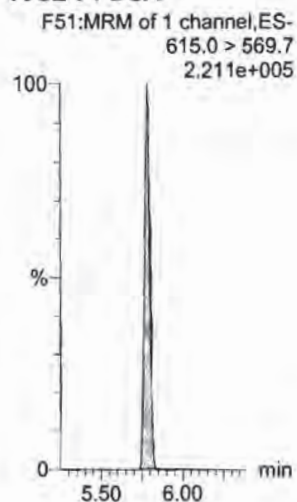
N-EtFOSA



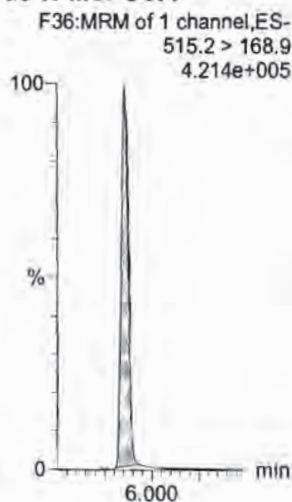
PFHxDA



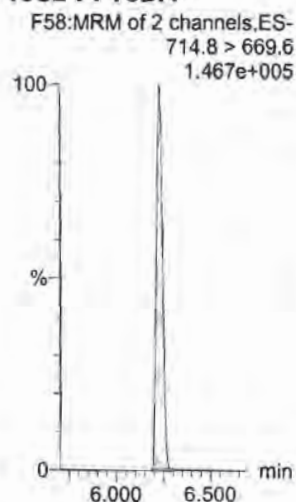
13C2-PFDaA



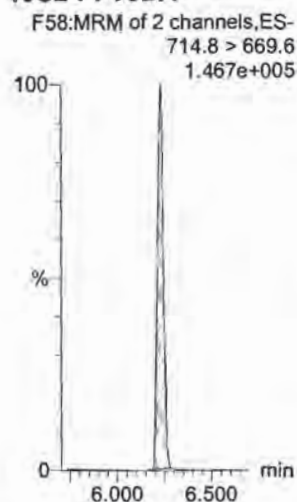
d3-N-MeFOSA



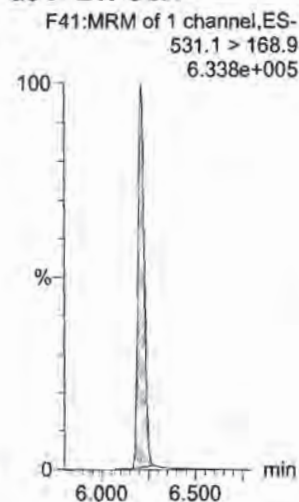
13C2-PFTeDA



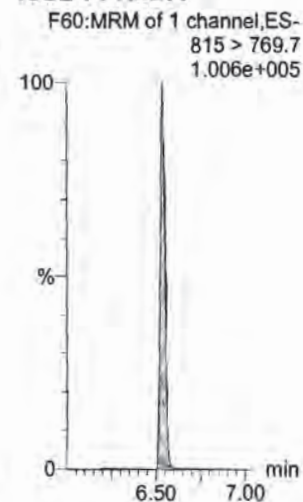
13C2-PFTeDA



d5-N-ETFOSA



13C2-PFHxDA



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

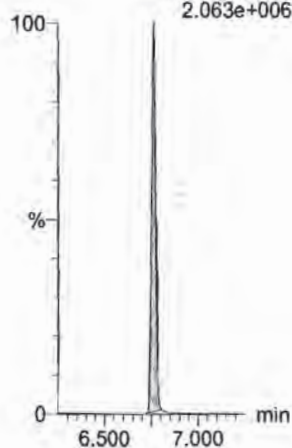
Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

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Name: 180115M2_8, Date: 16-Jan-2018, Time: 01:34:38, ID: ST180115M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

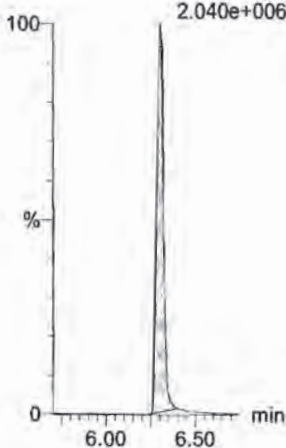
PFODA

F61:MRM of 1 channel,ES-
913.1 > 868.8
2.063e+006



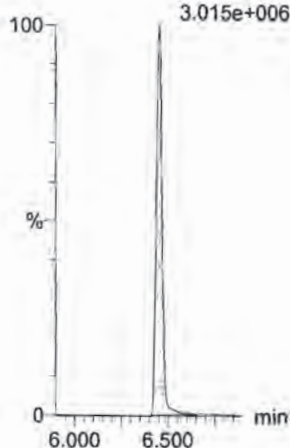
N-MeFOSE

F52:MRM of 1 channel,ES-
616.1 > 58.9
2.040e+006



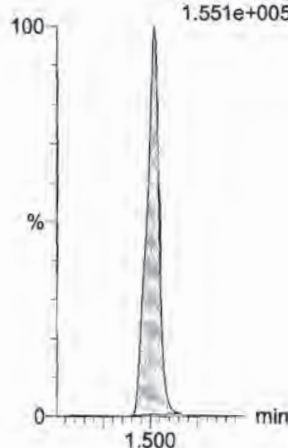
N-EtFOSE

F54:MRM of 1 channel,ES-
630.1 > 58.9
3.015e+006



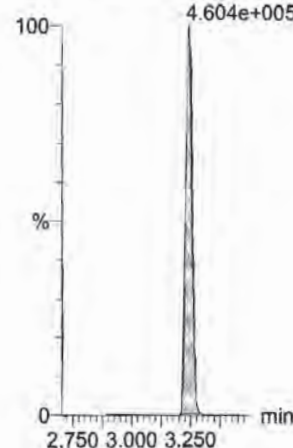
13C4-PFBA

F3:MRM of 1 channel,ES-
217. > 171.8
1.551e+005



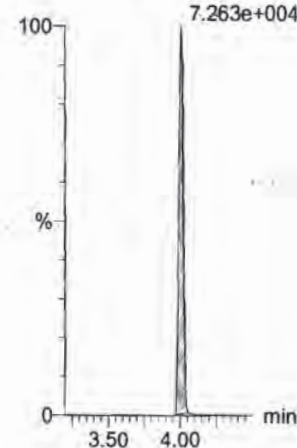
13C5-PFHxA

F10:MRM of 1 channel,ES-
318 > 272.9
4.604e+005



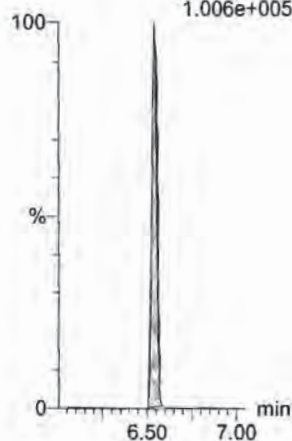
13C3-PFHxS

F16:MRM of 1 channel,ES-
401.9 > 79.9
7.263e+004



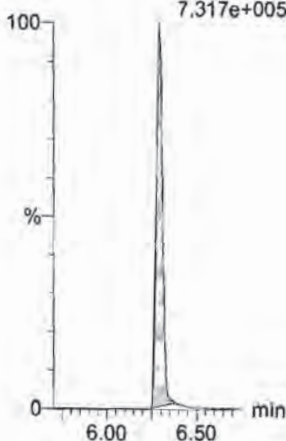
13C2-PFHxDa

F60:MRM of 1 channel,ES-
815 > 769.7
1.006e+005



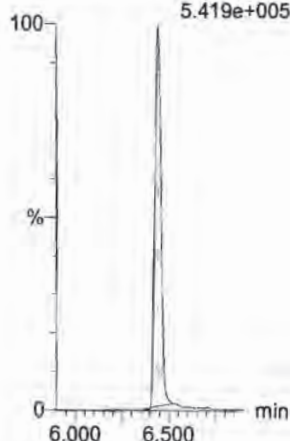
d7-N-MeFOSE

F53:MRM of 1 channel,ES-
623.1 > 58.9
7.317e+005



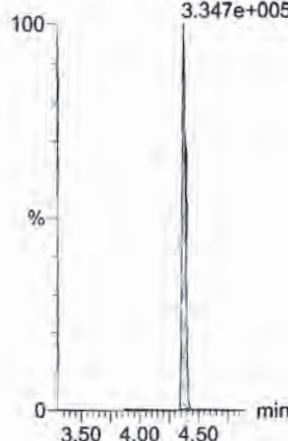
d9-N-EtFOSE

F55:MRM of 1 channel,ES-
639.2 > 58.8
5.419e+005



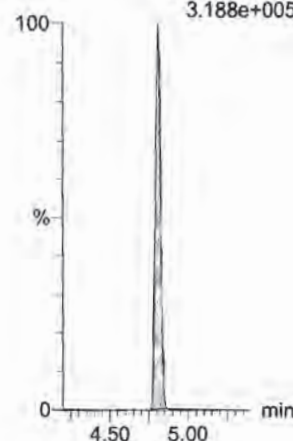
13C8-PFOA

F20:MRM of 1 channel,ES-
421.3 > 376
3.347e+005



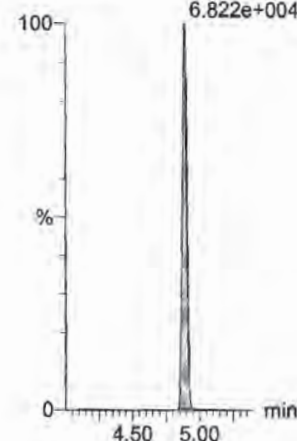
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
3.188e+005



13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
6.822e+004



Dataset: U:\Q4.PRO\results\180115M2\180115M2-CRV.qld

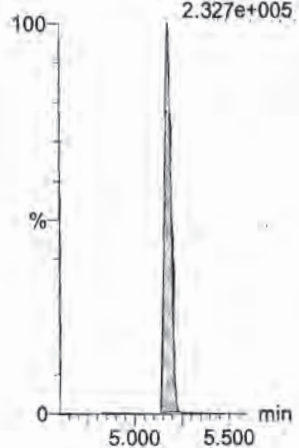
Last Altered: Tuesday, January 16, 2018 09:37:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 09:39:21 Pacific Standard Time

Name: 180115M2_8, Date: 16-Jan-2018, Time: 01:34:38, ID: ST180115M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

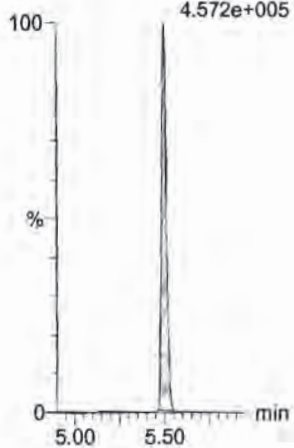
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
2.327e+005



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
4.572e+005



Dataset: U:\Q4.PRO\results\180115M2\180115M2-10.qld

Last Altered: Tuesday, January 16, 2018 10:33:59 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:34:30 Pacific Standard Time

Ⓐ PFDS < 70%
Ⓑ No SS available.

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_10, Date: 16-Jan-2018, Time: 01:57:31, ID: ICV180115M2-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

AC
1/16/18

1/16/2018

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	4.22e4	4.31e4	1.0000		1.64	1.53	12.2	9.143	91.4
2	2 PFPeA	263.1 > 218.9	3.87e4	4.74e4	1.0000		2.60	2.48	10.2	8.865	88.7
3	3 PFBS	299.0 > 79.7	7.49e3	5.83e3	1.0000		2.87	2.74	16.1	8.388	83.9
4	4 PFHxA	313.2 > 268.9	5.03e4	1.55e4	1.0000		3.36	3.25	16.2	9.233	92.3
5	5 PFHpA	363.0 > 318.9	3.86e4	3.81e4	1.0000		4.00	3.86	12.7	8.516	85.2
6	6 L-PFHxS	398.9 > 79.6	5.32e3	4.45e3	1.0000		4.14	4.01	15.0	7.365	73.7
7	8 6:2 FTS	427.1 > 407	7.45e3	4.45e3	1.0000		4.46	4.32	20.9	7.277	72.8
8	9 L-PFOA	413 > 368.7	4.17e4	5.84e4	1.0000		4.50	4.38	8.91	7.641	76.4
9	11 PFHpS	449 > 80.0	1.07e4	5.84e4	1.0000		4.60	4.48	2.29	8.064	80.6
10	12 PFNA	463.0 > 418.8	4.68e4	4.69e4	1.0000		4.94	4.81	12.5	9.162	91.6
11	13 PFOSA	498.1 > 77.8	3.83e3	3.99e3	1.0000		5.00	4.87	12.0	9.978	99.8
12	14 L-PFOS	499 > 79.9	9.56e3	1.09e4	1.0000		5.02	4.89	11.0	9.839	98.4
13	16 PFDA	513 > 468.8	3.70e4	4.01e4	1.0000		5.31	5.18	11.5	8.007	80.1
14	17 8:2 FTS	527 > 506.9	6.16e3	4.01e4	1.0000		5.28	5.15	1.92	7.523	75.2
15	18 N-MeFOSAA	570.1 > 419	1.06e4	9.21e3	1.0000		5.45	5.33	14.4	8.677	86.8
16	19 N-EiFOSAA	584.2 > 419	8.54e3	1.06e4	1.0000		5.60	5.48	10.0	7.762	77.6
17	20 PFUdA	563.0 > 518.9	1.34e4	1.66e4	1.0000		5.62	5.50	10.1	7.882	78.8
18	21 PFDS	598.8 > 80	1.97e3	1.66e4	1.0000		5.67	5.55	1.48	4.394	43.9
19	22 PFDoA	612.9 > 569.0	7.26e3	5.53e3	1.0000		5.91	5.78	16.4	11.272	112.7
20	23 N-MeFOSA	512.1 > 168.9		2.76e3	1.0000		5.87				
21	24 PFTTrDA	662.9 > 618.9	6.78e3	5.53e3	1.0000		6.15	6.03	15.3	7.147	71.5
22	25 PFTeDA	712.9 > 668.8	3.76e3	1.87e3	1.0000		6.35	6.23	25.2	7.572	75.7
23	26 N-EiFOSA	526.1 > 168.9		2.97e3	1.0000		6.25				
24	27 PFHxDA	813.1 > 768.6		1.01e3	1.0000		6.64				
25	28 PFODA	913.1 > 868.8		1.01e3	1.0000		6.85				
26	29 N-MeFOSE	616.1 > 58.9		1.02e4	1.0000		6.31				
27	30 N-EiFOSE	630.1 > 58.9		9.18e3	1.0000		6.45				
28	31 13C3-PFBA	216.1 > 171.8	4.31e4	4.78e4	1.0000	0.779	1.64	1.53	11.3	14.466	115.7
29	32 13C3-PFPeA	266. > 221.8	4.74e4	5.13e4	1.0000	0.797	2.60	2.48	11.5	14.472	115.8
30	33 13C3-PFBS	302. > 98.8	5.83e3	5.13e4	1.0000	0.095	2.87	2.75	1.42	14.929	119.4
	34 13C3-PFHxA	315. > 268.8	1.55e4	5.13e4	1.0000	0.636	3.36	3.25	3.78	5.937	118.7

Dataset: U:\Q4.PRO\results\180115M2\180115M2-10.qld

Last Altered: Tuesday, January 16, 2018 10:33:59 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:34:30 Pacific Standard Time

Name: 180115M2_10, Date: 16-Jan-2018, Time: 01:57:31, ID: ICV180115M2-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	3.81e4	5.13e4	1.0000	0.621	4.00	3.86	9.27	14.929	119.4
33	36 18O2-PFHxS	403.0 > 102.6	4.45e3	1.25e4	1.0000	0.336	4.14	4.01	4.44	13.221	105.8
34	37 13C2-6.2 FTS	429.1 > 408.9	9.75e3	4.79e4	1.0000	0.192	4.46	4.33	2.55	13.229	105.8
35	38 13C2-PFOA	414.9 > 369.7	5.84e4	4.79e4	1.0000	1.001	4.50	4.38	15.3	15.234	121.9
36	39 13C5-PFNA	468.2 > 422.9	4.69e4	4.38e4	1.0000	0.811	4.94	4.81	13.4	16.506	132.0
37	40 13C8-PFOSA	506.1 > 77.7	3.99e3	1.79e4	1.0000	0.196	5.00	4.87	2.78	14.134	113.1
38	41 13C8-PFOS	507.0 > 79.9	1.09e4	1.14e4	1.0000	0.862	5.02	4.89	11.9	13.836	110.7
39	42 13C2-PFDA	515.1 > 469.9	4.01e4	3.72e4	1.0000	0.996	5.31	5.18	13.5	13.560	108.5
40	43 13C2-8.2 FTS	529.1 > 508.7	4.91e3	5.13e4	1.0000	0.103	5.28	5.15	1.19	11.599	92.8
41	44 d3-N-MeFOSAA	573.3 > 419	9.21e3	1.79e4	1.0000	0.340	5.45	5.32	6.42	18.871	151.0
42	45 d5-N-EtFOSAA	589.3 > 419	1.06e4	1.79e4	1.0000	0.377	5.60	5.48	7.41	19.663	157.3
43	46 13C2-PFUdA	565 > 519.8	1.66e4	1.79e4	1.0000	0.944	5.62	5.50	11.5	12.235	97.9
44	47 13C2-PFDoA	615.0 > 569.7	5.53e3	1.79e4	1.0000	0.726	5.91	5.78	3.85	5.307	42.5
45	48 d3-N-MeFOSA	515.2 > 168.9	2.76e3	1.79e4	1.0000	0.119	5.87	5.86	1.92	16.158	10.8
46	49 13C2-PFTeDA	714.8 > 669.6	1.87e3	1.79e4	1.0000	0.371	6.35	6.23	1.30	3.503	28.0
47	50 d5-N-ETFOSA	531.1 > 168.9	2.97e3	1.79e4	1.0000	0.174	6.25	6.21	2.07	11.921	7.9
48	51 13C2-PFHxDA	815 > 769.7	1.01e3	1.79e4	1.0000	0.559	6.64	6.54	0.702	1.256	25.1
49	52 d7-N-MeFOSE	623.1 > 58.9	1.02e4	1.79e4	1.0000	0.179	6.31	6.29	7.09	39.533	26.4
50	53 d9-N-EtFOSE	639.2 > 58.8	9.18e3	1.79e4	1.0000	0.160	6.45	6.44	6.40	40.069	26.7
51	54 13C4-PFBA	217. > 171.8	4.78e4	4.78e4	1.0000	1.000	1.64	1.52	12.5	12.500	100.0
52	55 13C5-PFHxA	318 > 272.9	5.13e4	5.13e4	1.0000	1.000	3.36	3.25	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	1.25e4	1.25e4	1.0000	1.000	4.14	4.01	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	4.79e4	4.79e4	1.0000	1.000	4.50	4.38	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	4.38e4	4.38e4	1.0000	1.000	4.94	4.81	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	1.14e4	1.14e4	1.0000	1.000	5.02	4.89	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	3.72e4	3.72e4	1.0000	1.000	5.31	5.18	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	1.79e4	1.79e4	1.0000	1.000	5.62	5.50	12.5	12.500	100.0

Dataset: U:\Q4.PRO\results\180115M2\180115M2-10.qld

Last Altered: Tuesday, January 16, 2018 10:33:59 Pacific Standard Time

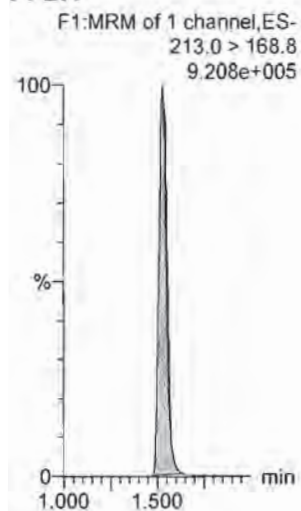
Printed: Tuesday, January 16, 2018 10:34:30 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 15 Jan 2018 11:38:30

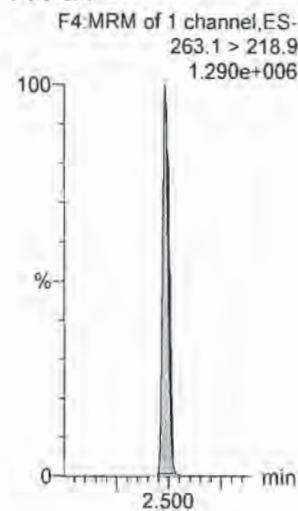
Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_10, Date: 16-Jan-2018, Time: 01:57:31, ID: ICV180115M2-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

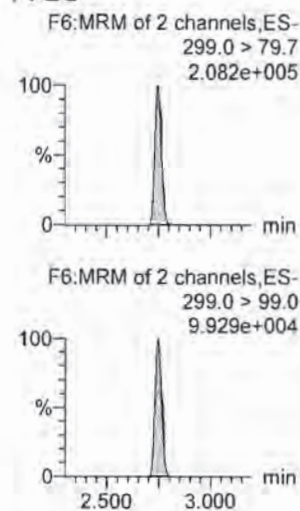
PFBA



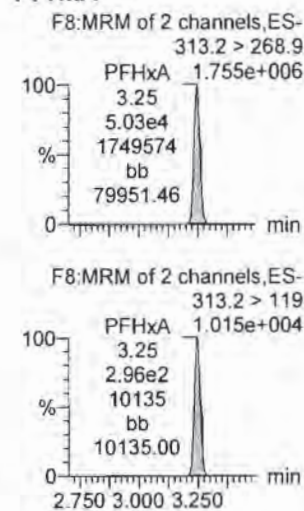
PFPeA



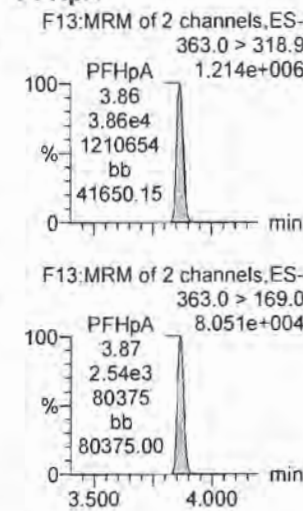
PFBS



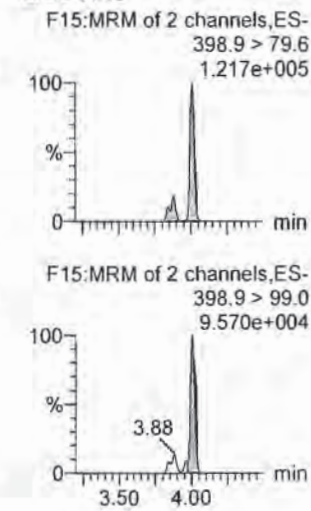
PFHxA



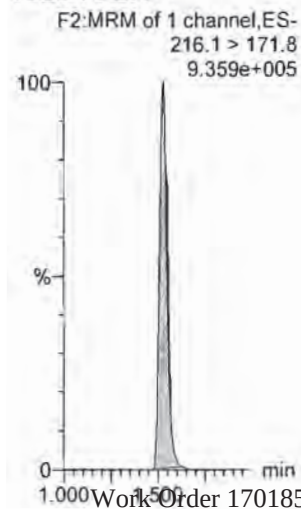
PFHpA



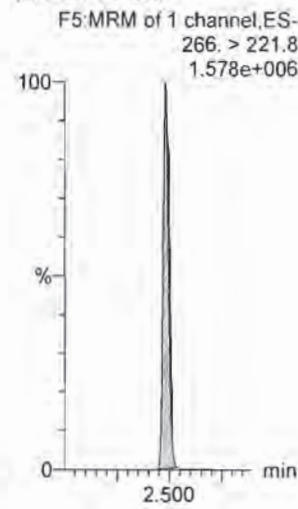
L-PFHxS



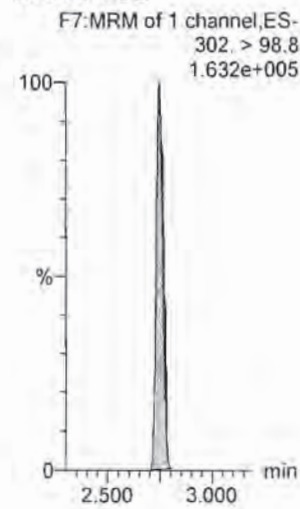
13C3-PFBA



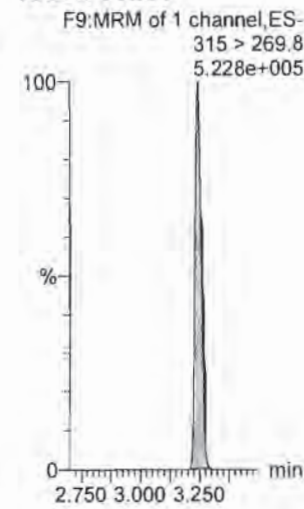
13C3-PFPeA



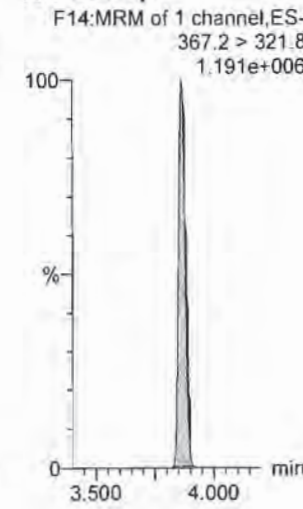
13C3-PFBS



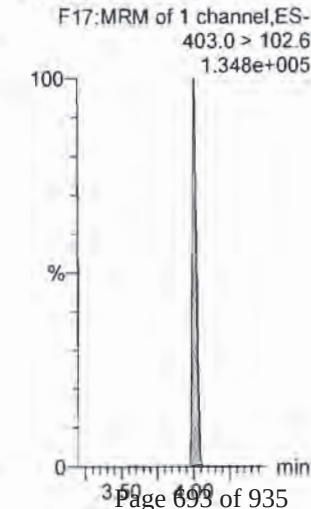
13C2-PFHxA



13C4-PFHpA



18O2-PFHxS



Dataset: U:\Q4.PRO\results\180115M2\180115M2-10.qld

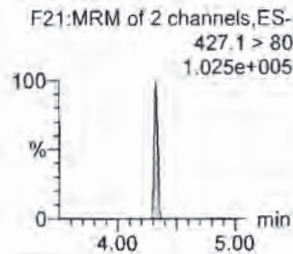
Last Altered: Tuesday, January 16, 2018 10:33:59 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:34:30 Pacific Standard Time

Name: 180115M2_10, Date: 16-Jan-2018, Time: 01:57:31, ID: ICV180115M2-1 PFC ICV 17L1201, Description: PFC ICV 17L1201

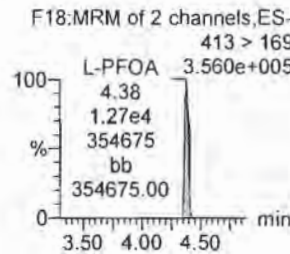
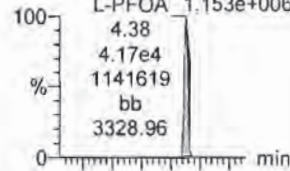
6:2 FTS

F21:MRM of 2 channels,ES-
427.1 > 407
2.148e+005



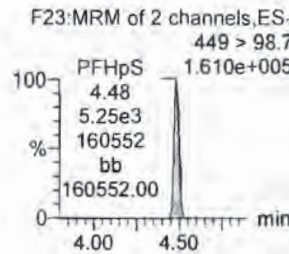
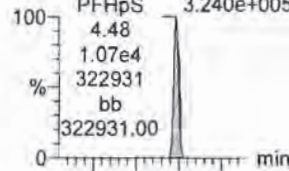
L-PFOA

F18:MRM of 2 channels,ES-
413 > 368.7
1.153e+006



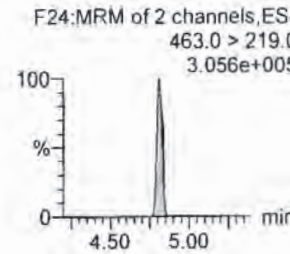
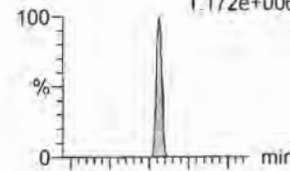
PFHpS

F23:MRM of 2 channels,ES-
449 > 80.0
3.240e+005



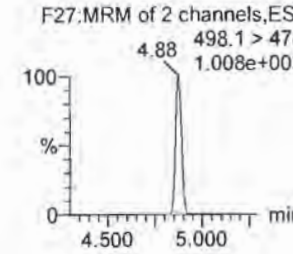
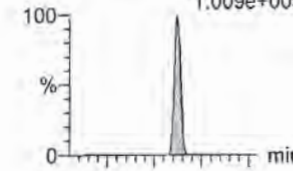
PFNA

F24:MRM of 2 channels,ES-
463.0 > 418.8
1.172e+006



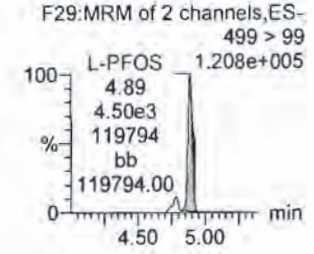
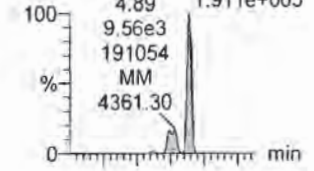
PFOSA

F27:MRM of 2 channels,ES-
498.1 > 77.8
1.009e+005



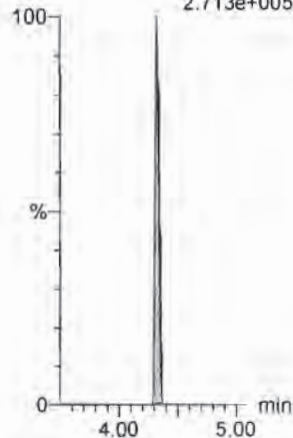
L-PFOS

F29:MRM of 2 channels,ES-
L-PFOS 499 > 79.9
1.911e+005



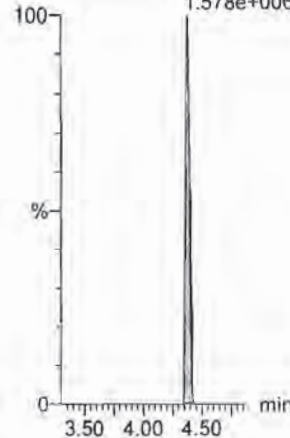
13C2-6:2 FTS

F22:MRM of 1 channel,ES-
429.1 > 408.9
2.713e+005



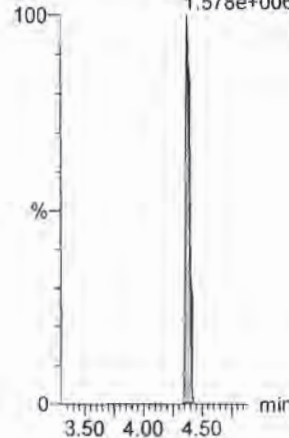
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
1.578e+006



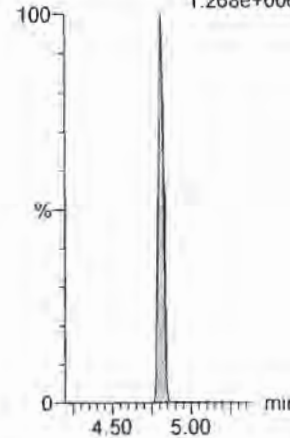
13C2-PFOA

F19:MRM of 1 channel,ES-
414.9 > 369.7
1.578e+006



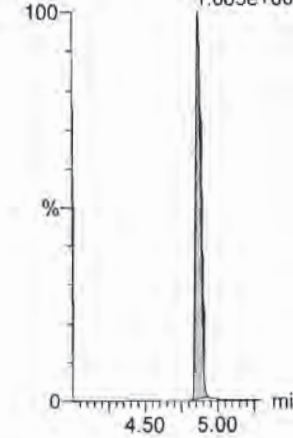
13C5-PFNA

F25:MRM of 1 channel,ES-
468.2 > 422.9
1.268e+006



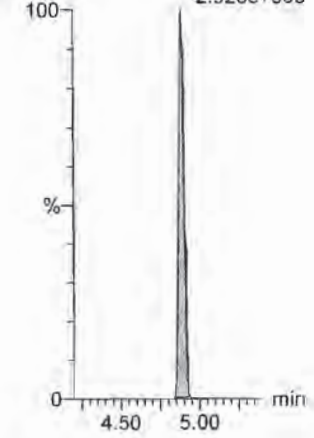
13C8-PFOSA

F31:MRM of 1 channel,ES-
506.1 > 77.7
1.065e+005



13C8-PFOS

F32:MRM of 1 channel,ES-
507.0 > 79.9
2.928e+005

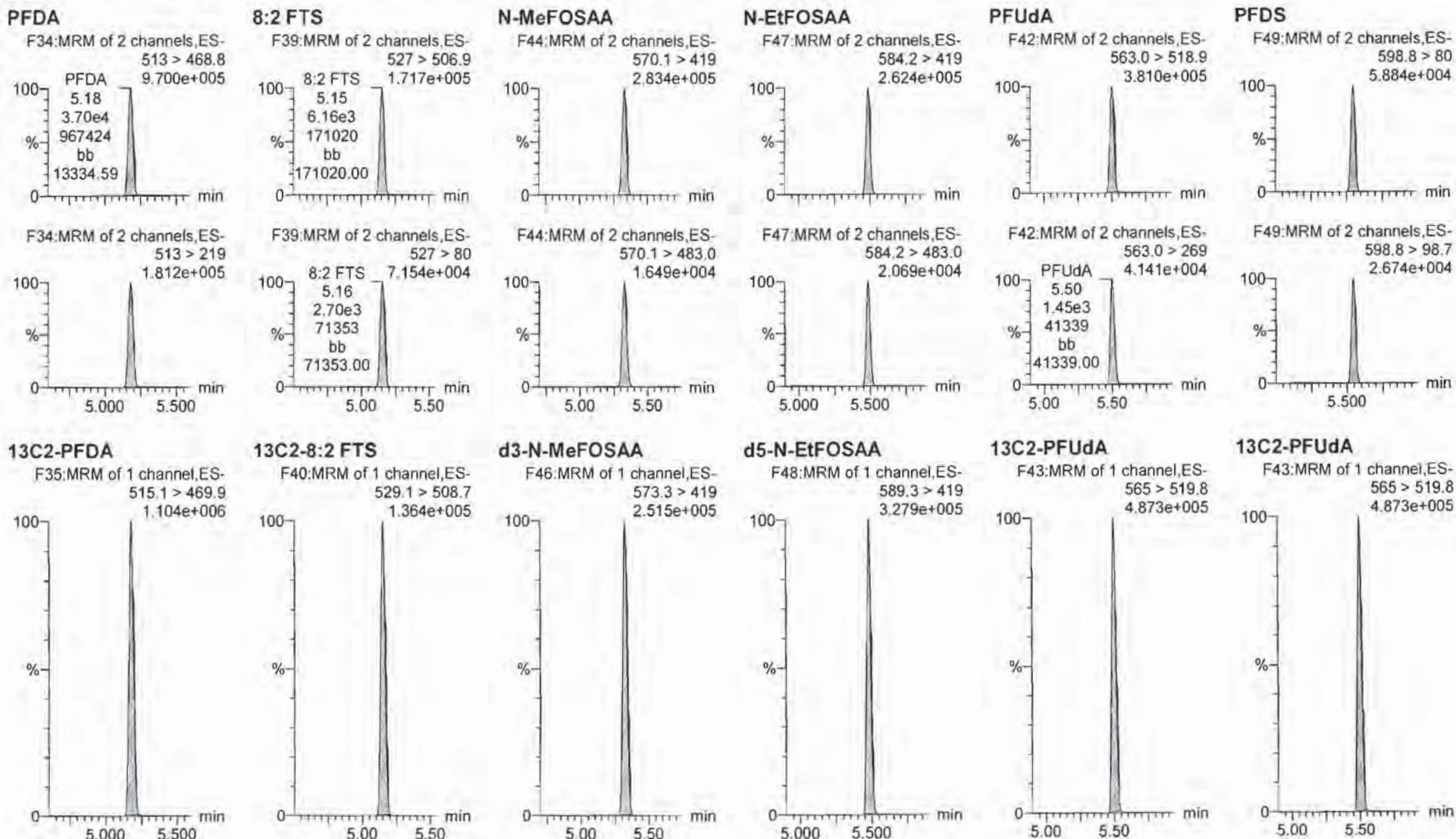


Dataset: U:\Q4.PRO\results\180115M2\180115M2-10.qld

Last Altered: Tuesday, January 16, 2018 10:33:59 Pacific Standard Time

Printed: Tuesday, January 16, 2018 10:34:30 Pacific Standard Time

Name: 180115M2_10, Date: 16-Jan-2018, Time: 01:57:31, ID: ICV180115M2-1 PFC ICV 17L1201, Description: PFC ICV 17L1201



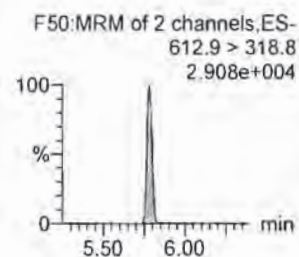
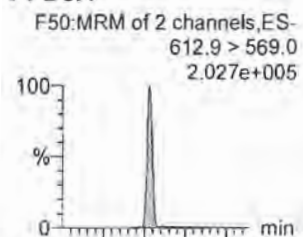
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Last Altered: Tuesday, January 16, 2018 10:33:59 Pacific Standard Time

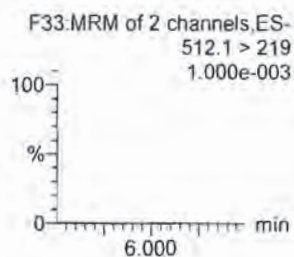
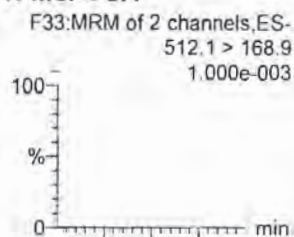
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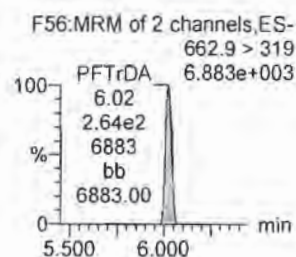
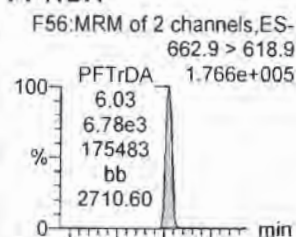
PFDaA



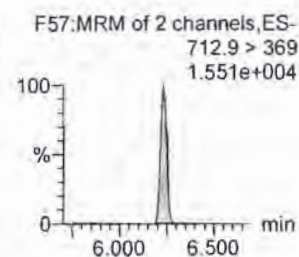
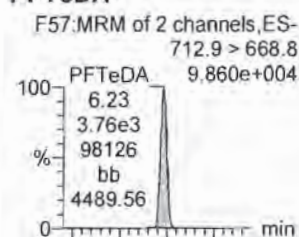
N-MeFOSA



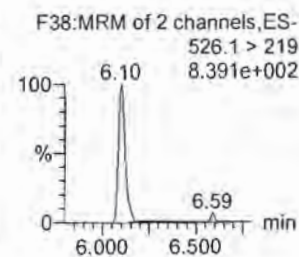
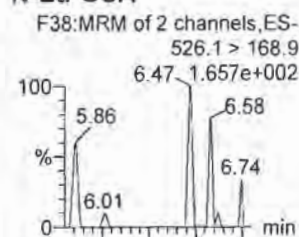
PFTTrDA



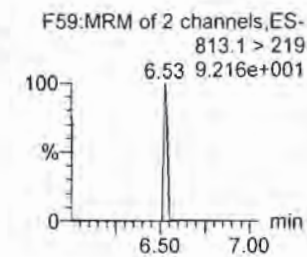
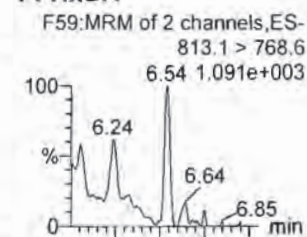
PFTeDA



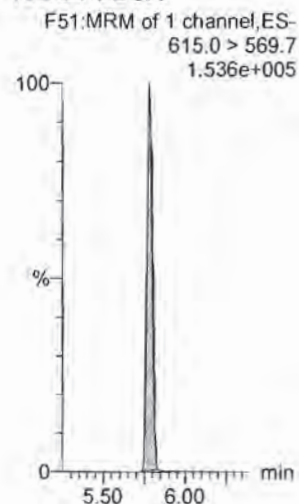
N-EtFOSA



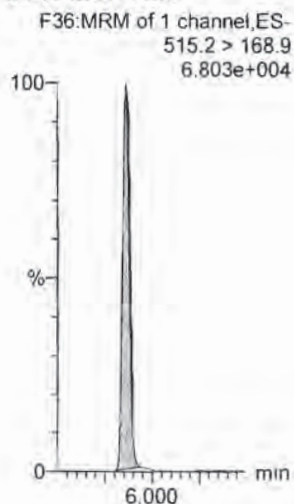
PFHxDA



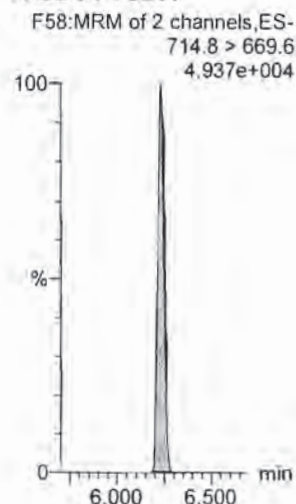
13C2-PFDaA



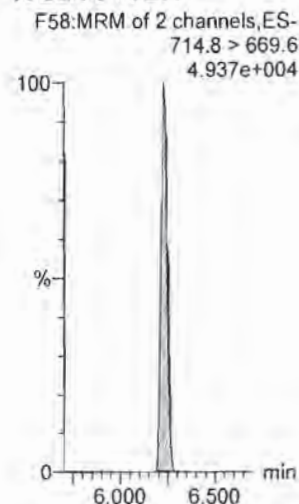
d3-N-MeFOSA



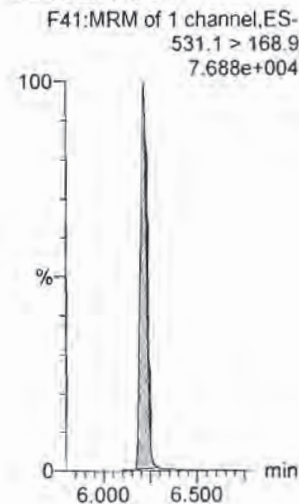
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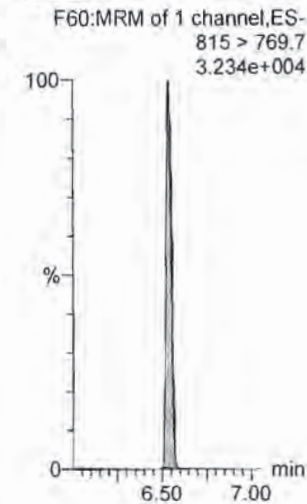
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d5-N-ETFOSA



13C2-PFHxDA



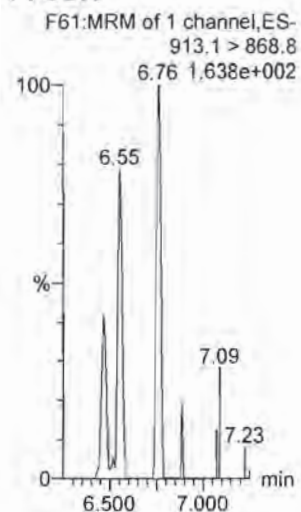
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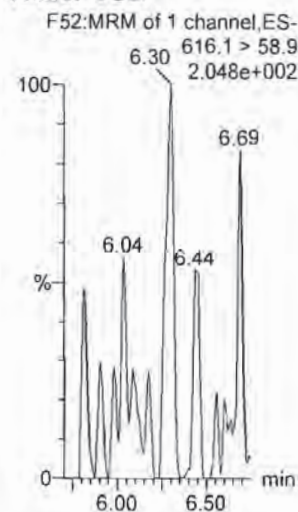
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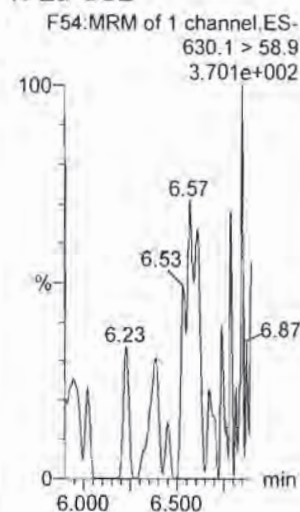
PFODA



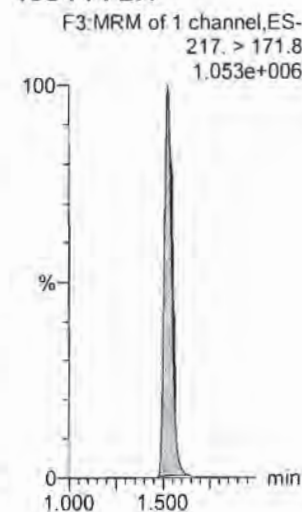
N-MeFOSE



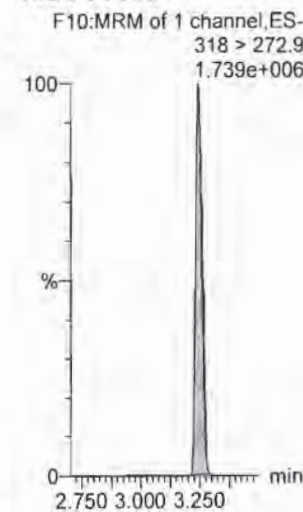
N-EtFOSE



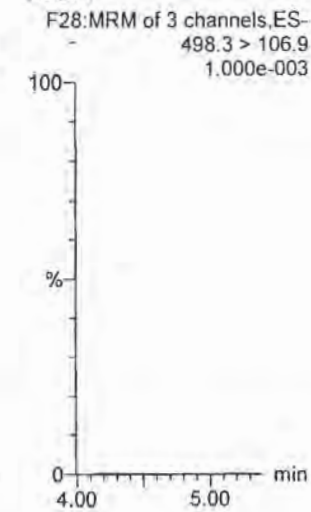
13C4-PFBA



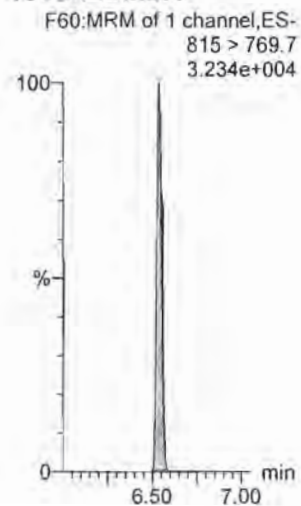
13C5-PFHxA



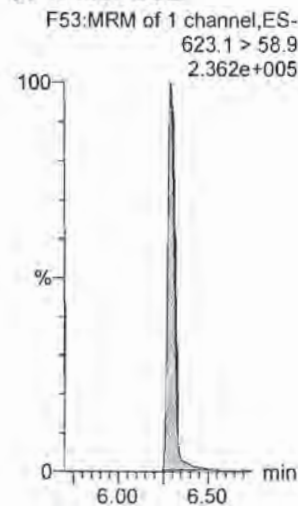
TCDA



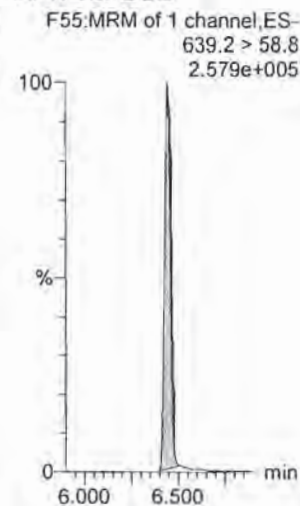
13C2-PFHxDa



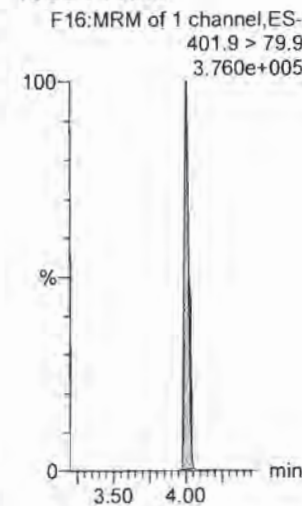
d7-N-MeFOSE



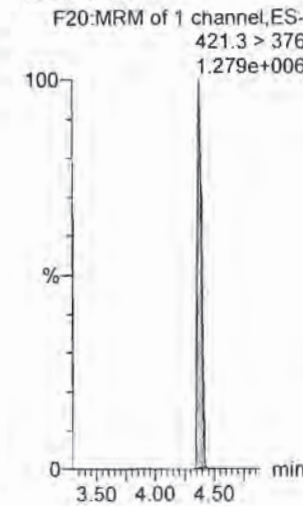
d9-N-EtFOSE



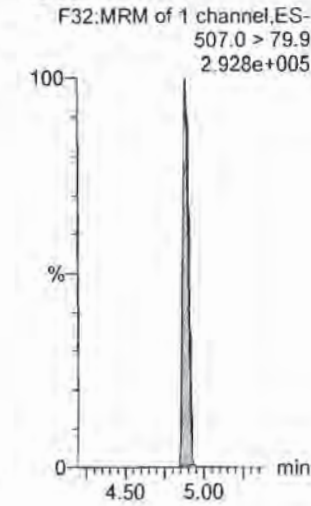
13C3-PFHxS



13C8-PFOA



13C8-PFOS



Dataset: U:\Q4.PRO\results\180115M2\180115M2-10.qld

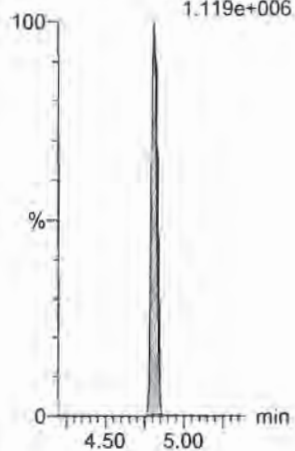
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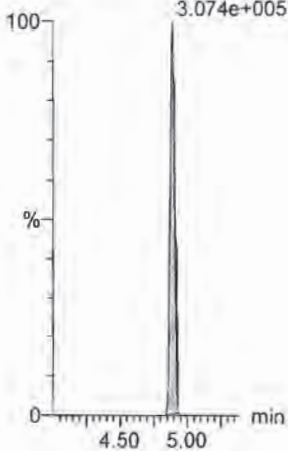
13C9-PFNA

F26:MRM of 1 channel,ES-
472.2 > 426.9
1.119e+006



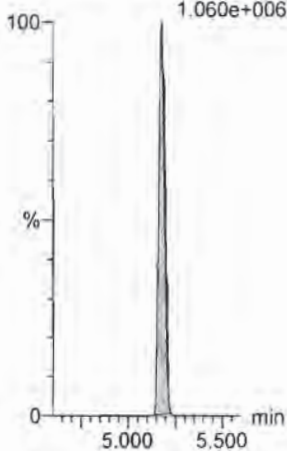
13C4-PFOS

F30:MRM of 1 channel,ES-
503 > 79.9
3.074e+005



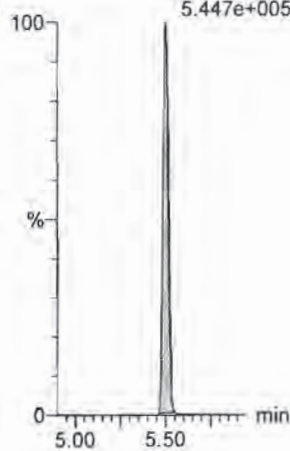
13C6-PFDA

F37:MRM of 1 channel,ES-
519.1 > 473.7
1.060e+006



13C7-PFUDa

F45:MRM of 1 channel,ES-
570.1 > 524.8
5.447e+005



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Dataset: U:\Q4.PRO\results\180115M2\180115M2-9.qld

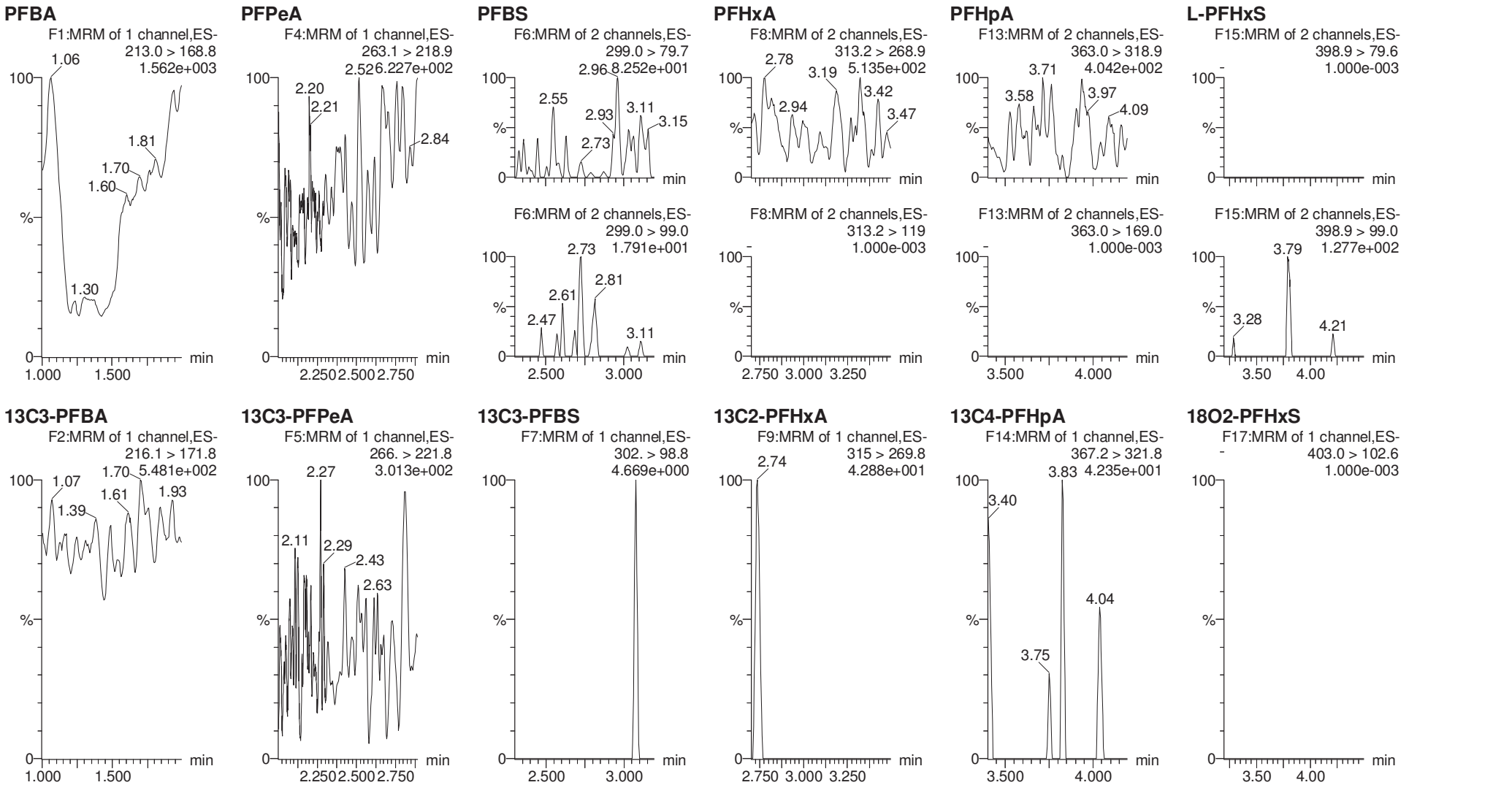
Last Altered: Tuesday, January 16, 2018 13:50:18 Pacific Standard Time

Printed: Tuesday, January 16, 2018 13:51:15 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS_FULL_80C_011518.mdb 16 Jan 2018 13:43:12

Calibration: U:\Q4.PRO\CurveDB\C18_VAL-PFAS_Q4_01-15-18-FULL-OLD.cdb 16 Jan 2018 10:22:57

Name: 180115M2_9, Date: 16-Jan-2018, Time: 01:46:05, ID: IPA, Description: IPA



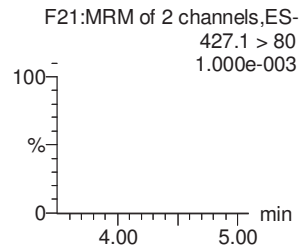
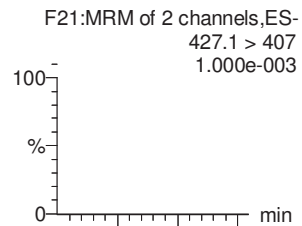
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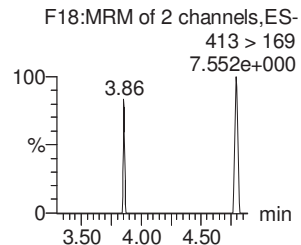
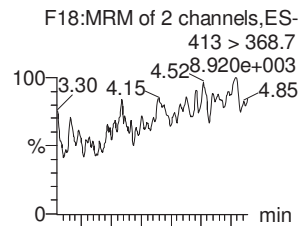
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Name: 180115M2_9, Date: 16-Jan-2018, Time: 01:46:05, ID: IPA, Description: IPA

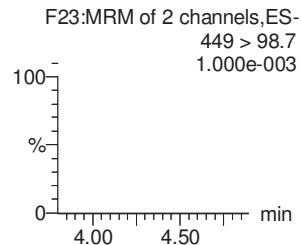
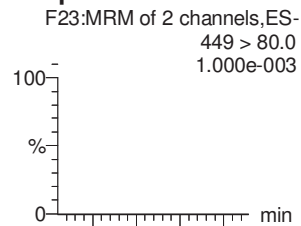
6:2 FTS



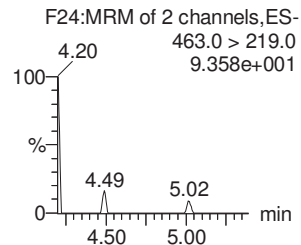
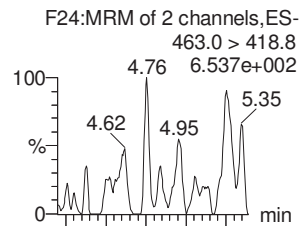
L-PFOA



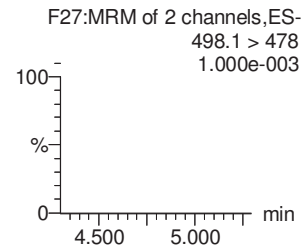
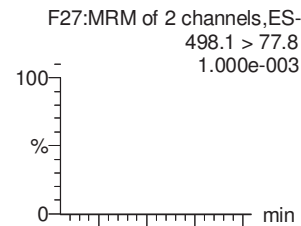
PFHpS



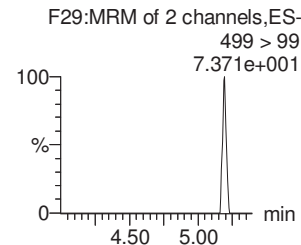
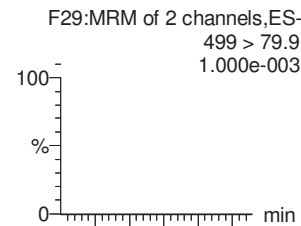
PFNA



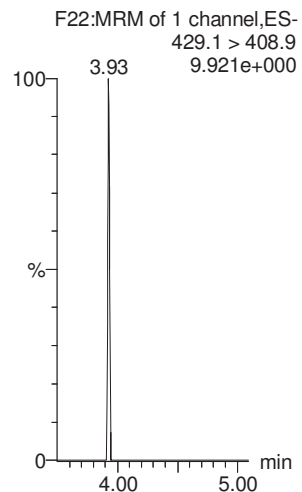
PFOSA



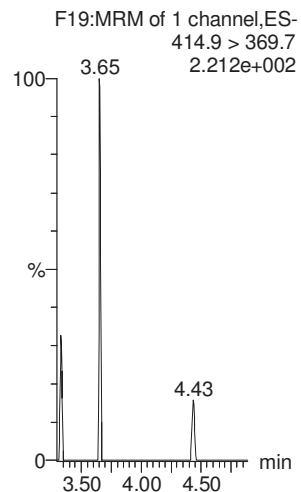
L-PFOS



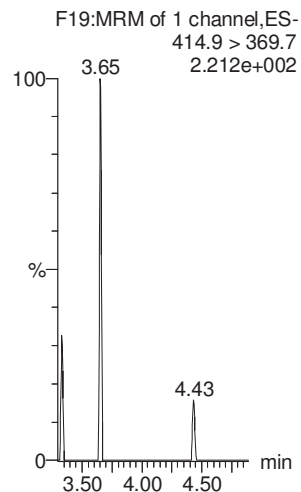
13C2-6:2 FTS



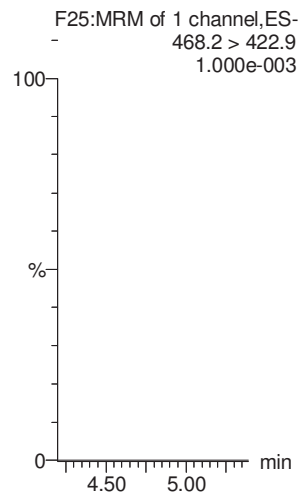
13C2-PFOA



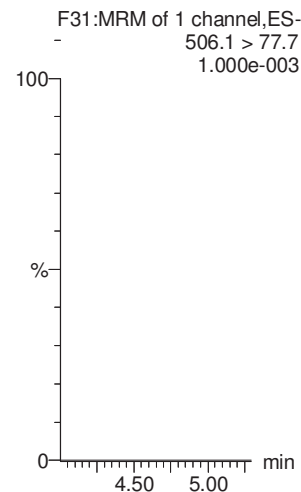
13C2-PFOA



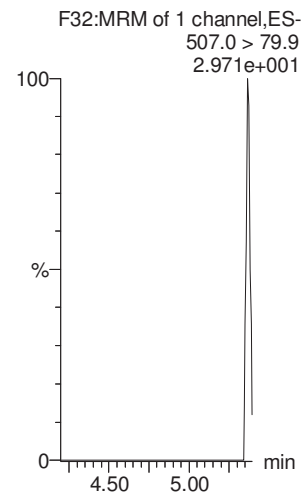
13C5-PFNA



13C8-PFOSA



13C8-PFOS



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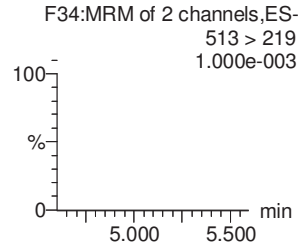
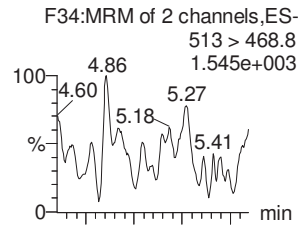
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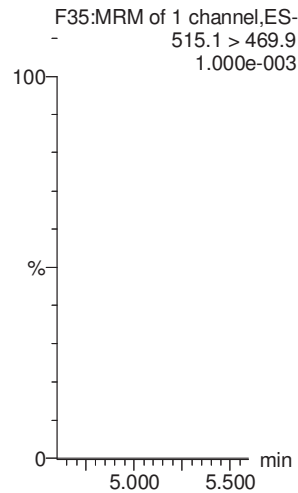
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Name: 180115M2_9, Date: 16-Jan-2018, Time: 01:46:05, ID: IPA, Description: IPA

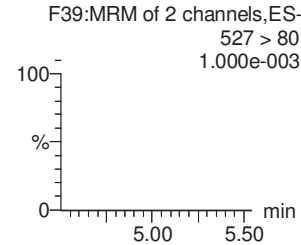
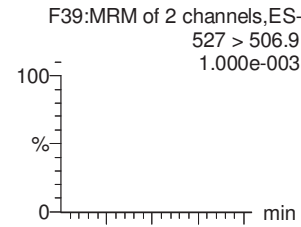
PFDA



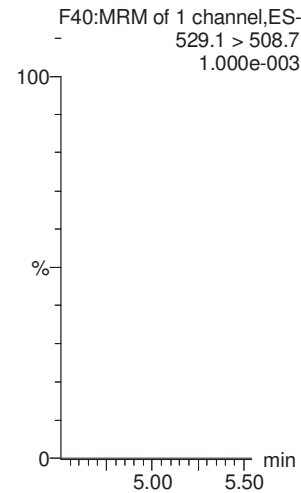
13C2-PFDA



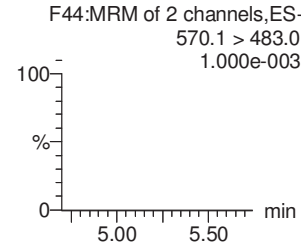
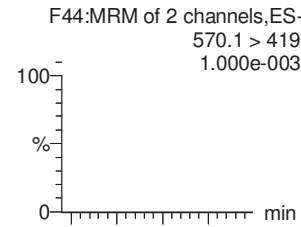
8:2 FTS



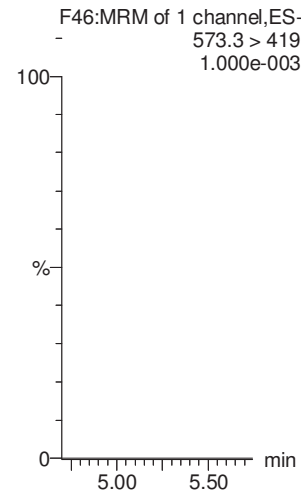
13C2-8:2 FTS



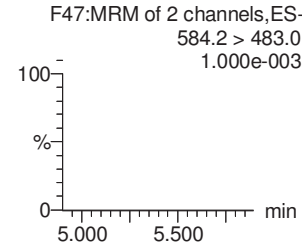
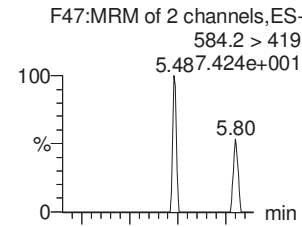
N-MeFOSAA



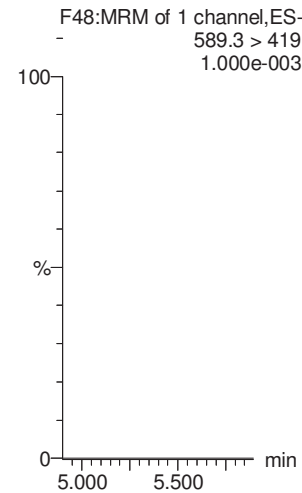
d3-N-MeFOSAA



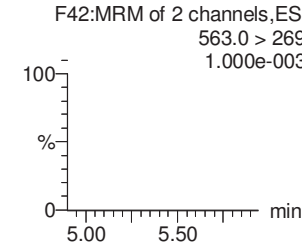
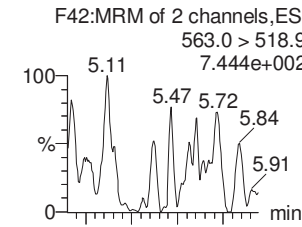
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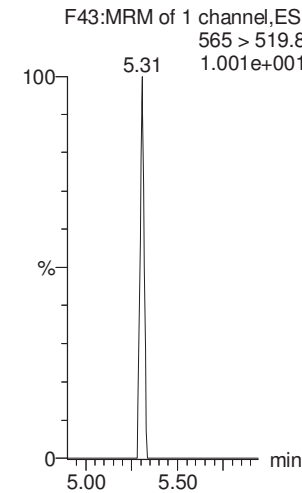
d5-N-EtFOSAA



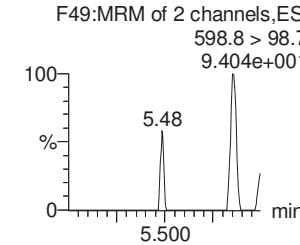
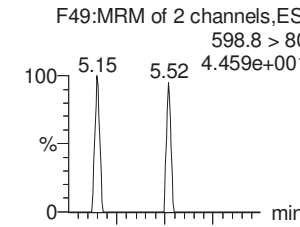
PFUdA



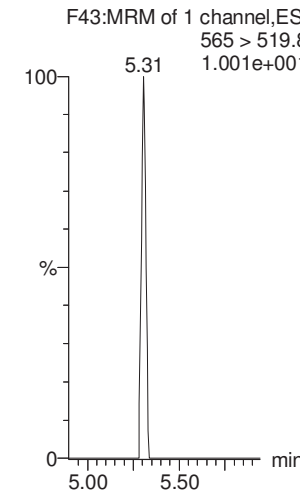
13C2-PFUdA



PFDS



13C2-PFUdA



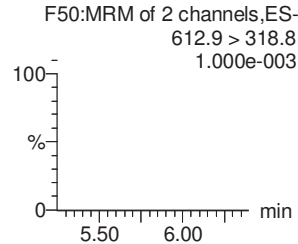
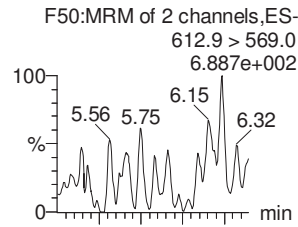
Vista Analytical Laboratory

Dataset: U:\Q4.PRO\results\180115M2\180115M2-9.qld

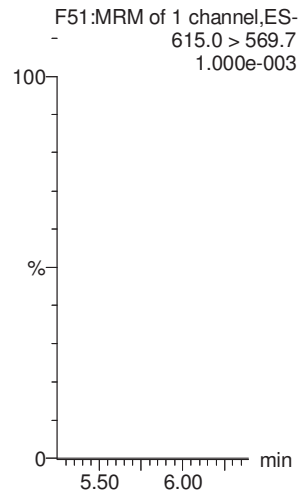
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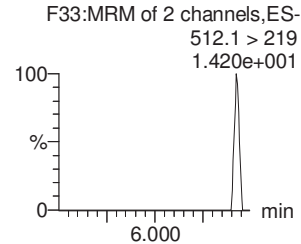
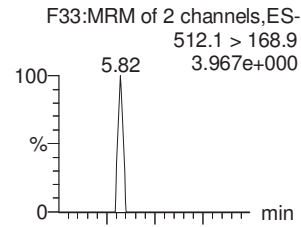
PFD_oA



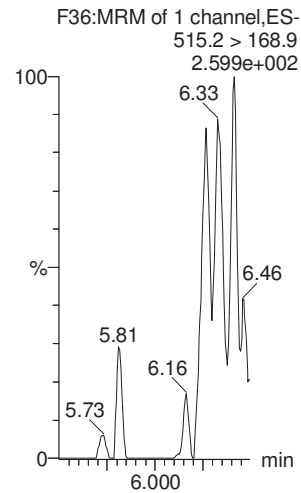
¹³C2-PFD_oA



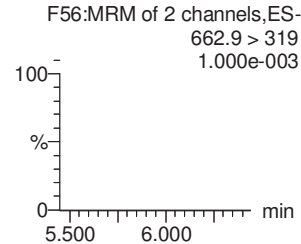
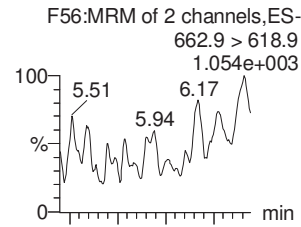
N-MeFOSA



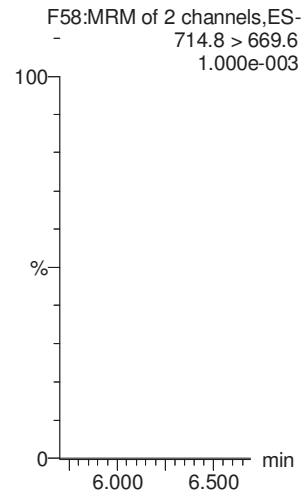
d3-N-MeFOSA



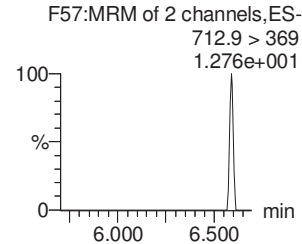
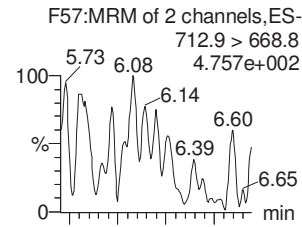
PFT_rDA



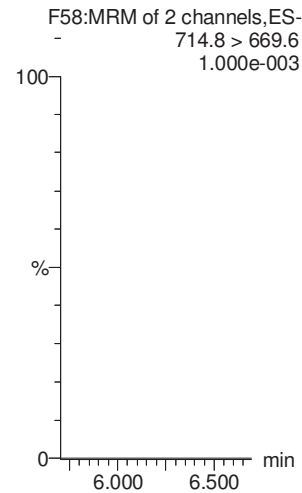
¹³C2-PFT_rDA



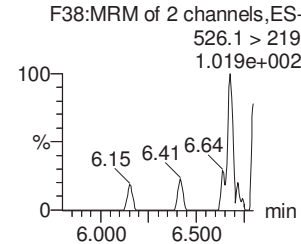
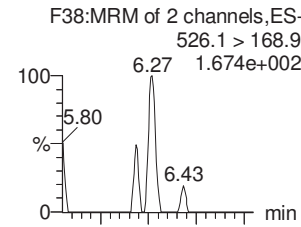
PFT_eDA



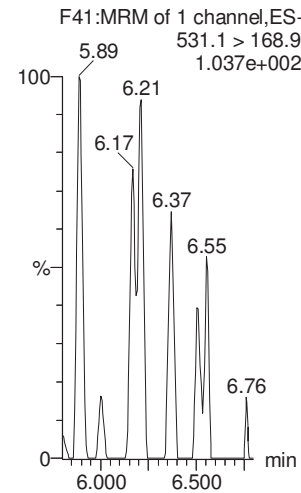
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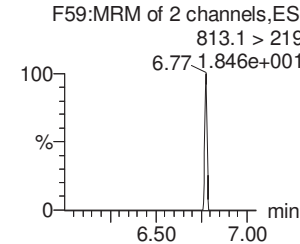
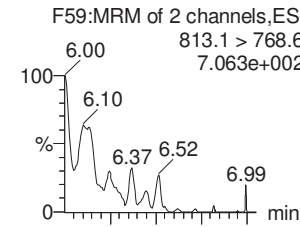
N-EtFOSA



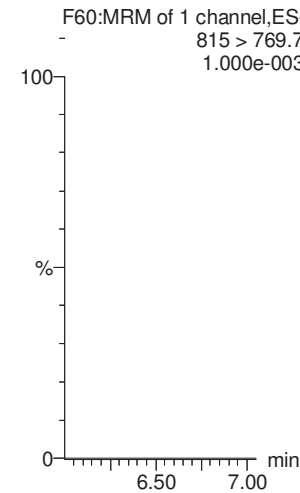
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PFH_xDA



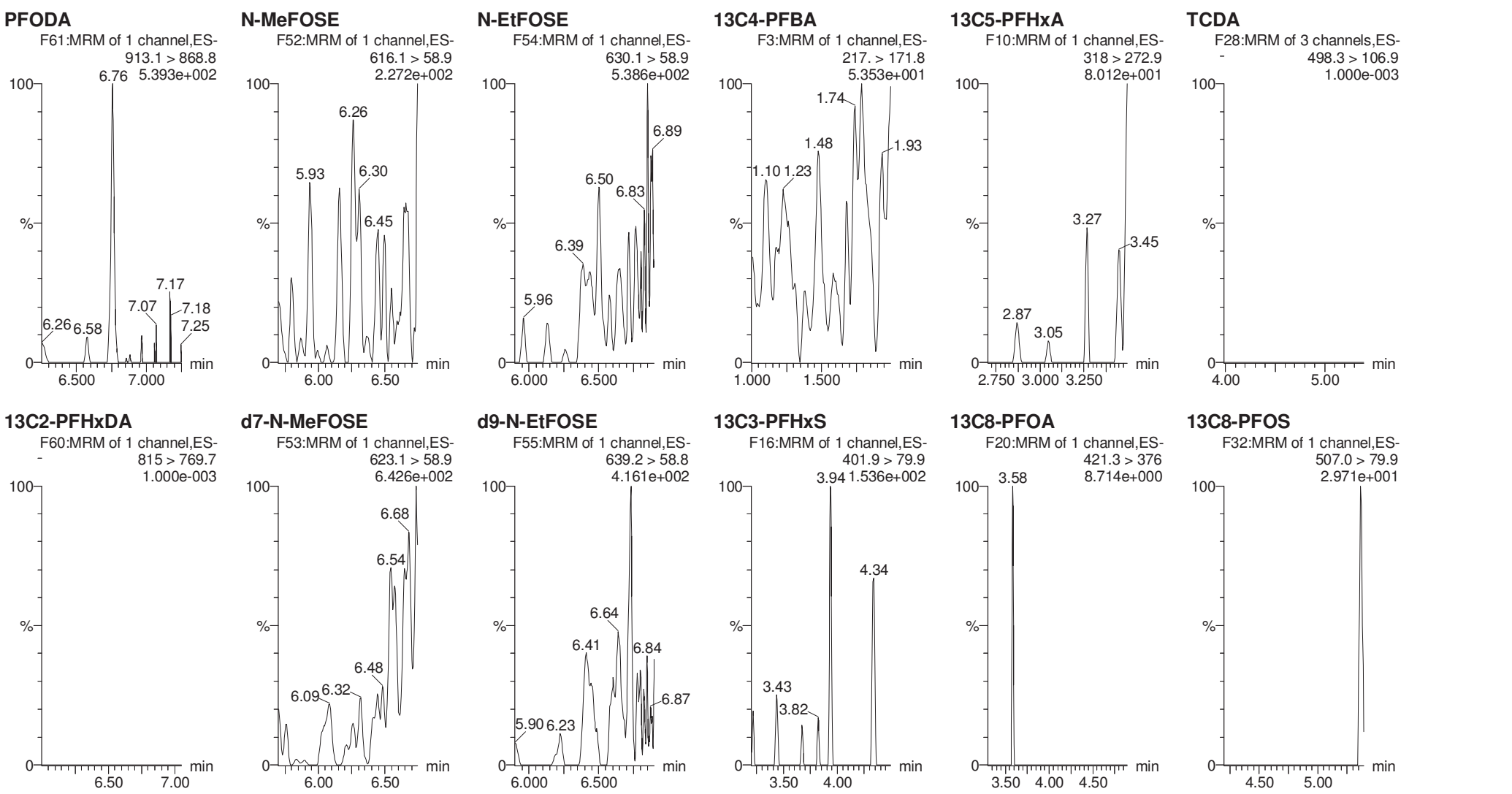
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Printed: Tuesday, January 16, 2018 13:51:15 Pacific Standard Time

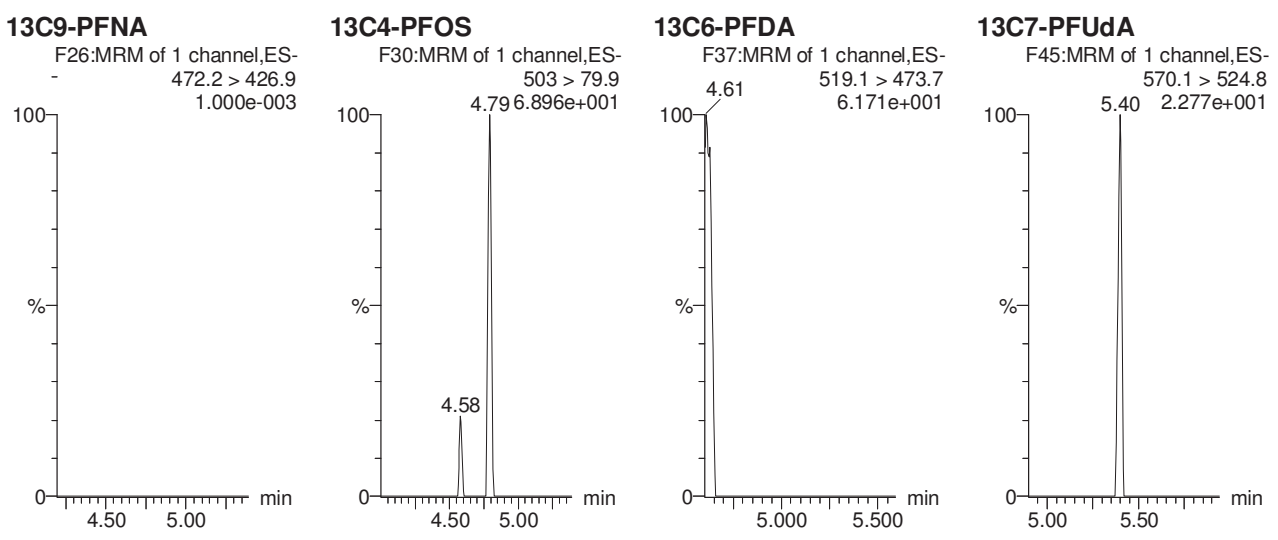
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Printed: Tuesday, January 16, 2018 13:51:15 Pacific Standard Time

Name: 180115M2_9, Date: 16-Jan-2018, Time: 01:46:05, ID: IPA, Description: IPA



Analytical Standard Record

Vista Analytical Laboratory

17J1820

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
16G1221	br-PFOSK anion	12-Jul-16	** Vendor **	14-Oct-20	19-Oct-17 08:16 by INJ	0.431
17G1209	FOSA-I	12-Jul-17	** Vendor **	30-Sep-21	13-Jul-17 09:08 by INJ	0.4
17G1312	PFTeDA	13-Jul-17	** Vendor **	30-Sep-21	17-Jul-17 16:23 by INJ	0.4
17G1313	PFTTrDA	13-Jul-17	** Vendor **	02-May-22	17-Jul-17 16:22 by INJ	0.4
17G1323	br-PFHxSK	13-Jul-17	** Vendor **	04-Jan-22	17-Jul-17 16:16 by INJ	0.44
17G1325	L-PFDS	13-Jul-17	** Vendor **	17-Feb-22	17-Jul-17 16:11 by INJ	0.415
17G1326	L-PFHpS	13-Jul-17	** Vendor **	18-Oct-21	17-Jul-17 16:08 by INJ	0.42
17G1805	PFDA	18-Jul-17	** Vendor **	31-May-21	18-Jul-17 12:37 by INJ	0.4
17G1806	PFHxA	18-Jul-17	** Vendor **	02-Dec-21	18-Jul-17 12:37 by INJ	0.4
17G1807	MeFOSAA	18-Jul-17	** Vendor **	11-Jan-22	18-Jul-17 12:37 by INJ	0.4
17G1808	EtFOSAA	18-Jul-17	** Vendor **	11-Jan-22	18-Jul-17 12:37 by INJ	0.4
17G1809	PFBA	18-Jul-17	** Vendor **	29-May-22	18-Jul-17 12:37 by INJ	0.4
17G1810	PFODA	18-Jul-17	** Vendor **	29-Apr-21	18-Jul-17 12:37 by INJ	0.4
17G1811	L-PFBS	18-Jul-17	** Vendor **	02-Dec-21	18-Jul-17 12:37 by INJ	0.454
17G1812	8:2FTS	18-Jul-17	** Vendor **	12-Dec-21	18-Jul-17 12:37 by INJ	0.418
17G1813	6:2FTS	18-Jul-17	** Vendor **	20-Apr-22	18-Jul-17 12:36 by INJ	0.422
17H0820	PFDoA	08-Aug-17	** Vendor **	31-May-21	08-Aug-17 11:02 by INJ	0.4
17H0821	PFNA	08-Aug-17	** Vendor **	30-Sep-21	08-Aug-17 11:03 by INJ	0.4
17H0822	PFPeA	08-Aug-17	** Vendor **	14-Jun-22	08-Aug-17 11:05 by INJ	0.4
17H0823	PFOA	08-Aug-17	** Vendor **	17-Feb-22	08-Aug-17 11:06 by INJ	0.4
17H0824	PFUdA	08-Aug-17	** Vendor **	18-Oct-21	08-Aug-17 11:08 by INJ	0.4
17H0825	PFHxDA	08-Aug-17	** Vendor **	25-May-21	08-Aug-17 11:09 by INJ	0.4
17H0826	PFHpA	08-Aug-17	** Vendor **	02-Dec-21	08-Aug-17 11:12 by INJ	0.4
17H0827	N-EtFOSA-M	08-Aug-17	** Vendor **	05-Jul-22	08-Aug-17 11:13 by INJ	2
17H0828	N-MeFOSA-M	08-Aug-17	** Vendor **	05-Jul-22	08-Aug-17 11:15 by INJ	2
17H0829	N-EtFOSE-M	08-Aug-17	** Vendor **	24-Apr-22	08-Aug-17 11:16 by INJ	2
17H0830	N-MeFOSE-M	08-Aug-17	** Vendor **	24-Apr-22	08-Aug-17 11:17 by INJ	2

Description:	PFC NS Stock	Expires:	18-Oct-19
Standard Type:	Analyte Spike	Prepared:	18-Oct-17
Solvent:	MeOH	Prepared By:	Isaac N. Johnson
Final Volume (mls):	20	Department:	LCMS
Vials:	1	Last Edit:	19-Oct-17 08:19 by INJ

PFOS and PFHxS linear and branched components

Analyte	CAS Number	Concentration	Units
L-PFDS		1	ug/mL
6:2 FTS	27619-97-2	1	ug/mL
L-PFTeDA		1	ug/mL
L-PFPeA		1	ug/mL
L-PFOSA		1	ug/mL
L-PFOS		0.789	ug/mL
L-PFODA		1	ug/mL
L-PFOA		1	ug/mL
L-PFNA		1	ug/mL

Analytical Standard Record

Vista Analytical Laboratory

17J1820

Description:	PFC NS Stock	Expires:	18-Oct-19
Standard Type:	Analyte Spike	Prepared:	18-Oct-17
Solvent:	MeOH	Prepared By:	Isaac N. Johnson
Final Volume (mls):	20	Department:	LCMS
Vials:	1	Last Edit:	19-Oct-17 08:19 by INJ

PFOS and PFHxS linear and branched components

Analyte	CAS Number	Concentration	Units
L-PFHxS		0.812	ug/mL
L-PFHxDA		1	ug/mL
L-PFHxA		1	ug/mL
L-PFUnA		1	ug/mL
L-PFHpA		1	ug/mL
MeFOSA	31506-32-8	5	ug/mL
L-PFDoA		1	ug/mL
L-PFDA		1	ug/mL
L-PFBS		1	ug/mL
L-PFBA		1	ug/mL
L-8:2FTS		1	ug/mL
L-6:2 FTS		1	ug/mL
EtFOSE	1691-99-2	5	ug/mL
EtFOSAA	2991-50-6	1	ug/mL
EtFOSA	4151-50-2	5	ug/mL
Br-PFHxS	3871-99-6	0.189	ug/mL
8:2 FTS	39108-34-4	1	ug/mL
L-PFHpS		1	ug/mL
PFHxS	355-46-4	1	ug/mL
Total PFHxS		1	ug/mL
Total PFHpS		1	ug/mL
Total PFDS		1	ug/mL
Total 6:2 FTS		1	ug/mL
PFUnA	2058-94-8	1	ug/mL
PFTTrDA	72629-94-8	1	ug/mL
PFTeDA	376-06-7	1	ug/mL
PFPeA	2706-90-3	1	ug/mL
PFOSA	754-91-6	1	ug/mL
PFOS	1763-23-1	1	ug/mL
PFODA	16517-11-6	1	ug/mL
L-PFTTrDA		1	ug/mL
PFNA	375-95-1	1	ug/mL
Total PFUnA		1	ug/mL
PFHxDA	67905-19-5	1	ug/mL

Analytical Standard Record**Vista Analytical Laboratory****17J1820**

Description:	PFC NS Stock	Expires:	18-Oct-19
Standard Type:	Analyte Spike	Prepared:	18-Oct-17
Solvent:	MeOH	Prepared By:	Isaac N. Johnson
Final Volume (mls):	20	Department:	LCMS
Vials:	1	Last Edit:	19-Oct-17 08:19 by INJ

PFOS and PFHxS linear and branched components

Analyte	CAS Number	Concentration	Units
PFHxA	307-24-4	1	ug/mL
PFHpS	375-92-8	1	ug/mL
PFHpA	375-85-9	1	ug/mL
PFDS	335-77-3	1	ug/mL
PFDoA	307-55-1	1	ug/mL
PFDA	335-76-2	1	ug/mL
PFBS	375-73-5	1	ug/mL
PFBA	375-22-4	1	ug/mL
MeFOSE	24448-09-7	5	ug/mL
MeFOSAA	2355-31-9	1	ug/mL
PFOA	335-67-1	1	ug/mL

1661221

**WELLINGTON
LABORATORIES****CERTIFICATE OF ANALYSIS
DOCUMENTATION****br-PFOSK****Potassium Perfluorooctanesulfonate
Solution/Mixture of Linear and
Branched Isomers**

PRODUCT CODE: br-PFOSK
LOT NUMBER: brPFOSK1015
CONCENTRATION: 50 ± 2.5 µg/ml (total potassium salt)
46.4 ± 2.3 µg/ml (total PFOS anion)
SOLVENT(S): Methanol
DATE PREPARED: (mm/dd/yyyy) 10/13/2015
LAST TESTED: (mm/dd/yyyy) 10/14/2015
EXPIRY DATE: (mm/dd/yyyy) 10/14/2020
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorooctanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:

Table A: Isomeric Components and Percent Composition by ¹⁹F-NMR
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS Data (SIR)
Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- A 5-point calibration curve was generated using linear PFOS (potassium salt) and mass-labelled PFOS as an internal standard to enable quantitation of br-PFOSK using isotopic dilution.
- CAS#: 2795-39-3 (for linear isomer; potassium salt).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

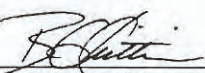


For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: br-PFOSK; Isomeric Components and Percent Composition (by ^{19}F -NMR)*

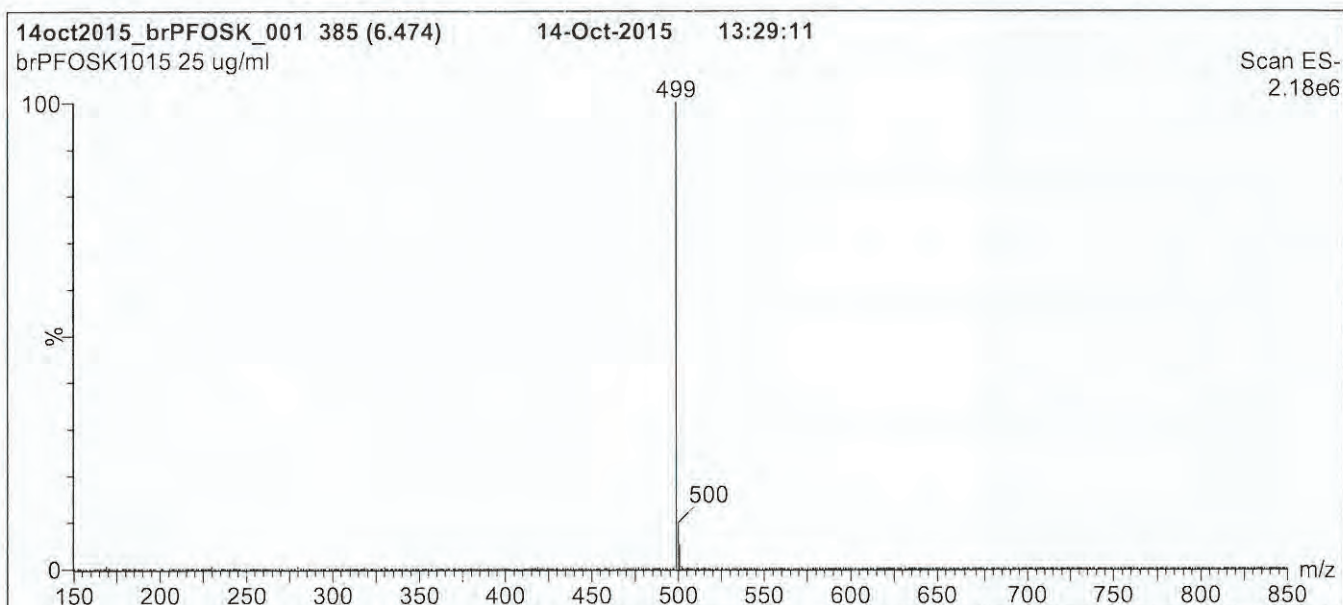
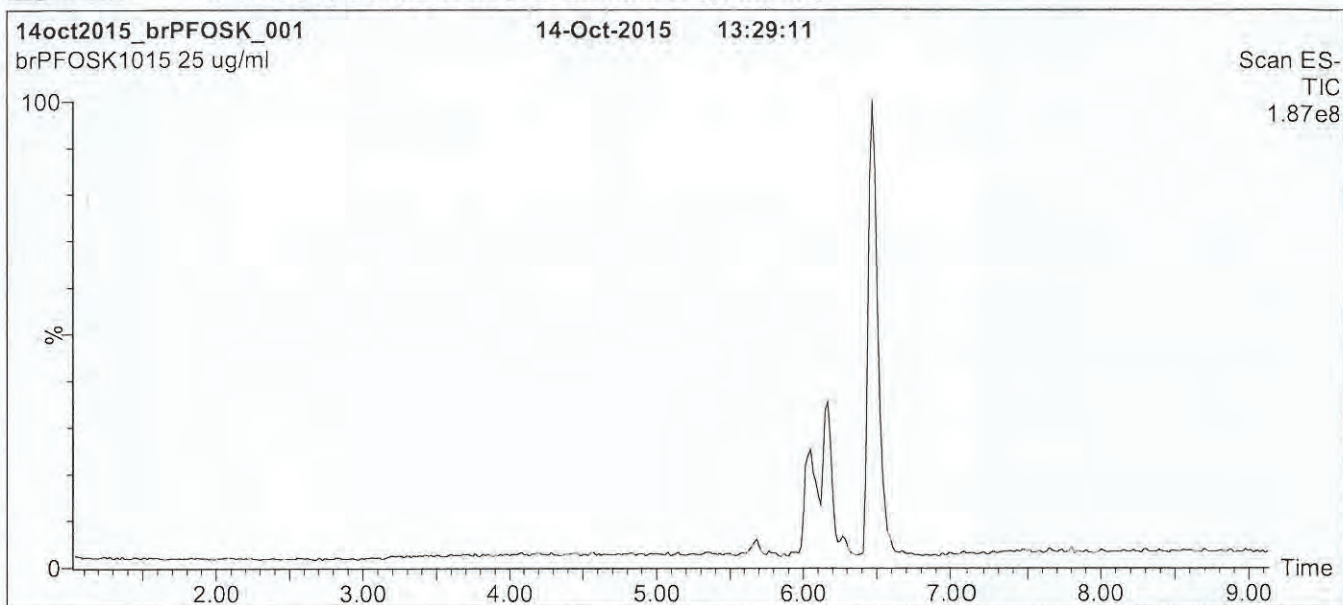
Isomer	Name	Structure	Percent Composition by ^{19}F -NMR
1	Potassium perfluoro-1-octanesulfonate	$\text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+$	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CFSO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CFCF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	0.6
4	Potassium 3-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CFCF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	1.9
5	Potassium 4-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CFCF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	2.2
6	Potassium 5-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CFCF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	4.5
7	Potassium 6-trifluoromethylperfluoroheptanesulfonate	$\begin{array}{c} \text{CF}_3\text{CFCF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	10.0
8	Potassium 5,5-di(trifluoromethyl)perfluorohexanesulfonate	$\begin{array}{c} \text{CF}_3 \\ \\ \text{CF}_3-\text{CCF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	0.2
9	Potassium 4,4-di(trifluoromethyl)perfluorohexanesulfonate	$\begin{array}{c} \text{CF}_3 \\ \\ \text{CF}_3\text{CF}_2-\text{C}-\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	0.03
10	Potassium 4,5-di(trifluoromethyl)perfluorohexanesulfonate	$\begin{array}{c} \text{CF}_3-\text{CF}-\text{CF}-\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \quad \\ \text{CF}_3 \quad \text{CF}_3 \end{array}$	0.4
11	Potassium 3,5-di(trifluoromethyl)perfluorohexanesulfonate	$\begin{array}{c} \text{CF}_3-\text{CF}-\text{CF}_2-\text{CF}-\text{CF}_2\text{CF}_2\text{SO}_3\text{K}^+ \\ \quad \\ \text{CF}_3 \quad \text{CF}_3 \end{array}$	0.07

* Percent of total perfluorooctanesulfonate isomers only. Isomers are labelled in Figure 2.
 ** Systematic Name: Potassium perfluorooctane-2-sulfonate.

Certified By: 
 B.G. Chittim

Date: 10/15/2015
 (mm/dd/yyyy)

Figure 1: br-PFOSK; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 12 min and hold for 2 min.
Return to initial conditions over 0.5 min.
Time: 16 min

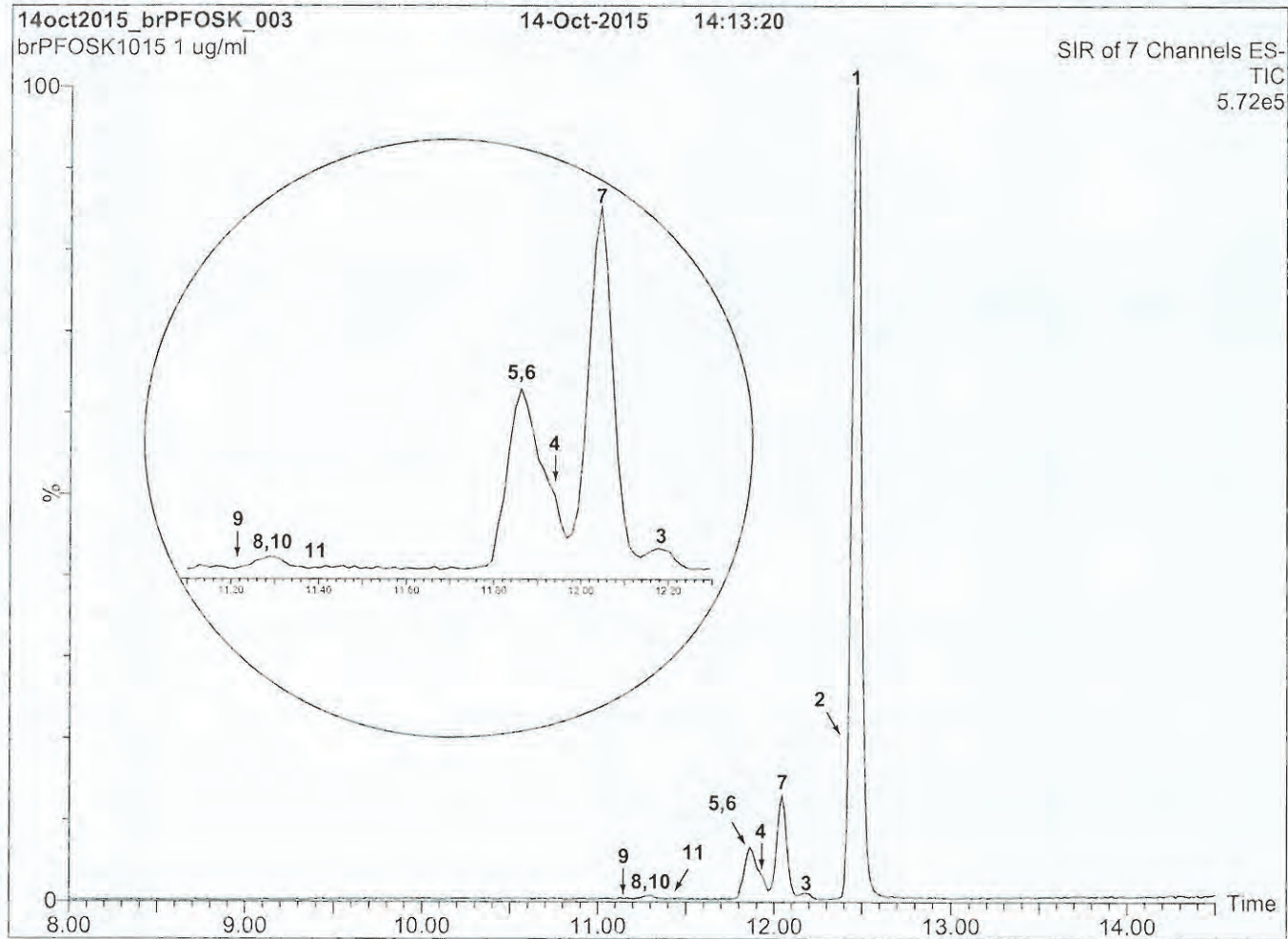
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: br-PFOSK; LC/MS Data (SIR)



Conditions for Figure 2:

LC: Waters Acquity Ultra Performance LC

MS: Micromass Quattro *micro* API MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈ (1.7 μ m, 2.1 x 100 mm)

Injection: 1.0 μ g/ml of br-PFOSK

Mobile Phase: Gradient
45% (80:20 MeOH:ACN) / 55% H₂O (both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 15 min and hold for 3 min.
Return to initial conditions over 1 min.
Time: 20 min

Flow: 300 μ l/min

MS Conditions:

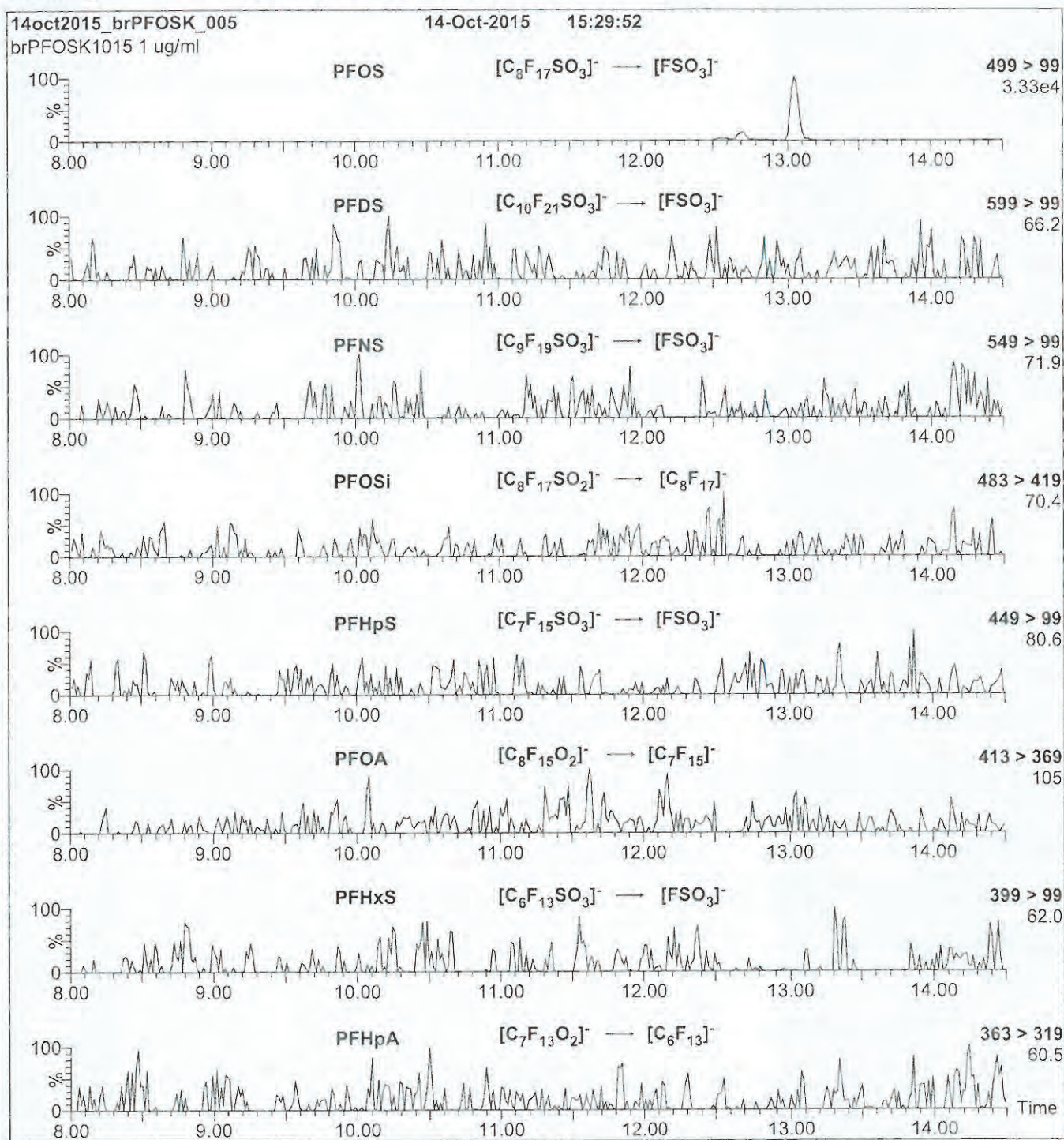
SIR (ES⁺)

Source = 110 °C

Desolvation = 325 °C

Cone Voltage = 60V

Figure 3: br-PFOSK; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.06e-3

Collision Energy (eV) = 11-50 (variable)

17G1209



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

FOSA-I ✓

LOT NUMBER:

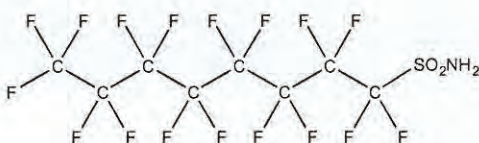
FOSA0916I ✓

COMPOUND:

Perfluoro-1-octanesulfonamide

STRUCTURE:**CAS #:**

754-91-6

**MOLECULAR FORMULA:** $C_8H_2F_{17}NO_2S$ **MOLECULAR WEIGHT:**

499.14

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Isopropanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

09/30/2016

EXPIRY DATE: (mm/dd/yyyy)

09/30/2021

RECOMMENDED STORAGE:

Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

10/07/2016

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1209

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

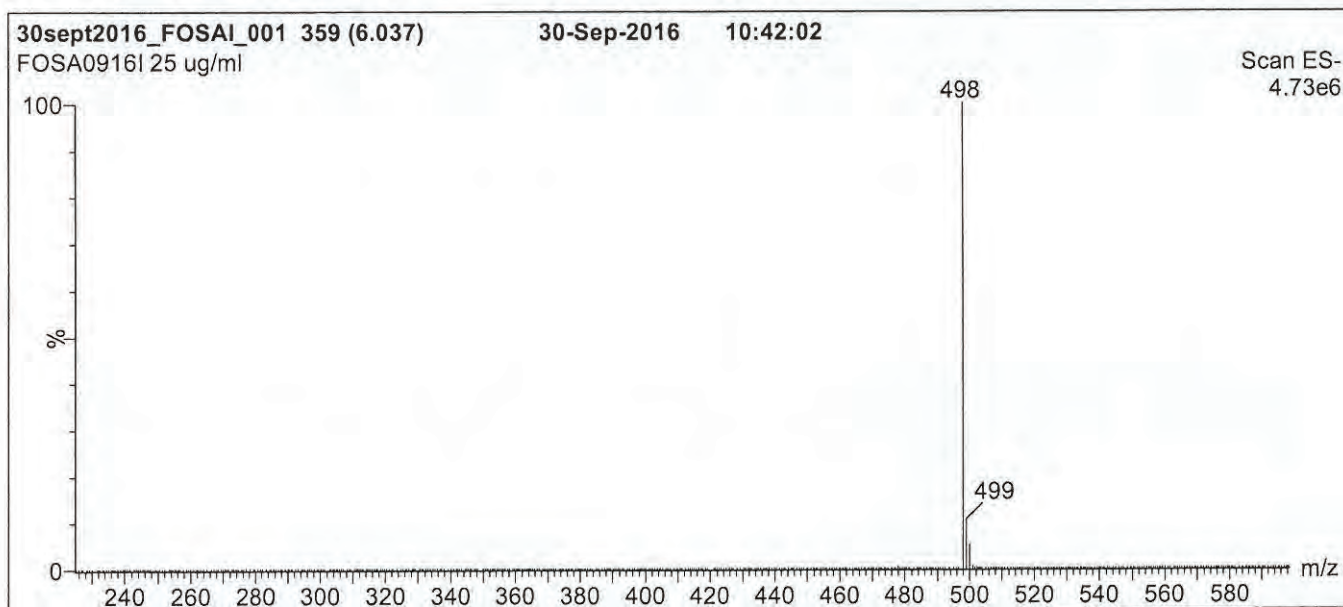
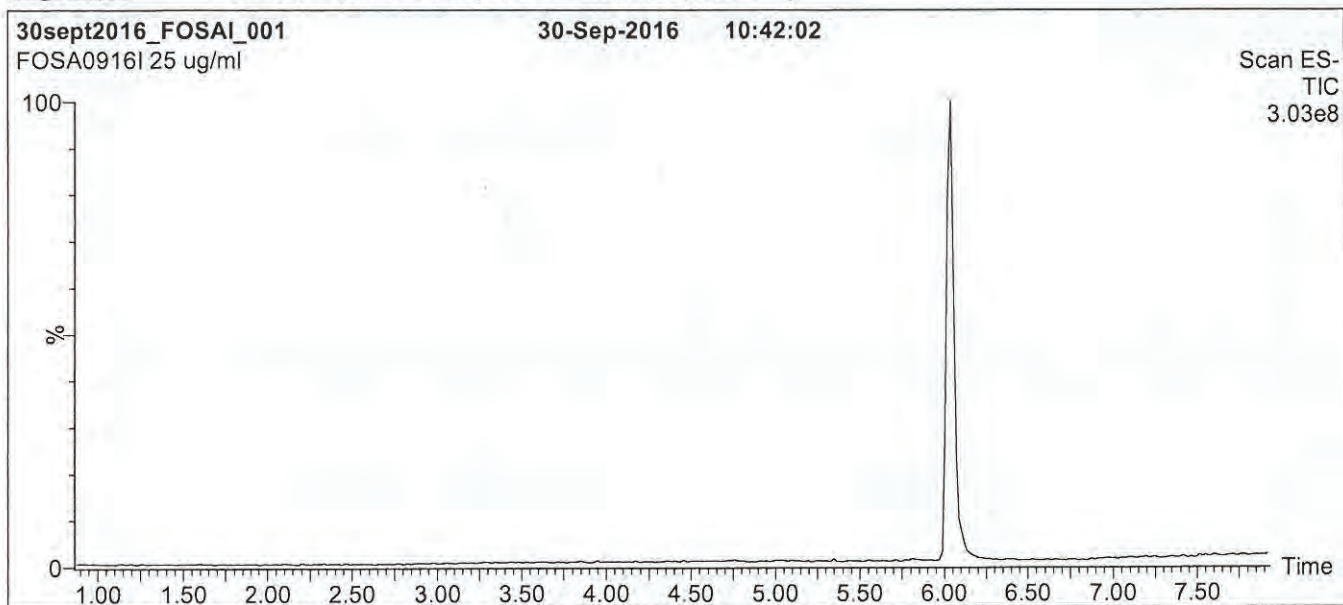
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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1761209

Figure 1: FOSA-I; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 μ l/min

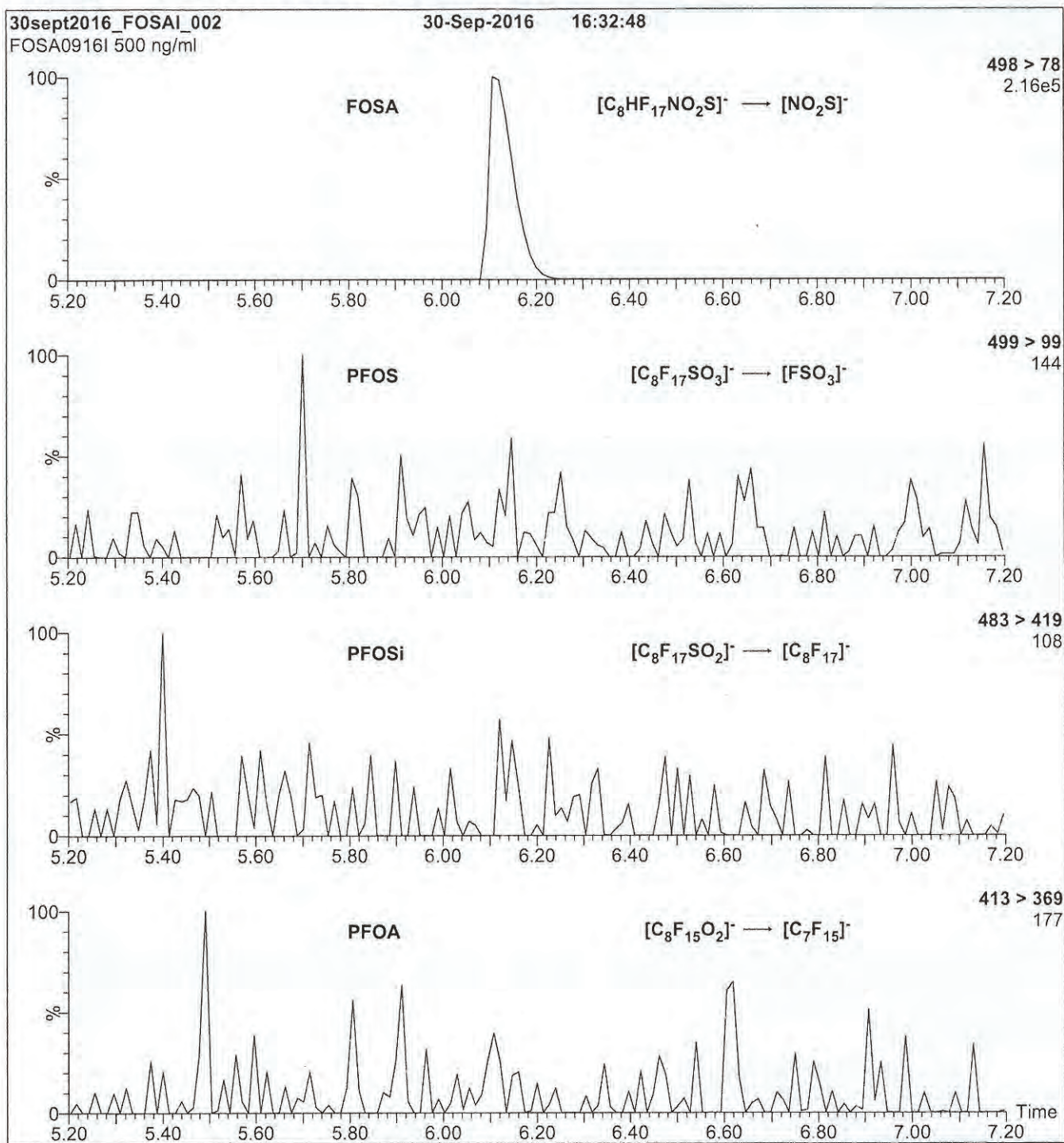
MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

17G1209

Figure 2: FOSA-I; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 30

17G1312



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFTeDA

COMPOUND:

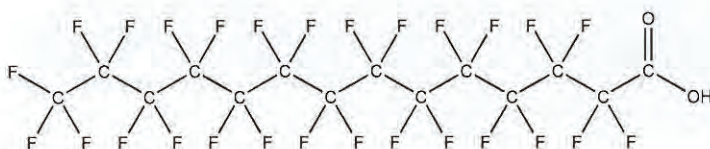
Perfluoro-n-tetradecanoic acid

LOT NUMBER:

PFTeDA0916

STRUCTURE:**CAS #:**

376-06-7

**MOLECULAR FORMULA:** $C_{14}H_{27}O_2$ **CONCENTRATION:** $50 \pm 2.5 \mu\text{g/ml}$ **MOLECULAR WEIGHT:**

714.11

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

09/30/2016

EXPIRY DATE: (mm/dd/yyyy)

09/30/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.2% of PFDa ($C_{12}H_{23}O_2$) and ~ 0.2% of PFPeDA ($C_{15}H_{29}O_2$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim
Date:

10/05/2016

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1312

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

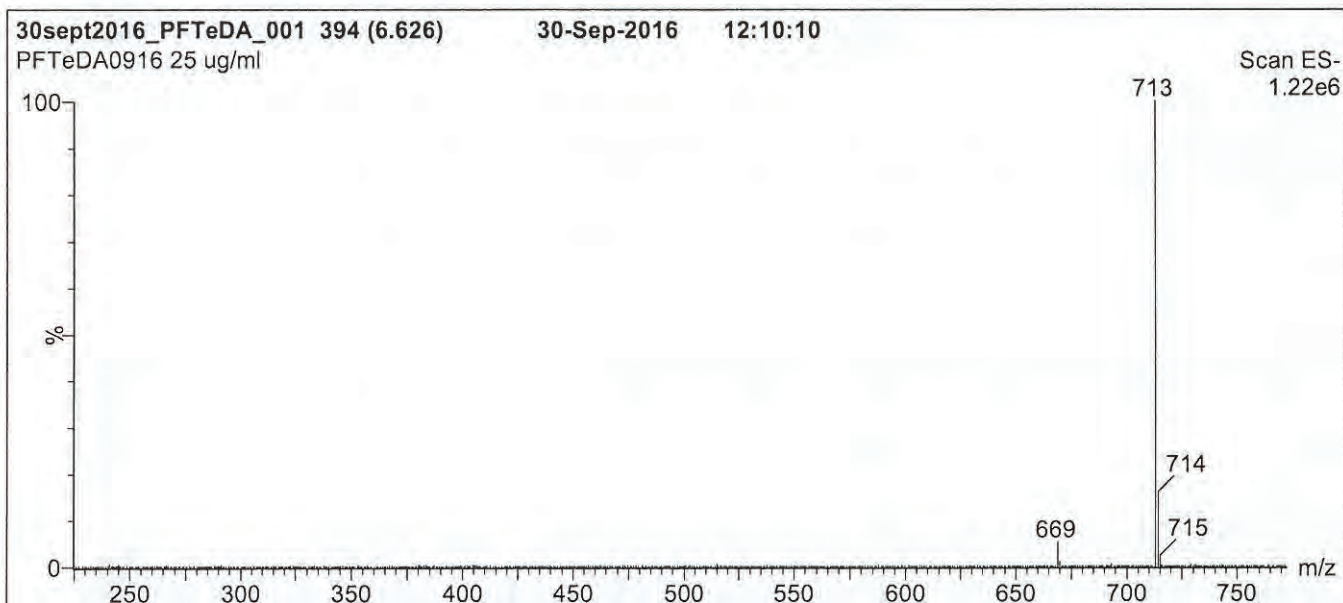
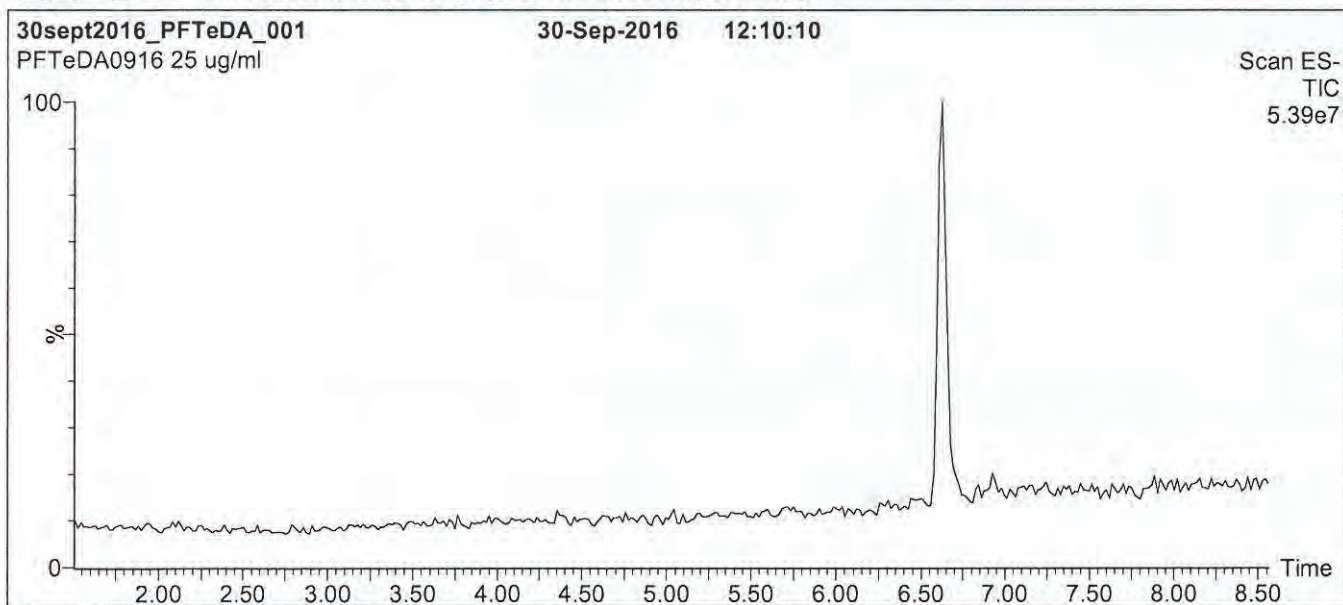
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17G1312

Figure 1: PFTeDA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 65% (80:20 MeOH:ACN) / 35% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7.5 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

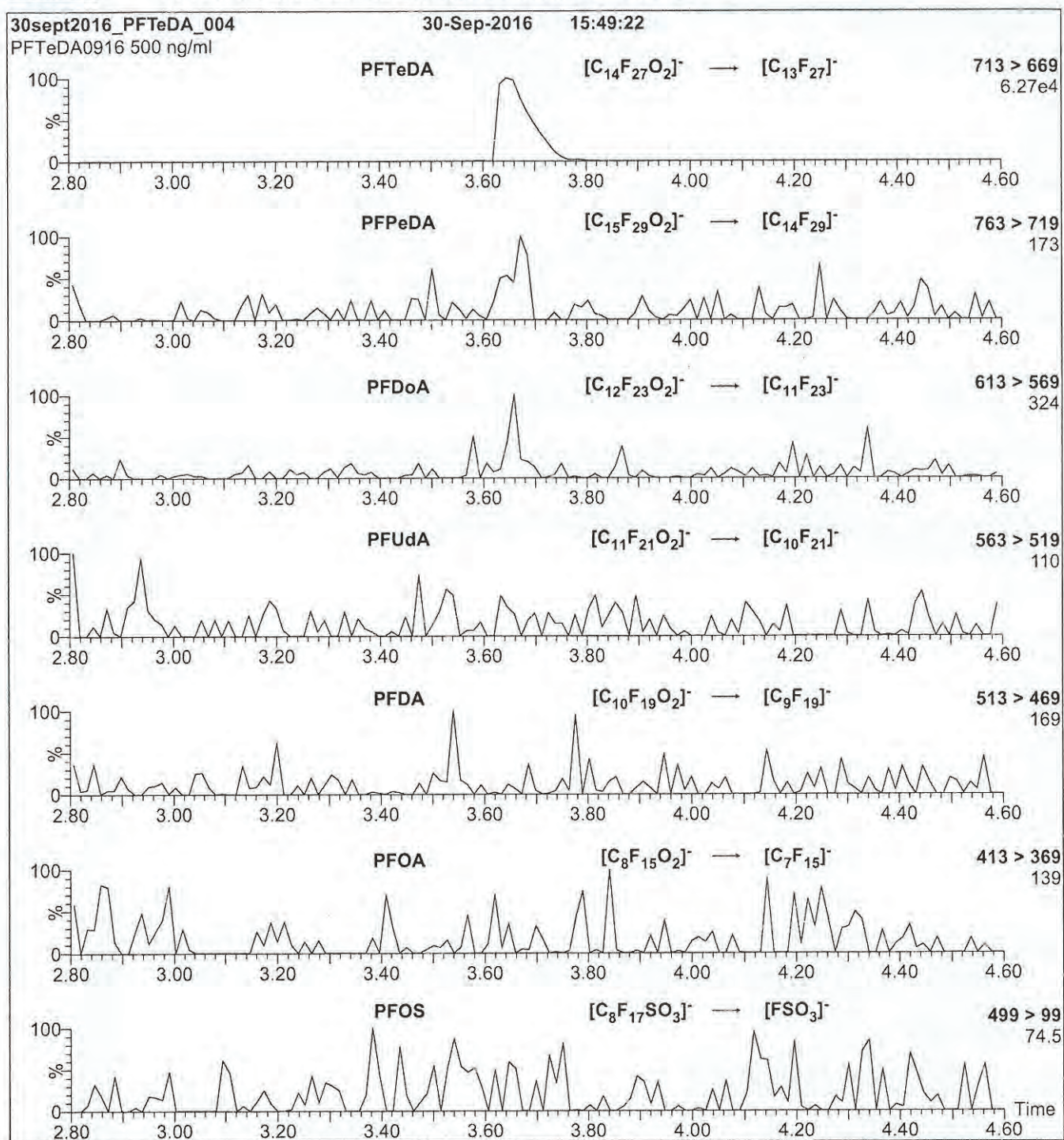
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 15.00
 Cone Gas Flow (l/hr) = 60
 Desolvation Gas Flow (l/hr) = 750

17G1312

Figure 2: PFTeDA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml PFTeDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 14

17G1313



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFTTrDA

LOT NUMBER:

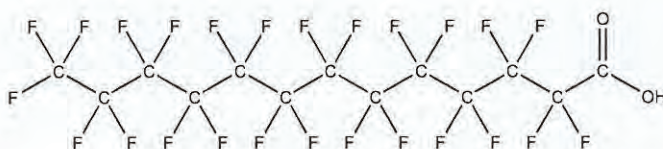
PFTTrDA0517

COMPOUND:

Perfluoro-n-tridecanoic acid

STRUCTURE:**CAS #:**

72629-94-8

**MOLECULAR FORMULA:** $C_{13}HF_{25}O_2$ **MOLECULAR WEIGHT:**

664.11

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**Methanol
Water (<1%)**CHEMICAL PURITY:**

>98%

LAST TESTED: (mm/dd/yyyy)

05/02/2017

EXPIRY DATE: (mm/dd/yyyy)

05/02/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of PFUdA ($C_{11}HF_{21}O_2$), ~ 0.4% of PFDoA ($C_{12}HF_{23}O_2$), and ~ 0.1% of PFTeDA ($C_{14}HF_{27}O_2$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date:

05/04/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1313

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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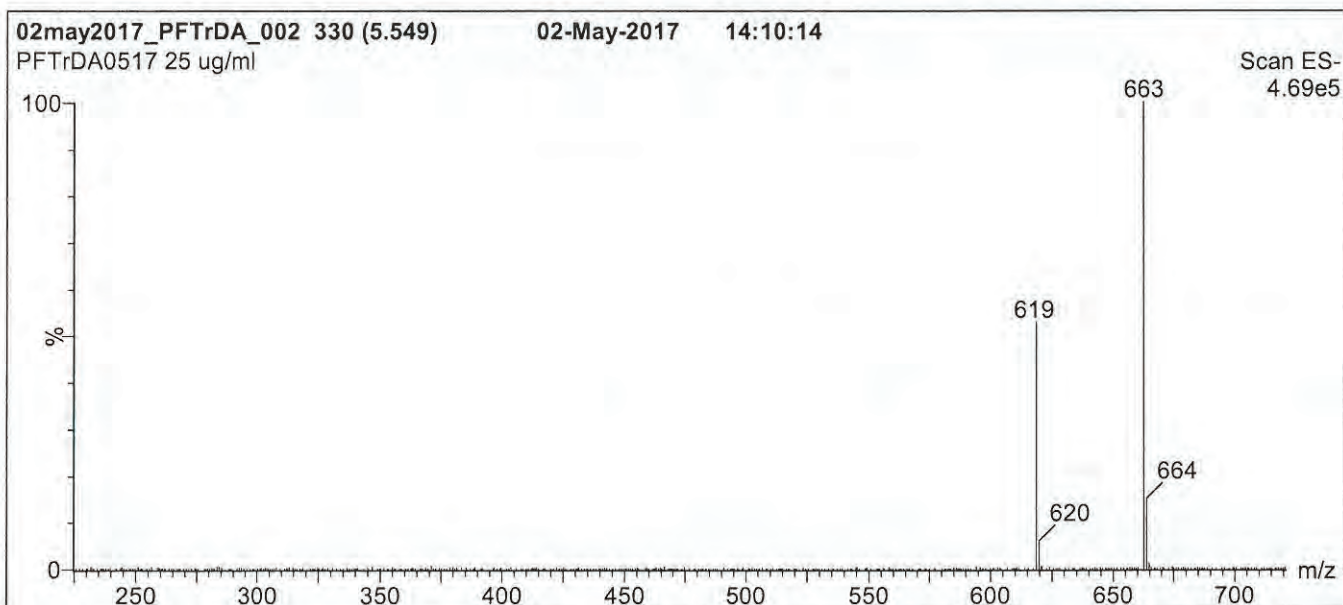
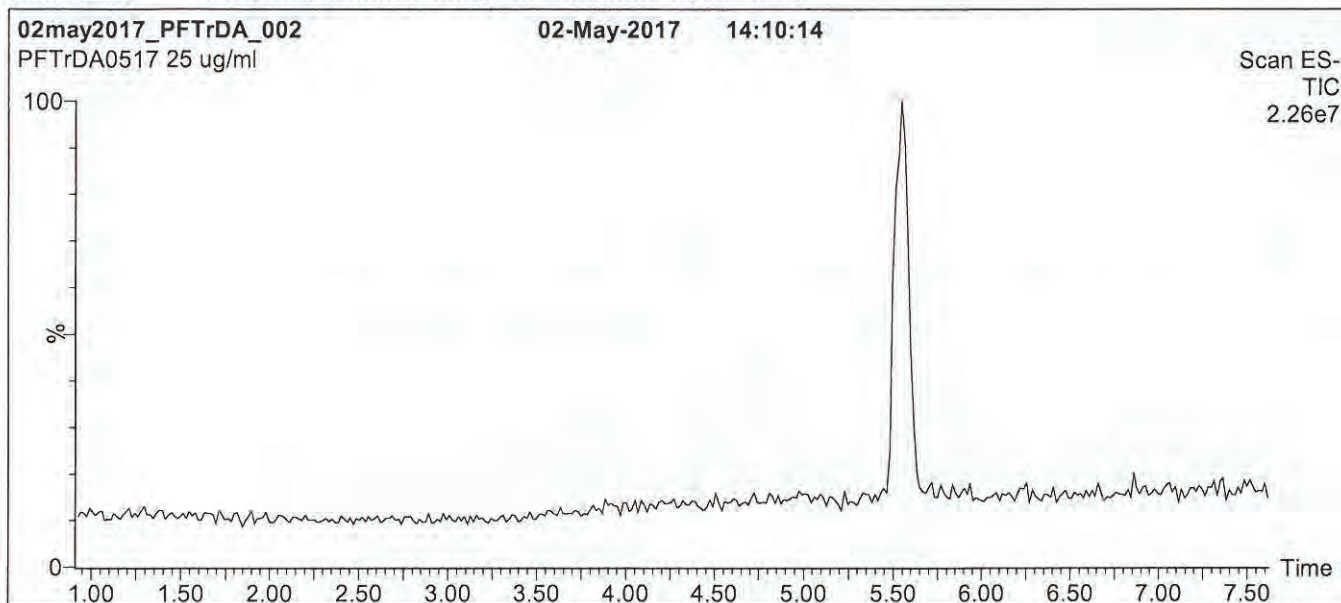
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17G1313

Figure 1: PFTTrDA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 60% (80:20 MeOH:ACN) / 40% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

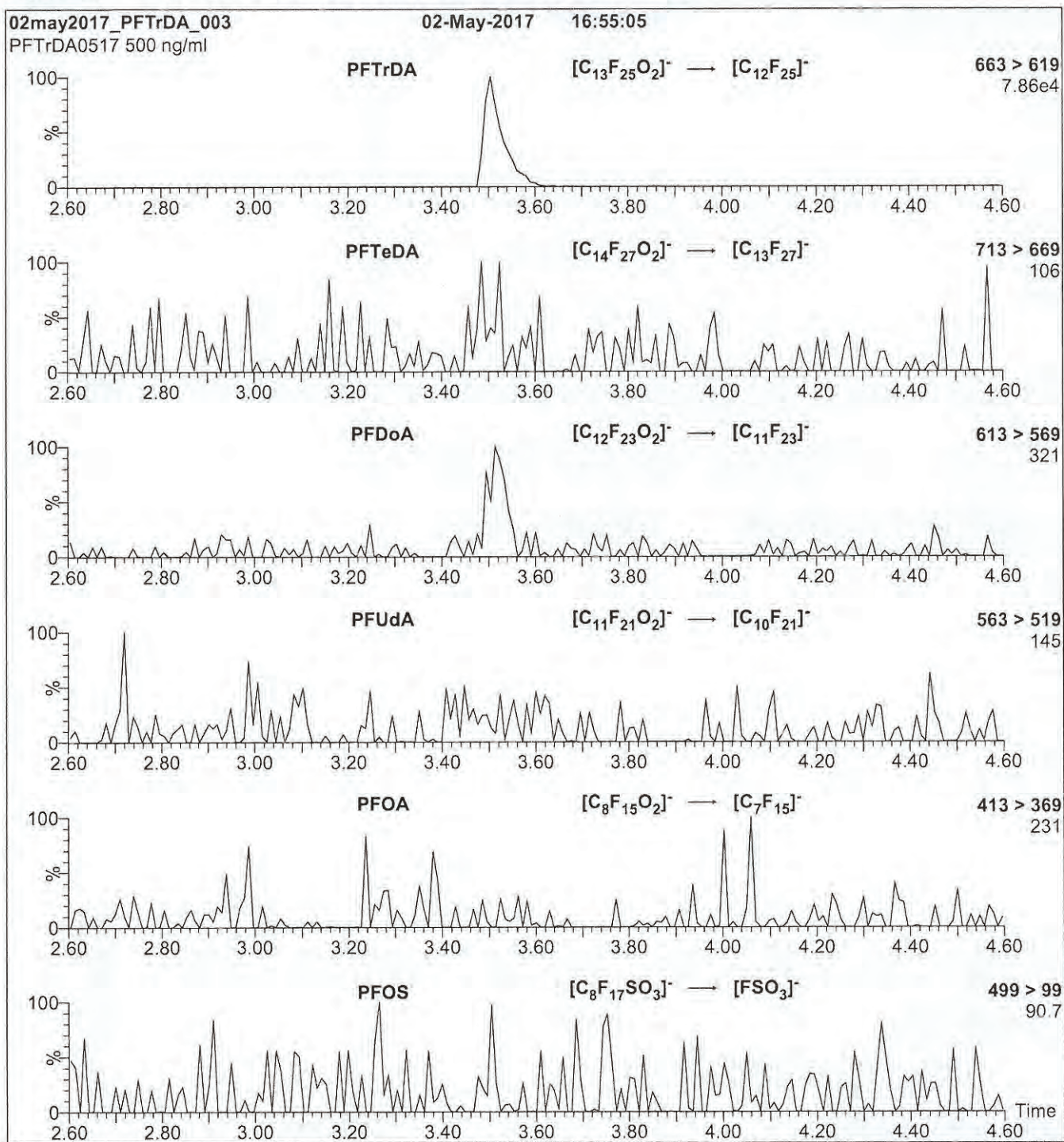
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 22.00
 Cone Gas Flow (l/hr) = 60
 Desolvation Gas Flow (l/hr) = 650

17 G1313

Figure 2: PFTrDA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml PFTTrDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.17e-3
Collision Energy (eV) = 15

17G 13 23

**WELLINGTON
LABORATORIES****CERTIFICATE OF ANALYSIS
DOCUMENTATION****br-PFHxSK****Potassium Perfluorohexanesulfonate
Solution/Mixture of Linear and
Branched Isomers****PRODUCT CODE:**

br-PFHxSK ✓

LOT NUMBER:

brPFHxSK0117 ✓

CONCENTRATION:

50.0 ± 2.5 µg/ml (total potassium salt)

45.5 ± 2.3 µg/ml (total PFHxS anion)

SOLVENT(S):

Methanol

DATE PREPARED: (mm/dd/yyyy)

01/03/2017

LAST TESTED: (mm/dd/yyyy)

01/04/2017

EXPIRY DATE: (mm/dd/yyyy)

01/04/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DESCRIPTION:

The chemical purity has been determined to be ≥98% perfluorohexanesulfonate linear and branched isomers. The full name, structure and percent composition for each of the identified isomeric components are given in Table A.

DOCUMENTATION/ DATA ATTACHED:Table A: Isomeric Components and Percent Composition by ¹⁹F-NMR

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS Data (SIR)

Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.5% of perfluoro-1-pentanesulfonate and ~ 0.2% of perfluoro-1-octanesulfonate.
- CAS#: 3871-99-6 (for linear isomer; potassium salt).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1323

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

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where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

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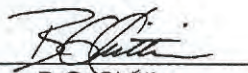
17G132.3

Table A: br-PFHxSK; Isomeric Components and Percent Composition (by ^{19}F -NMR)*

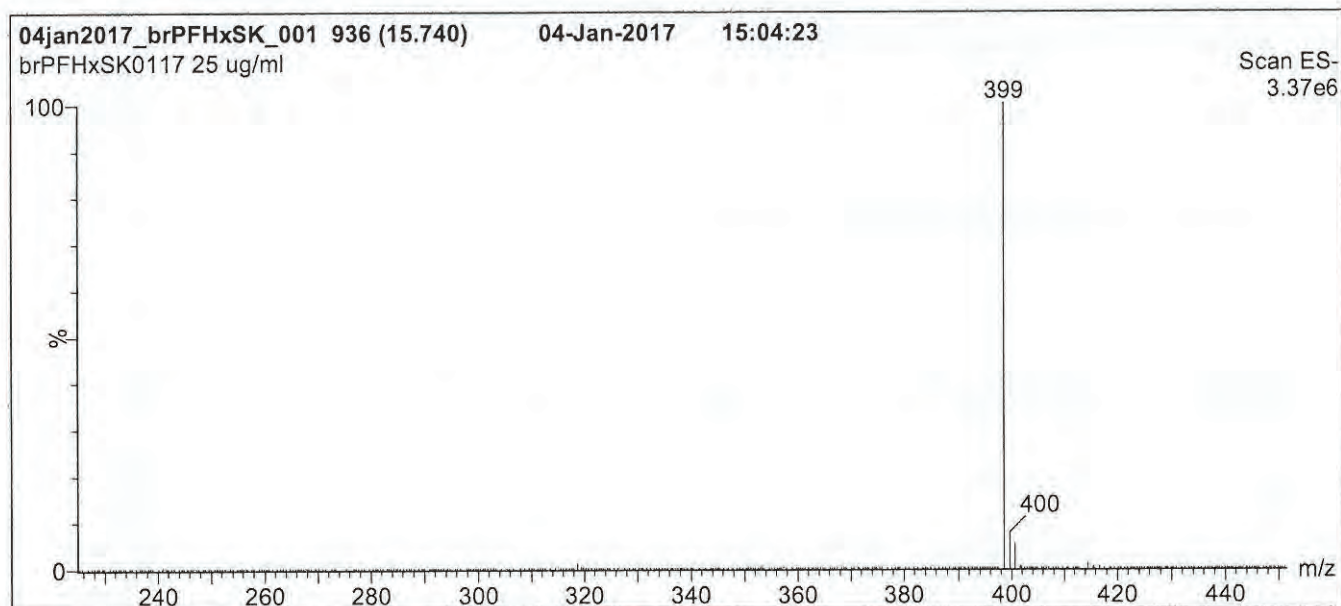
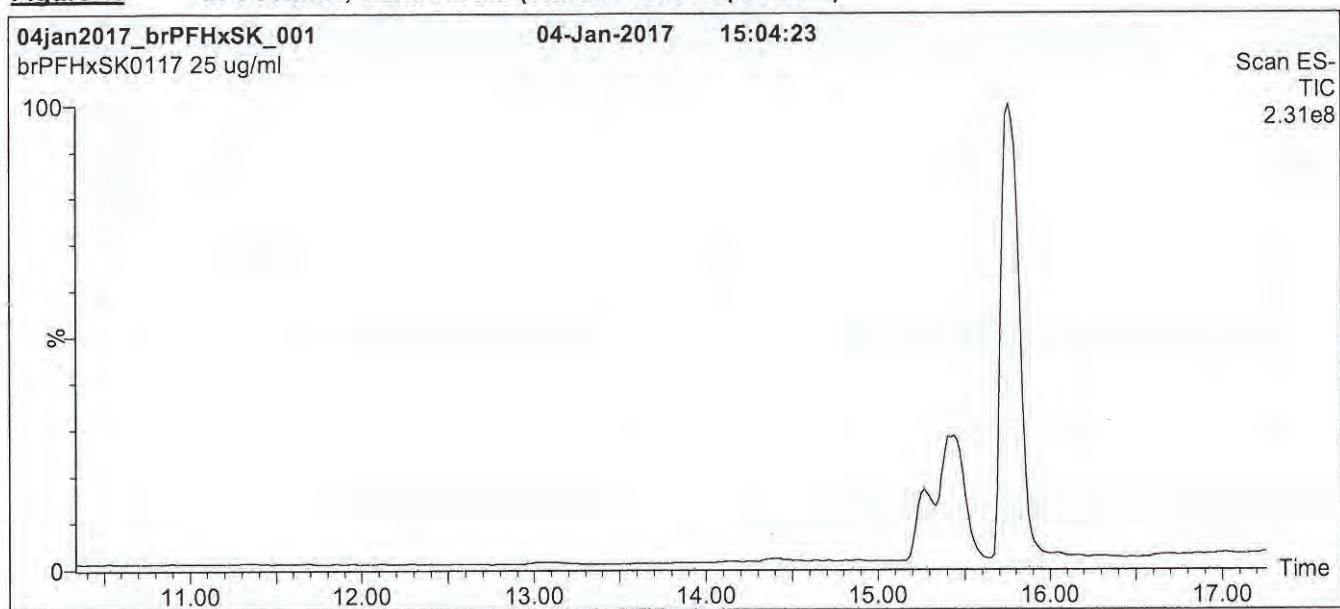
Isomer	Name	Structure	Percent Composition by ^{19}F -NMR
1	Potassium perfluoro-1-hexanesulfonate	$\text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+$	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$\text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{C}(\text{CF}_3)\text{SO}_3^-\text{K}^+$	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$\text{CF}_3\text{CF}_2\text{CF}_2\text{C}(\text{CF}_3)\text{CF}_2\text{SO}_3^-\text{K}^+$	1.4
4	Potassium 3-trifluoromethylperfluoropentanesulfonate	$\text{CF}_3\text{CF}_2\text{C}(\text{CF}_3)\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+$	5.0
5	Potassium 4-trifluoromethylperfluoropentanesulfonate	$\text{CF}_3\text{C}(\text{CF}_3)\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+$	8.9
6	Potassium 3,3-di(trifluoromethyl)perfluorobutanesulfonate	$\text{CF}_3\text{C}(\text{CF}_3)_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+$	0.2
7	Other Unidentified Isomers		0.5

* Percent of total perfluorohexanesulfonate isomers only.
 ** Systematic Name: Potassium perfluorohexane-2-sulfonate.

Certified By:


 B.G. Chittim
Date: 01/20/2017
(mm/dd/yyyy)

17G1323

Figure 1: br-PFHxSK; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 20% (80:20 MeOH:ACN) / 80% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 50% organic over 14 min. Ramp to
 90% organic over 3 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 20 min

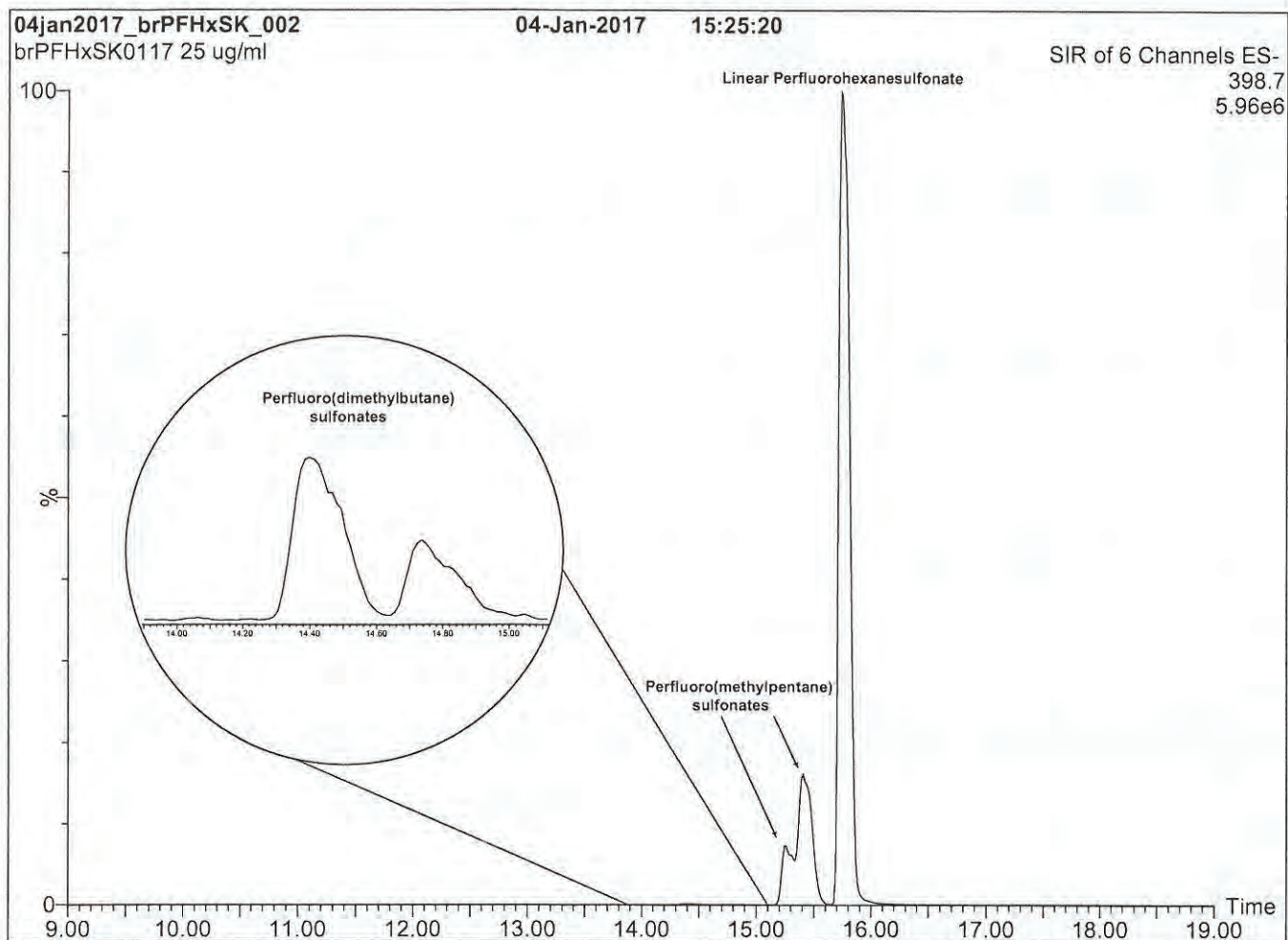
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 50.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

17G1323

Figure 2: br-PFHxSK; LC/MS Data (SIR)**Conditions for Figure 2:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 20% (80:20 MeOH:ACN) / 80% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 50% organic over 14 min. Ramp to
 90% organic over 3 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 20 min

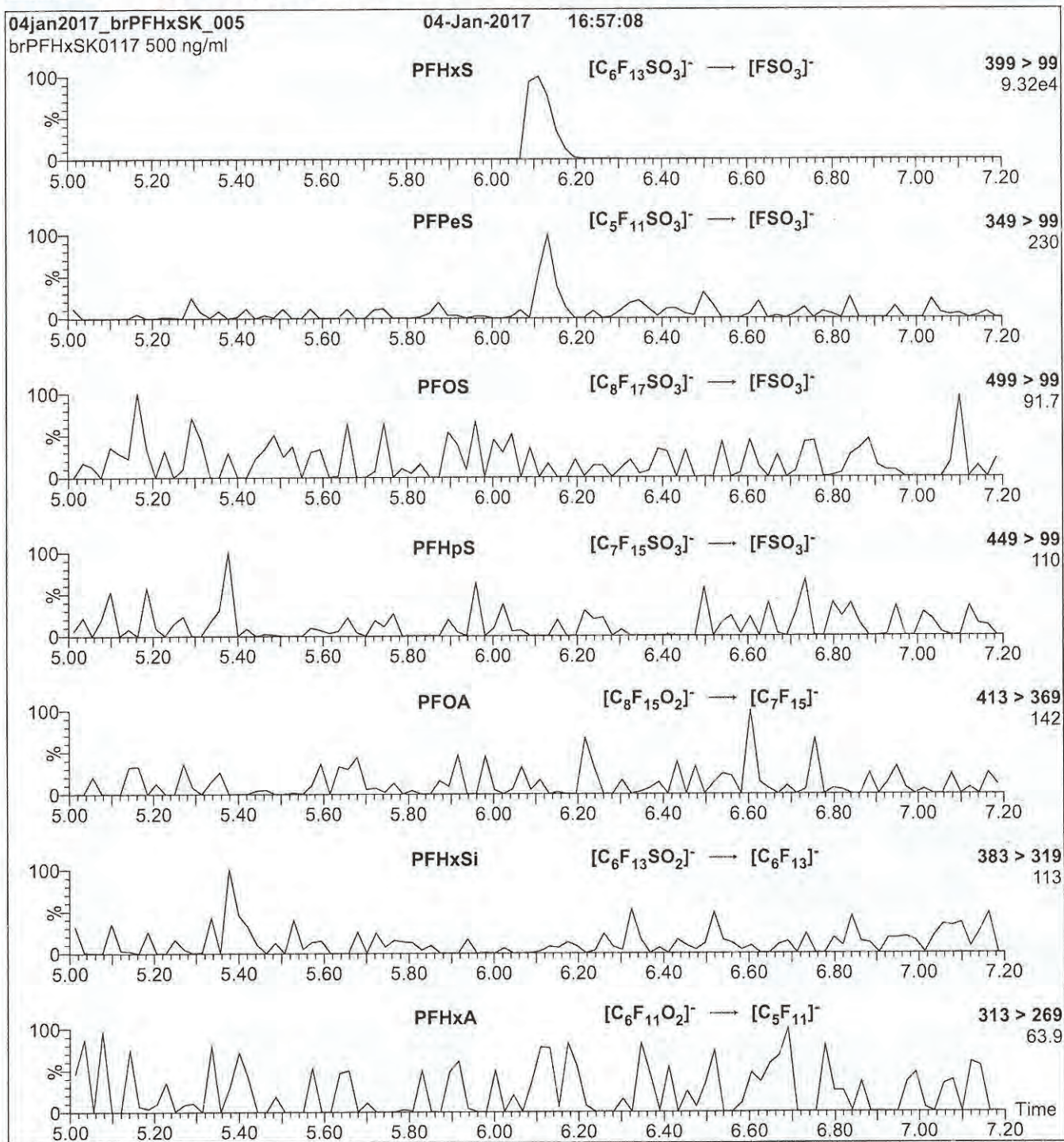
Flow: 300 μ l/min

MS Parameters

Experiment: SIR (6 channels)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = variable (15-62)
 Cone Gas Flow (l/hr) = 60
 Desolvation Gas Flow (l/hr) = 750

17G1323

Figure 3: br-PFHxSK; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 3:**

Injection: Direct loop injection
10 μ l (500 ng/ml br-PFHxSK)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 30

17G1325



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

L-PFDS

COMPOUND:

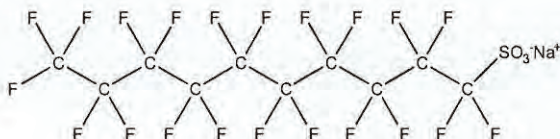
Sodium perfluoro-1-decanesulfonate

LOT NUMBER:

LPFDS0217

STRUCTURE:**CAS #:**

2806-15-7

**MOLECULAR FORMULA:** $C_{10}F_{21}SO_3Na$ **CONCENTRATION:**

50.0 ± 2.5 µg/ml (Na salt)
48.2 ± 2.4 µg/ml (PFDS anion)

MOLECULAR WEIGHT:

622.13

SOLVENT(S):

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

02/17/2017

EXPIRY DATE: (mm/dd/yyyy)

02/17/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.9% of sodium perfluoro-1-dodecanesulfonate (L-PFDoS).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 02/22/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1325

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

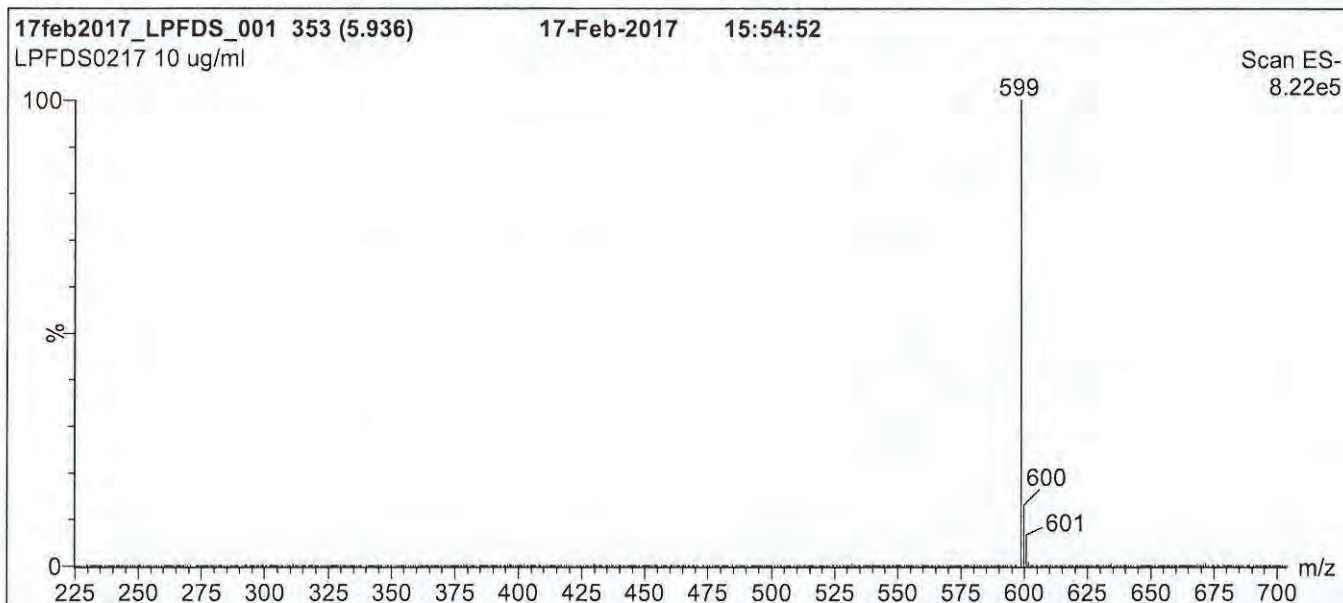
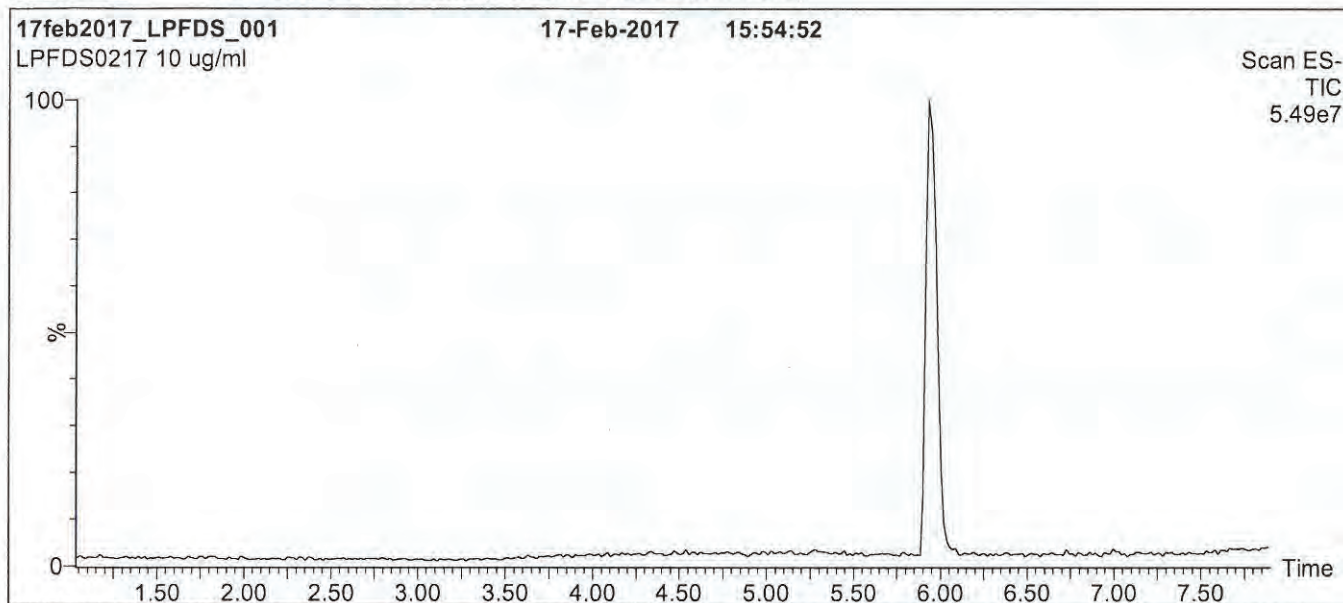
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

17G1325

Figure 1: L-PFDS; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
1 min before returning to initial conditions in 0.5 min.
Time: 10 min

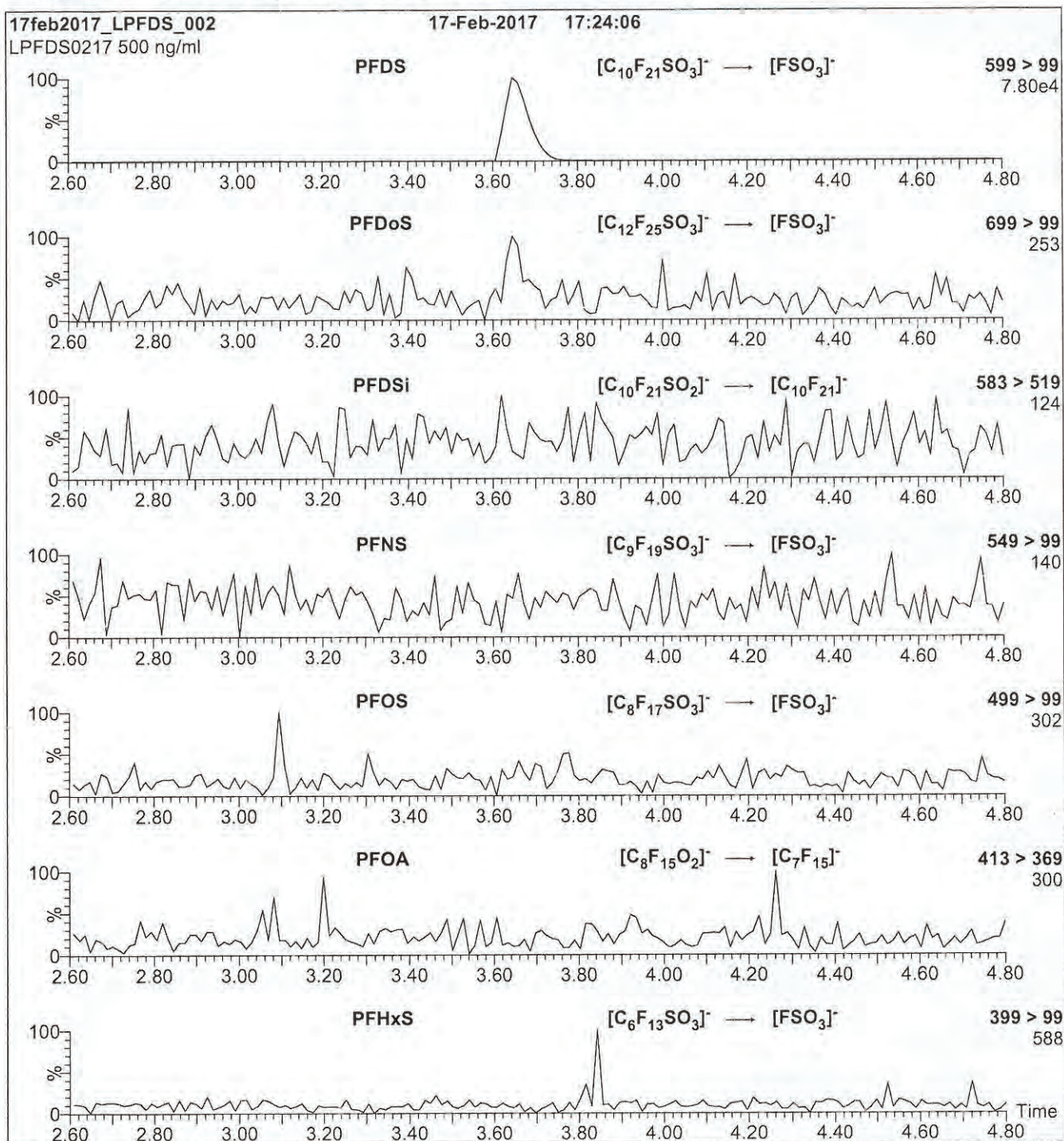
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 70.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

17G1325

Figure 2: L-PFDS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFDS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 50

17G1326



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

L-PFHps

COMPOUND:

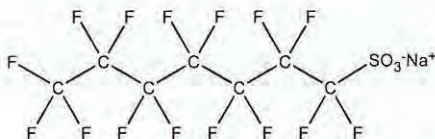
Sodium perfluoro-1-heptanesulfonate

LOT NUMBER:

LPFHps1016

STRUCTURE:**CAS #:**

Not available

**MOLECULAR FORMULA:** $C_7F_{15}SO_3Na$ **MOLECULAR WEIGHT:**

472.10

CONCENTRATION:

$50.0 \pm 2.5 \mu\text{g/ml}$ (Na salt)
 $47.6 \pm 2.4 \mu\text{g/ml}$ (PFHpS anion)

SOLVENT(S):

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

10/18/2016

EXPIRY DATE: (mm/dd/yyyy)

10/18/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.2% of L-PFHxS ($C_8F_{13}SO_3Na$) and ~ 0.1% of L-PFOS ($C_8F_{17}SO_3Na$).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

 10/20/2016
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1326

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

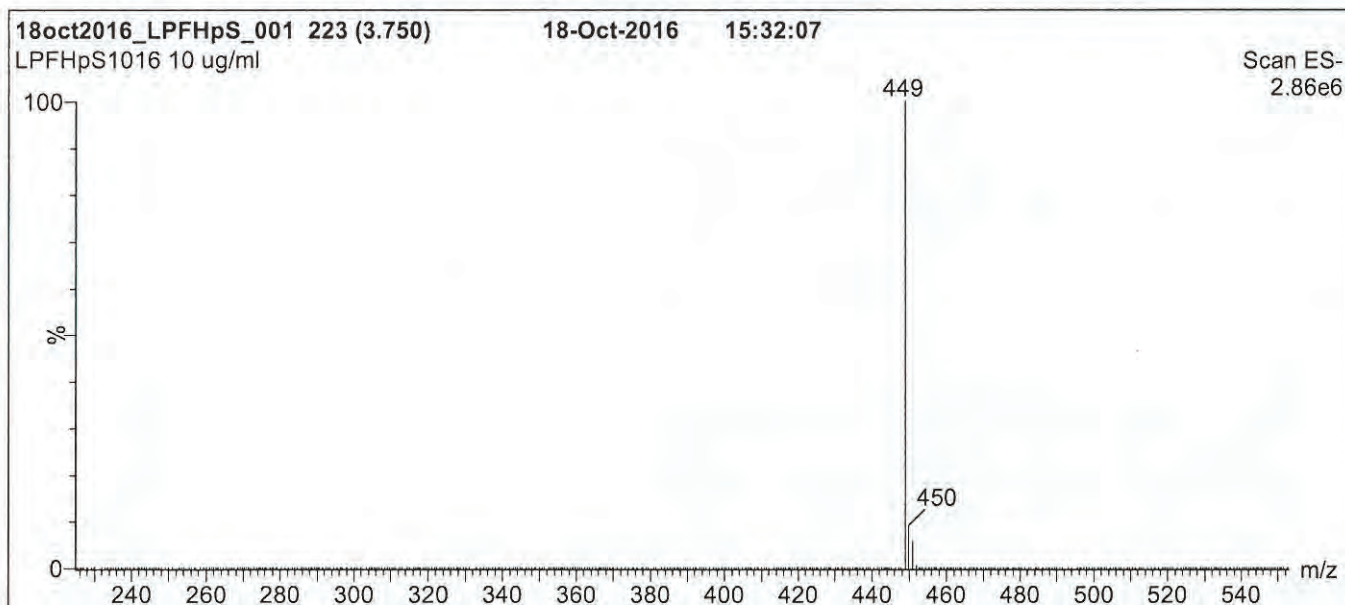
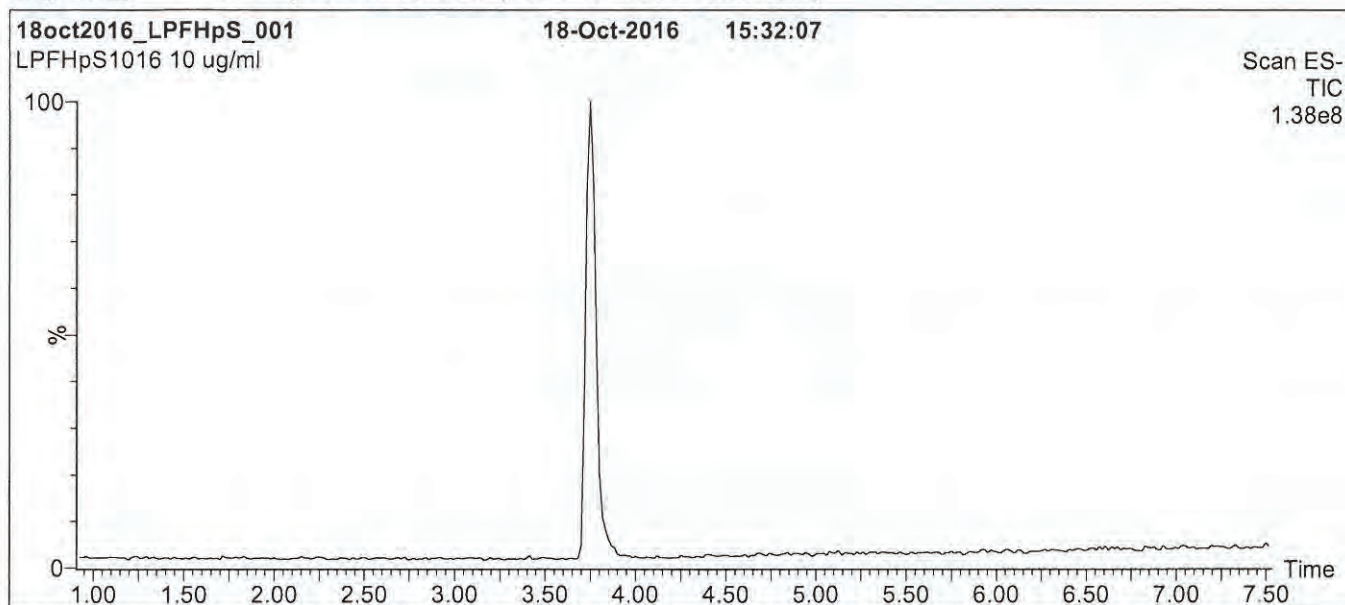
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

17G1326

Figure 1: L-PFHpS; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 55% (80:20 MeOH:ACN) / 45% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold
 for 2 min before returning to initial conditions in 0.5 min.
 Time: 10 min

Flow: 300 μ l/min

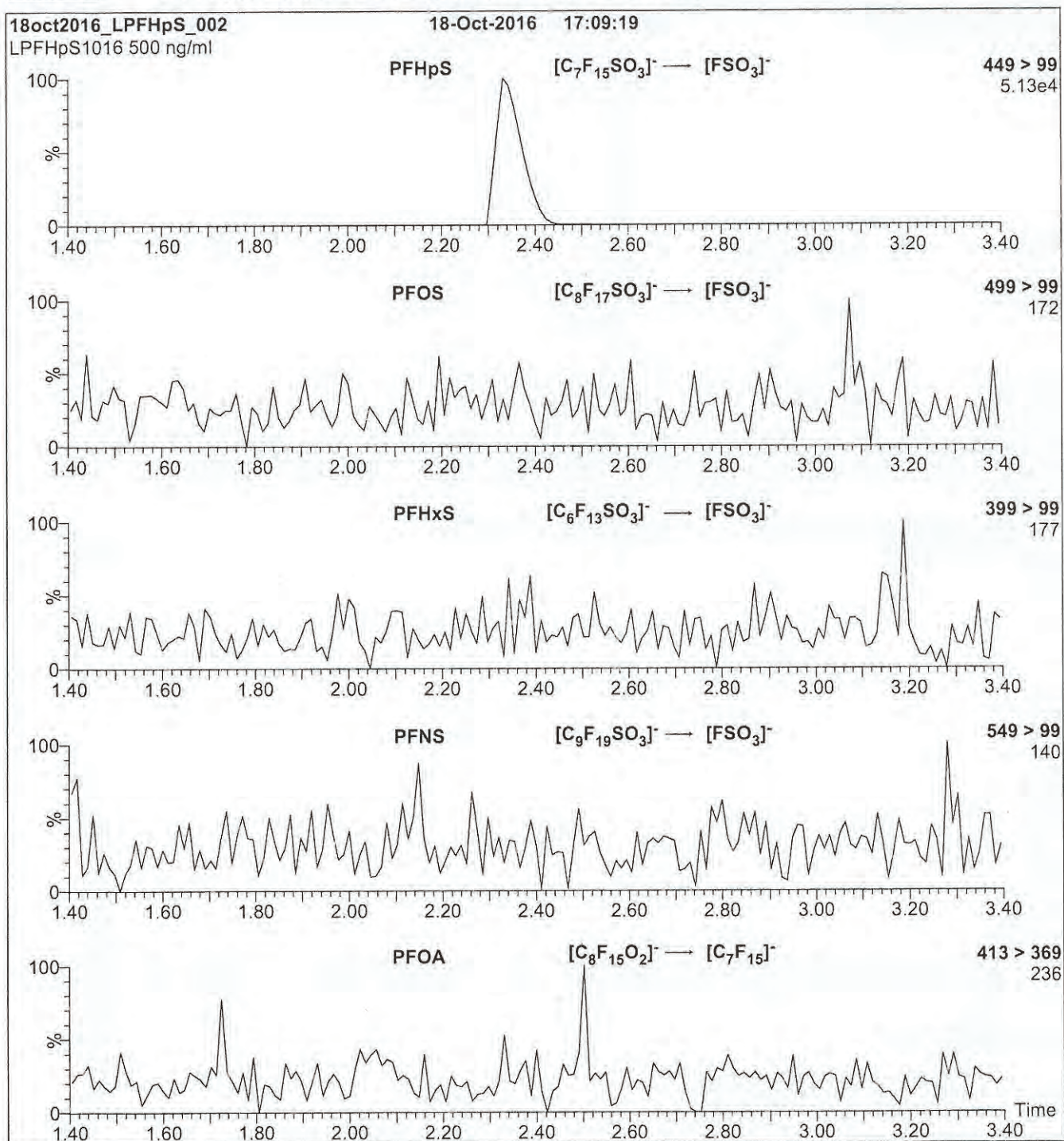
MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 60.00
 Cone Gas Flow (l/hr) = 60
 Desolvation Gas Flow (l/hr) = 750

17 G1326

Figure 2: L-PFHpS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFHpS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 35

17G1805



WELLINGTON LABORATORIES

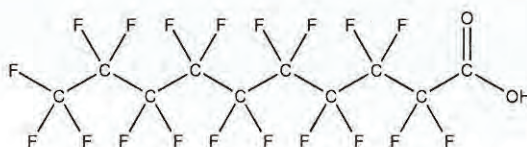
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:✓
PFDA**COMPOUND:**

Perfluoro-n-decanoic acid

LOT NUMBER:✓
PFDA0516**STRUCTURE:****CAS #:**

335-76-2

**MOLECULAR FORMULA:** $C_{10}H_{19}O_2$ **CONCENTRATION:** $50 \pm 2.5 \mu\text{g/ml}$ **MOLECULAR WEIGHT:**

514.08

SOLVENT(S):Methanol
Water (<1%)**CHEMICAL PURITY:**

>98%

LAST TESTED: (mm/dd/yyyy)

05/31/2016

EXPIRY DATE: (mm/dd/yyyy)

05/31/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.2% of Perfluoro-n-nonanoic acid (PFNA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim
Date: 06/13/2016

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1805

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

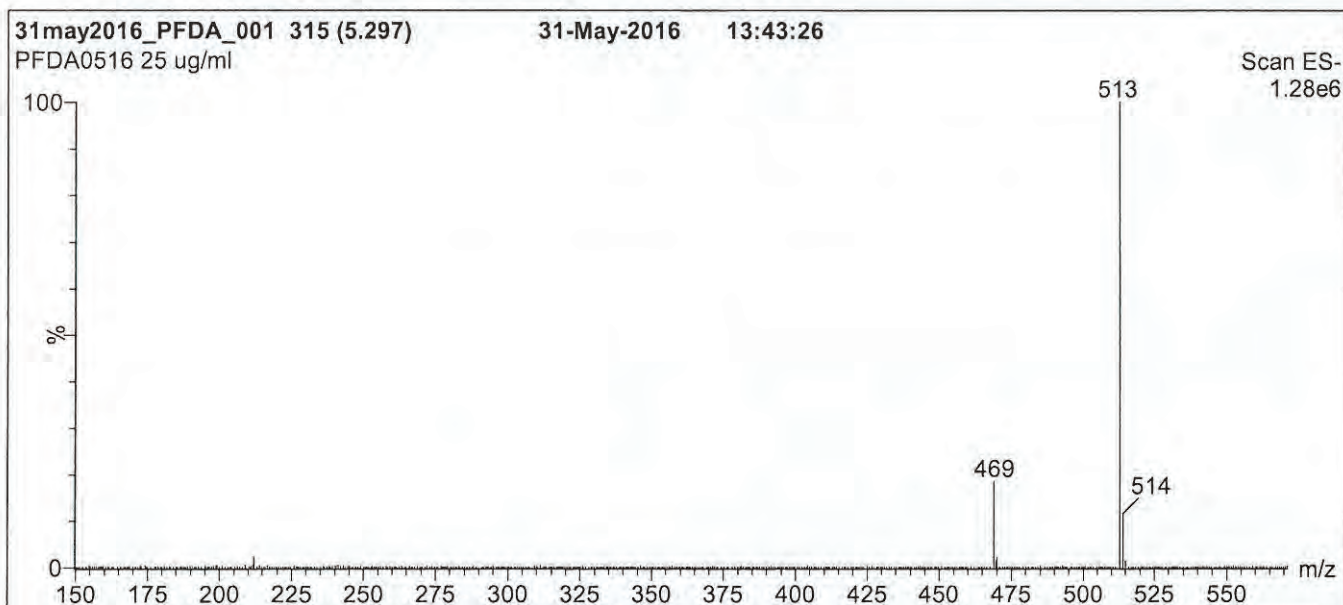
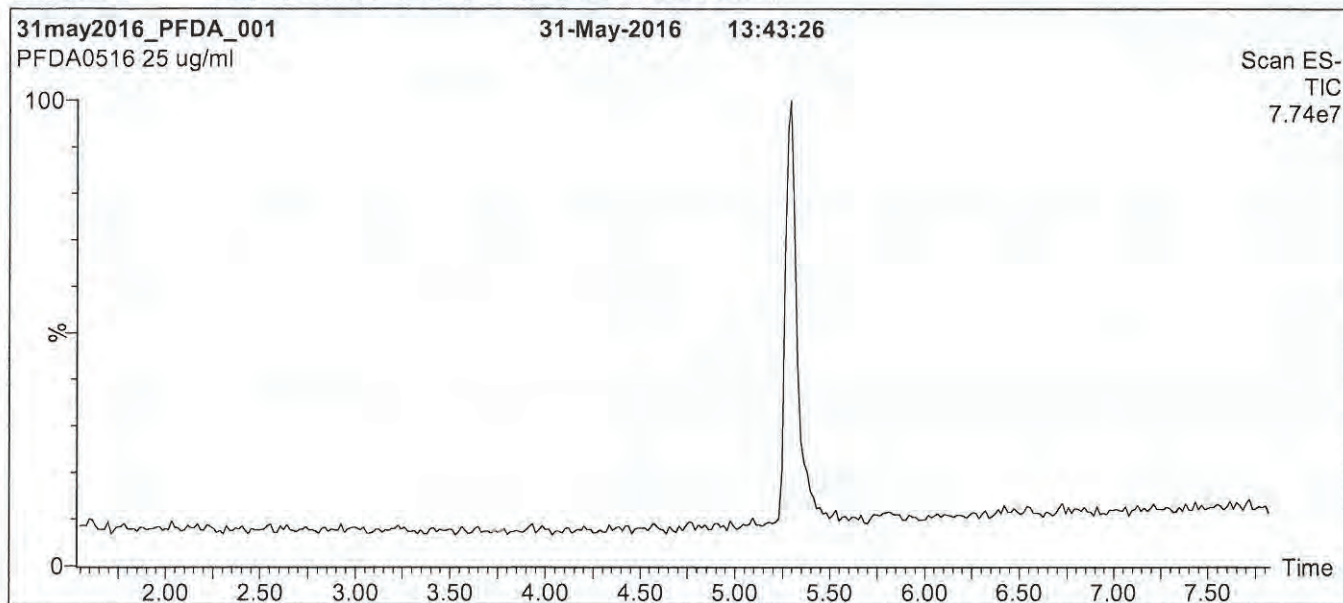
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

17G1805

Figure 1: PFDA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7.5 min and hold for
 1.5 min before returning to initial conditions in 0.5 min.
 Time: 10 min

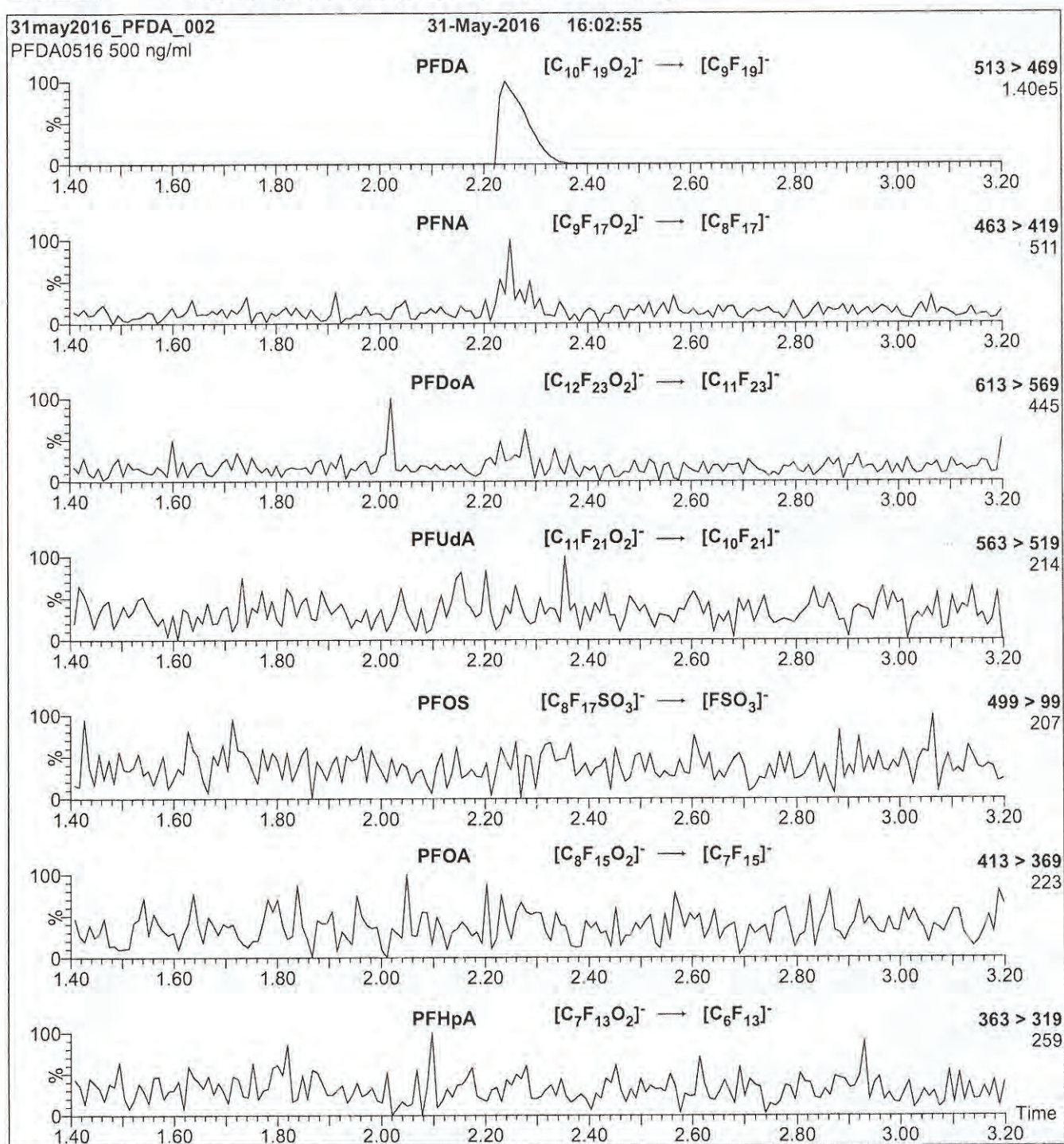
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 15.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17G1805

Figure 2: PFDA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml PFDA)

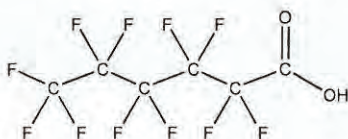
Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 13

17G1806

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**PRODUCT CODE:**
COMPOUND:✓
PFHxA
Perfluoro-n-hexanoic acid**LOT NUMBER:** ✓
PFHxA1216**STRUCTURE:****CAS #:** 307-24-4**MOLECULAR FORMULA:**
CONCENTRATION: $C_6H_{11}O_2$
 $50 \pm 2.5 \mu\text{g/ml}$ **MOLECULAR WEIGHT:** 314.05
SOLVENT(S): Methanol
Water (<1%)**CHEMICAL PURITY:**

>98%

LAST TESTED: (mm/dd/yyyy)

12/02/2016

EXPIRY DATE: (mm/dd/yyyy)

12/02/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 1.0% of branched isomers.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. ChittimDate: 12/07/2016
(mm/dd/yyyy)**Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA**
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1806

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

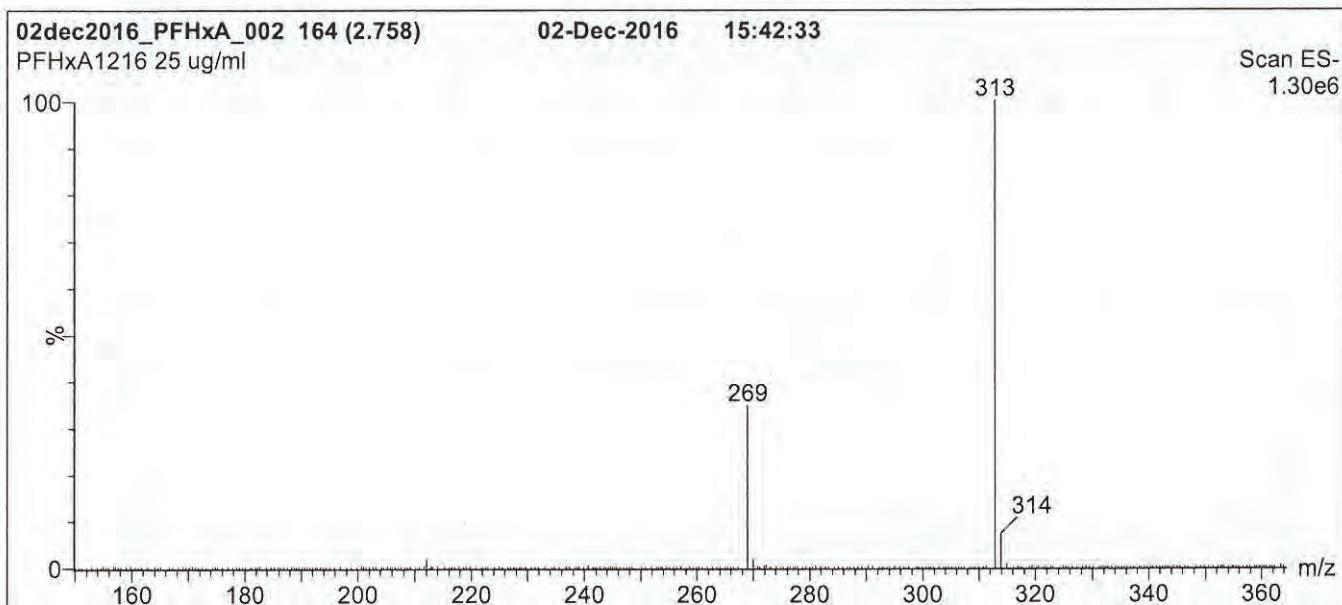
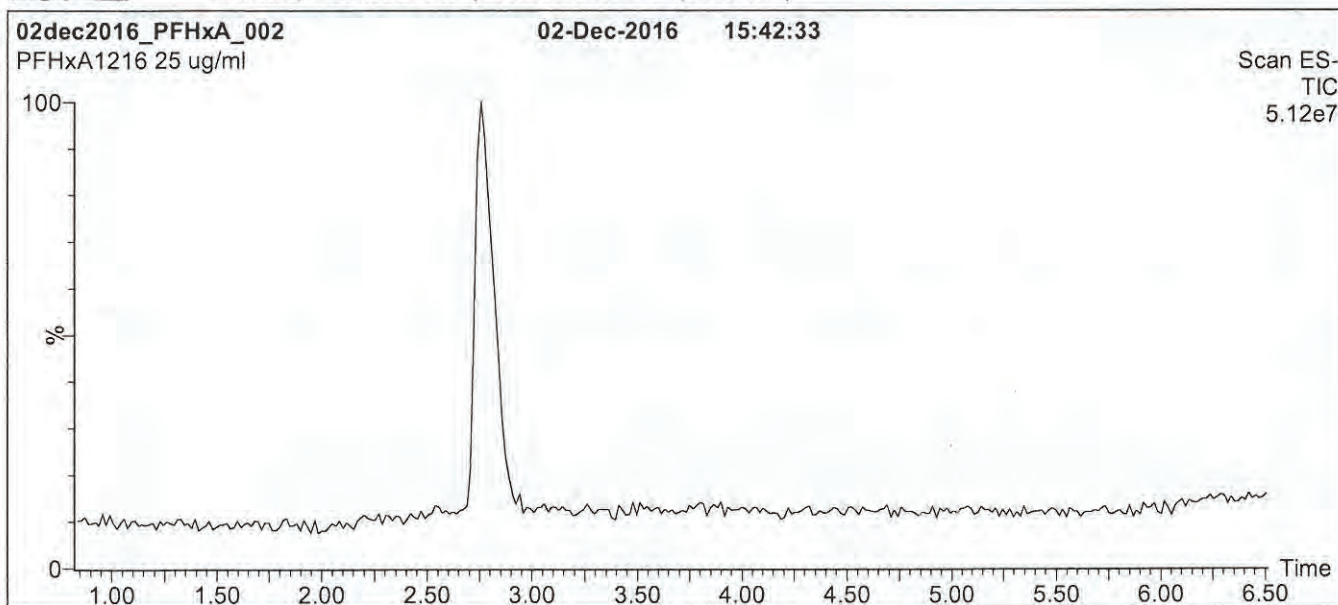
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17G1806

Figure 1: PFHxA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

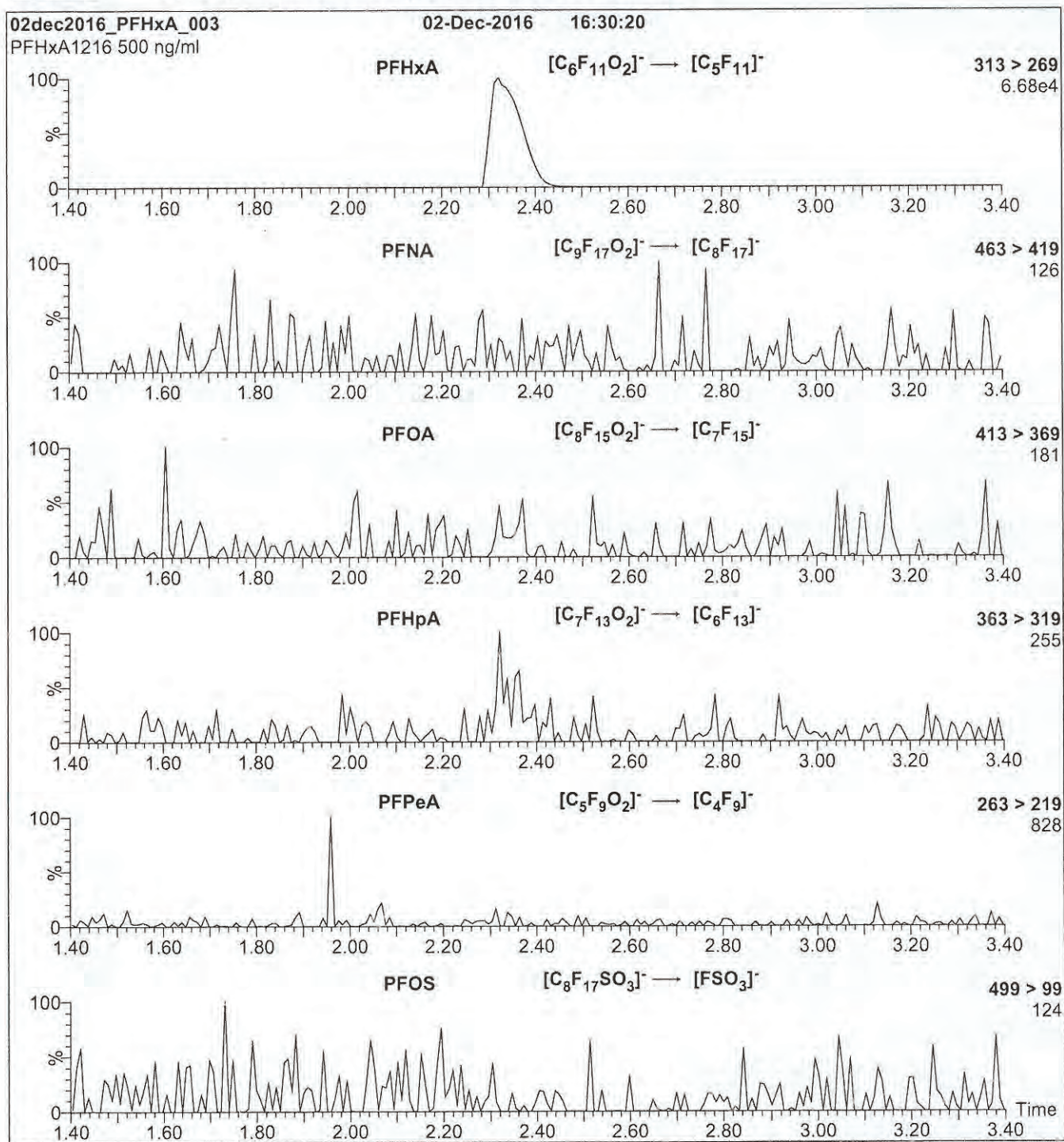
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

17G1806

Figure 2: PFHxA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml PFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 10

17G1807



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

N-MeFOSAA

LOT NUMBER:

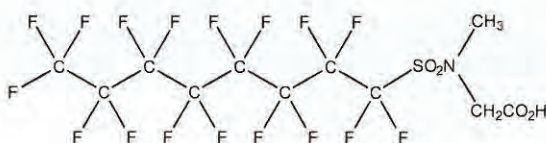
NMeFOSAA0117

COMPOUND:

N-methylperfluoro-1-octanesulfonamidoacetic acid

STRUCTURE:**CAS #:**

2355-31-9

**MOLECULAR FORMULA:** $C_{11}H_6F_{17}NO_4S$ **MOLECULAR WEIGHT:**

571.21

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

01/11/2017

EXPIRY DATE: (mm/dd/yyyy)

01/11/2022

RECOMMENDED STORAGE:

Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/12/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G1807

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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where x is expressed as a relative standard uncertainty of the individual parameter.

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LIMITED WARRANTY:

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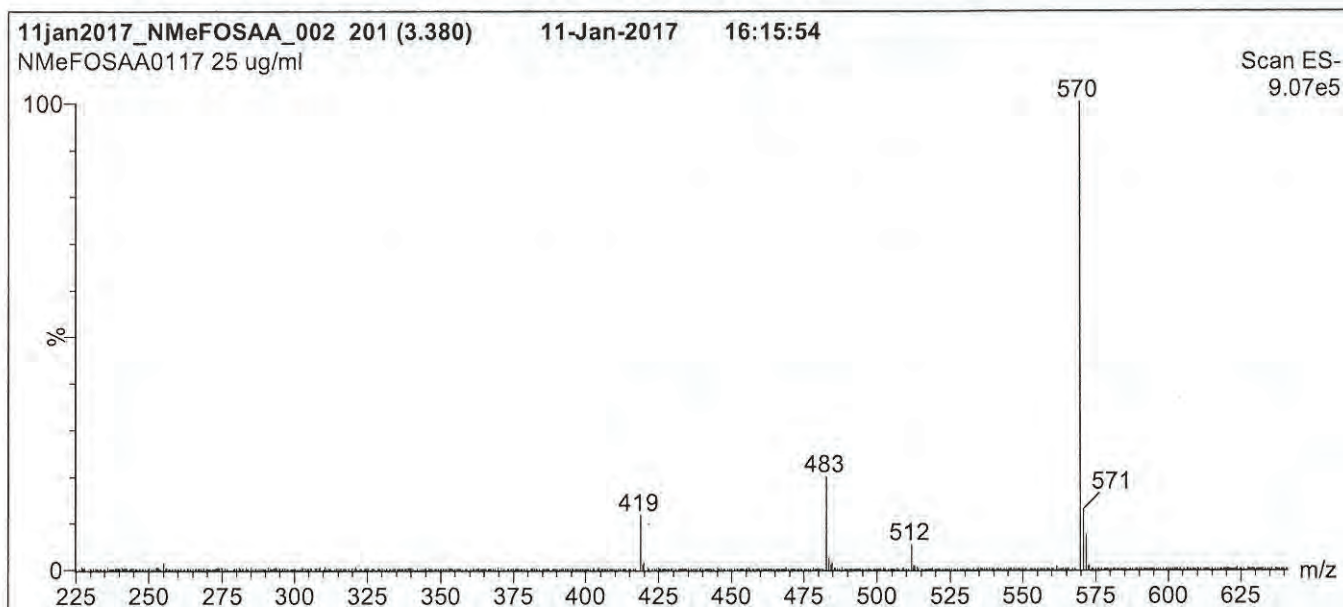
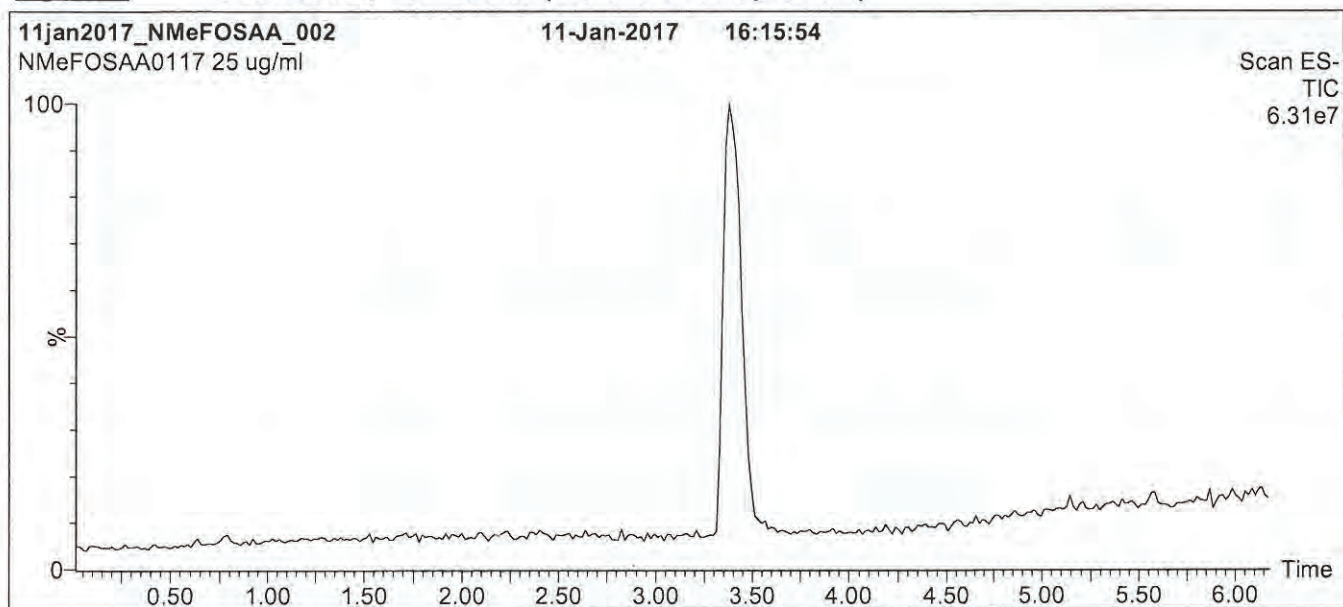
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17G1807

Figure 1: N-MeFOSAA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 65% (80:20 MeOH:ACN) / 35% H₂O
 (both with 10 mM NH₄OAc buffer)

Ramp to 90% organic over 7.5 min and hold for
 1.5 min before returning to initial conditions in 0.5 min.
 Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)

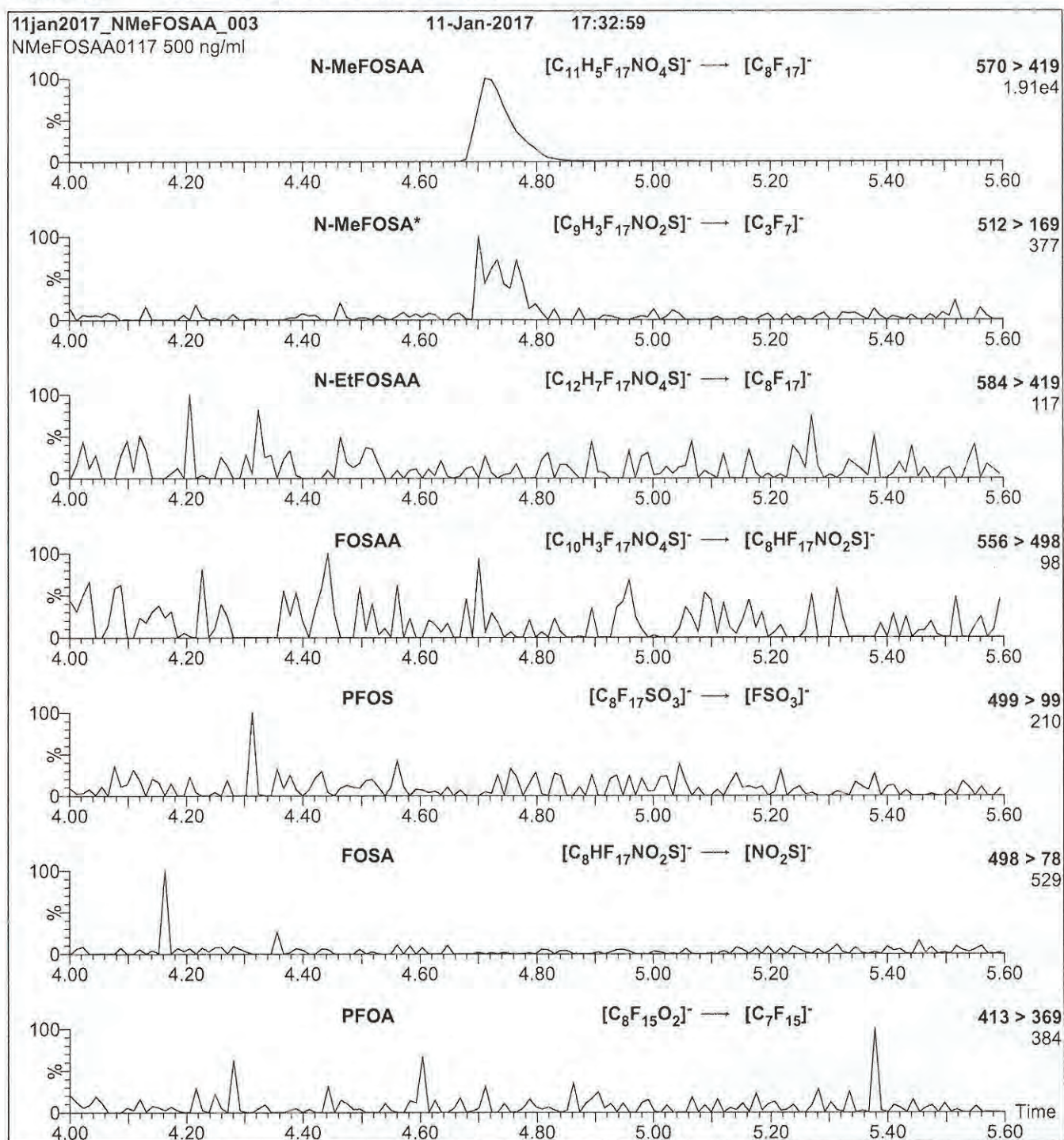
Capillary Voltage (kV) = 3.00

Cone Voltage (V) = 35.00

Cone Gas Flow (l/hr) = 50

Desolvation Gas Flow (l/hr) = 750

17G1807

Figure 2: N-MeFOSAA; LC/MS/MS Data (Selected MRM Transitions)

*Note: N-MeFOSA is formed by in-source fragmentation.

Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml N-MeFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 20

17G 1808



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

N-EtFOSAA

LOT NUMBER:

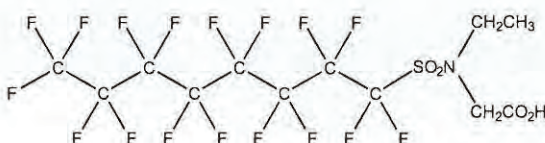
NEtFOSAA0117

COMPOUND:

N-ethylperfluoro-1-octanesulfonamidoacetic acid

STRUCTURE:**CAS #:**

2991-50-6

**MOLECULAR FORMULA:** $C_{12}H_8F_{17}NO_4S$ **MOLECULAR WEIGHT:**

585.23

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**Methanol
Water (<1%)**CHEMICAL PURITY:**

>98%

LAST TESTED: (mm/dd/yyyy)

01/11/2017

EXPIRY DATE: (mm/dd/yyyy)

01/11/2022

RECOMMENDED STORAGE:

Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 01/12/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G180.8

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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LIMITED WARRANTY:

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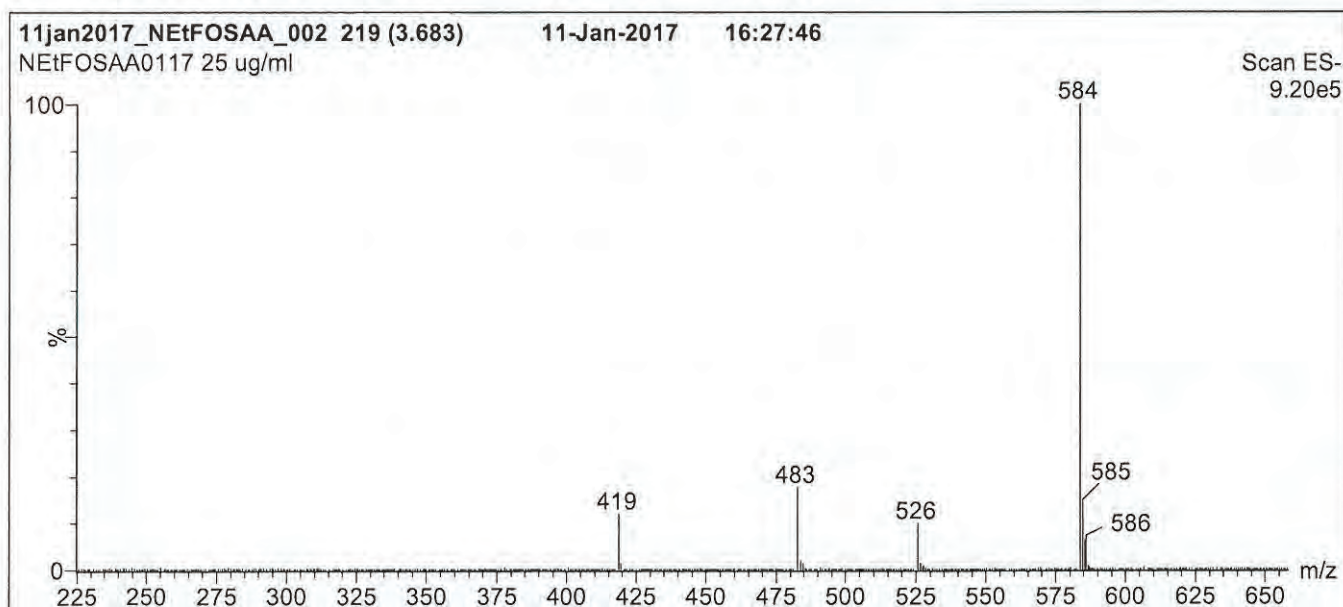
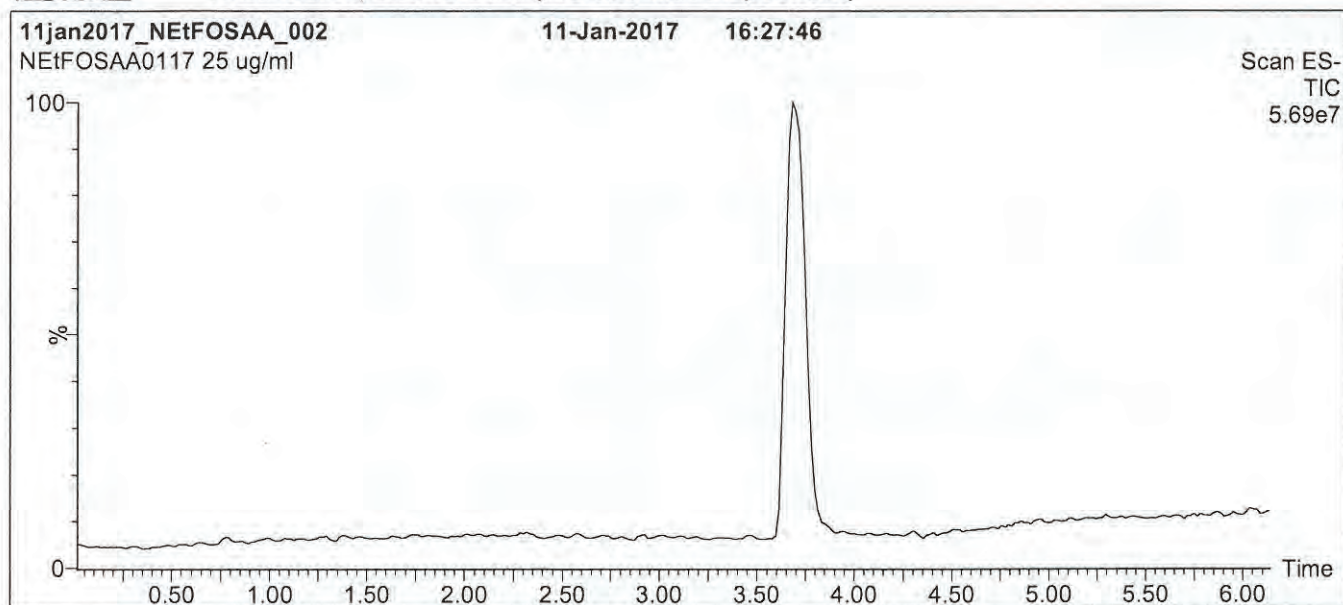
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17G1808

Figure 1: N-EtFOSAA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 65% (80:20 MeOH:ACN) / 35% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7.5 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

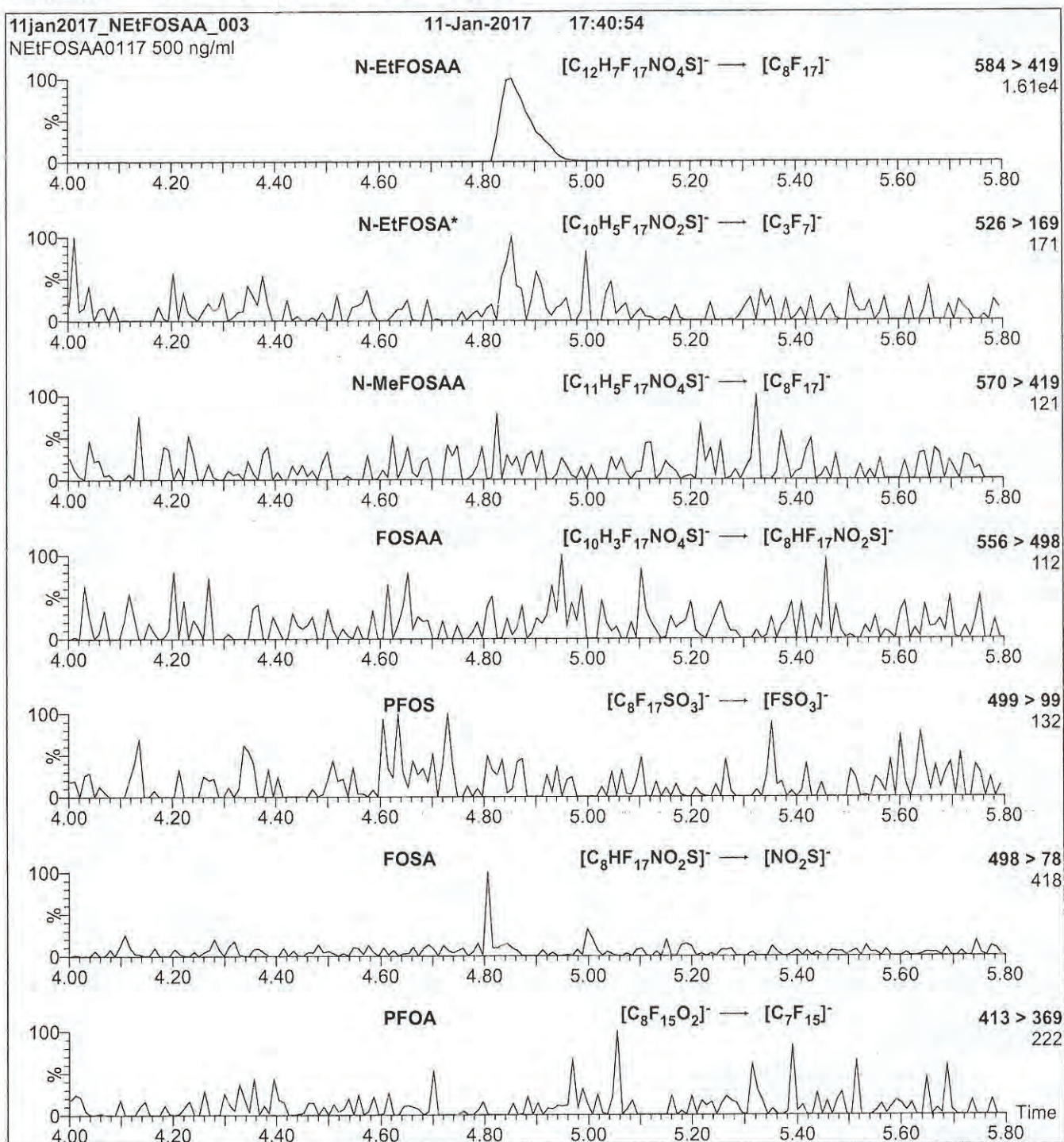
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 35.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17G1808

Figure 2: N-EtFOSAA; LC/MS/MS Data (Selected MRM Transitions)

Note: N-EtFOSA is formed by fragmentation of N-EtFOSAA.

Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml N-EtFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 20

17G1809



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFBA

COMPOUND:

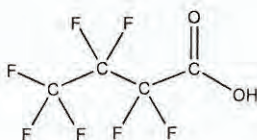
Perfluoro-n-butanoic acid

LOT NUMBER:

PFBA0517

STRUCTURE:**CAS #:**

375-22-4

**MOLECULAR FORMULA:** $C_4HF_7O_2$ **CONCENTRATION:** $50 \pm 2.5 \mu\text{g/ml}$ **MOLECULAR WEIGHT:**

214.04

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

05/29/2017

EXPIRY DATE: (mm/dd/yyyy)

05/29/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim, General Manager
Date: 05/30/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17G 1809

INTENDED USE:

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HAZARDS:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

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$x_1, x_2, \dots, x_n$ on which it depends is:

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LIMITED WARRANTY:

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QUALITY MANAGEMENT:

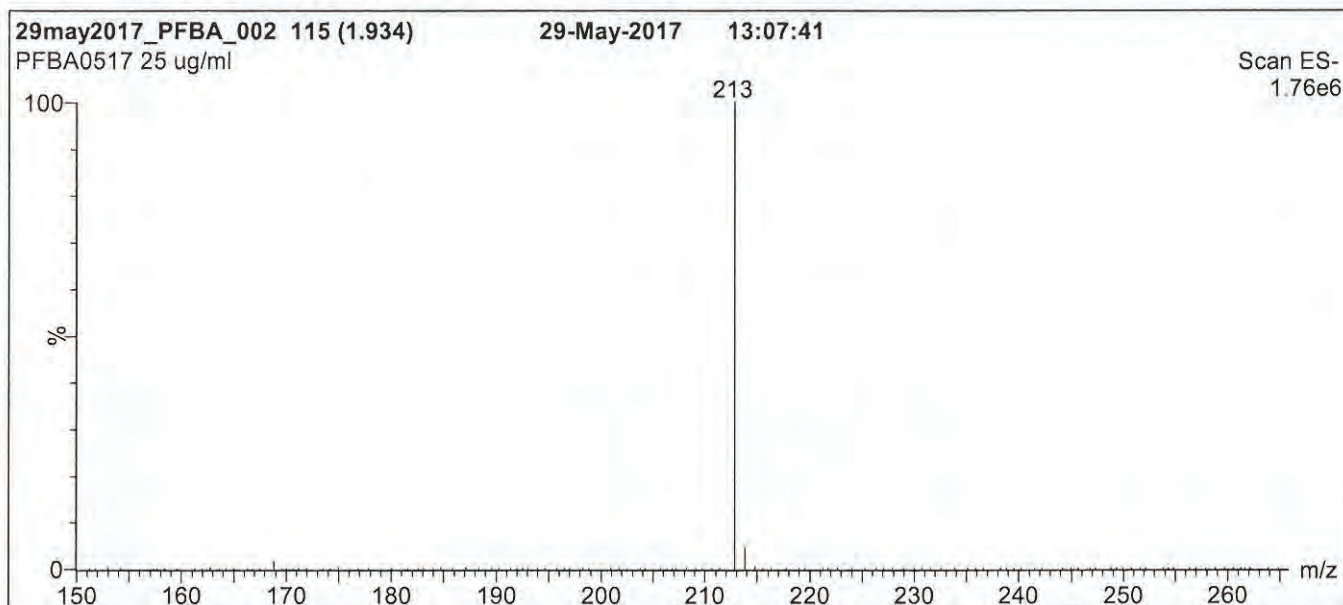
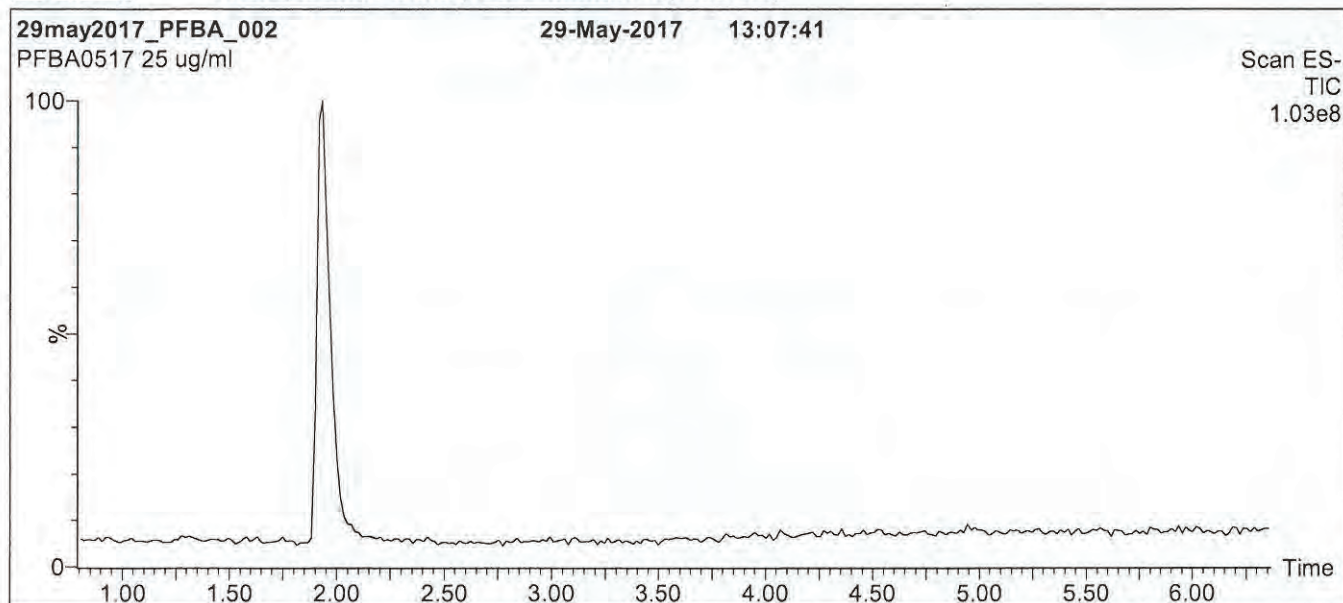
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17G1809

Figure 1: PFBA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)

Capillary Voltage (kV) = 3.00

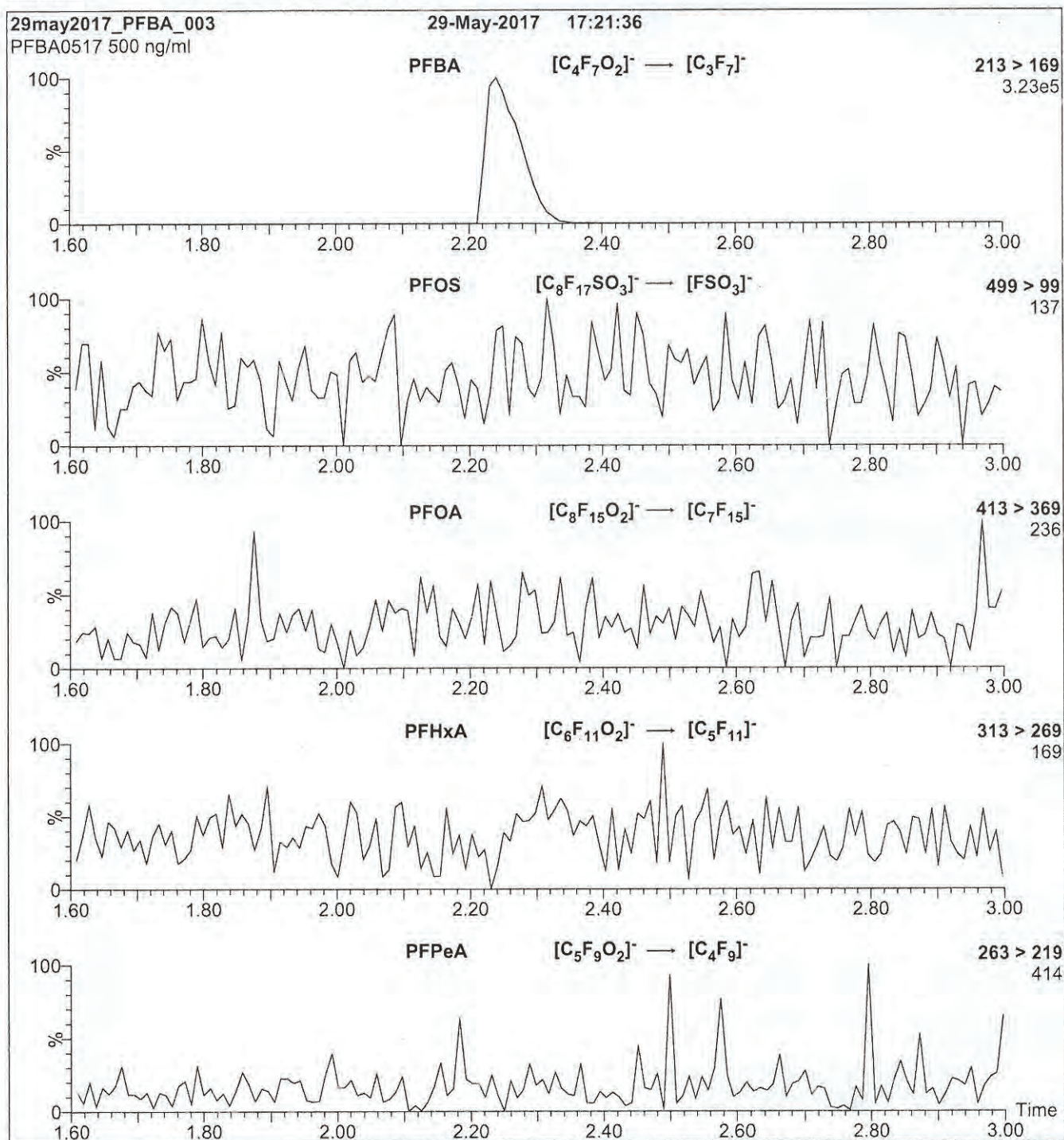
Cone Voltage (V) = 10.00

Cone Gas Flow (l/hr) = 100

Desolvation Gas Flow (l/hr) = 750

17 G 1809

Figure 2: PFBA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.39e-3

Collision Energy (eV) = 10

CERTIFICATE OF ANALYSIS

DOCUMENTATION

PFODA

Perfluoro-n-octadecanoic acid

PFODA0416

CAS #:

16517-11-6


$$C_{18}H_{35}O_2$$
 $50 \pm 2.5 \text{ } \mu\text{g/ml}$

914.14

Methanol

Water (<1%)

>98%

LAST TESTED: (mm/dd/yyyy)

04/29/2016

EXPIRY DATE: (mm/dd/yyyy)

04/29/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:


B.G. Chittim

Date: 05/20/2016

(mm/dd/yyyy)

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519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17 G1810

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

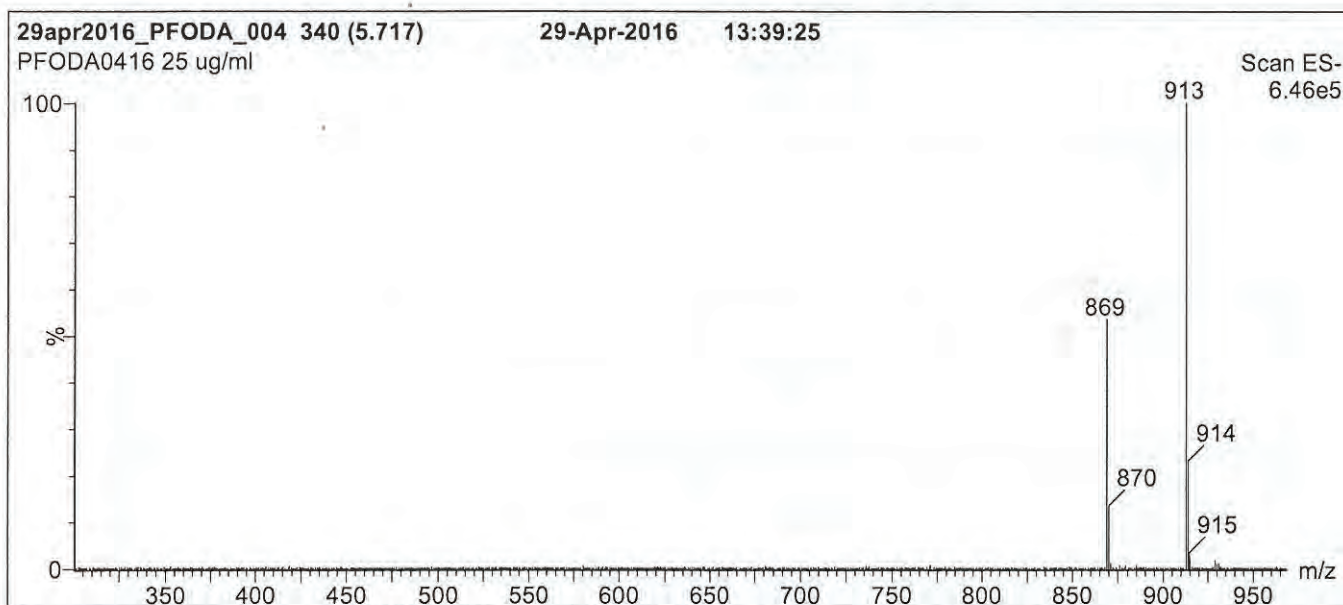
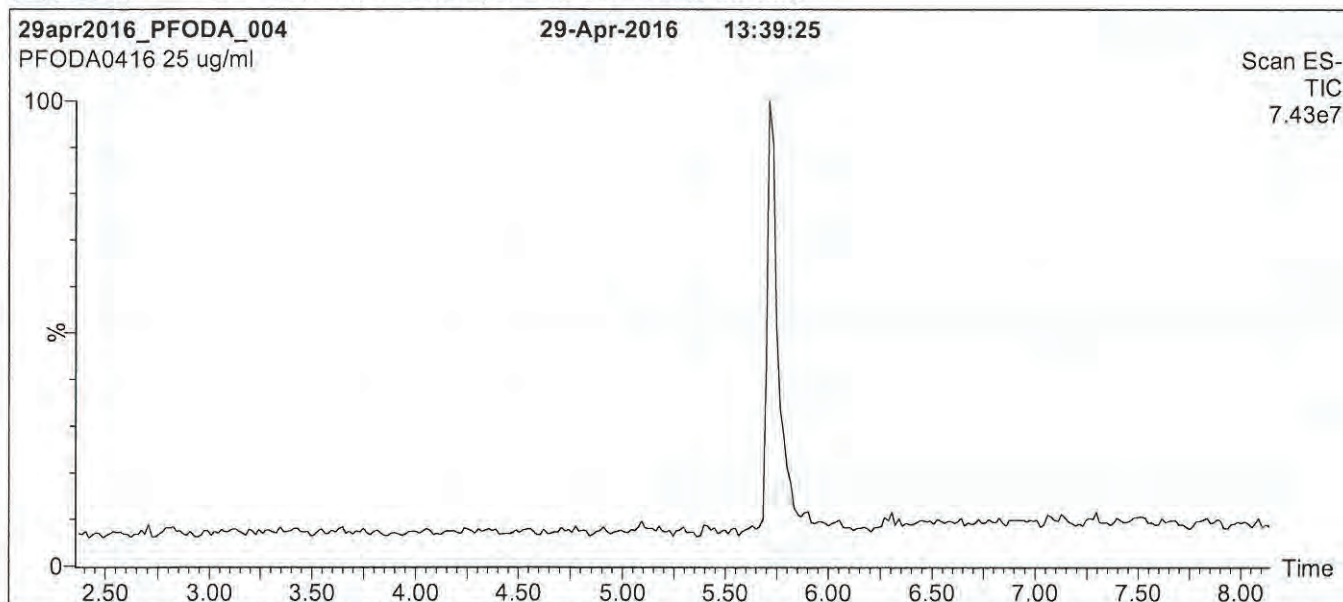
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: PFODA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 70% (80:20 MeOH:ACN) / 30% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 95% organic over 6 min and hold for
2.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

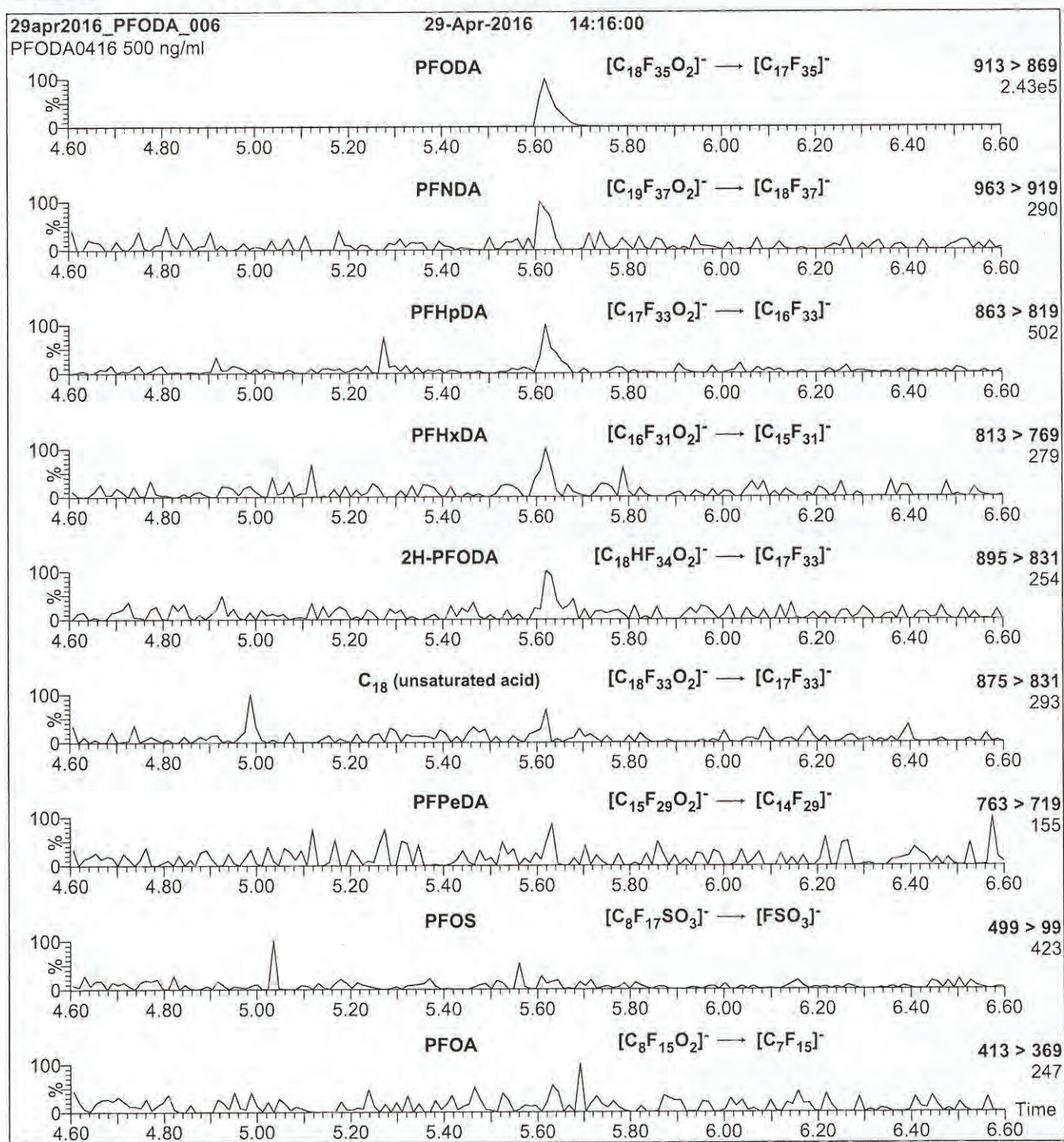
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 1000 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

17G1810

Figure 2: PFODA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml PFODA)

Mobile phase: Isocratic 90% (80:20 MeOH:ACN) / 10% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

17G1811



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

L-PFBS

COMPOUND:

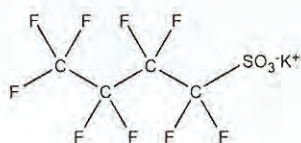
Potassium perfluoro-1-butanesulfonate

LOT NUMBER:

LPFBS1116

STRUCTURE:**CAS #:**

29420-49-3

**MOLECULAR FORMULA:** $C_4F_9SO_3K$ **CONCENTRATION:**

$50.0 \pm 2.5 \mu\text{g/ml}$ (K salt)
 $44.2 \pm 2.2 \mu\text{g/ml}$ (PFBS anion)

MOLECULAR WEIGHT:

338.19

SOLVENT(S):

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

12/02/2016

EXPIRY DATE: (mm/dd/yyyy)

12/02/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 12/05/2016

(mm/dd/yyyy)

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INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

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where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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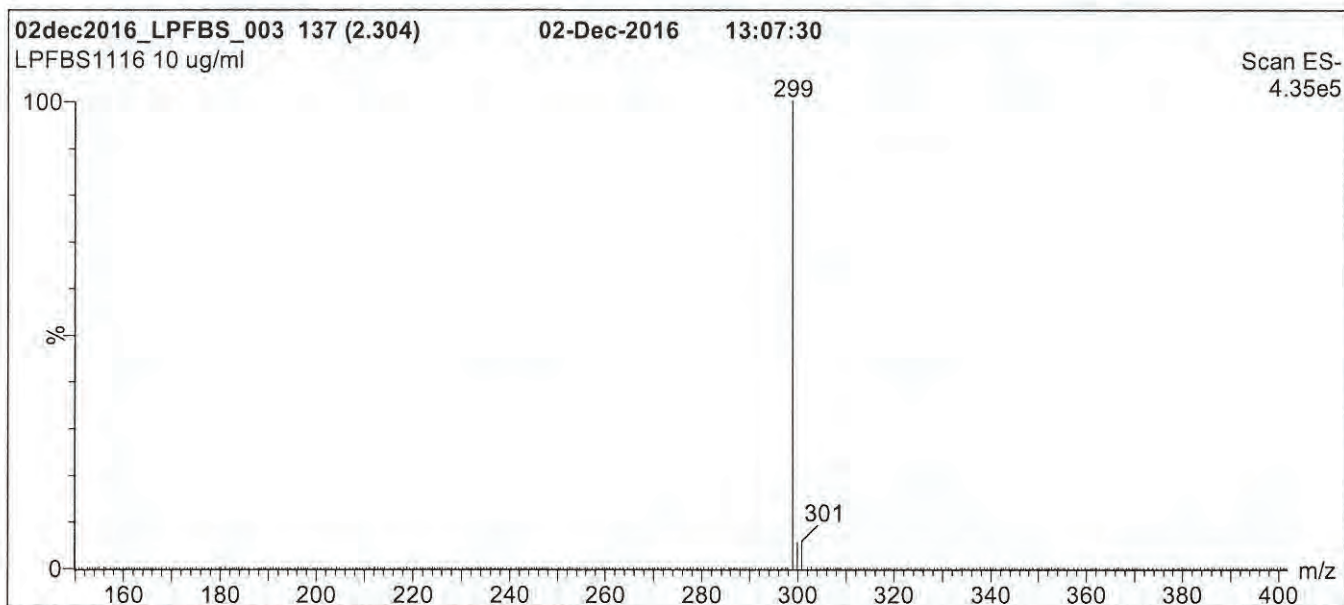
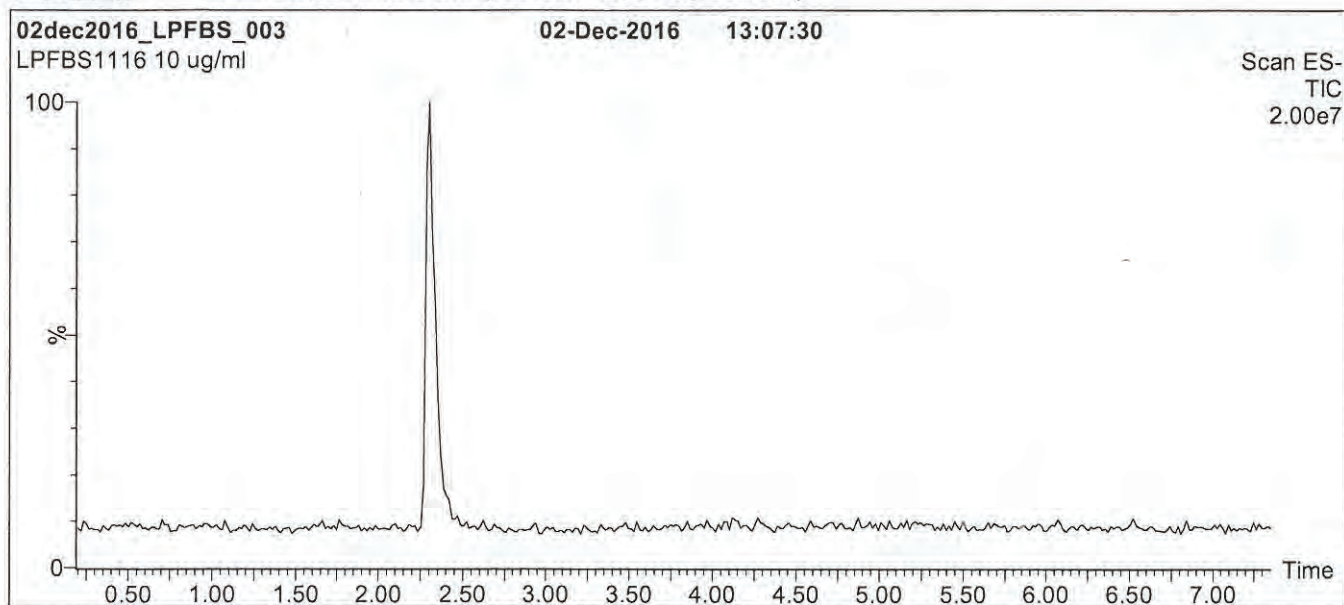
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17G1811

Figure 1: L-PFBS; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 40% (80:20 MeOH:ACN) / 60% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 2 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

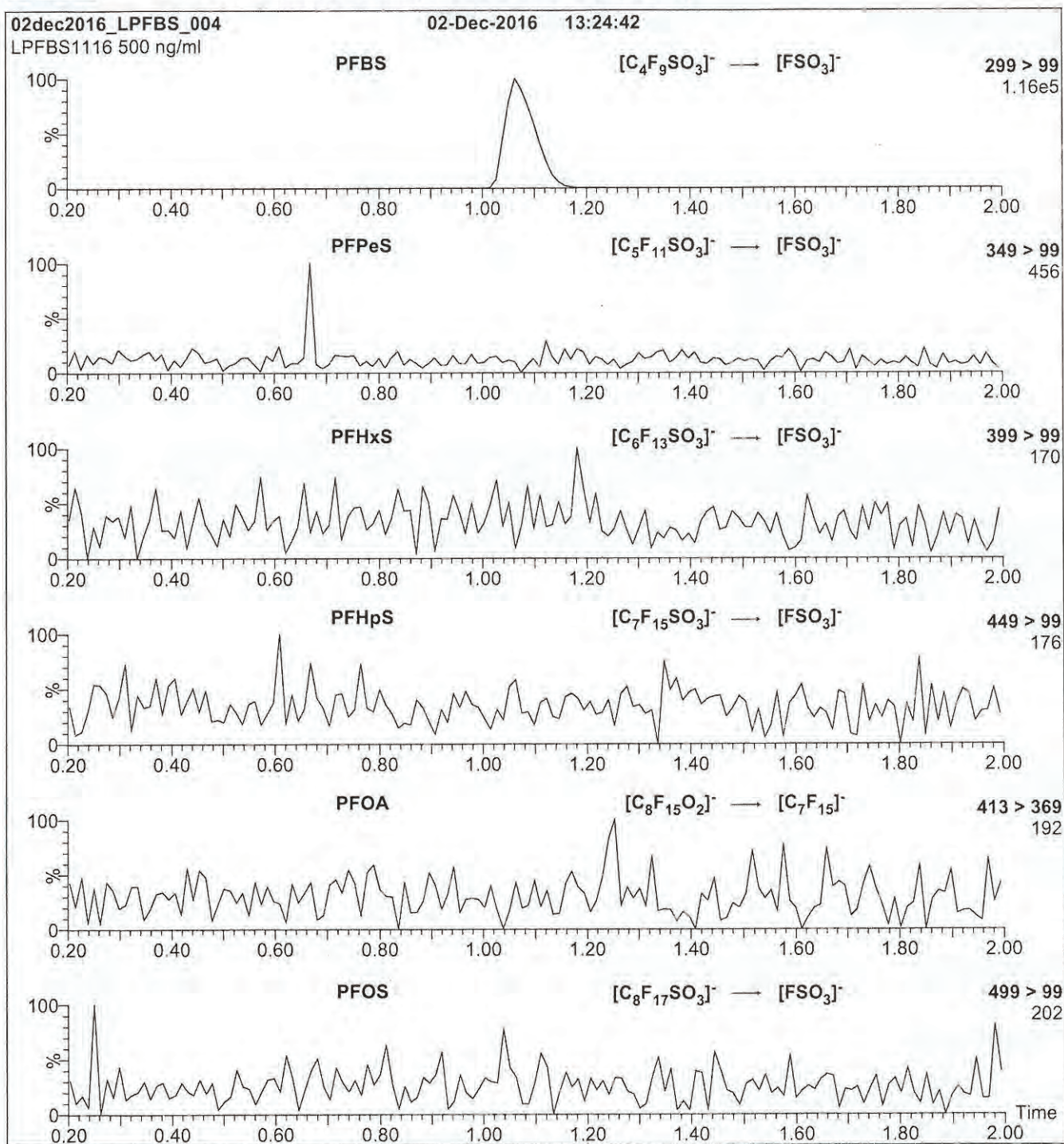
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 40.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17G1811

Figure 2: L-PFBS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml L-PFBS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 25

17G1812



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

8:2FTS

LOT NUMBER:

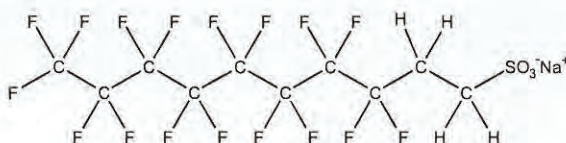
82FTS1216

COMPOUND:

Sodium 1H,1H,2H,2H-perfluorodecane sulfonate

STRUCTURE:**CAS #:**

Not available

**MOLECULAR FORMULA:** $C_{10}H_4F_{17}SO_3Na$ **MOLECULAR WEIGHT:**

550.16

CONCENTRATION:

50.0 ± 2.5 µg/ml (Na salt)
 47.9 ± 2.4 µg/ml (8:2FTS anion)

SOLVENT(S):

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

12/12/2016

EXPIRY DATE: (mm/dd/yyyy)

12/12/2021

RECOMMENDED STORAGE:

Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

12/21/2016

(mm/dd/yyyy)

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17G1812

INTENDED USE:

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HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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QUALITY MANAGEMENT:

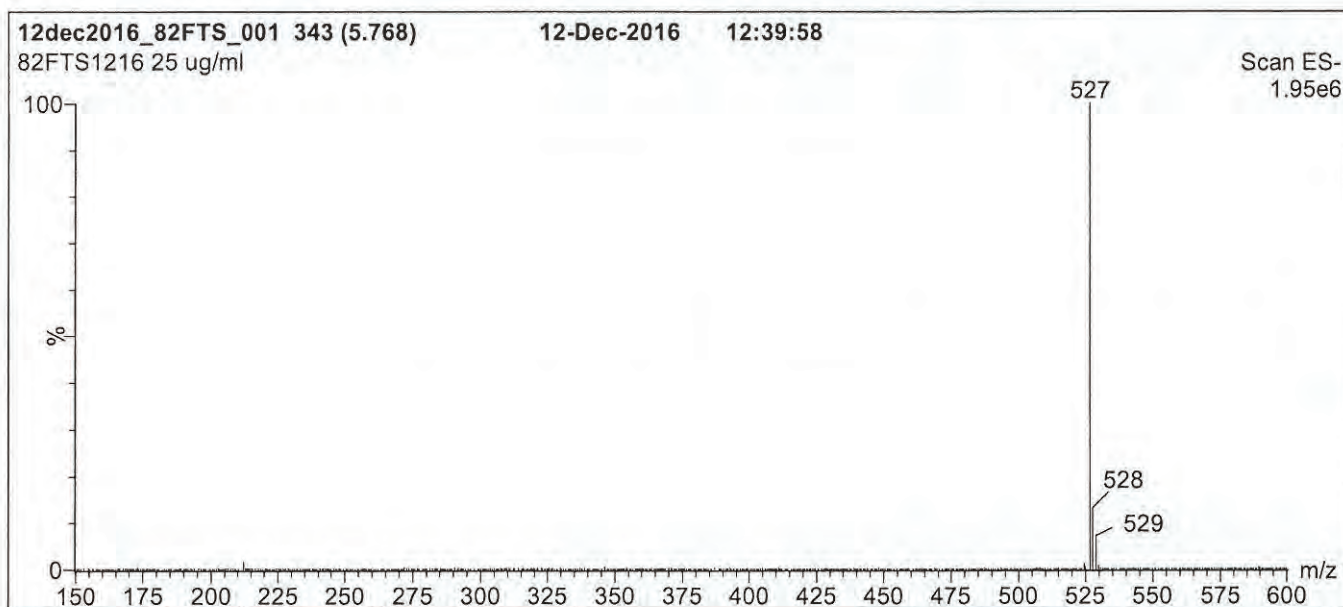
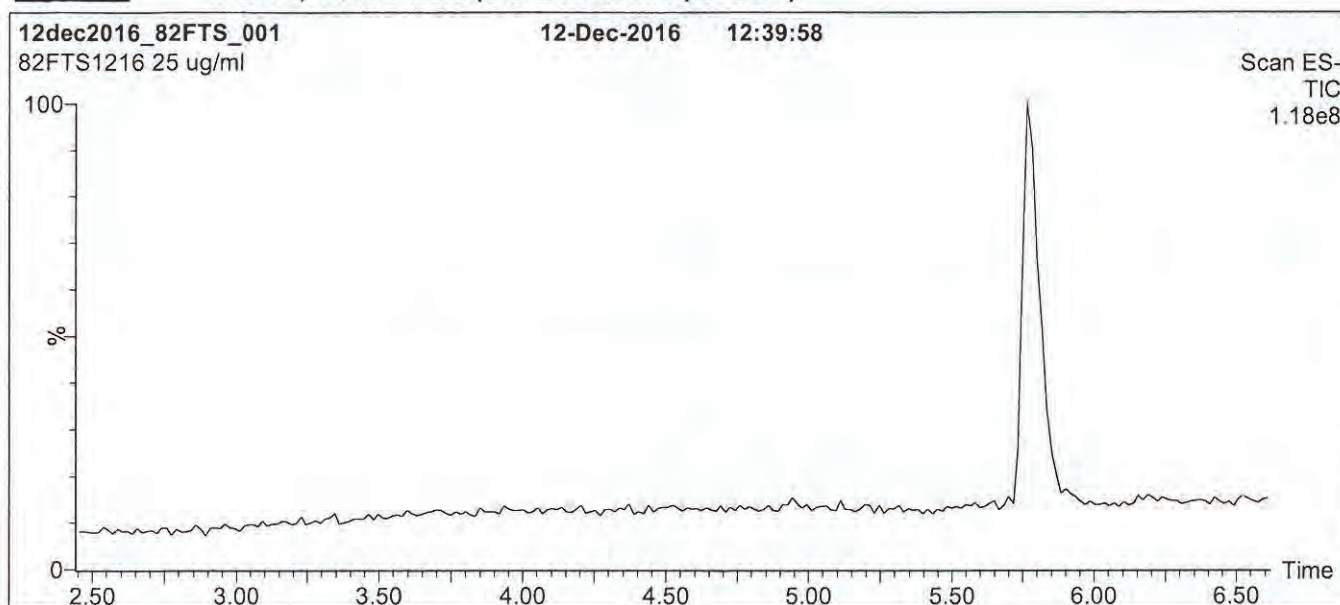
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17G1812

Figure 1: 8:2FTS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 85% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

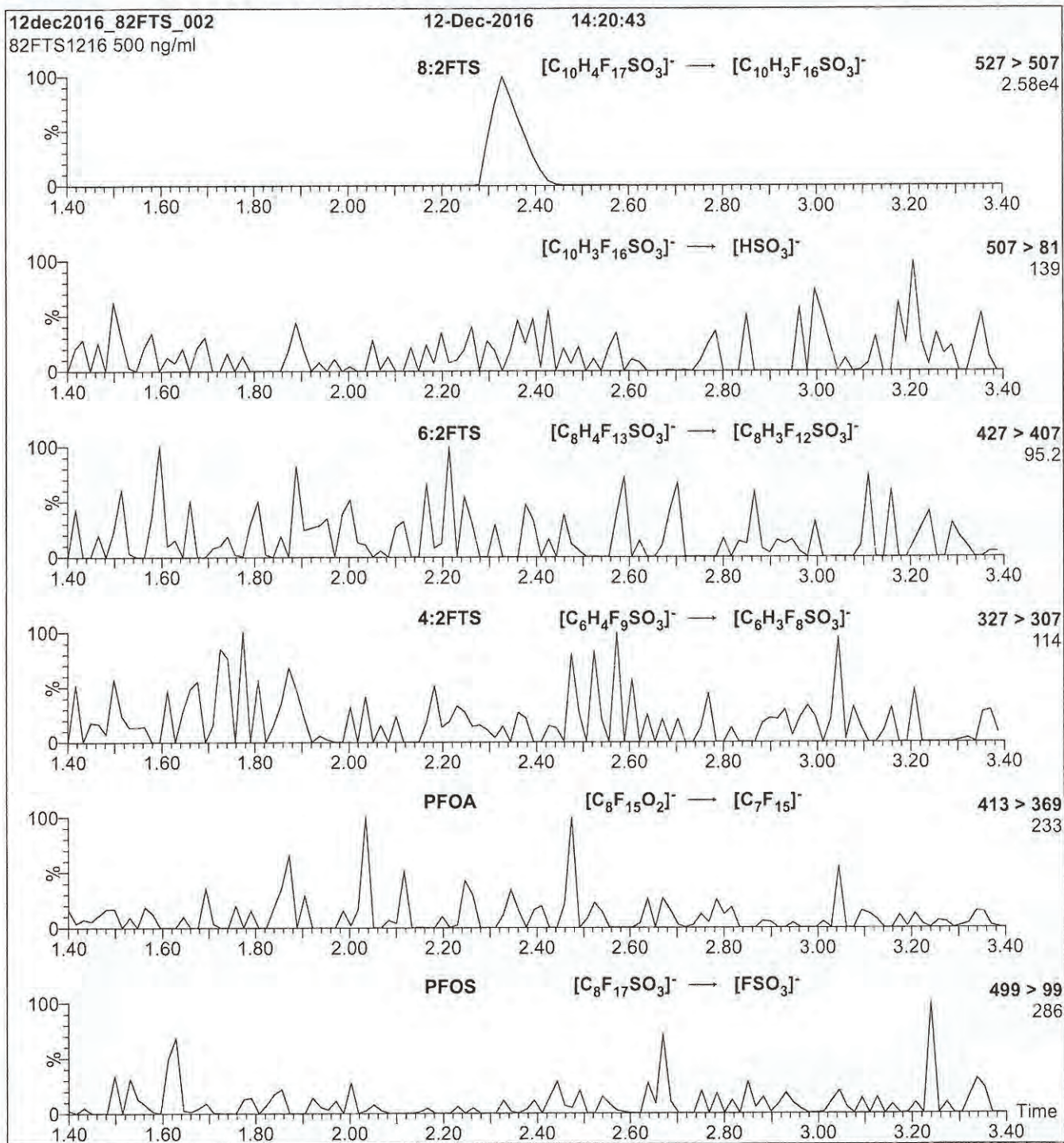
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

17G1812

Figure 2: 8:2FTS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml 8:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 30

17G1813



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

6:2FTS

LOT NUMBER:

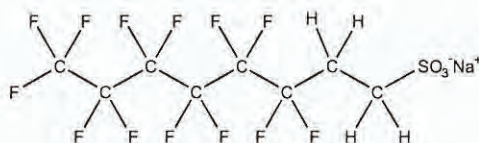
62FTS0417

COMPOUND:

Sodium 1H,1H,2H,2H-perfluorooctane sulfonate

STRUCTURE:**CAS #:**

Not available

**MOLECULAR FORMULA:** $C_8H_4F_{13}SO_3Na$ **MOLECULAR WEIGHT:**

450.15

CONCENTRATION:

50.0 ± 2.5 µg/ml (Na salt)
47.4 ± 2.4 µg/ml (6:2FTS anion)

SOLVENT(S):

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

04/20/2017

EXPIRY DATE: (mm/dd/yyyy)

04/20/2022

RECOMMENDED STORAGE:

Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim, General Manager
Date: 04/24/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17 G/813

INTENDED USE:

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HAZARDS:

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UNCERTAINTY:

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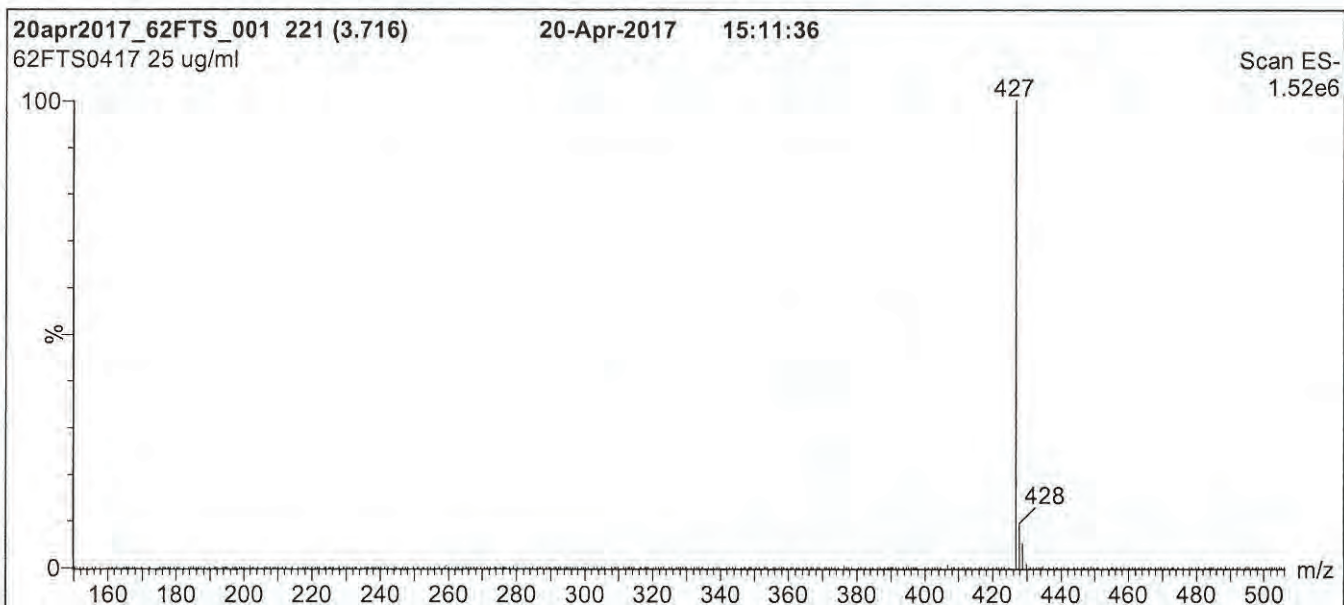
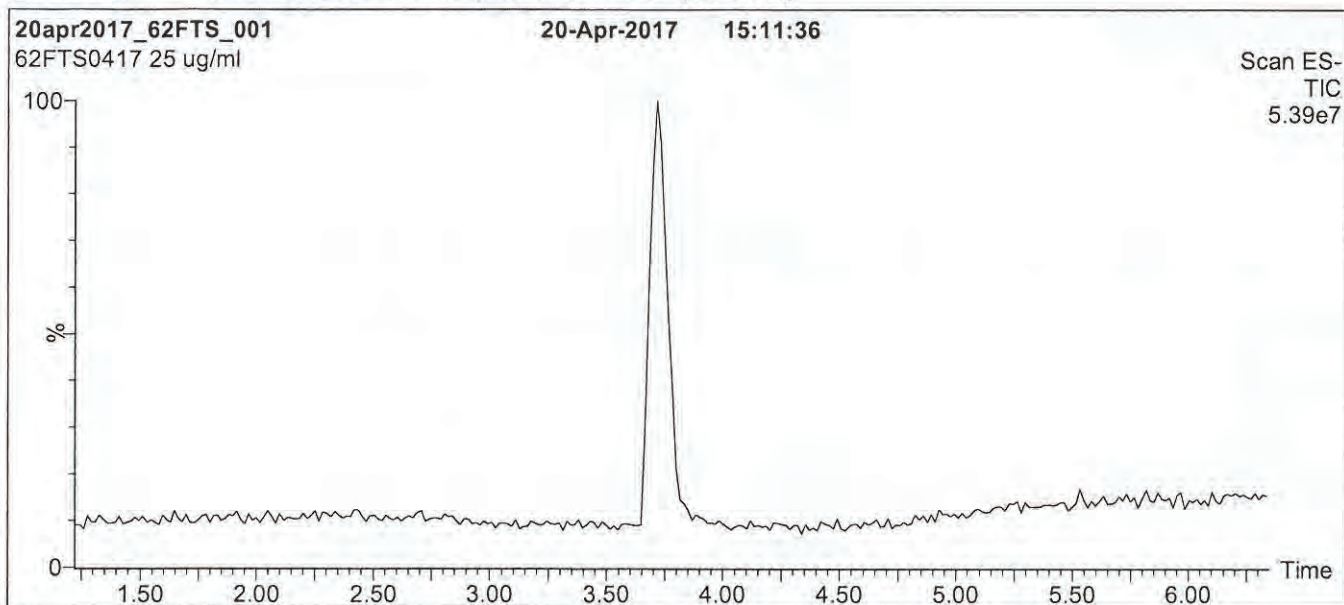
QUALITY MANAGEMENT:

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17G1813

Figure 1: 6:2FTS; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 85% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)

Capillary Voltage (kV) = 3.00

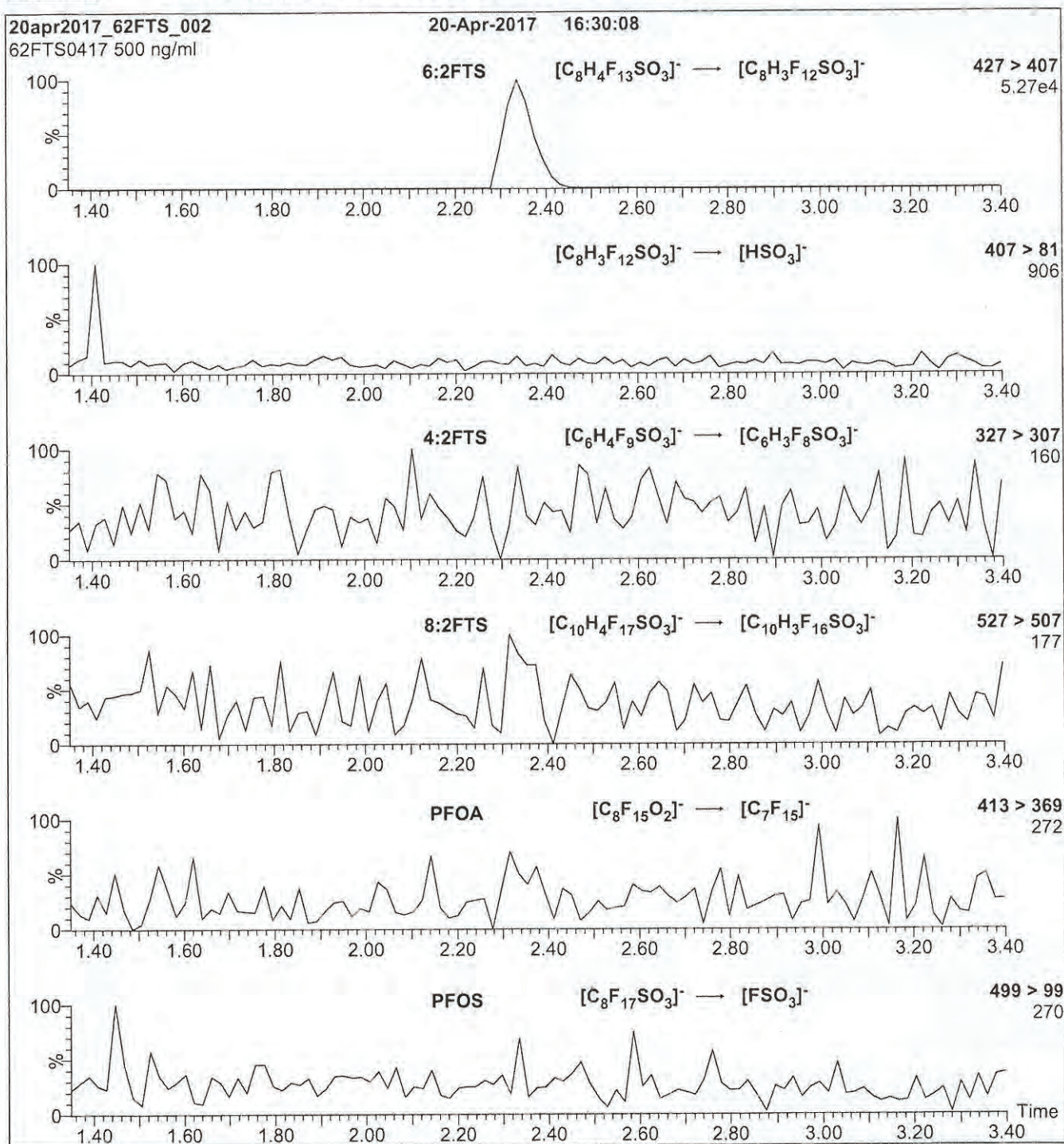
Cone Voltage (V) = 30.00

Cone Gas Flow (l/hr) = 50

Desolvation Gas Flow (l/hr) = 750

17G1813

Figure 2: 6:2FTS; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml 6:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 25

1740820



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFD0A ✓

LOT NUMBER:

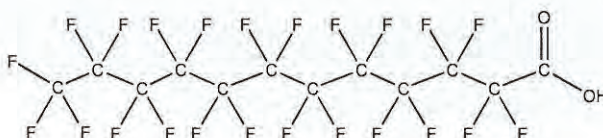
PFD0A0516

COMPOUND:

Perfluoro-n-dodecanoic acid

STRUCTURE:**CAS #:**

307-55-1

**MOLECULAR FORMULA:** $C_{12}H_{23}O_2$ **MOLECULAR WEIGHT:**

614.10

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

05/31/2016

EXPIRY DATE: (mm/dd/yyyy)

05/31/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

06/02/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

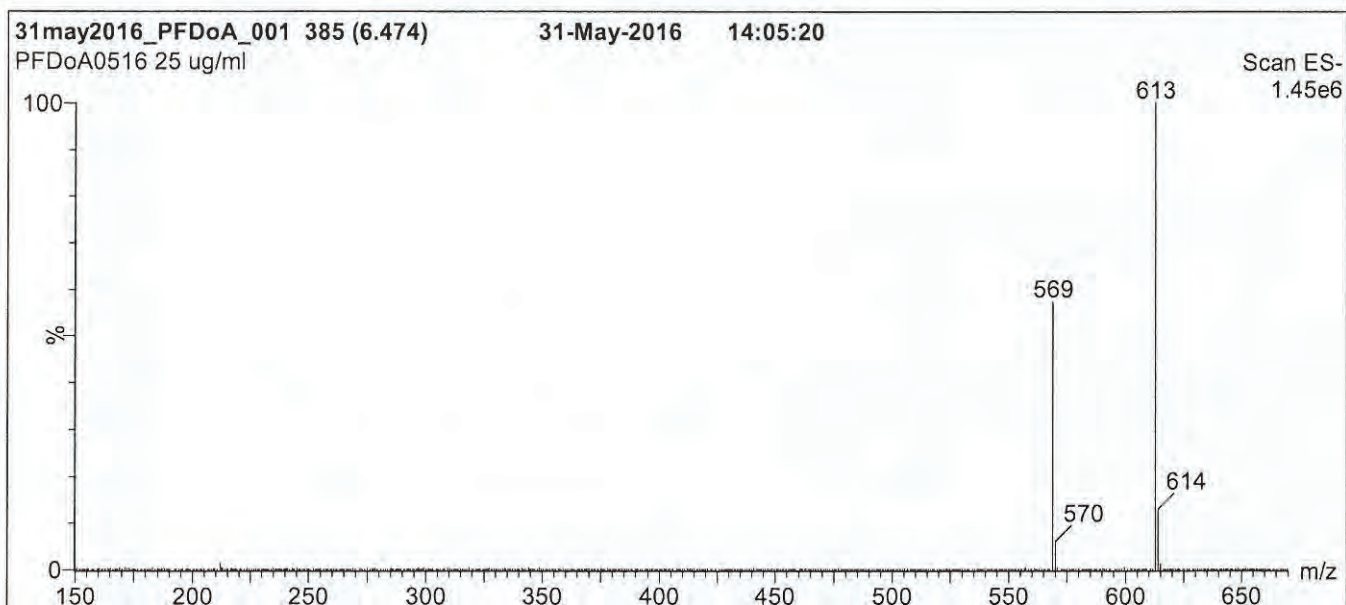
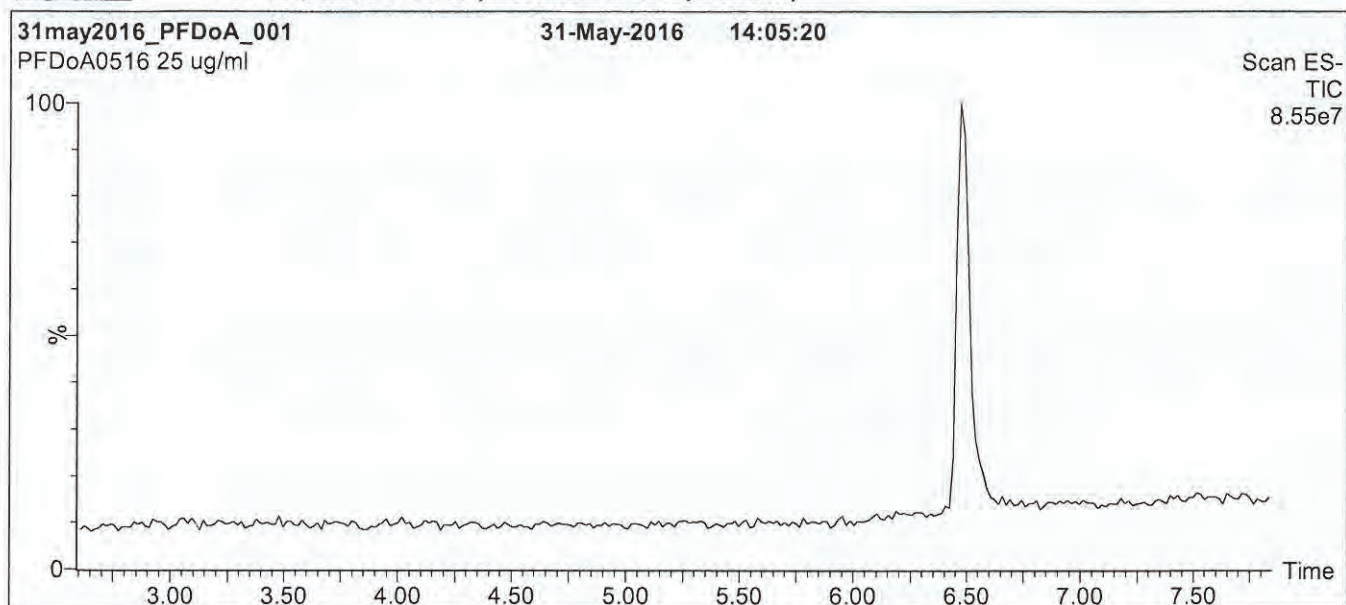
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: PFD_oA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

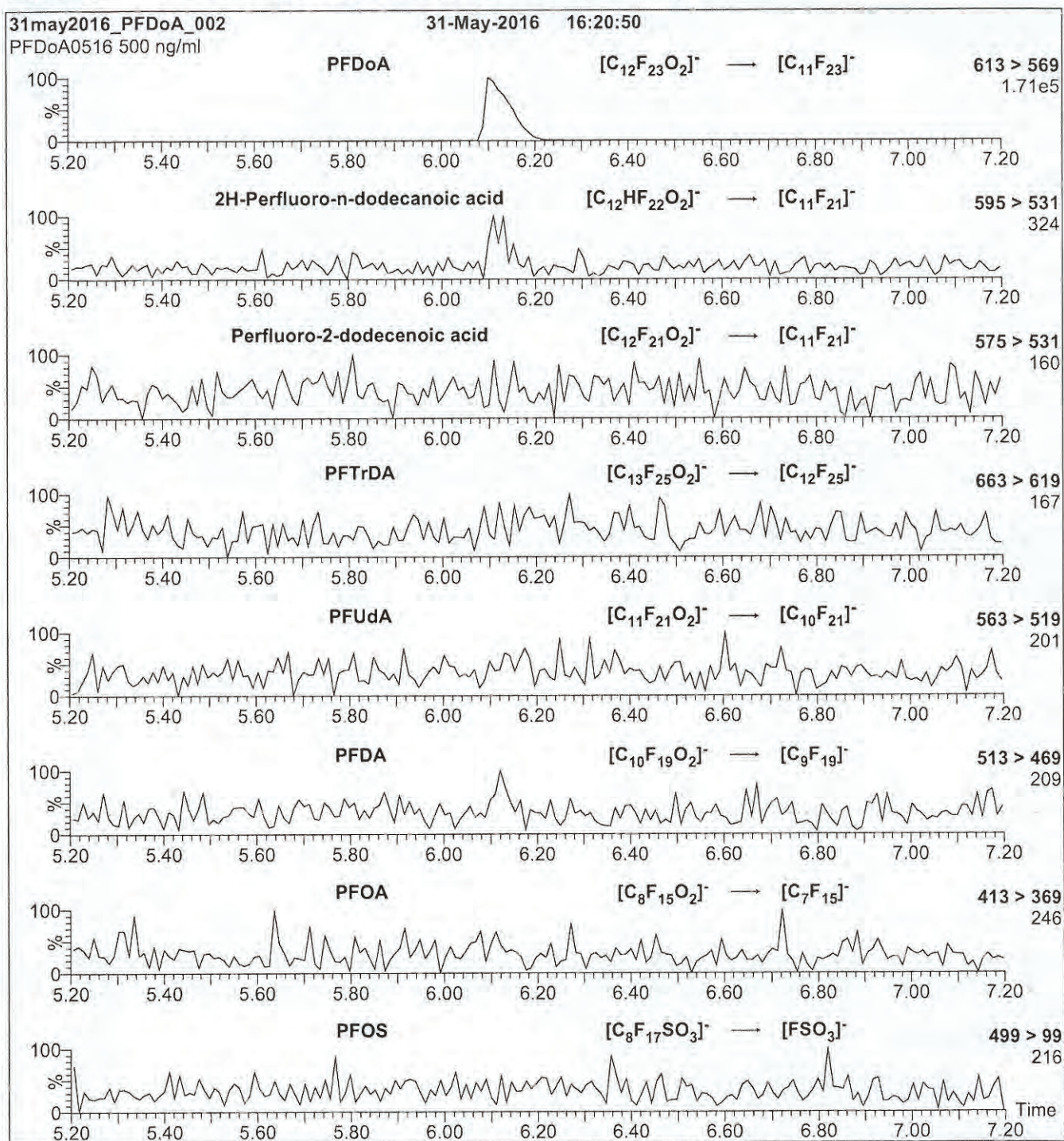
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 20.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFDa; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFDa)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 13

17 H 0821



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFNA ✓

LOT NUMBER:

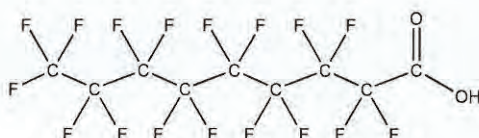
PFNA0916

COMPOUND:

Perfluoro-n-nonanoic acid

STRUCTURE:**CAS #:**

375-95-1

**MOLECULAR FORMULA:** $C_9H_{17}O_2$ **MOLECULAR WEIGHT:**

464.08

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

09/30/2016

EXPIRY DATE: (mm/dd/yyyy)

09/30/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.1% of perfluoro-n-octanoic acid (PFOA) and < 0.1% of perfluoro-n-heptanoic acid (PFHpA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

10/11/2016

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

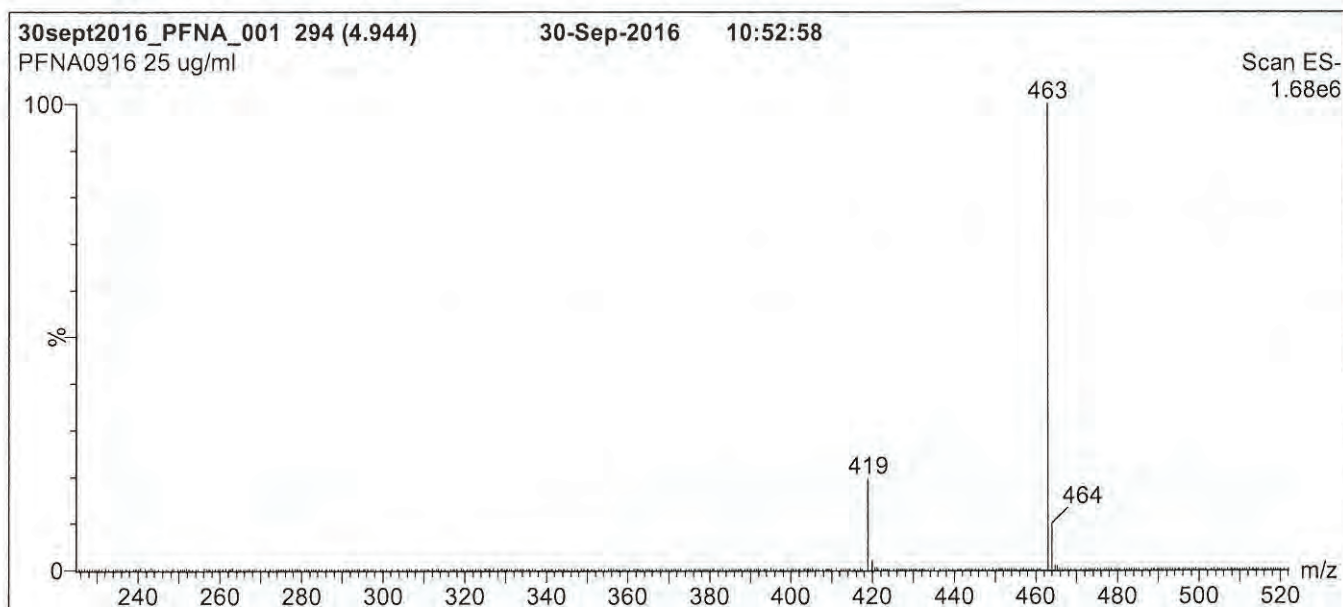
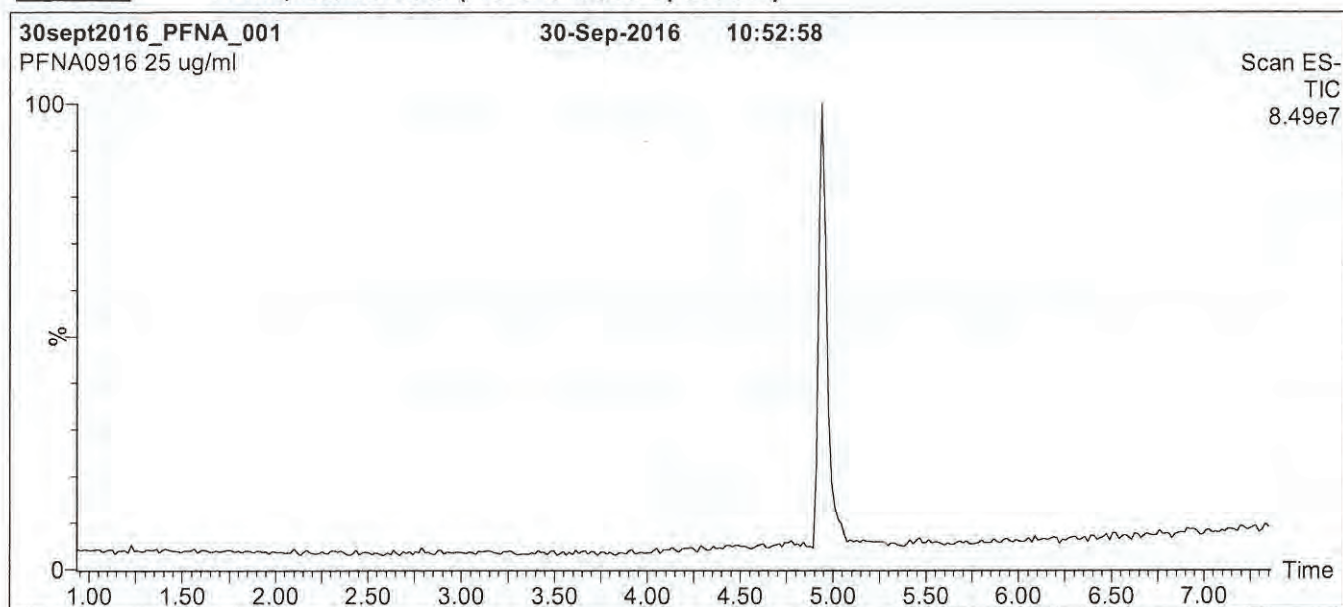
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: PFNA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)

Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.

Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)

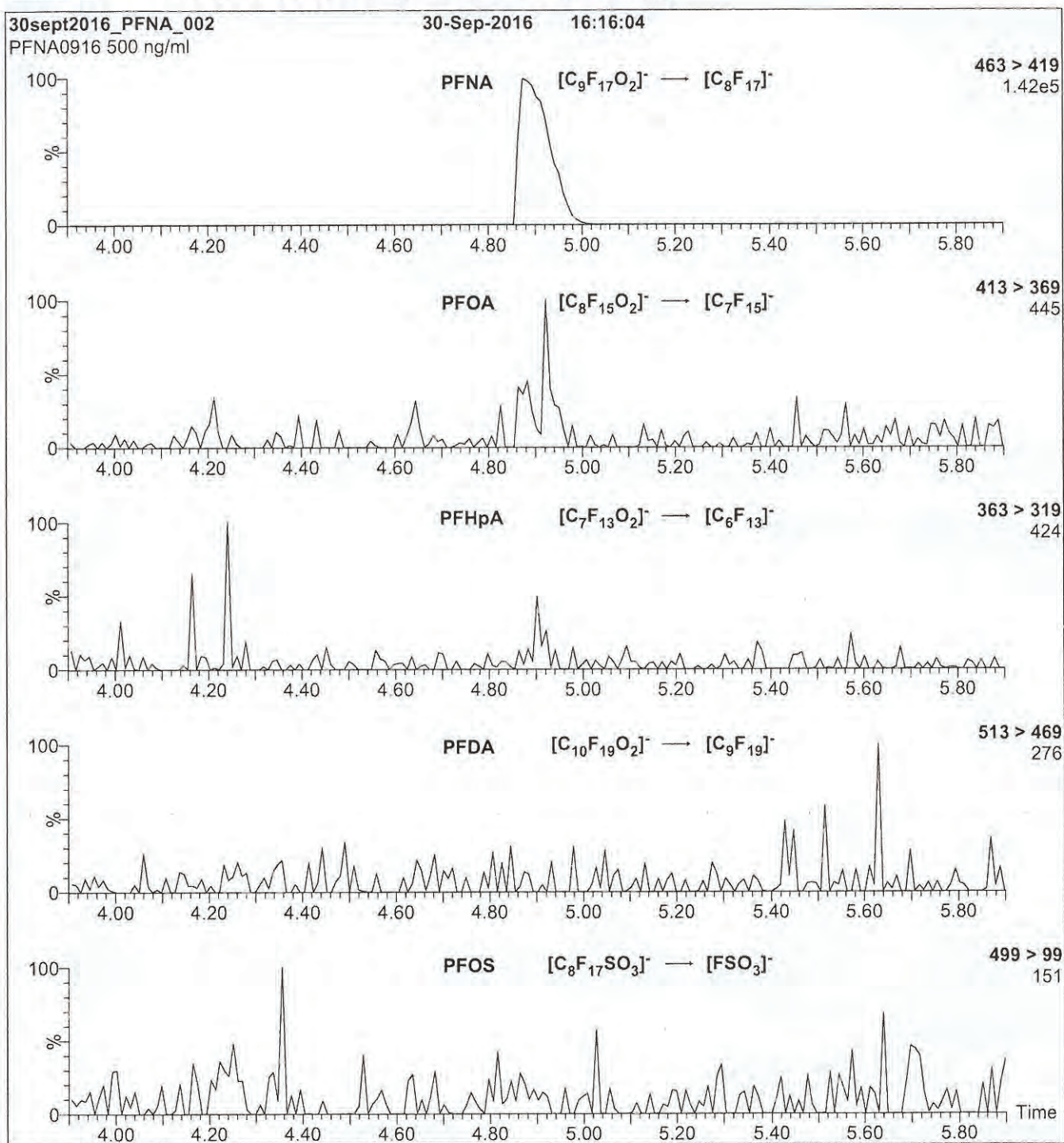
Capillary Voltage (kV) = 2.00

Cone Voltage (V) = 15.00

Cone Gas Flow (l/hr) = 50

Desolvation Gas Flow (l/hr) = 750

Figure 2: PFNA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 11

17H0822



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFPeA ✓

LOT NUMBER:

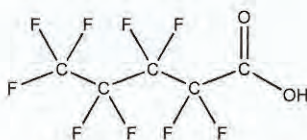
PFPeA0617

COMPOUND:

Perfluoro-n-pentanoic acid

STRUCTURE:**CAS #:**

2706-90-3

**MOLECULAR FORMULA:** $C_5HF_9O_2$ **MOLECULAR WEIGHT:**

264.05

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

06/14/2017

EXPIRY DATE: (mm/dd/yyyy)

06/14/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of Perfluoro-n-heptanoic acid (PFHpA) and ~ 0.2% of $C_5H_2F_8O_2$ (hydrido - derivative) as measured by ^{19}F NMR.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim, General Manager
Date:06/16/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

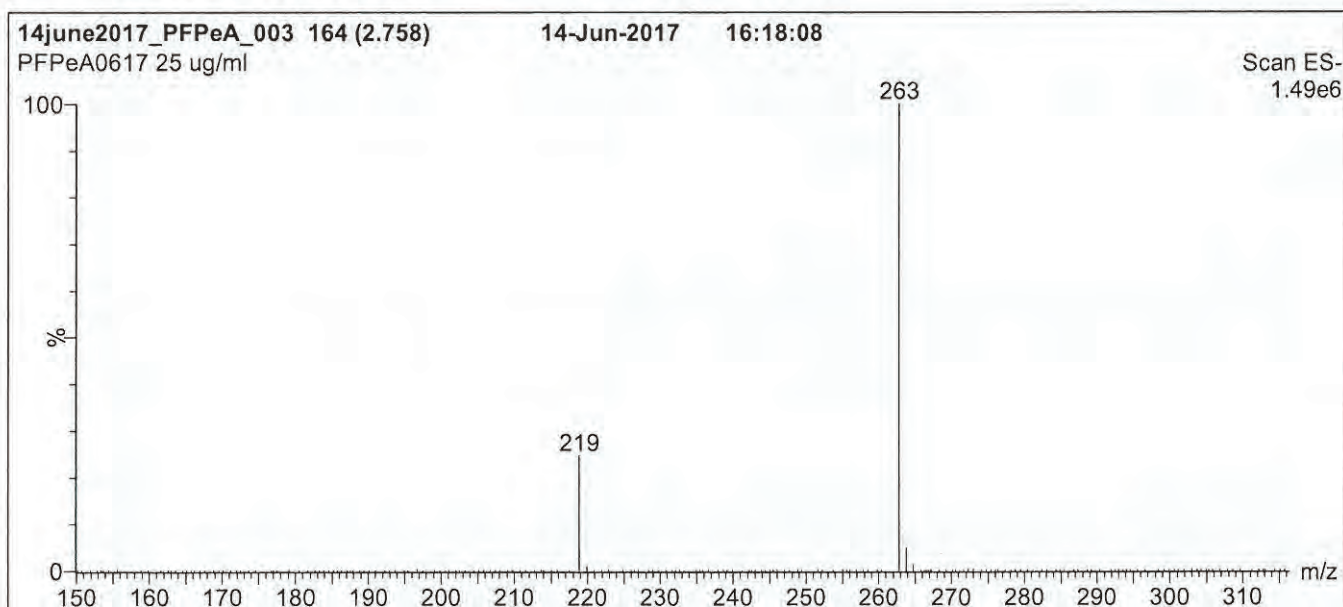
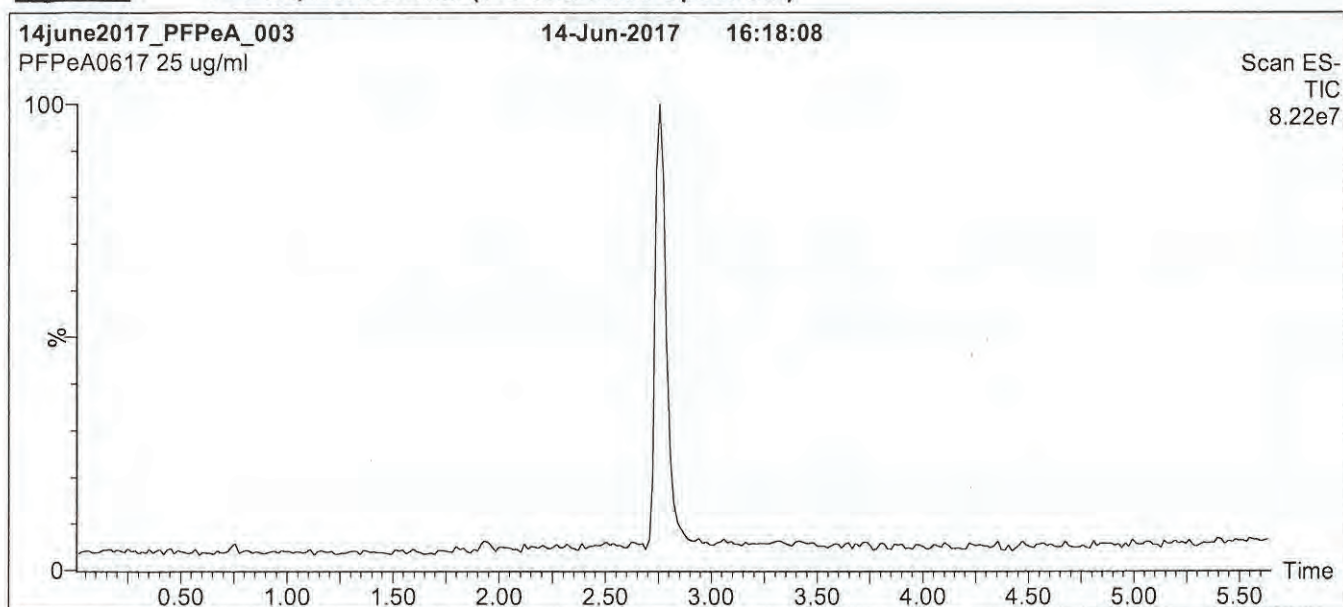
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: PFPeA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

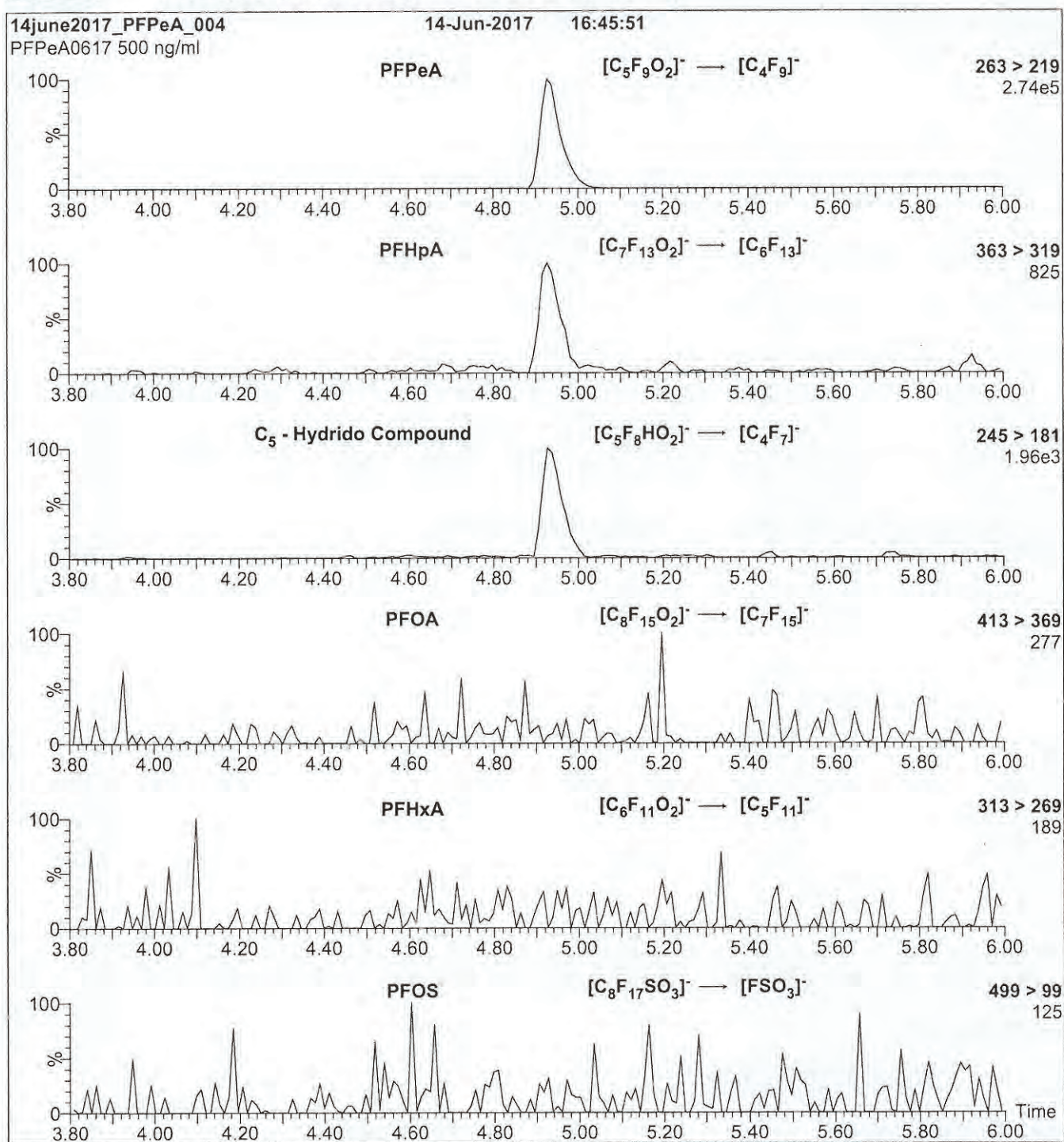
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFPeA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFPeA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.62e-3
Collision Energy (eV) = 9

17H0823



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFOA ✓

LOT NUMBER:

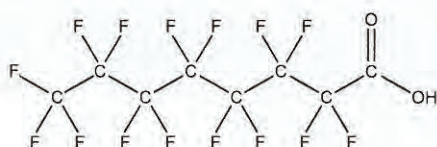
PFOA0217

COMPOUND:

Perfluoro-n-octanoic acid

STRUCTURE:**CAS #:**

335-67-1

**MOLECULAR FORMULA:** $C_8H_{15}O_2$ **MOLECULAR WEIGHT:**

414.07

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

02/17/2017

EXPIRY DATE: (mm/dd/yyyy)

02/17/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim
Date:02/22/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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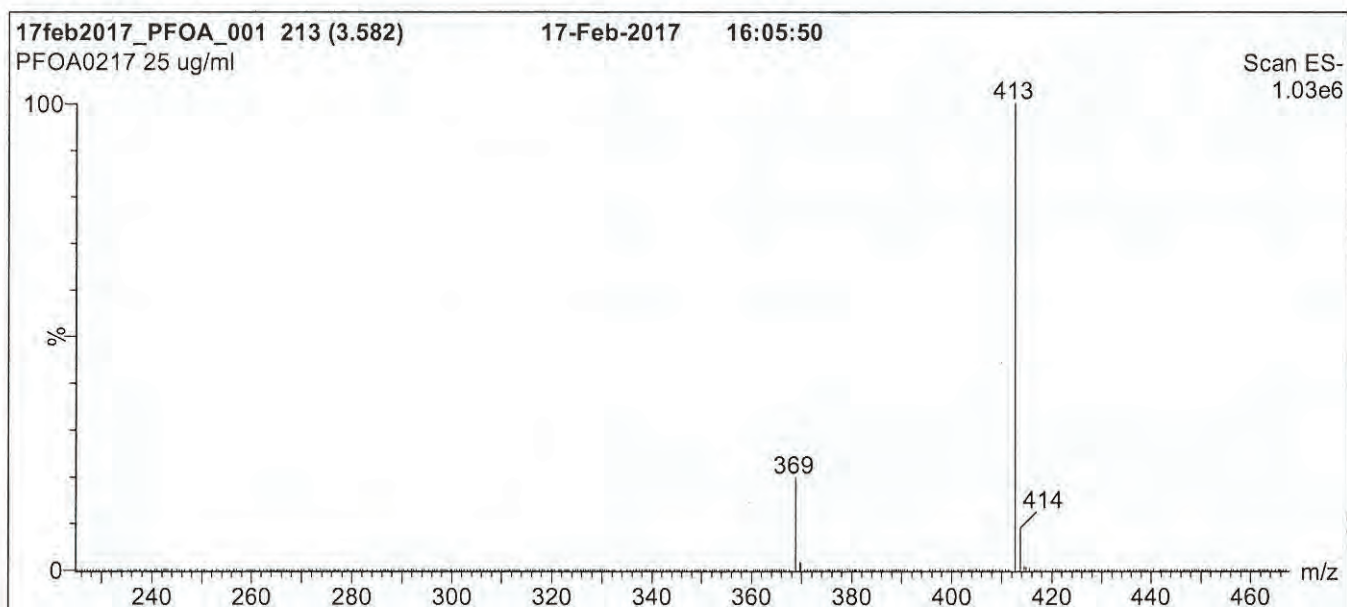
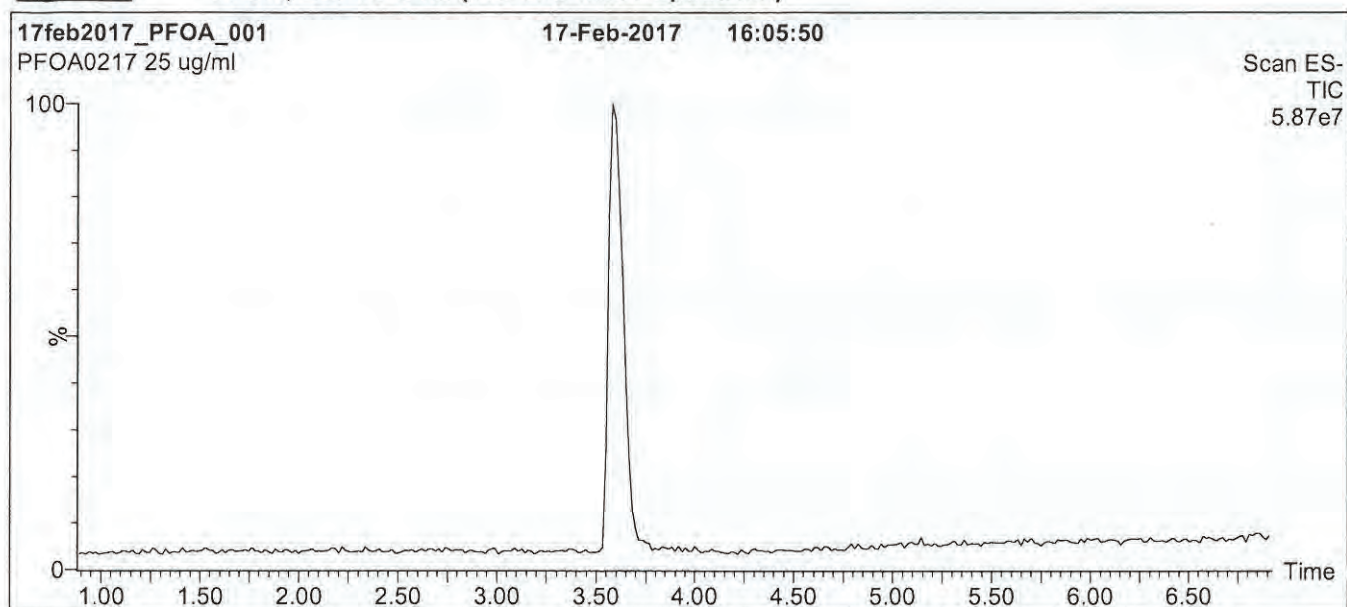
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: PFOA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
1 min before returning to initial conditions in 0.5 min.
Time: 10 min

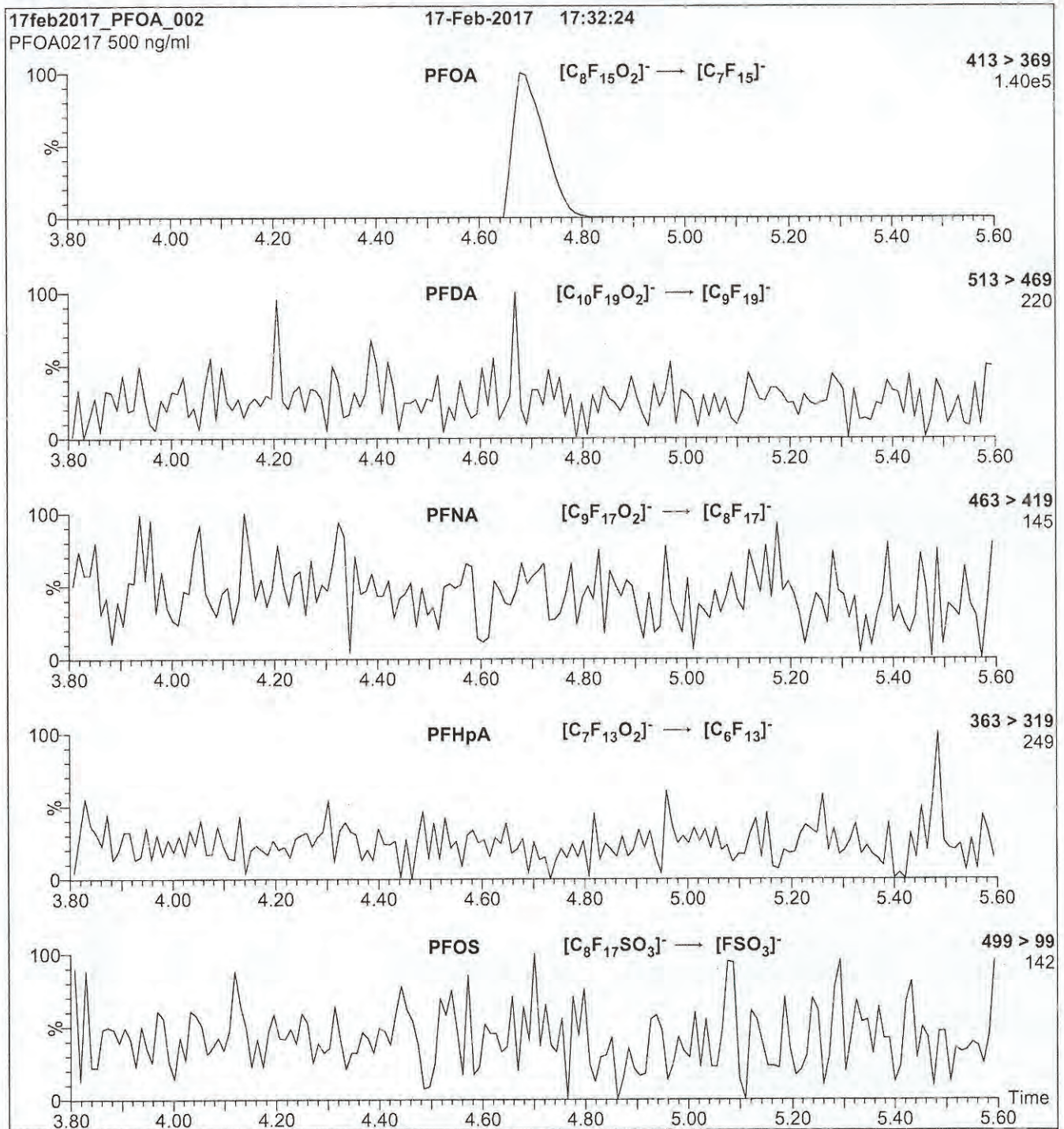
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFOA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 10

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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFUdA ✓

LOT NUMBER:

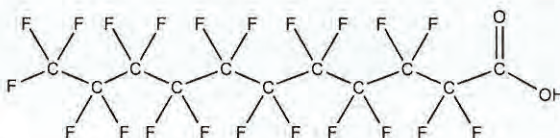
PFUdA1016

COMPOUND:

Perfluoro-n-undecanoic acid

STRUCTURE:**CAS #:**

2058-94-8

**MOLECULAR FORMULA:** $C_{11}HF_{21}O_2$ **MOLECULAR WEIGHT:**

564.09

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

10/18/2016

EXPIRY DATE: (mm/dd/yyyy)

10/18/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim
Date:10/19/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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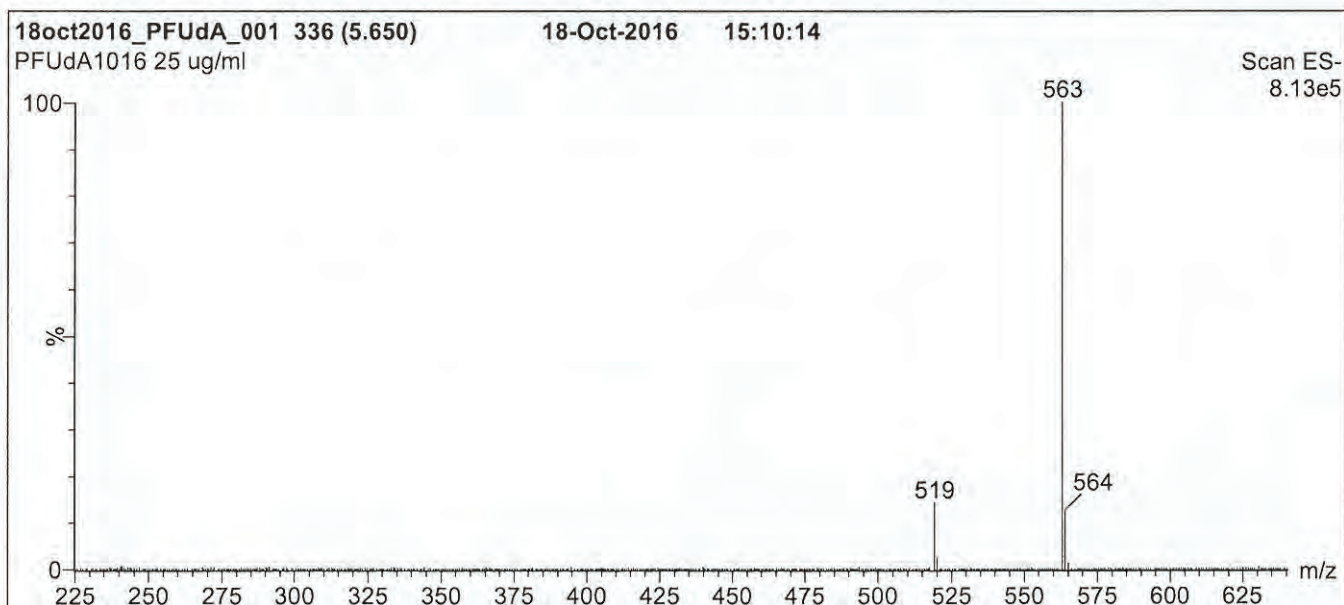
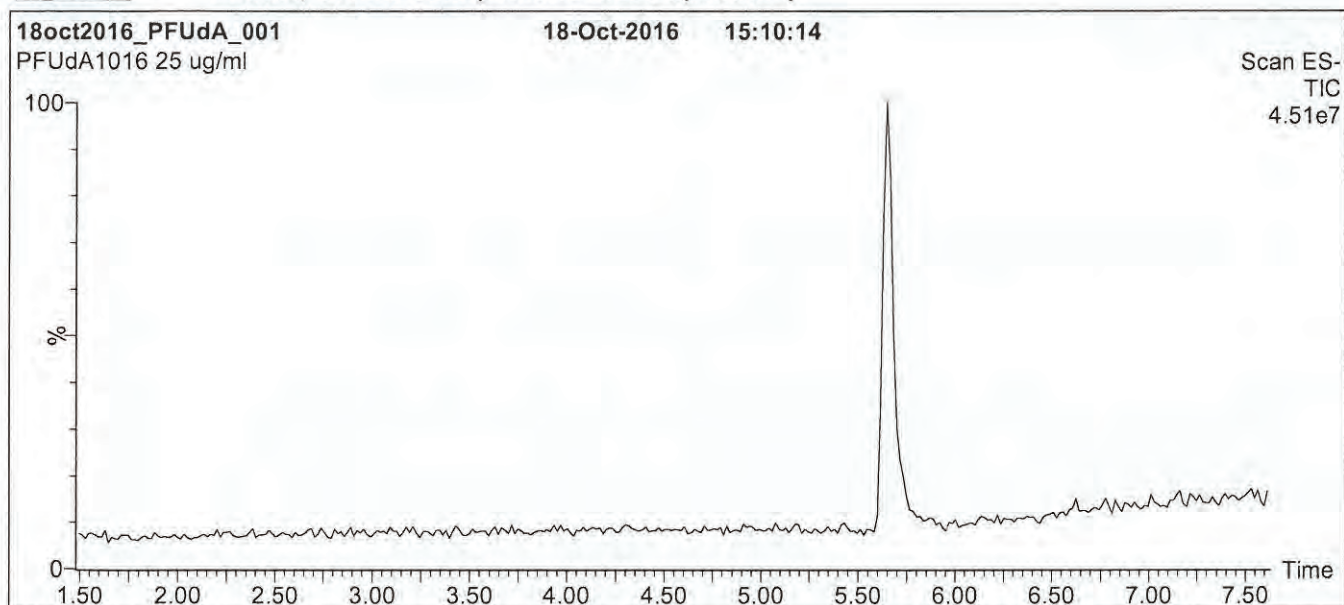
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: PFUdA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

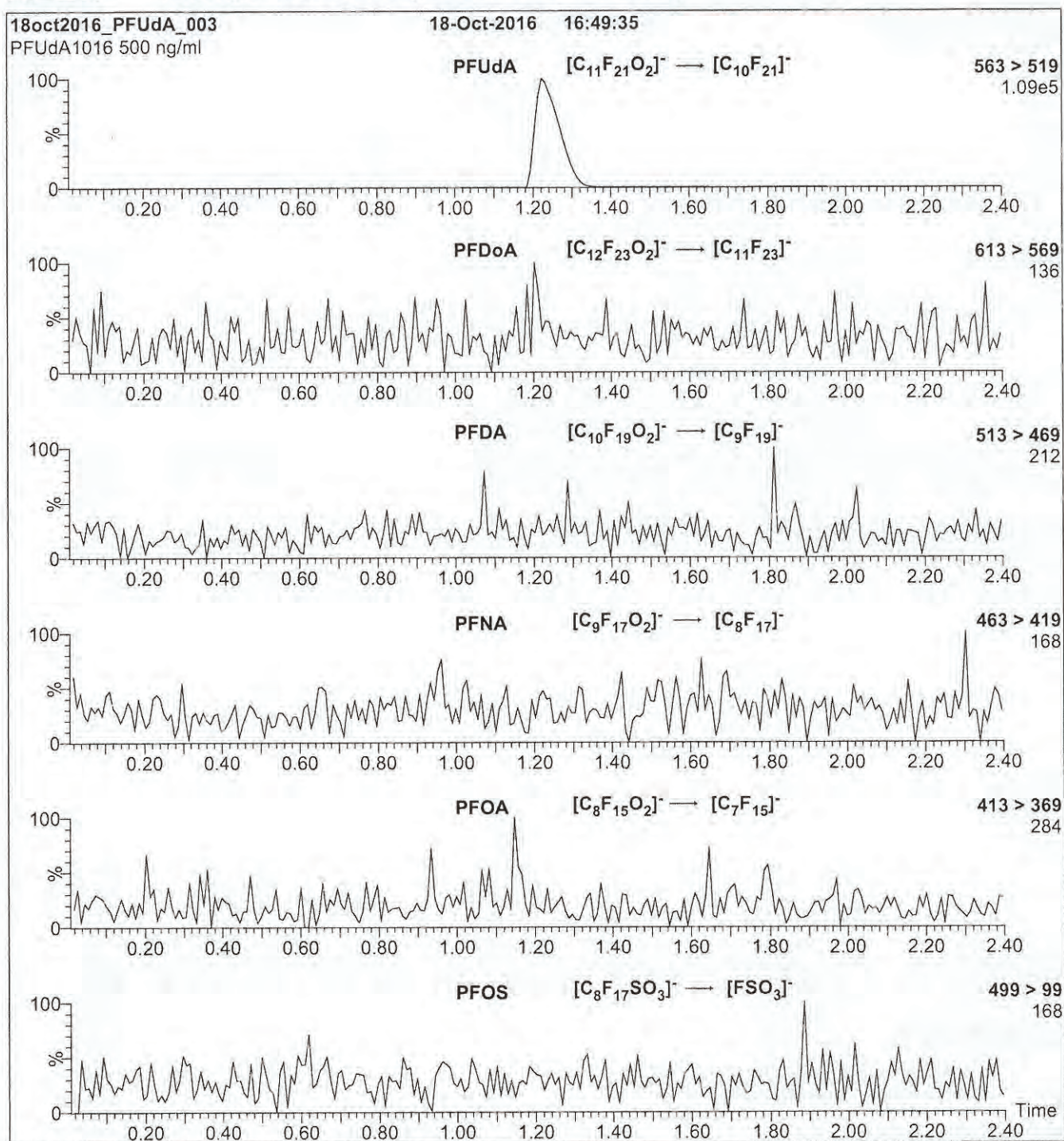
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 65
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFUdA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFUdA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.24e-3
Collision Energy (eV) = 11

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WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFHxDA ✓

LOT NUMBER:

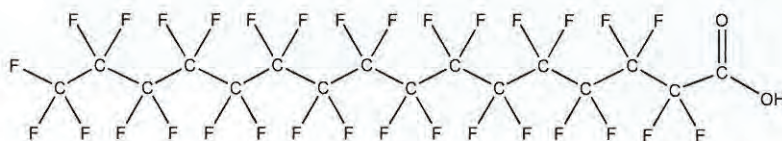
PFHxDA0516

COMPOUND:

Perfluoro-n-hexadecanoic acid

STRUCTURE:**CAS #:**

67905-19-5

**MOLECULAR FORMULA:** $C_{16}HF_{31}O_2$ **MOLECULAR WEIGHT:**

814.13

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

05/25/2016

EXPIRY DATE: (mm/dd/yyyy)

05/25/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.4% of PFODA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim
Date:05/27/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HOMOGENEITY:

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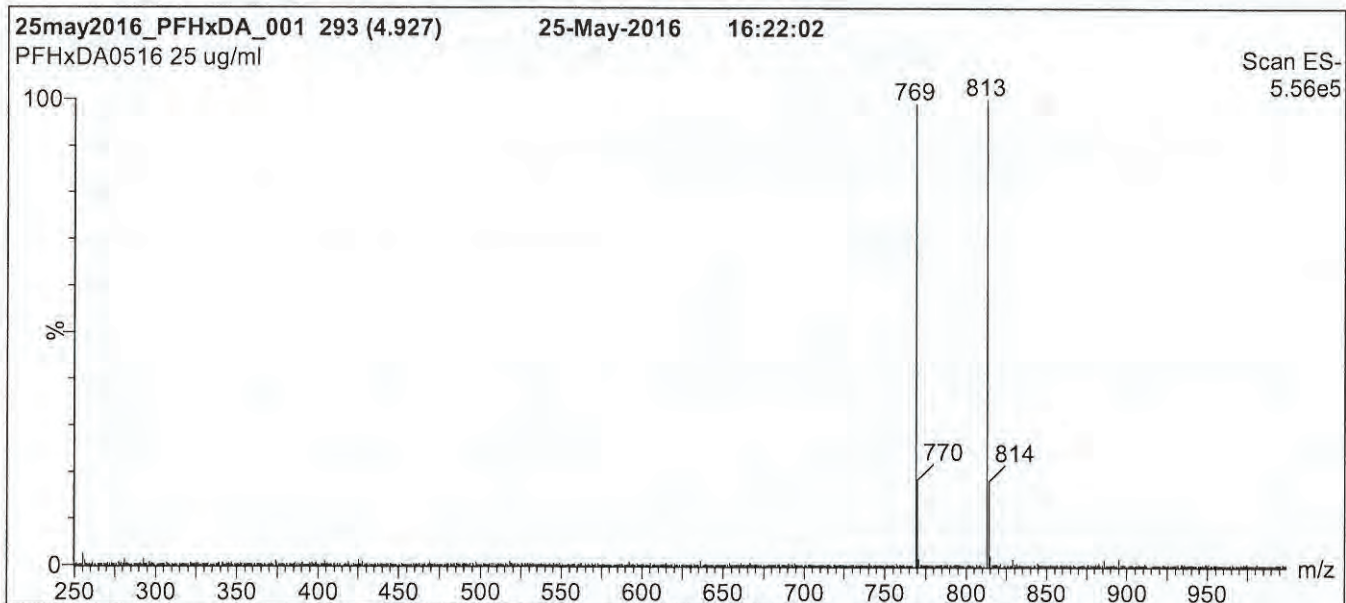
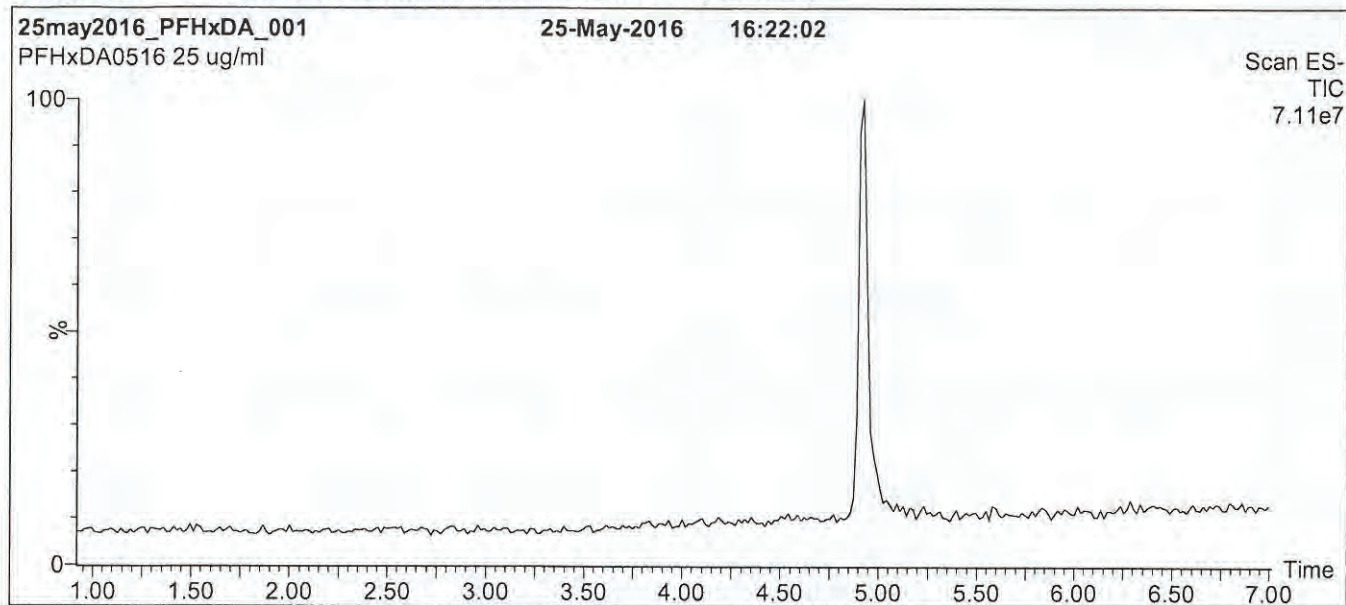
QUALITY MANAGEMENT:

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Figure 1: PFHxDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 70% (80:20 MeOH:ACN) / 30% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 95% organic over 6 min and hold for 2.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

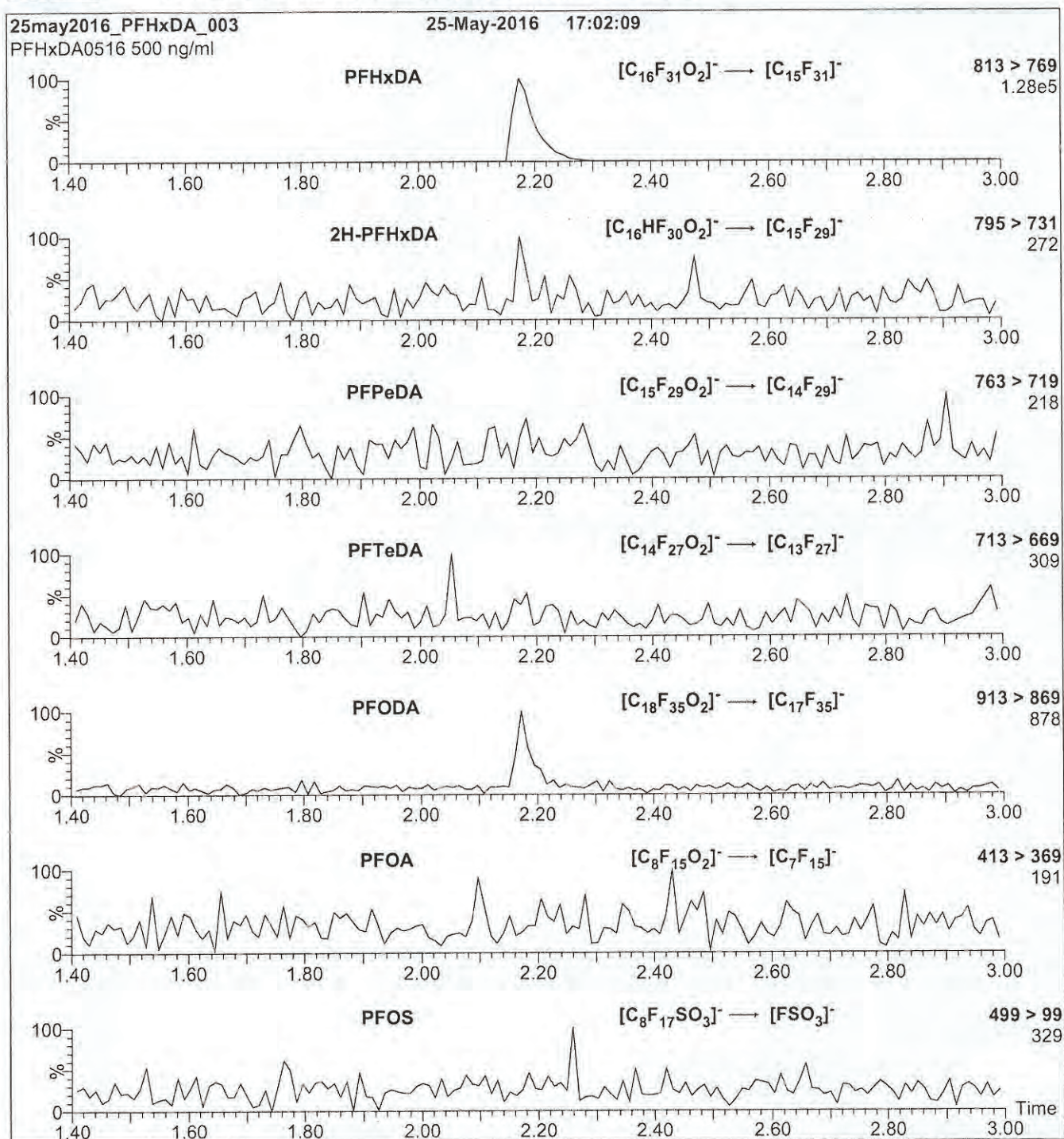
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 1250 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFHxDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.66e-3
Collision Energy (eV) = 15

17 H0826



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

PFHpA ✓

LOT NUMBER:

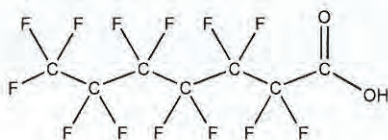
PFHpA1216

COMPOUND:

Perfluoro-n-heptanoic acid

STRUCTURE:**CAS #:**

375-85-9

**MOLECULAR FORMULA:** $C_7H_2F_{13}O_2$ **MOLECULAR WEIGHT:**

364.06

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

12/02/2016

EXPIRY DATE: (mm/dd/yyyy)

12/02/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

12/12/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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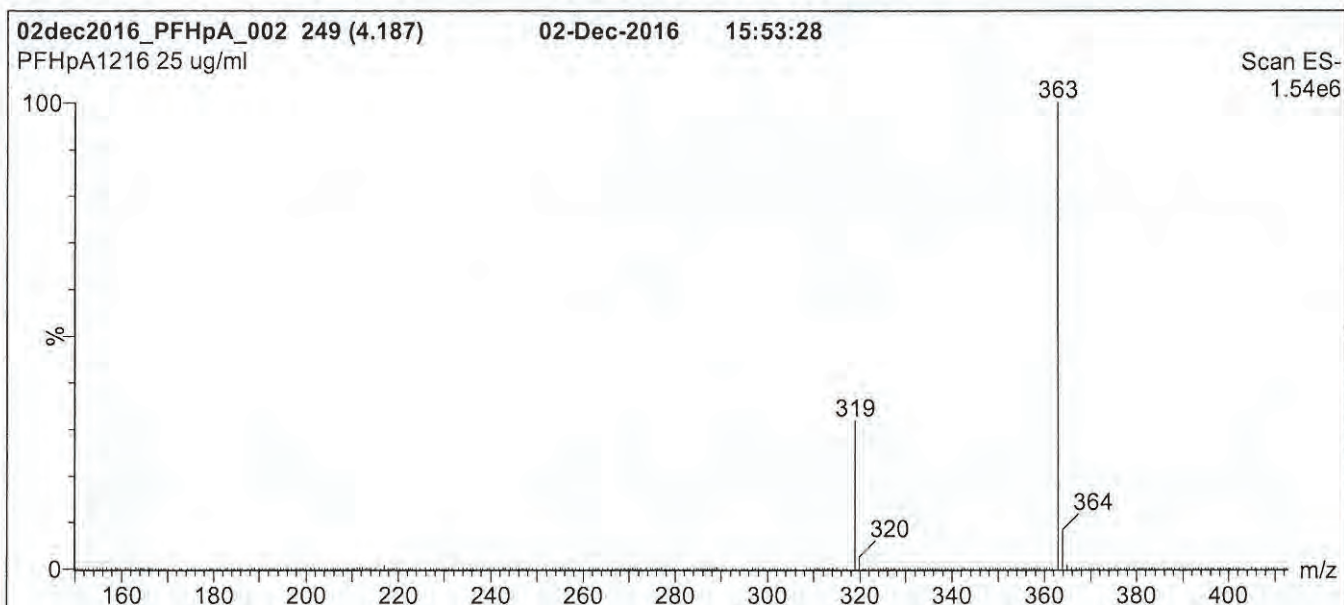
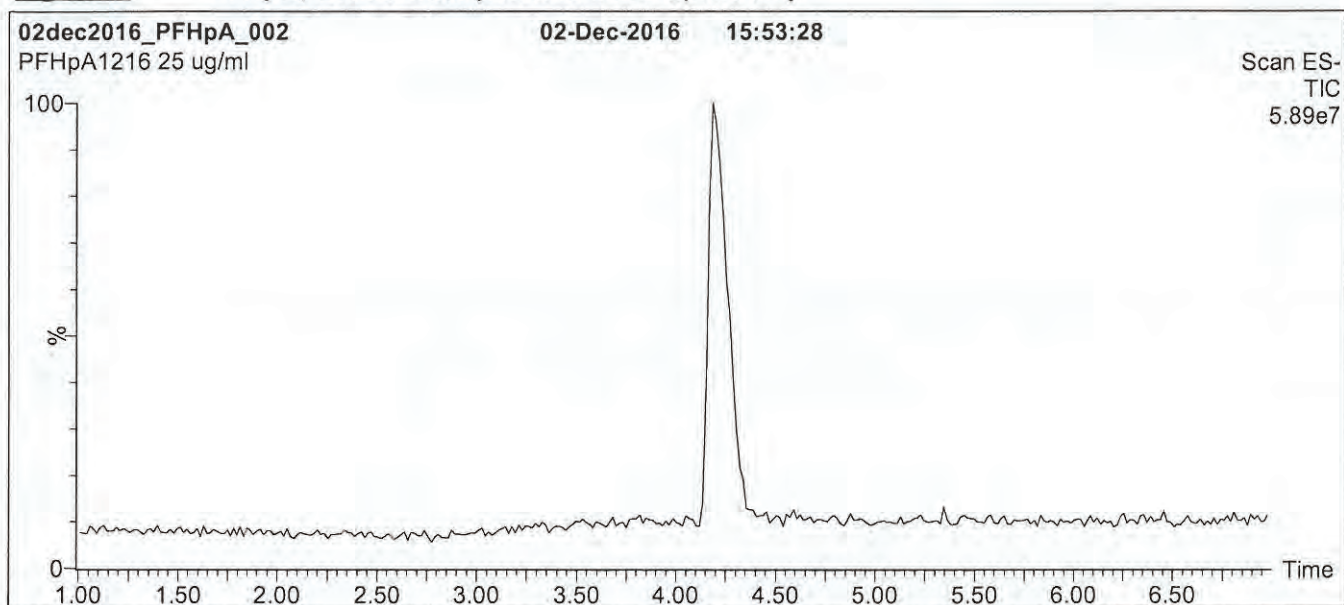
QUALITY MANAGEMENT:

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Figure 1: PFHpA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

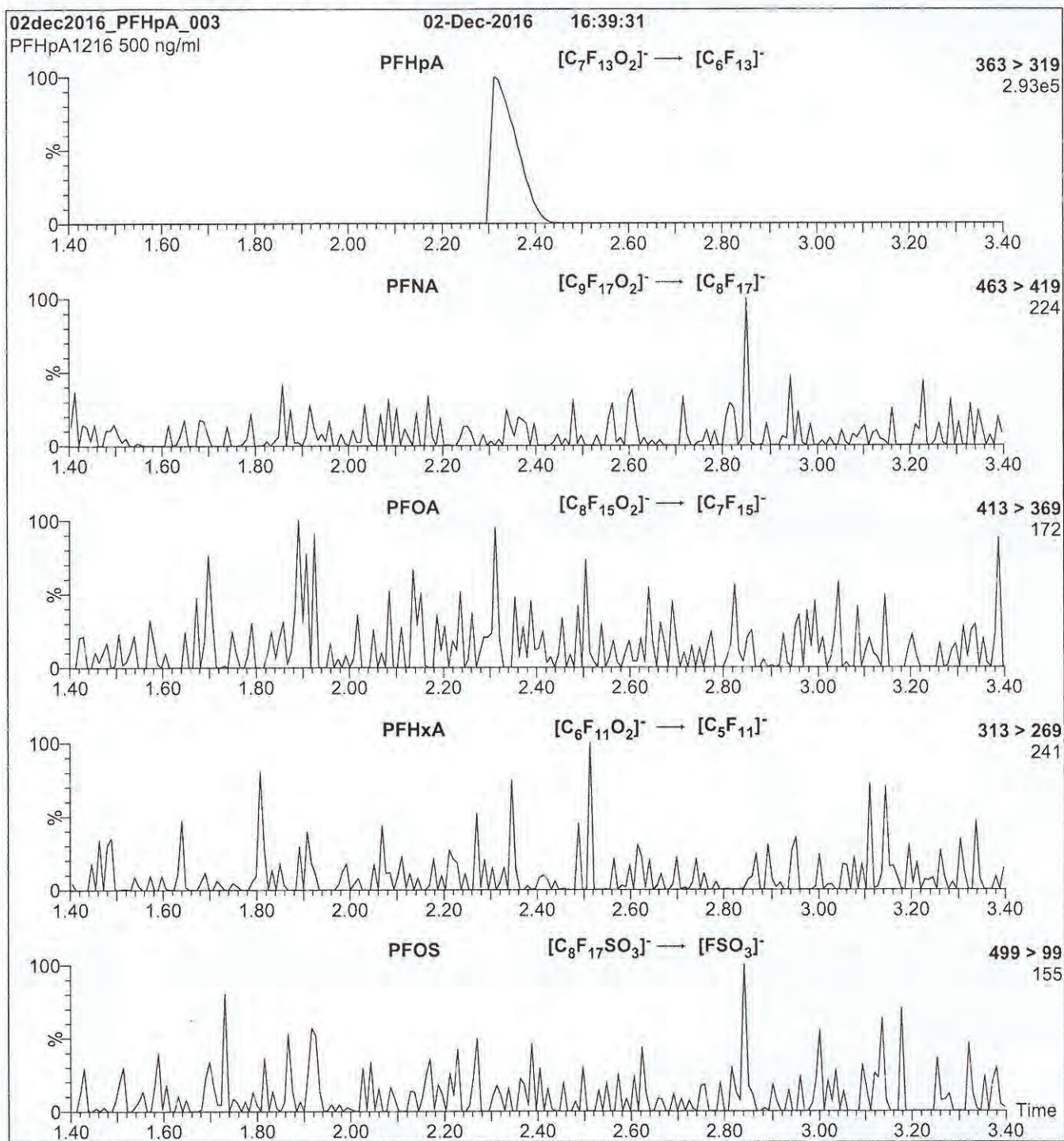
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: PFHpA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
 10 μ l (500 ng/ml PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
 (both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.50e-3
 Collision Energy (eV) = 11

174 0827



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

N-EtFOSA-M ✓

LOT NUMBER:

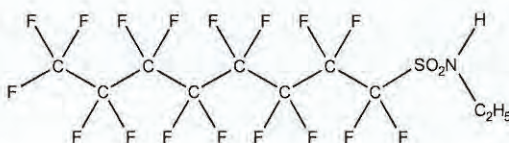
NEtFOSA0717M

COMPOUND:

N-ethylperfluoro-1-octanesulfonamide

STRUCTURE:**CAS #:**

4151-50-2

**MOLECULAR FORMULA:** $C_{10}H_{17}F_{17}NO_2S$ **MOLECULAR WEIGHT:**

527.20

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

07/05/2017

EXPIRY DATE: (mm/dd/yyyy)

07/05/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**

B.G. Chittim, General Manager
Date:07/18/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

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UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

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LIMITED WARRANTY:

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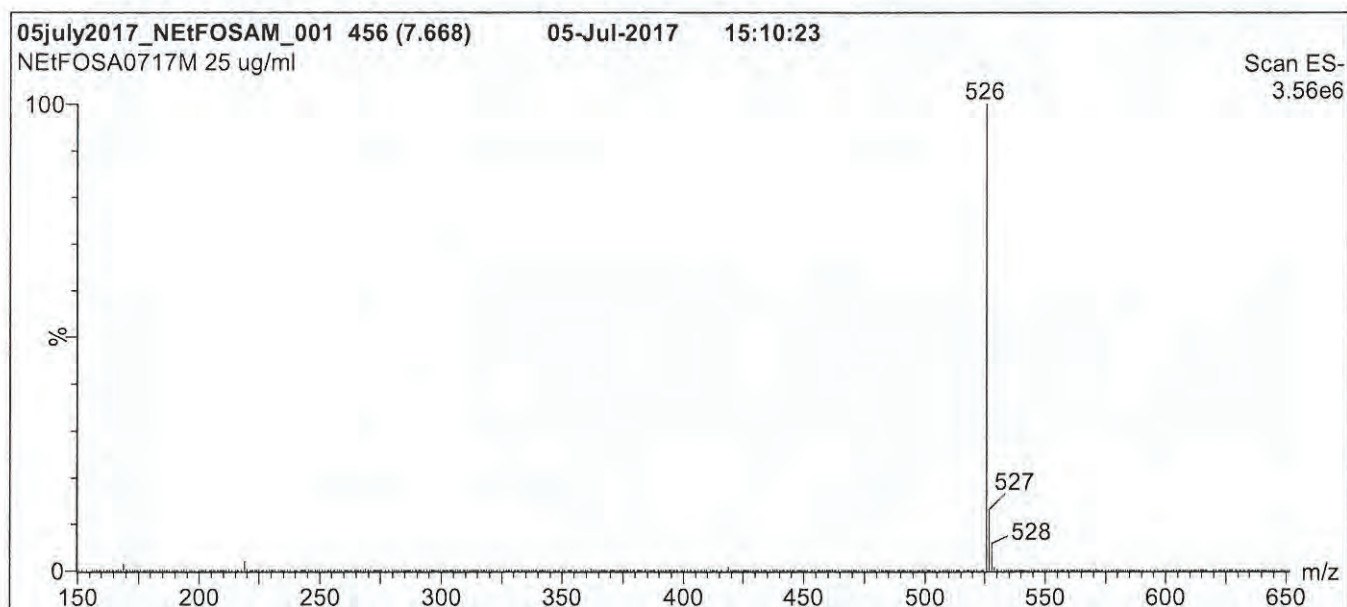
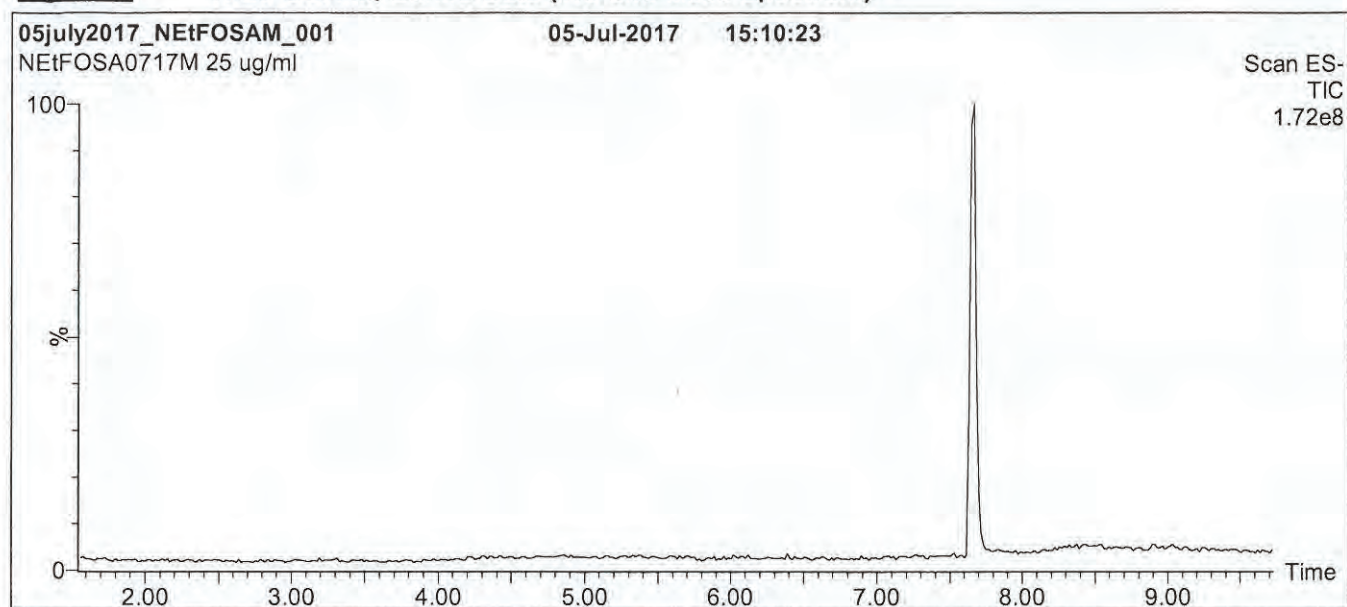
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: N-EtFOSA-M; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% H₂O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

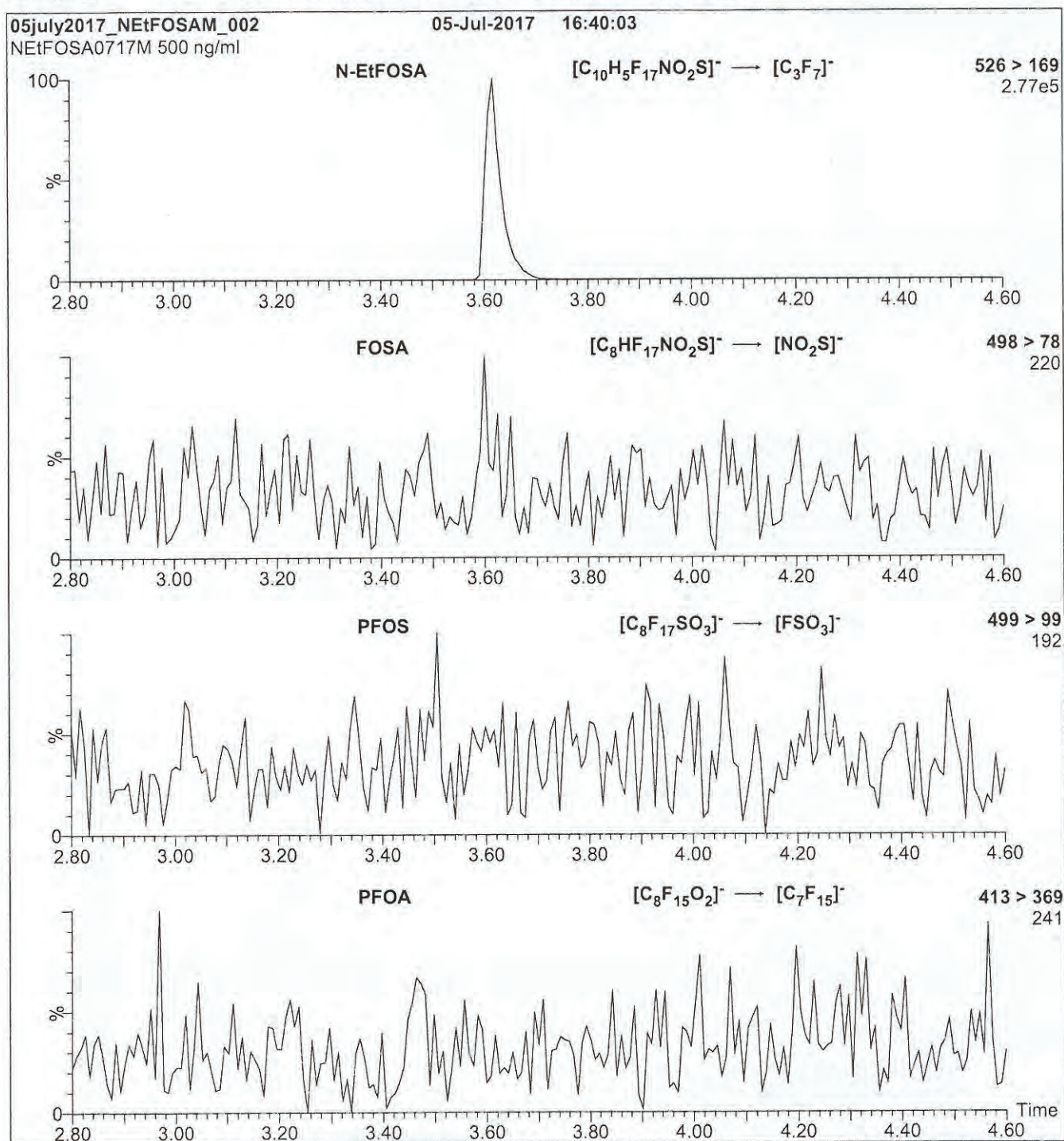
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: N-EtFOSA-M; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml N-EtFOSA-M)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 30

1740828

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**PRODUCT CODE:**

N-MeFOSA-M ✓

LOT NUMBER:

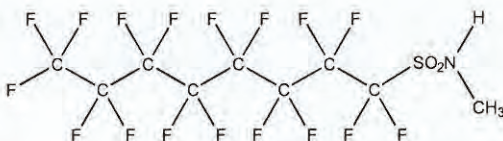
NMeFOSA0717M

COMPOUND:

N-methylperfluoro-1-octanesulfonamide

STRUCTURE:**CAS #:**

31506-32-8

**MOLECULAR FORMULA:** $C_9H_4F_{17}NO_2S$ **MOLECULAR WEIGHT:**

513.17

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

07/05/2017

EXPIRY DATE: (mm/dd/yyyy)

07/05/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**
B.G. Chittim, General Manager**Date:**07/10/2017
(mm/dd/yyyy)

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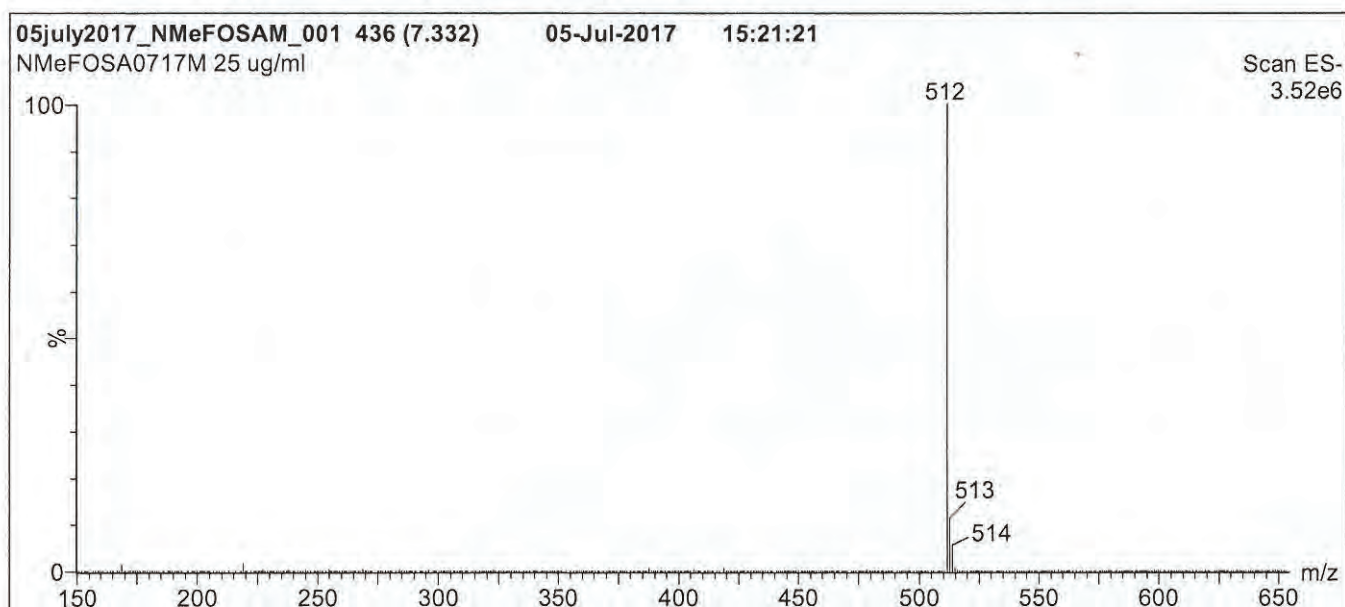
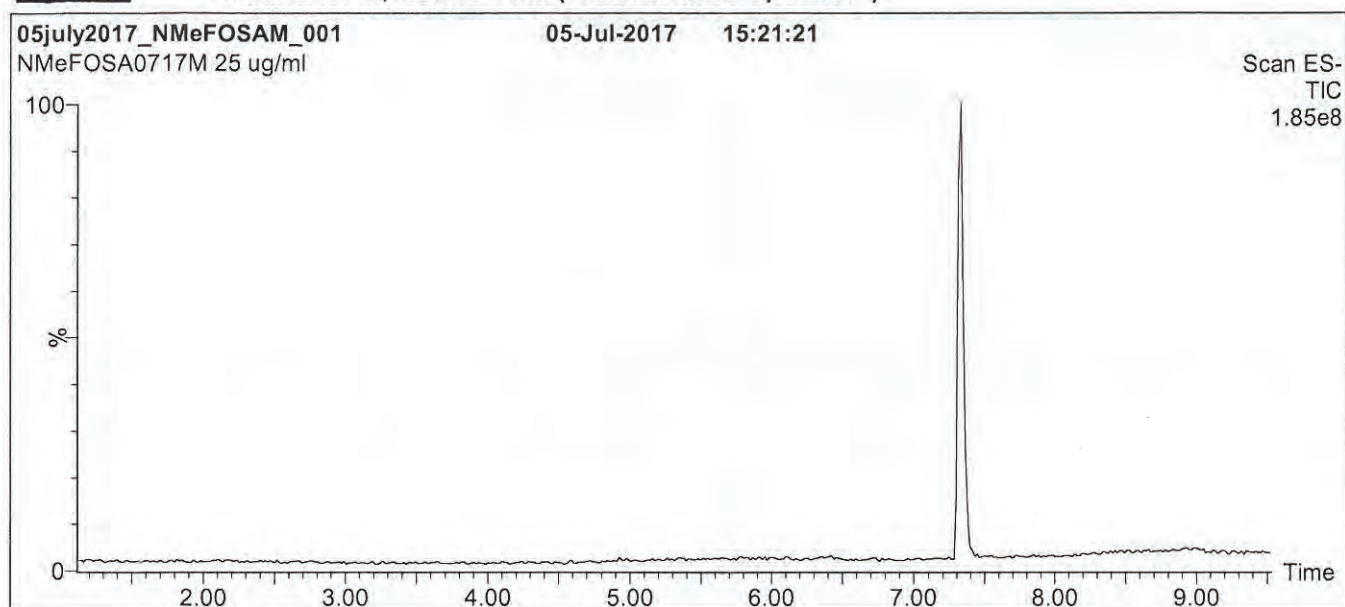
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Figure 1: N-MeFOSA-M; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 45% H₂O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

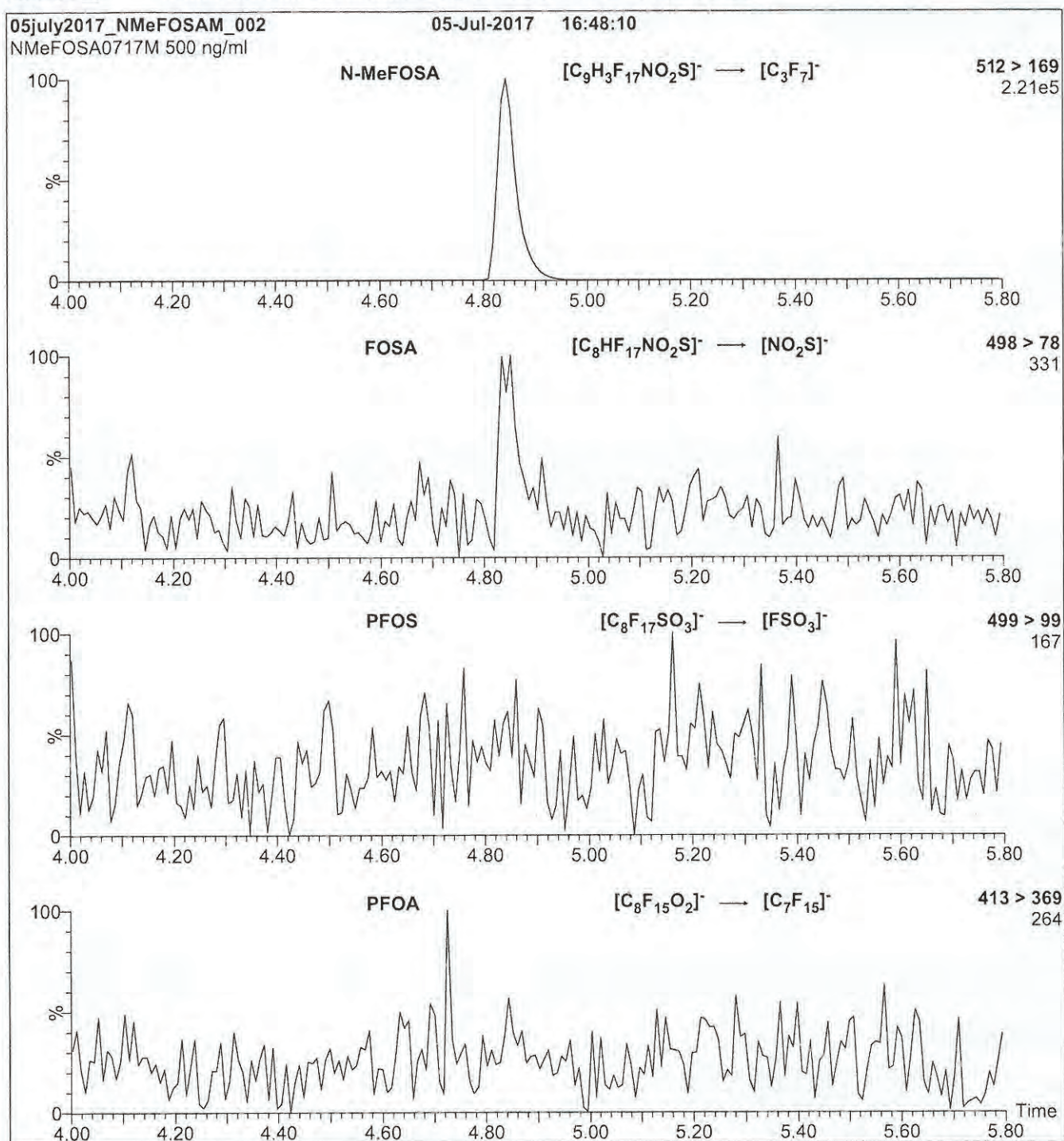
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: N-MeFOSA-M; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μ l (500 ng/ml N-MeFOSA-M)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 30

1740829



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

N-EtFOSE-M ✓

LOT NUMBER:

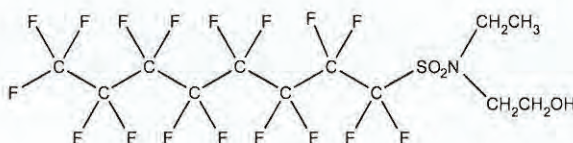
NEtFOSE0417M

COMPOUND:

2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol

STRUCTURE:**CAS #:**

1691-99-2

**MOLECULAR FORMULA:** $C_{12}H_{10}F_{17}NO_3S$ **MOLECULAR WEIGHT:**

571.25

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

04/24/2017 (HRGC/LRMS)

04/21/2017 (LC/MS)

EXPIRY DATE: (mm/dd/yyyy)

04/24/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: HRGC/LRMS Data (TIC and Mass Spectrum)

Figure 2: LC/MS Data (TIC and Mass Spectrum)

Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- In order to see the molecular ion (adduct free), the LC mobile phase should be free of ammonium acetate buffer.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date:

 04/26/2017
 (mm/dd/yyyy)

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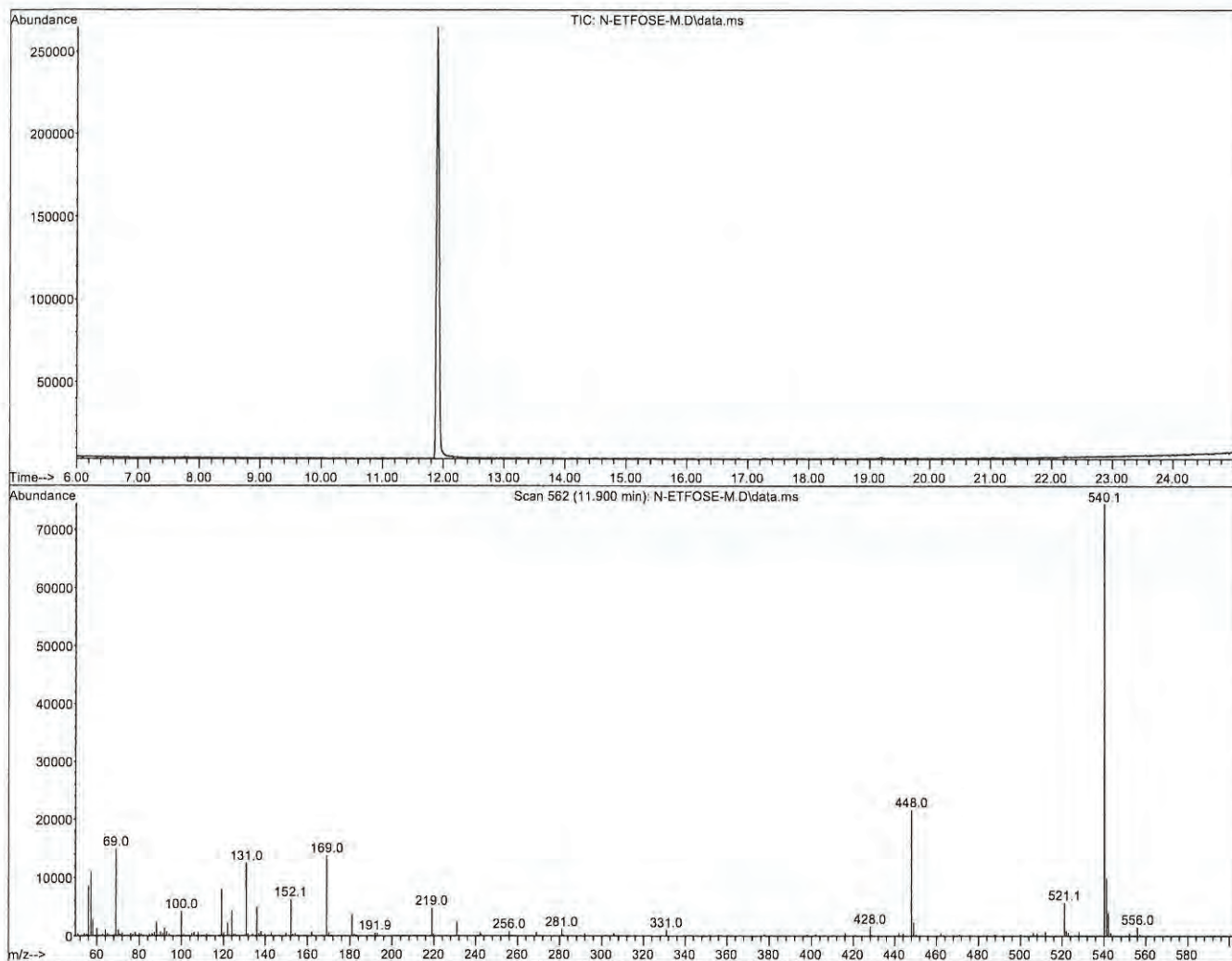
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Figure 1: N-EtFOSE-M; HRGC/LRMS Data (TIC and Mass Spectrum)



HRGC/LRMS:

Agilent 7890A (HRGC)

Agilent 5975C (LRMS)

Chromatographic Conditions:

Column: 30 m DB-5 (0.25 mm id, 0.25 μ m film thickness) Agilent J&W

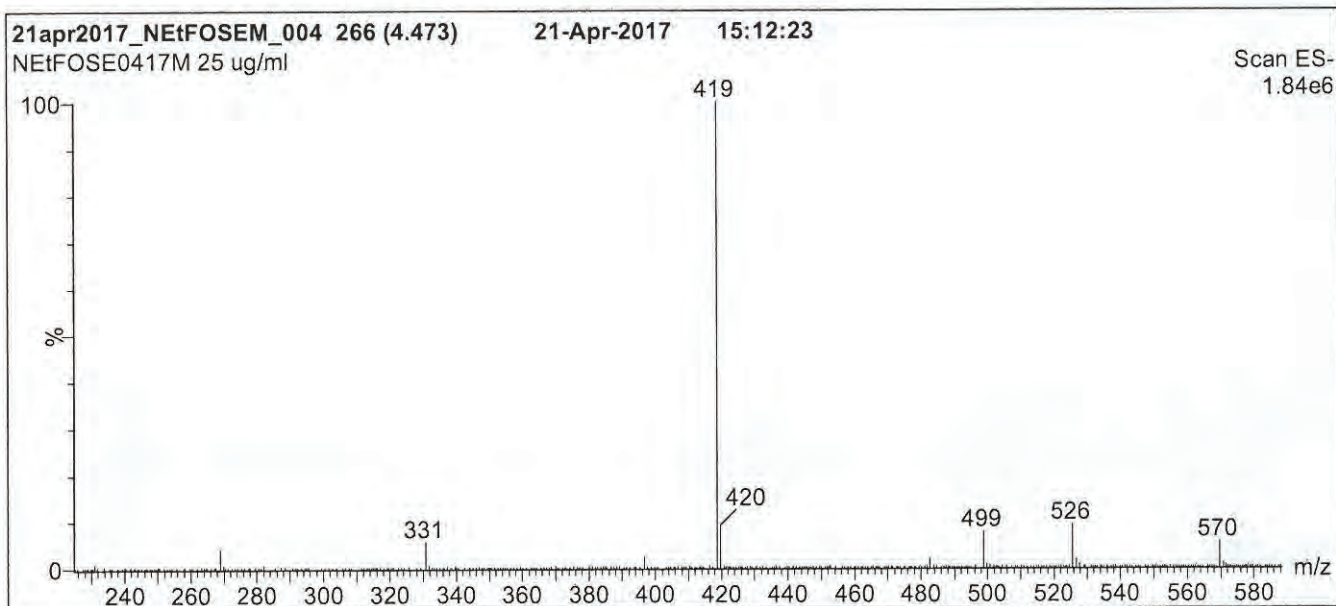
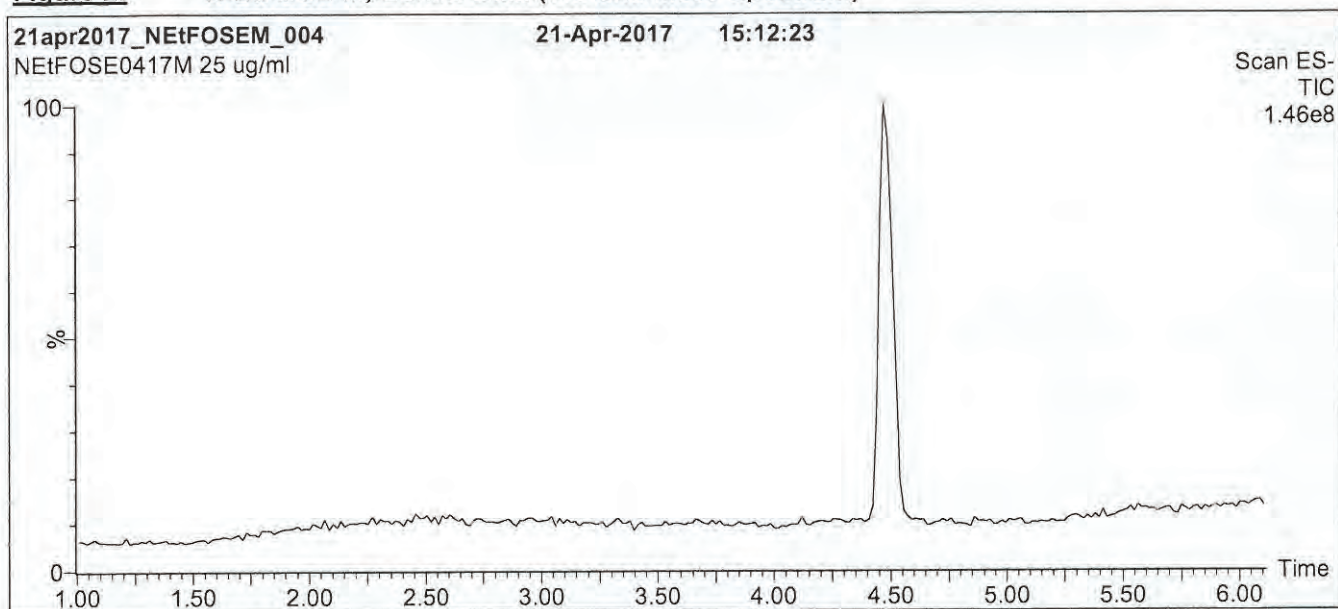
Injector: 250 $^{\circ}$ C (Splitless Injection)

Oven: 100 $^{\circ}$ C (5 min)
10 $^{\circ}$ C/min to 325 $^{\circ}$ C
325 $^{\circ}$ C (20 min)

Ionization: EI+

Detector: 250 $^{\circ}$ C
Full Scan (50-1000 amu)

Figure 2: N-EtFOSE-M; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 2:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro micro API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% MeOH / 40% H₂O
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

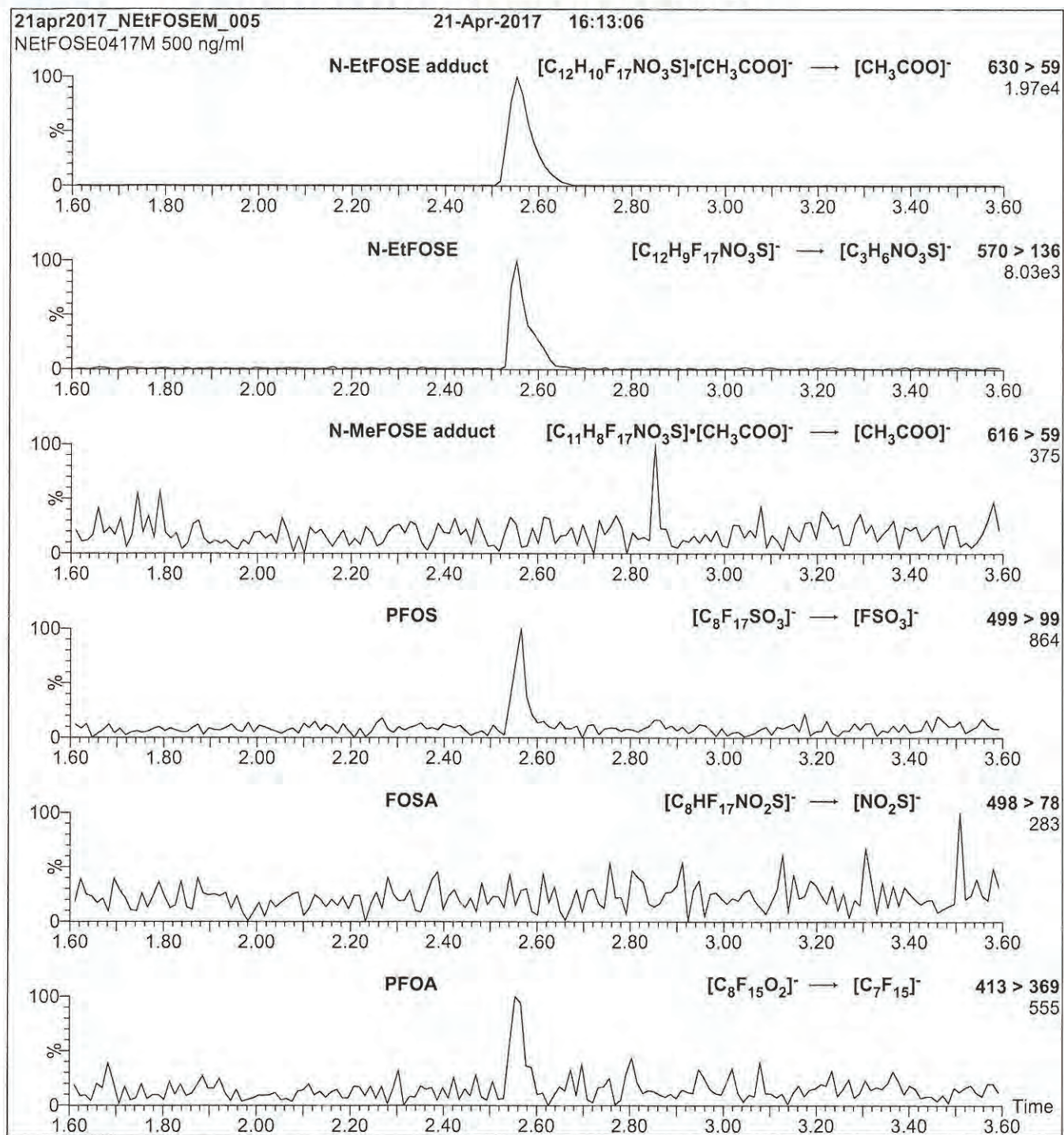
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 3: N-EtFOSE-M; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 3:

Injection: Direct loop injection
10 μ l (500 ng/ml N-EtFOSE-M)

Mobile phase: Isocratic 80% MeOH / 20% H₂O

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 33



STATE OF TEXAS, COUNTY OF DALLAS

Know all men by these presents, that _____

of the County of _____ State of _____

do hereby certify that _____

is the true and correct copy of _____

as the same appears from the _____

records of the _____

1740830



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

N-MeFOSE-M

LOT NUMBER:

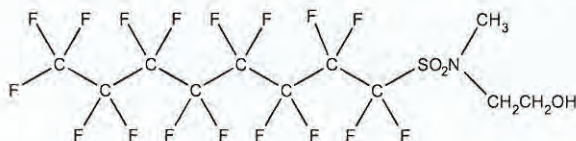
NMeFOSE0417M

COMPOUND:

2-(N-methylperfluoro-1-octanesulfonamido)-ethanol

STRUCTURE:**CAS #:**

24448-09-7

**MOLECULAR FORMULA:** $C_{11}H_8F_{17}NO_3S$ **MOLECULAR WEIGHT:**

557.22

CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):**

Methanol

CHEMICAL PURITY:

>98%

LAST TESTED: (mm/dd/yyyy)

04/24/2017 (HRGC/LRMS)

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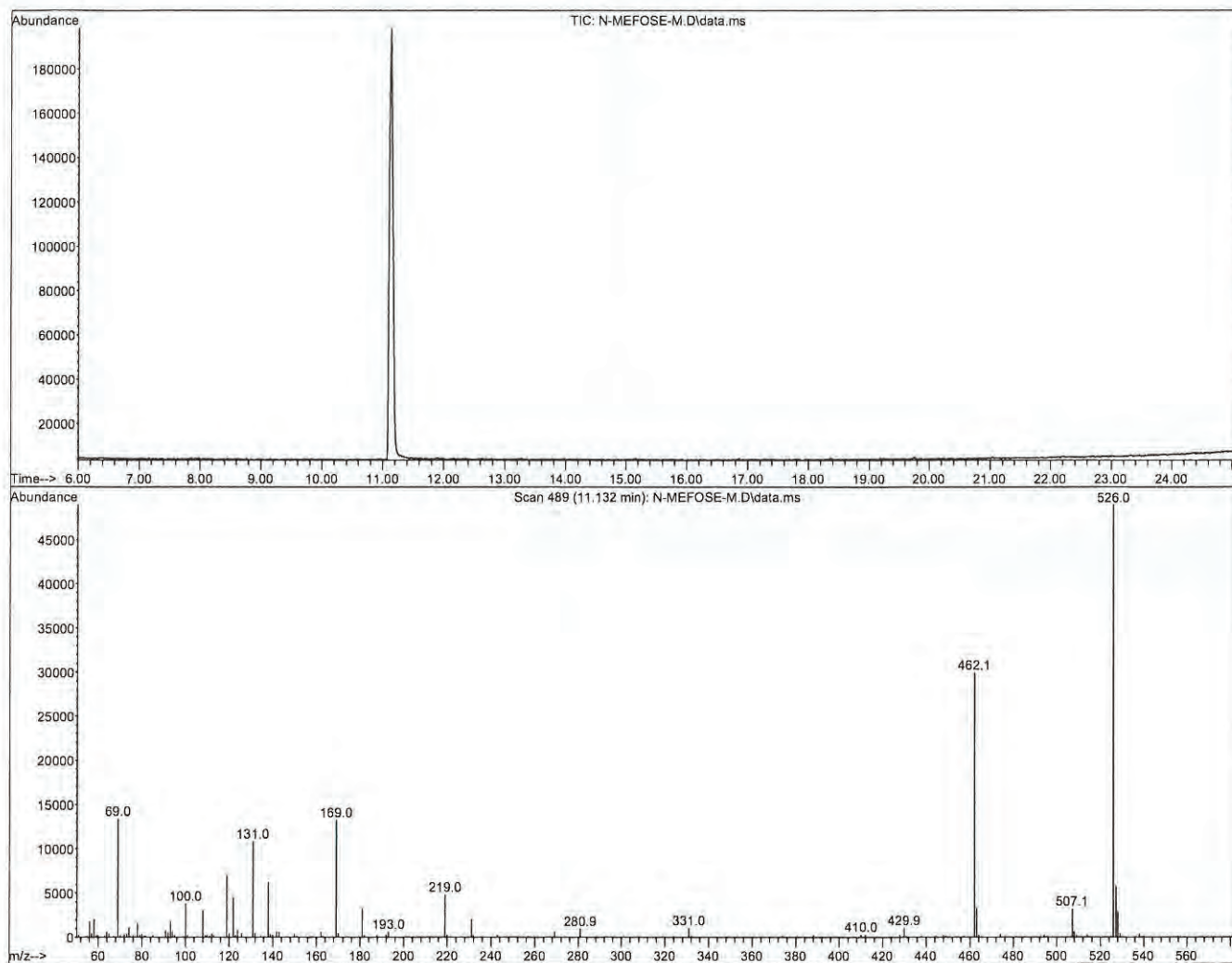
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For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: N-MeFOSE-M; HRGC/LRMS Data (TIC and Mass Spectrum)



HRGC/LRMS:

Agilent 7890A (HRGC)

Agilent 5975C (LRMS)

Chromatographic Conditions:

Column: 30 m DB-5 (0.25 mm id, 0.25 μ m film thickness) Agilent J&W

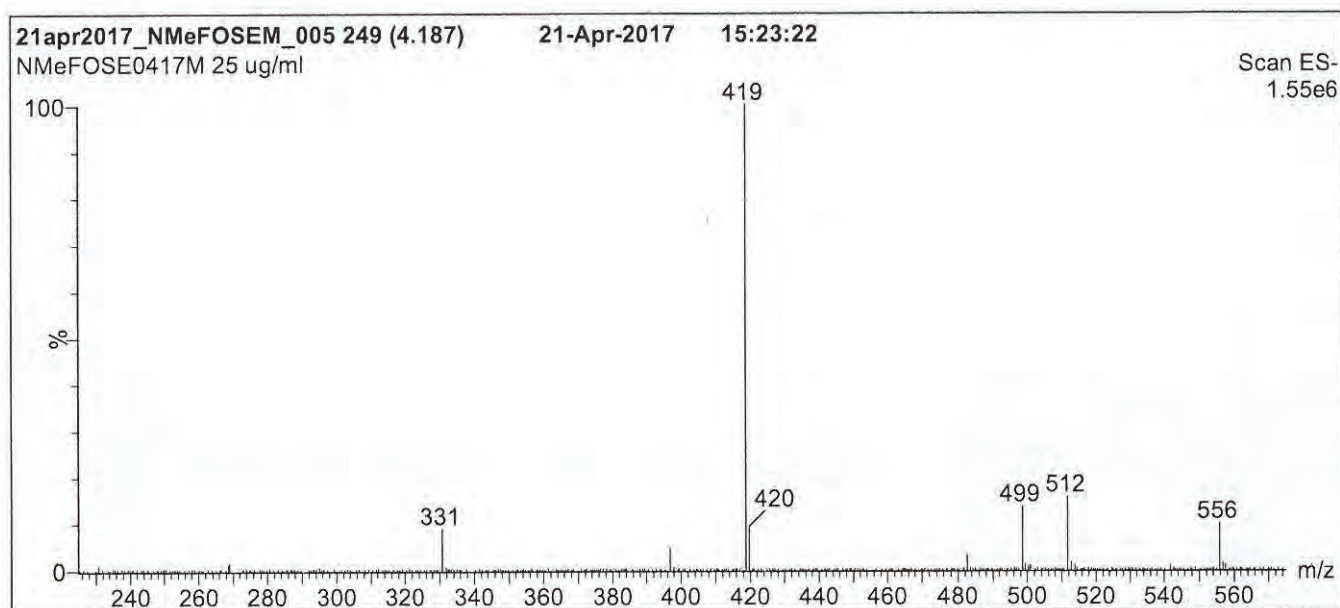
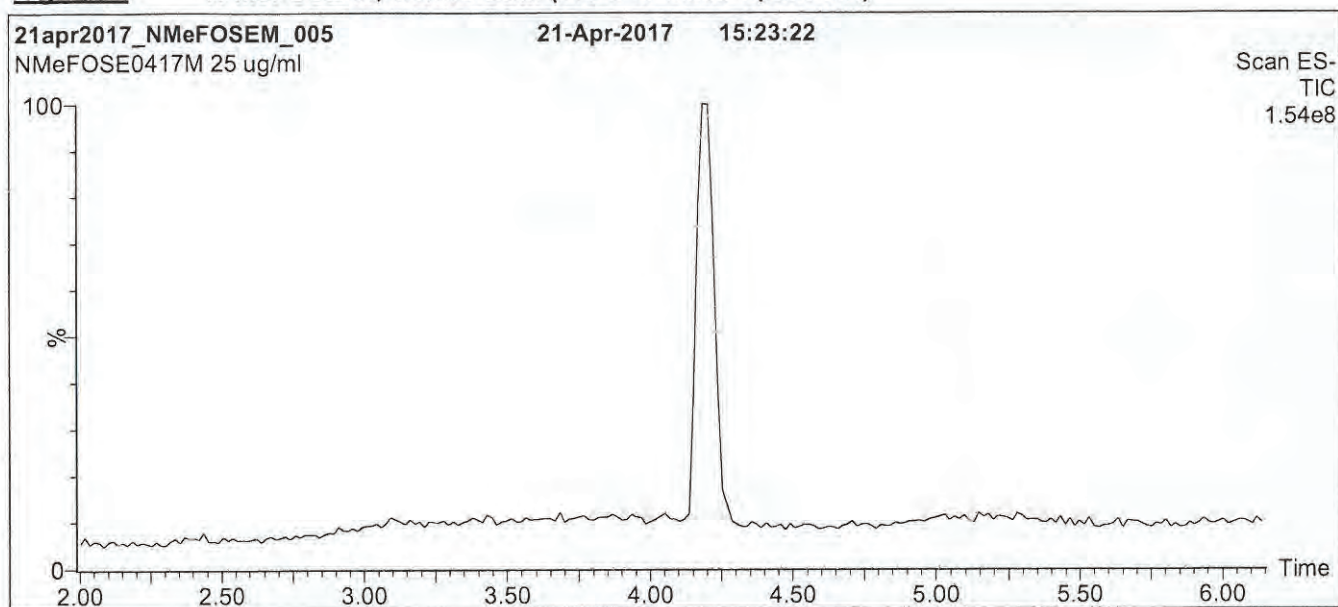
Injector: 250 $^{\circ}$ C (Splitless Injection)

Oven: 100 $^{\circ}$ C (5 min)
10 $^{\circ}$ C/min to 325 $^{\circ}$ C
325 $^{\circ}$ C (20 min)

Ionization: EI+

Detector: 250 $^{\circ}$ C
Full Scan (50-1000 amu)

Figure 2: N-MeFOSE-M; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 2:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% MeOH / 40% H₂O
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

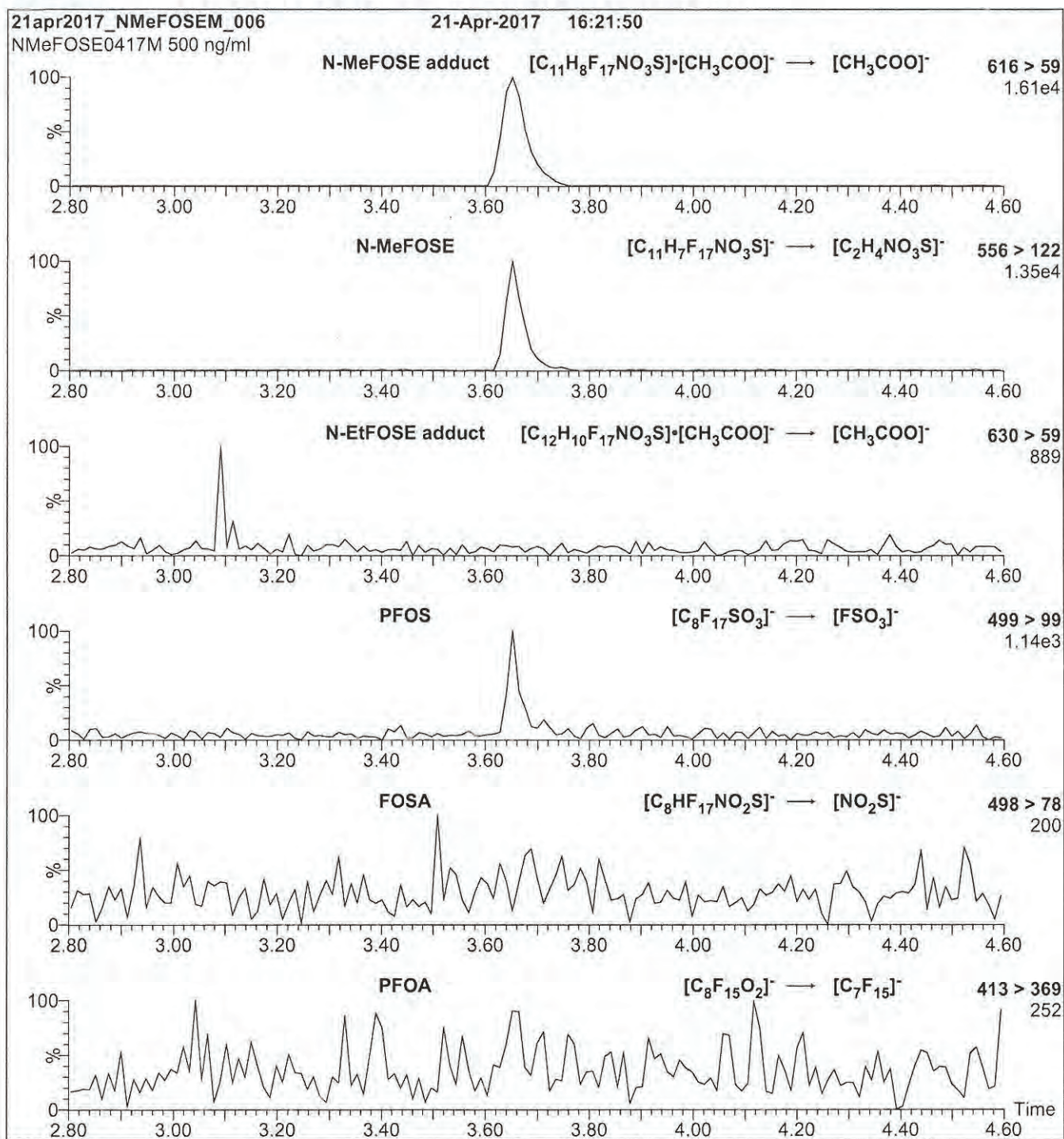
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.50
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 3: N-MeFOSE-M; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 3:

Injection: Direct loop injection
10 μ l (500 ng/ml N-MeFOSE-M)

Mobile phase: Isocratic 80% MeOH / 20% H₂O

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 35

Analytical Standard Record

Vista Analytical Laboratory

17L0402

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	(mls)
17E1716	13C2-PFHxA	17-May-17	** Vendor **	22-Nov-21	0.2
17H0801	13C2-PFHxDA	08-Aug-17	** Vendor **	07-Jan-21	0.2
17K0802	d3-N-Me-FOSAA	08-Nov-17	** Vendor **	19-May-22	0.5
17K0803	d5-N-EtFOSAA	08-Nov-17	** Vendor **	22-Nov-21	0.5
17K0804	13C3-PFBA	08-Nov-17	** Vendor **	27-May-21	0.5
17K0805	13C2-8:2 FTS	08-Nov-17	** Vendor **	05-Jul-22	0.522
17K0807	13C2-6:2 FTS	08-Nov-17	** Vendor **	17-Feb-22	0.526
17K0810	13C5-PFNA	08-Nov-17	** Vendor **	30-Sep-21	0.5
17K0812	13C2-PFTeDA	08-Nov-17	** Vendor **	01-Mar-22	0.5
17K0813	13C2-PFUdA	08-Nov-17	** Vendor **	22-Nov-21	0.5
17K0814	13C4-PFHpA	08-Nov-17	** Vendor **	03-May-22	0.5
17K0816	13C2-PFDoA	08-Nov-17	** Vendor **	23-May-22	0.5
17K0818	18O2-PFHxS	08-Nov-17	** Vendor **	17-Feb-22	0.529
17K0819	13C8-PFOS	08-Nov-17	** Vendor **	30-Sep-21	0.539
17K0821	13C3-PFBS	08-Nov-17	** Vendor **	24-May-22	0.538
17K3038	13C8-FOSA-I	30-Nov-17	** Vendor **	11-Oct-22	0.5
17K3039	13C2-PFDA	30-Nov-17	** Vendor **	13-Jul-22	0.5
17K3040	13C2-PFOA	30-Nov-17	** Vendor **	26-Oct-22	0.5
17K3041	13C3-PFPeA	30-Nov-17	** Vendor **	20-Apr-22	0.5

Description: PFC - IS

Standard Type: Reagent

Solvent: MeOH

Final Volume (mls): 20

Vials: 1

Expires: 04-Dec-18

Prepared: 04-Dec-17

Prepared By: Kyle Byrd-Fisher

Department: LCMS

Last Edit: 12-Dec-17 09:51 by AEW

Analyte	CAS Number	Concentration	Units
13C3-PFBS		1.25	ug/mL
13C2-8:2 FTS		1.25	ug/mL
13C2-PFDA		1.25	ug/mL
13C2-PFDoA		1.25	ug/mL
13C2-PFHxA		0.5	ug/mL
13C2-PFHxDA		0.5	ug/mL
13C2-PFOA		1.25	ug/mL
13C2-PFTeDA		1.25	ug/mL
13C2-6:2 FTS		1.25	ug/mL
13C3-PFBA		1.25	ug/mL
d5-EtFOSAA		1.25	ug/mL
13C3-PFPeA		1.25	ug/mL
13C4-PFHpA		1.25	ug/mL
13C5-PFNA		1.25	ug/mL

Analytical Standard Record

Vista Analytical Laboratory

17L0402

Description:	PFC - IS	Expires:	04-Dec-18
Standard Type:	Reagent	Prepared:	04-Dec-17
Solvent:	MeOH	Prepared By:	Kyle Byrd-Fisher
Final Volume (mls):	20	Department:	LCMS
Vials:	1	Last Edit:	12-Dec-17 09:51 by AEW

Analyte	CAS Number	Concentration	Units
13C8-PFOS		1.25	ug/mL
13C8-PFOSA		1.25	ug/mL
18O2-PFHxS		1.25	ug/mL
d3-MeFOSAA		1.25	ug/mL
13C2-PFUnA		1.25	ug/mL



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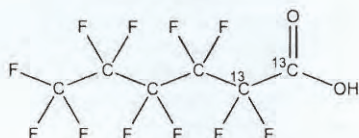
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFHxA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]hexanoic acid

LOT NUMBER: MPFHxA1116

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₄HF₁₁O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 316.04
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%

ISOTOPIC PURITY: ≥99%¹³C
(1,2-¹³C₂)

LAST TESTED: (mm/dd/yyyy) 11/22/2016

EXPIRY DATE: (mm/dd/yyyy) 11/22/2021

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of perfluoro-n-hexanoic acid and ~ 0.3% of perfluoro-n-octanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 12/13/2016
(mm/dd/yyyy)

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17-10801



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

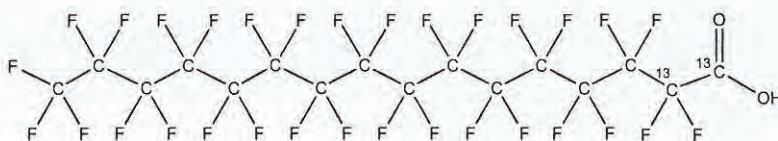
M2PFHxDA ✓

LOT NUMBER:

M2PFHxDA1112

COMPOUND:Perfluoro-n-[1,2-¹³C₂]hexadecanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₂¹²C₁₄HF₃₁O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

816.11

SOLVENT(S):Methanol
Water (<1%)**CHEMICAL PURITY:**

>98%

ISOTOPIC PURITY:≥99% ¹³C
(1,2-¹³C₂)**LAST TESTED:** (mm/dd/yyyy)

01/07/2016

EXPIRY DATE: (mm/dd/yyyy)

01/07/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.3% of native perfluoro-n-hexadecanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

01/11/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

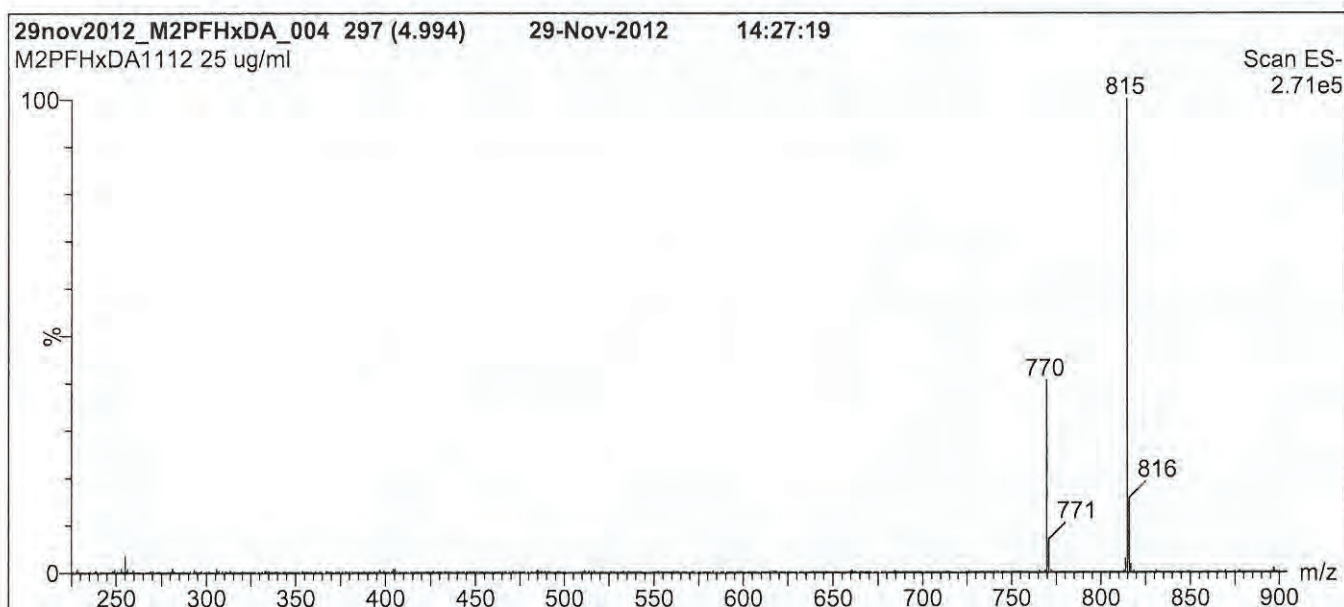
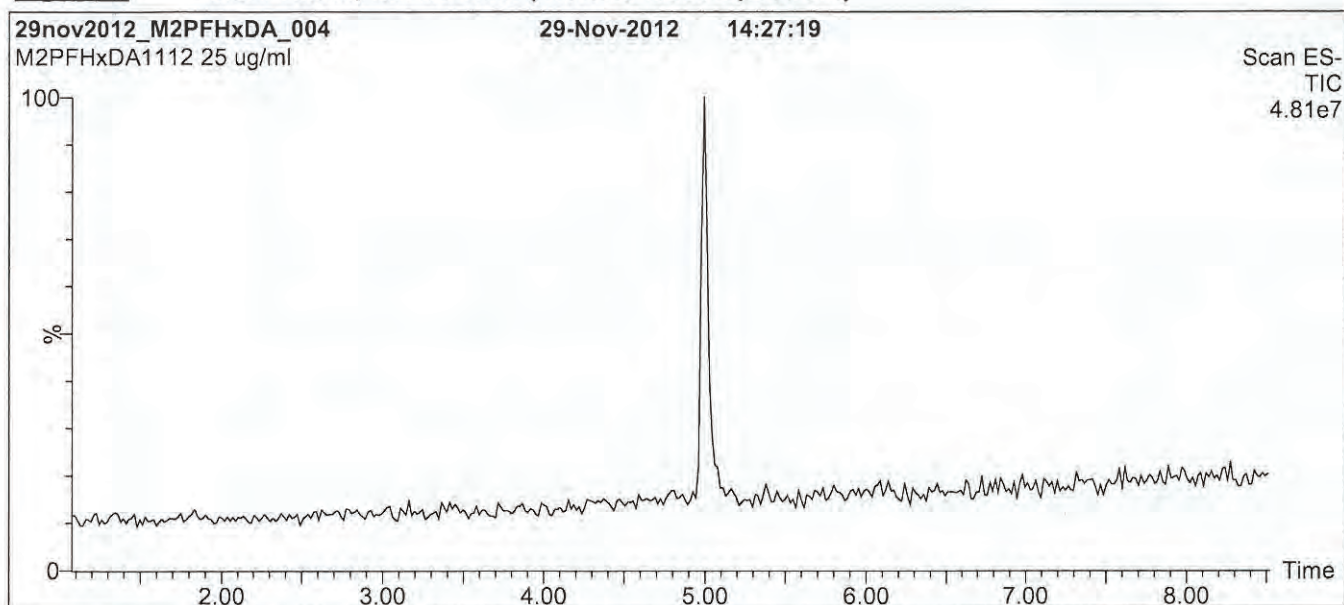
QUALITY MANAGEMENT:

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Figure 1: M2PFHxDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 100% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

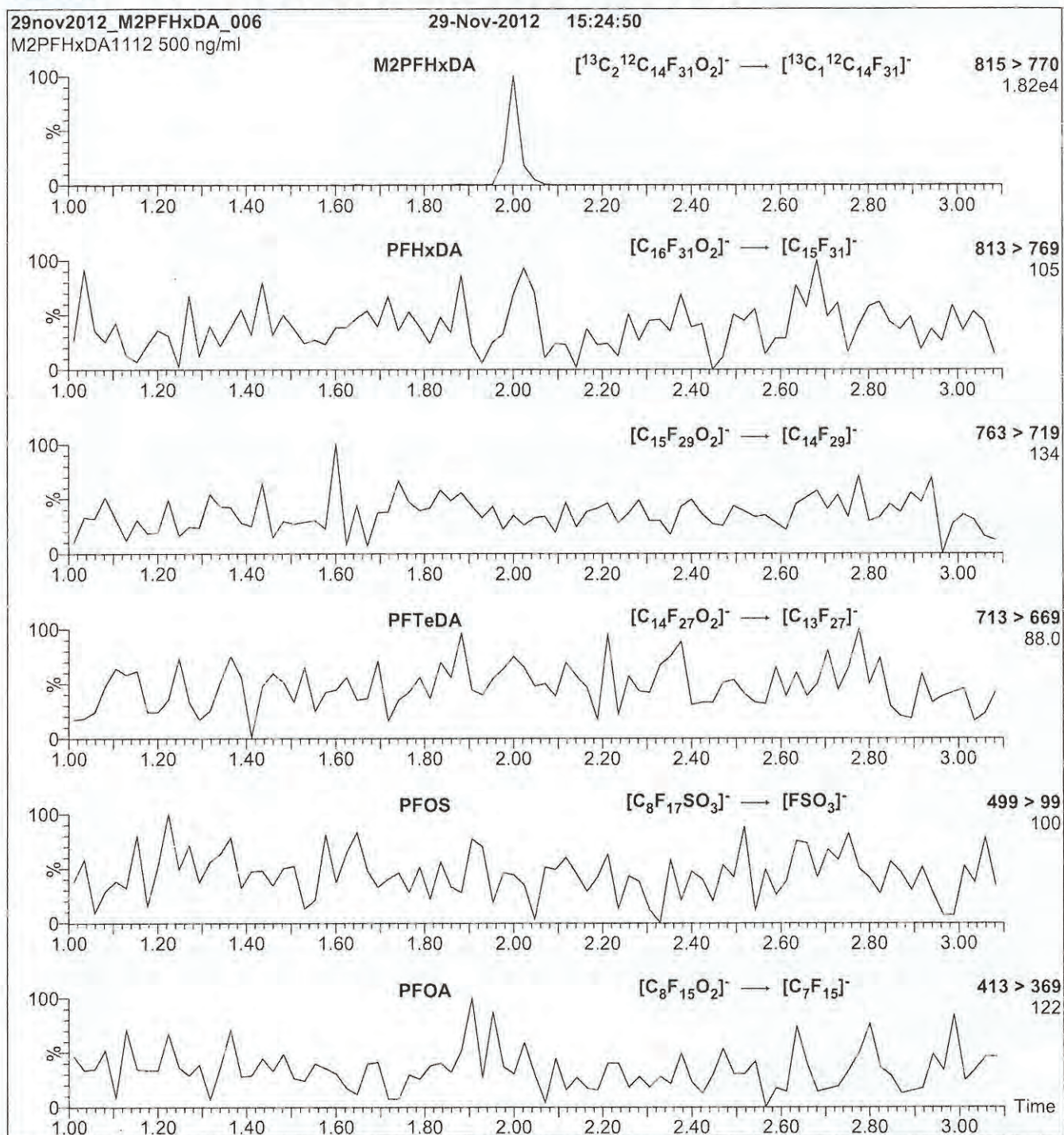
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 1200 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 25.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

Figure 2: M2PFHxDA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFHxDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 15

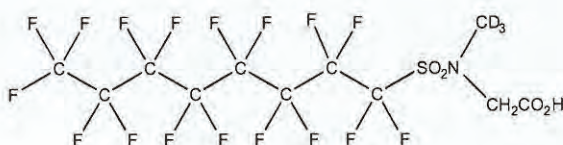
17K0802



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: d3-N-MeFOSAA **LOT NUMBER:** d3NMeFOSAA0517
COMPOUND: N-methyl-d3-perfluoro-1-octanesulfonamidoacetic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: $C_{11}D_3H_3F_{17}NO_4S$ **MOLECULAR WEIGHT:** 574.23
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** $\geq 98\% \text{ } ^2\text{H}_3$
LAST TESTED: (mm/dd/yyyy) 05/19/2017
EXPIRY DATE: (mm/dd/yyyy) 05/19/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:
 B.G. Chittim, General Manager

Date: 05/31/2017
 (mm/dd/yyyy)

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17K0802

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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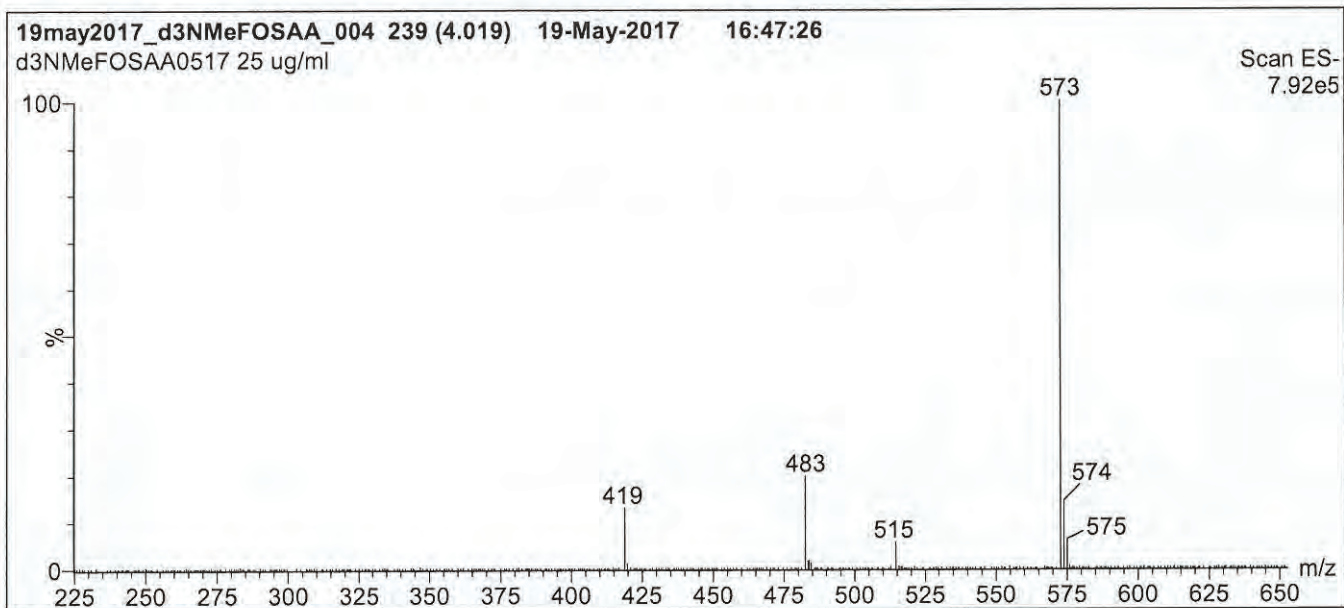
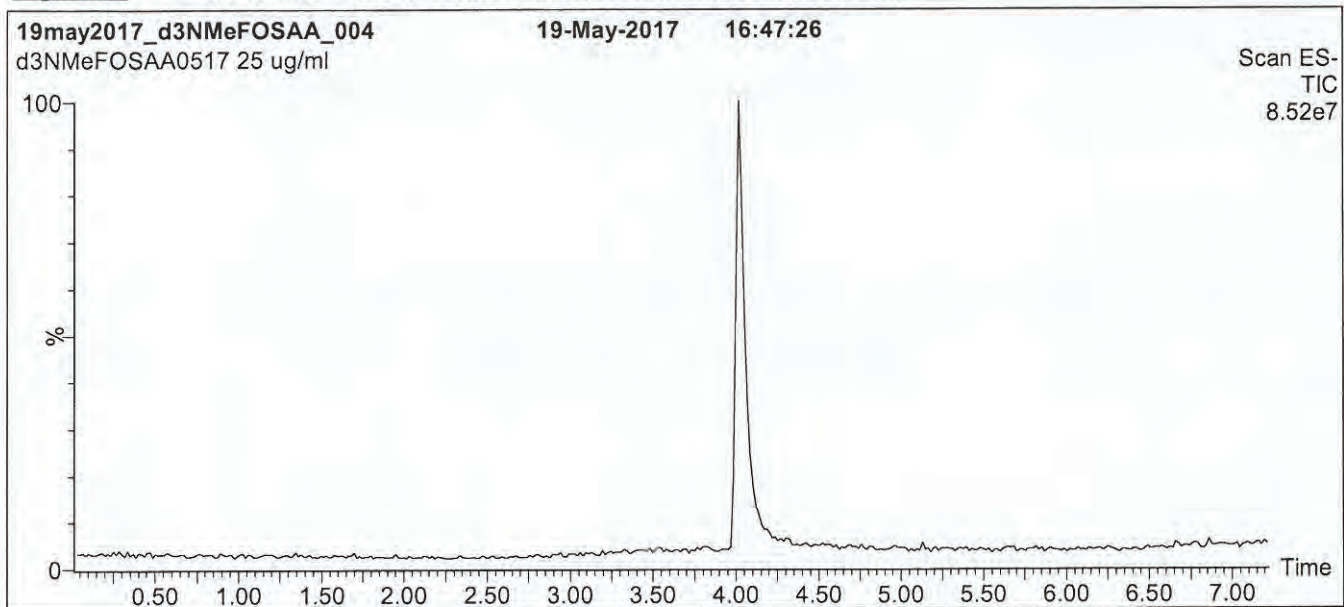
QUALITY MANAGEMENT:

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For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

17K0802

Figure 1: d3-N-MeFOSAA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 60% (80:20 MeOH:ACN) / 40% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

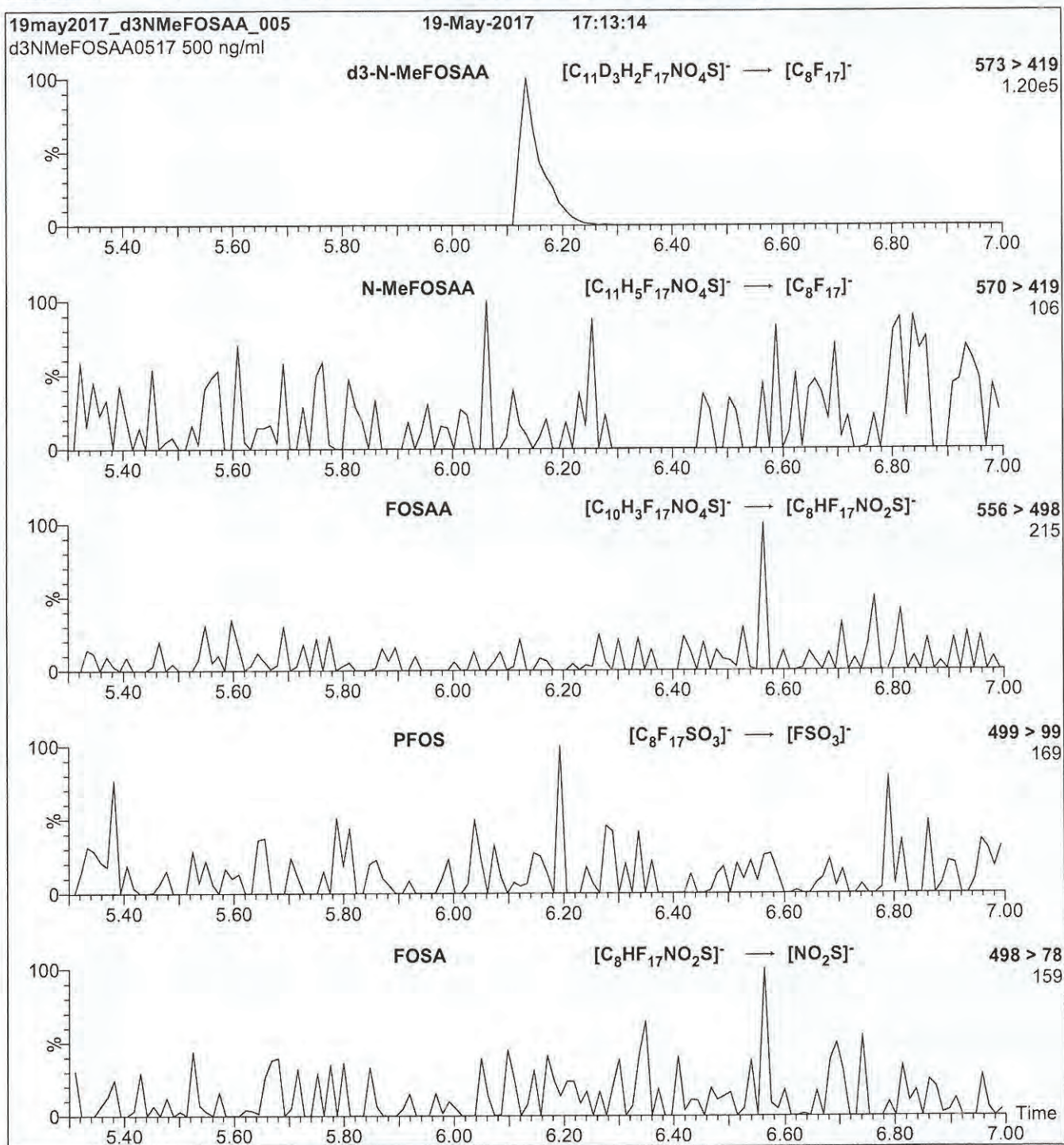
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 35.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17K0802

Figure 2: d3-N-MeFOSAA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml d3-N-MeFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 20

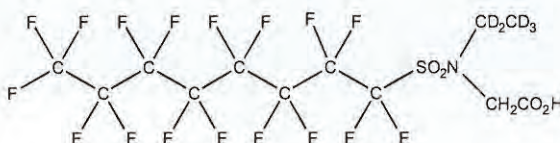
17K0803



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: d5-N-EtFOSAA **LOT NUMBER:** d5NEtFOSAA1116
COMPOUND: N-ethyl-d5-perfluoro-1-octanesulfonamidoacetic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: $C_{12}D_5H_3F_{17}NO_4S$ **MOLECULAR WEIGHT:** 590.26
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$ **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** $\geq 98\% \text{ } ^2\text{H}_5$
LAST TESTED: (mm/dd/yyyy) 11/22/2016
EXPIRY DATE: (mm/dd/yyyy) 11/22/2021
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent the conversion of the acetic acid moiety to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 12/01/2016
(mm/dd/yyyy)

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17K0803

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

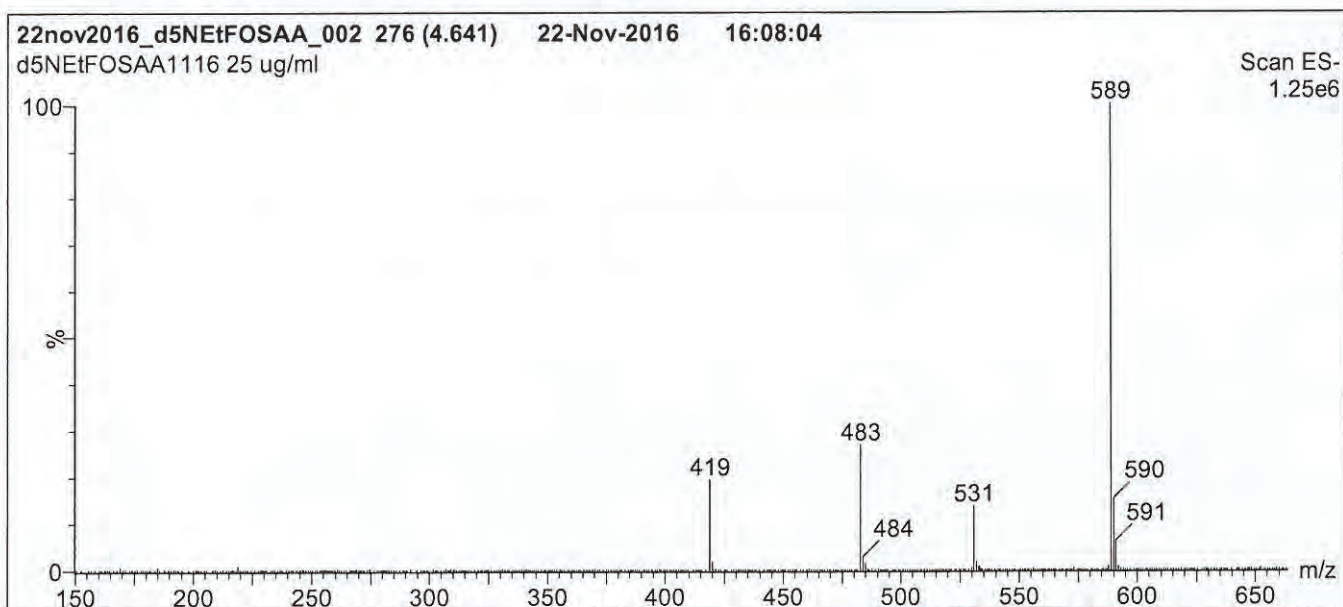
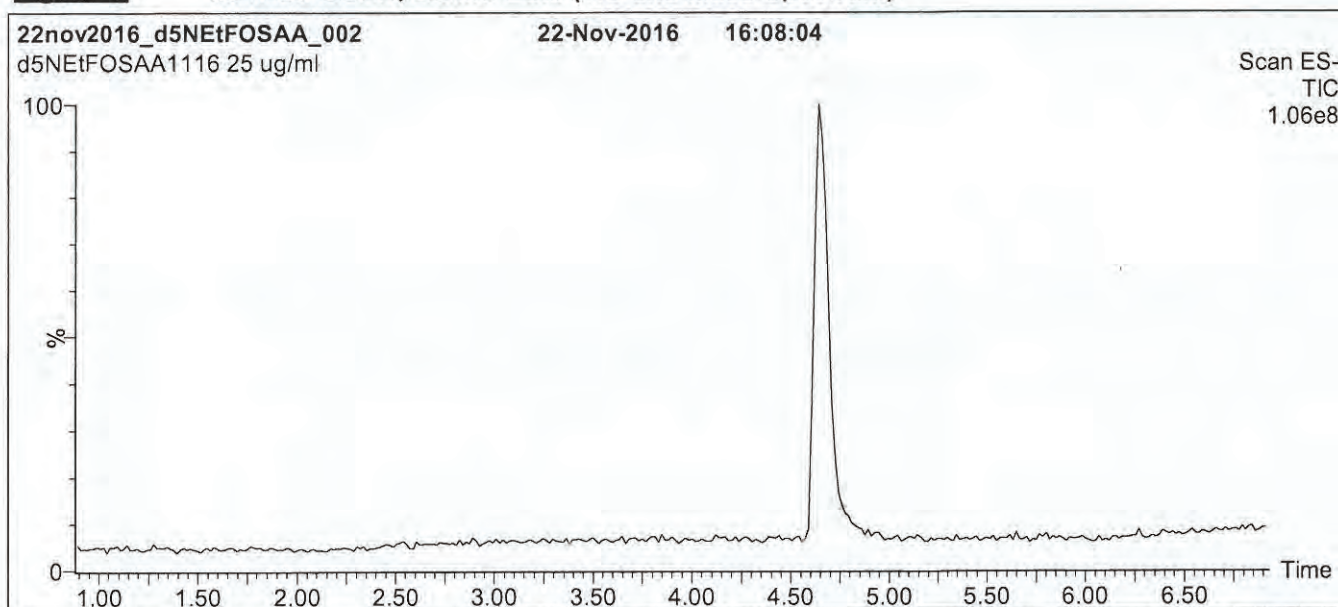
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17K0803

Figure 1: d5-N-EtFOSAA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 60% (80:20 MeOH:ACN) / 40% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

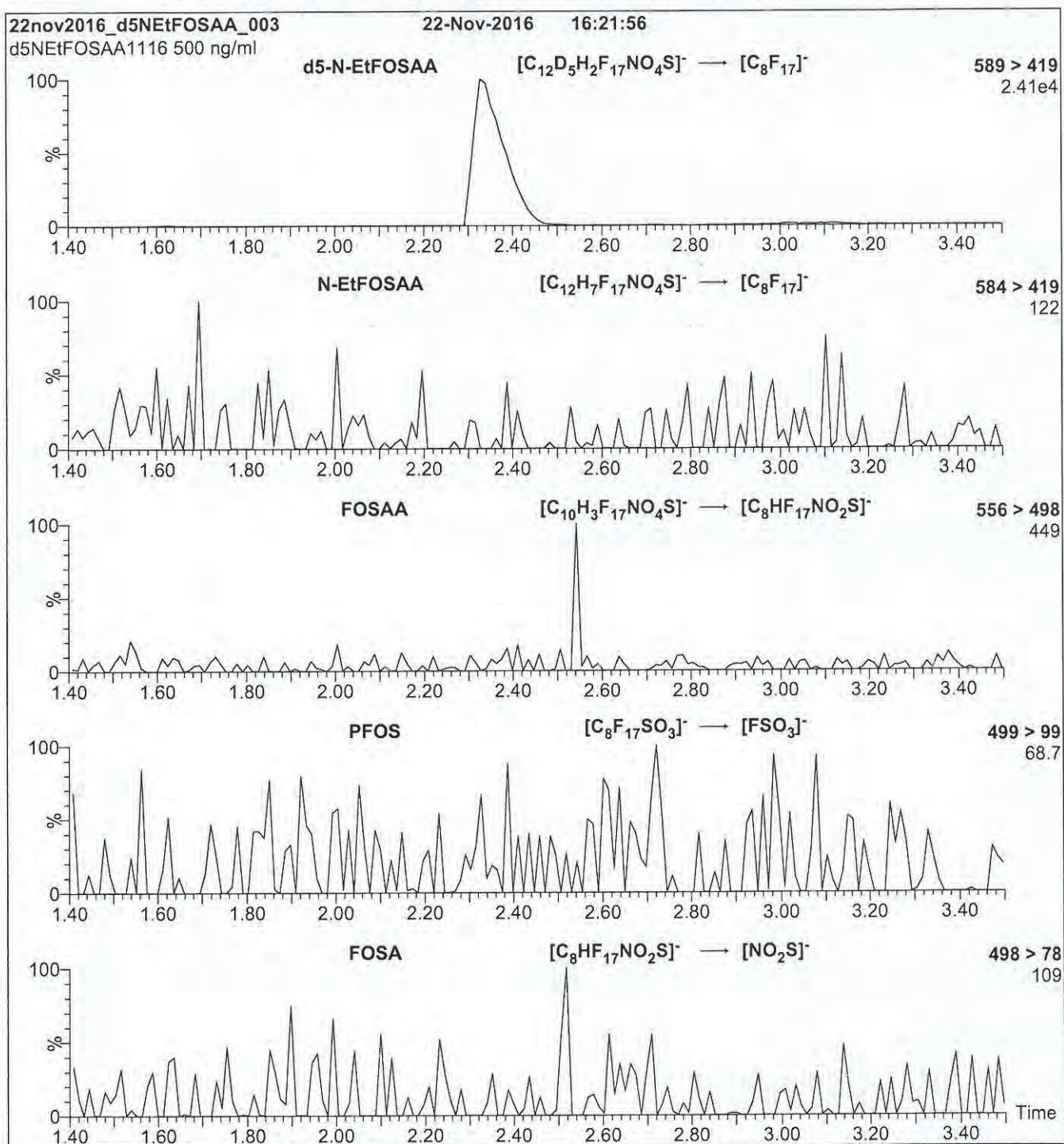
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 35.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

17K0803

Figure 2: d5-N-EtFOSAA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml d5-N-EtFOSAA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 20

17K0804



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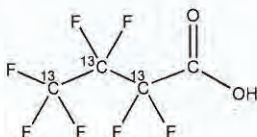
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M3PFBA
COMPOUND: Perfluoro-n-[2,3,4-¹³C₃]butanoic acid

LOT NUMBER: M3PFBA0516

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₃¹²CHF₇O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 217.02
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 05/27/2016
EXPIRY DATE: (mm/dd/yyyy) 05/27/2021

ISOTOPIC PURITY: ≥99% ¹³C
(2,3,4-¹³C₃)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

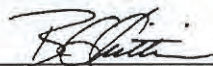
Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.2% of perfluoro-n-[¹³C₃]propanoic acid and also contains ~ 1.0% of perfluoro-n-[1,2,3,4-¹³C₄]butanoic acid due to the naturally occurring isotopic abundance of ¹³C in the unlabelled carbon atom.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:


B.G. Chittim

Date: 07/08/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K0804

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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LIMITED WARRANTY:

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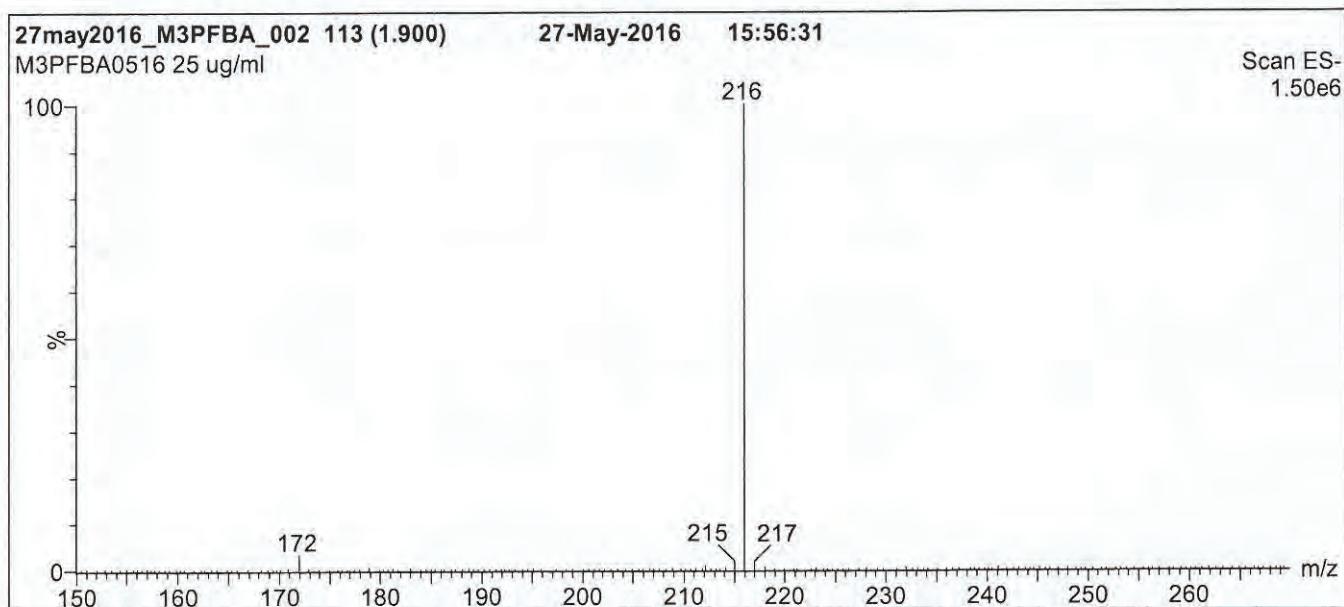
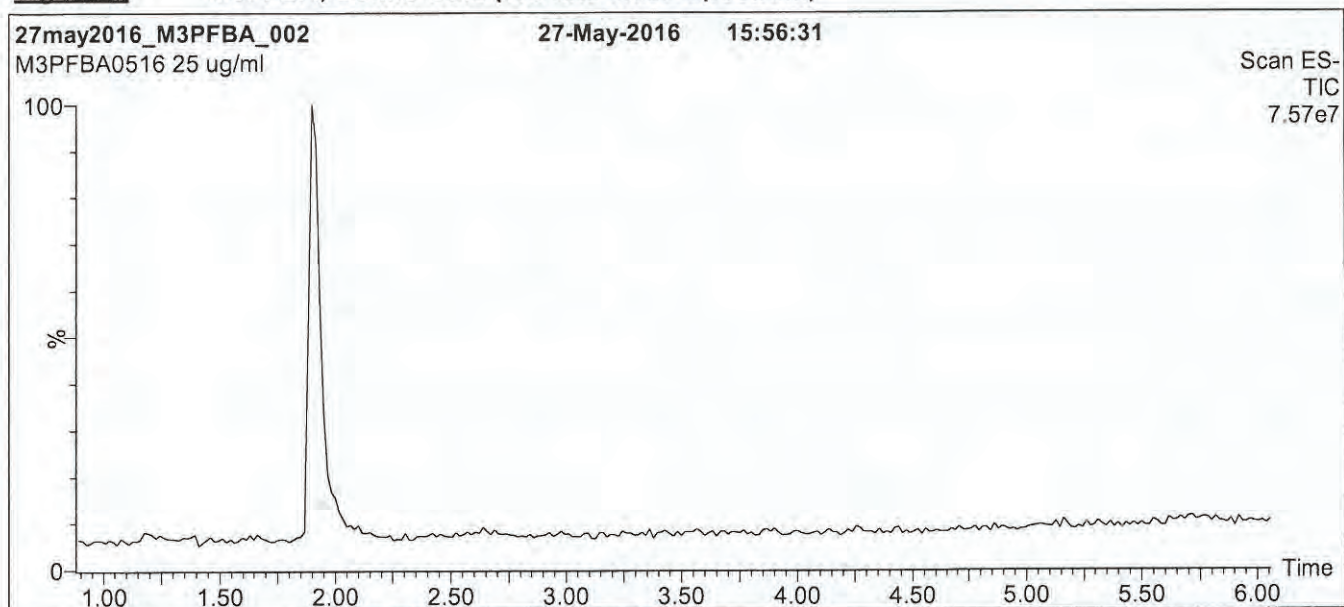
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17K0804

Figure 1: M3PFBA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

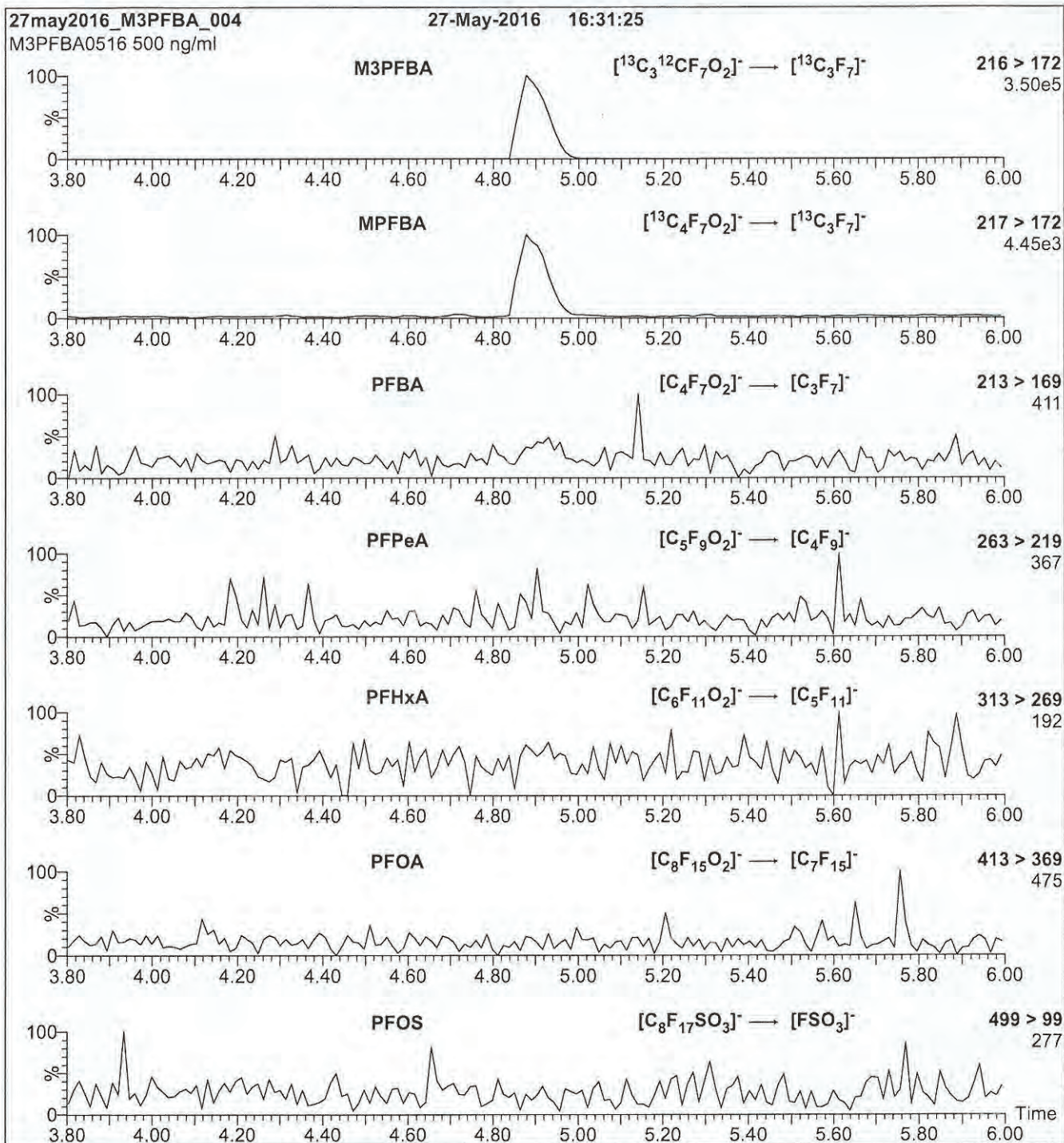
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 10.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

17K0804

Figure 2: M3PFBA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M3PFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.62e-3
Collision Energy (eV) = 10

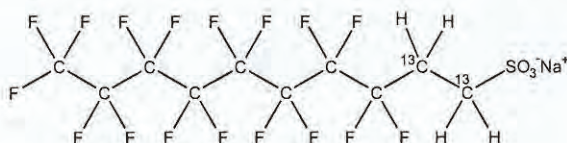
17K0805



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2-8:2FTS **LOT NUMBER:** M282FTS0717
COMPOUND: Sodium 1H,1H,2H,2H-perfluoro-[1,2-¹³C₂]decane sulfonate
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₂¹²C₈H₄F₁₇SO₃Na **MOLECULAR WEIGHT:** 552.15
CONCENTRATION: 50.0 ± 2.5 µg/ml (Na salt) **SOLVENT(S):** Methanol
 47.9 ± 2.4 µg/ml (M2-8:2FTS anion)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 07/05/2017 (1,2-¹³C₂)
EXPIRY DATE: (mm/dd/yyyy) 07/05/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The native 8:2FTS contains 4.22% of ³⁴S (due to natural isotopic abundance) therefore both native 8:2FTS and M2-8:2FTS will produce signals in the m/z 529 to m/z 509 channel during SRM analysis. We recommend using the m/z 529 to m/z 81 transition to monitor for M2-8:2FTS during quantitative analysis as it will be free of any native contribution (see Figure 2).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 07/07/2017
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K0805

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

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where x is expressed as a relative standard uncertainty of the individual parameter.

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LIMITED WARRANTY:

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QUALITY MANAGEMENT:

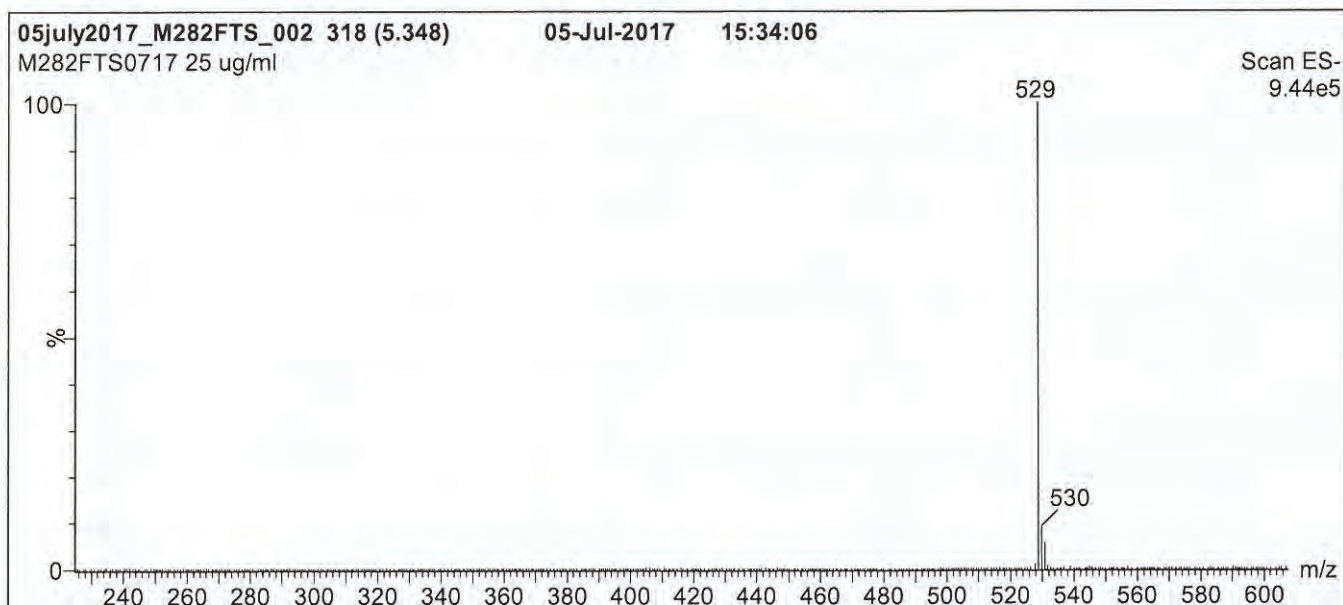
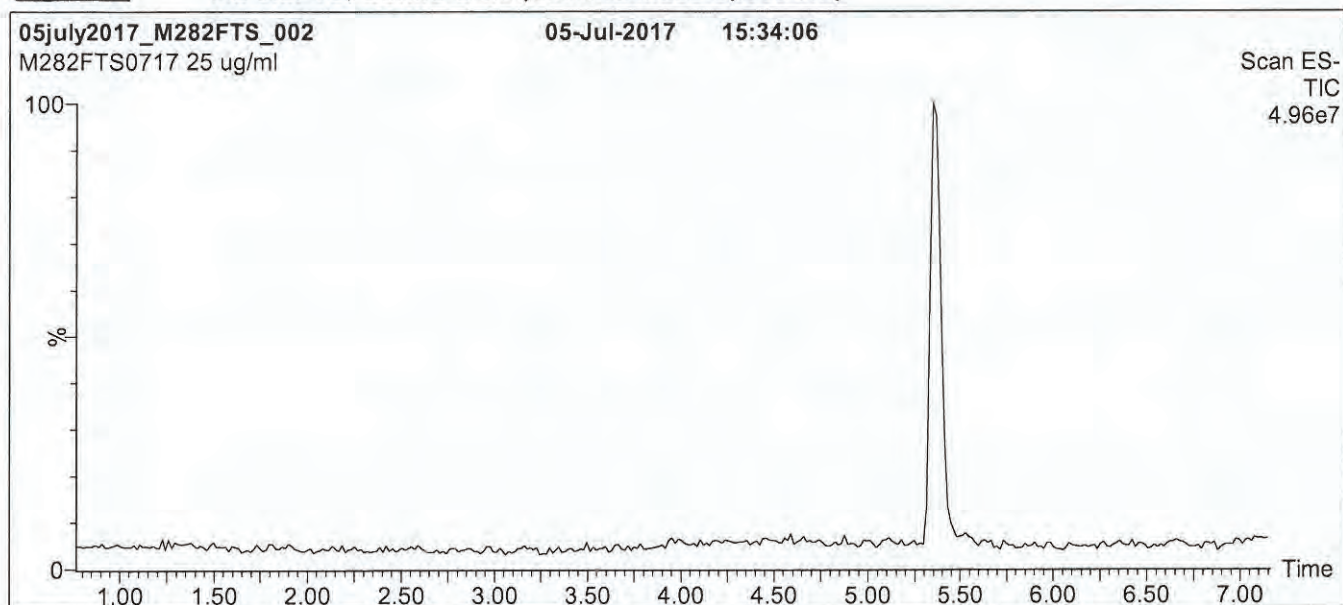
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17K0805

Figure 1: M2-8:2FTS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

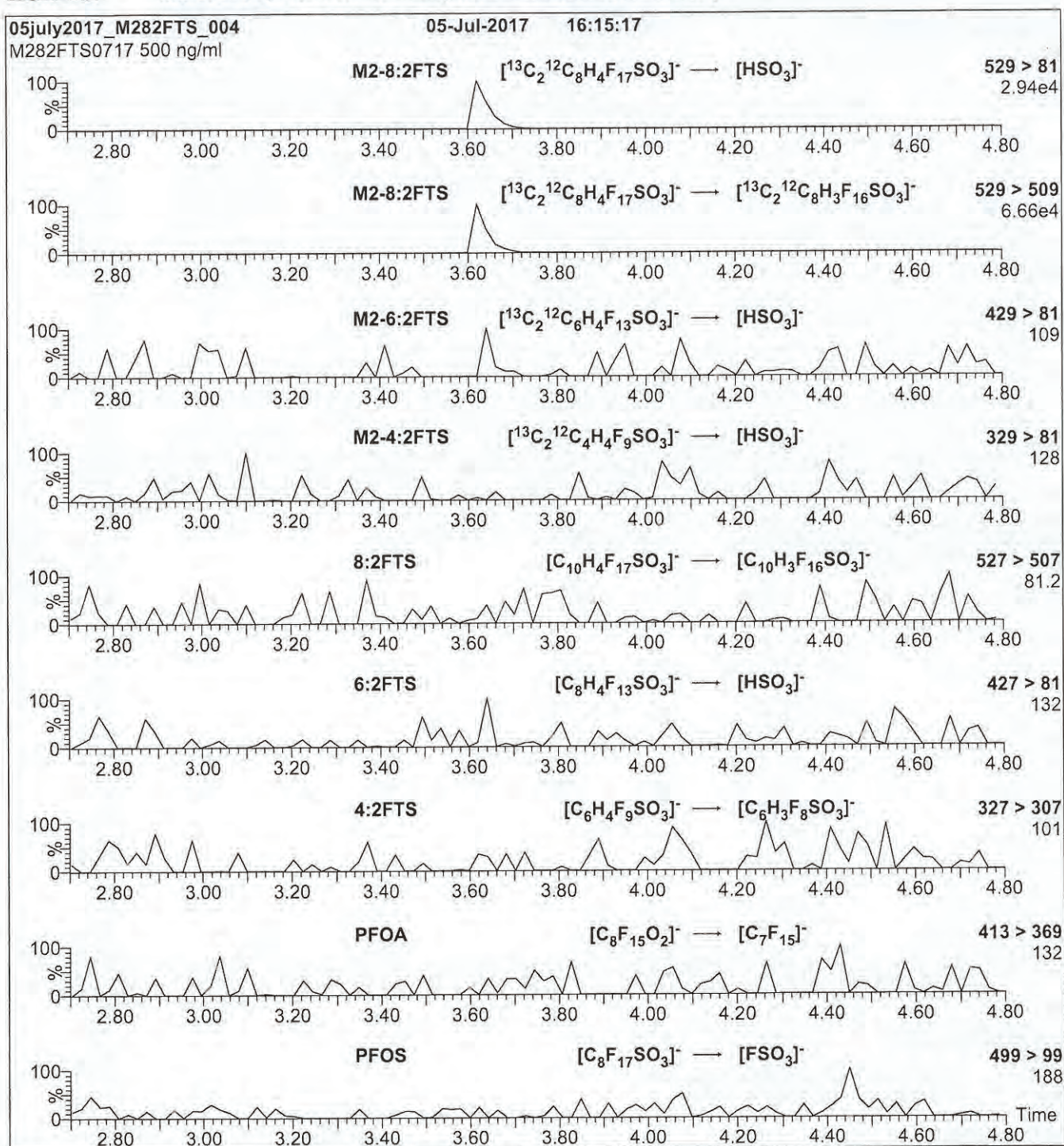
Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)
Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

17K0805

Figure 2: M2-8:2FTS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M2-8:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.50e-3
Collision Energy (eV) = 30

17K0807

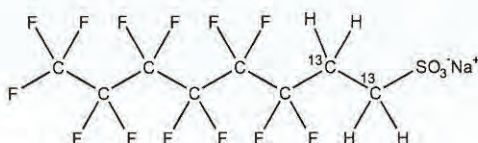


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2-6:2FTS **LOT NUMBER:** M262FTS0217
COMPOUND: Sodium 1H,1H,2H,2H-perfluoro-[1,2-¹³C₂]octane sulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₂¹²C₆H₄F₁₃SO₃Na **MOLECULAR WEIGHT:** 452.13
CONCENTRATION: 50.0 ± 2.5 µg/ml (Na salt) **SOLVENT(S):** Methanol
 47.5 ± 2.4 µg/ml (M2-6:2FTS anion)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 02/17/2017 (1,2-¹³C₂)
EXPIRY DATE: (mm/dd/yyyy) 02/17/2022
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The native 6:2FTS contains 4.22% of ³⁴S (due to natural isotopic abundance) therefore both native 6:2FTS and M2-6:2FTS will produce signals in the m/z 429 to m/z 409 channel during SRM analysis. We recommend using the m/z 429 to m/z 81 transition to monitor for M2-6:2FTS during quantitative analysis as it will be free of any native contribution (see Figure 2).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 02/24/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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17K0807

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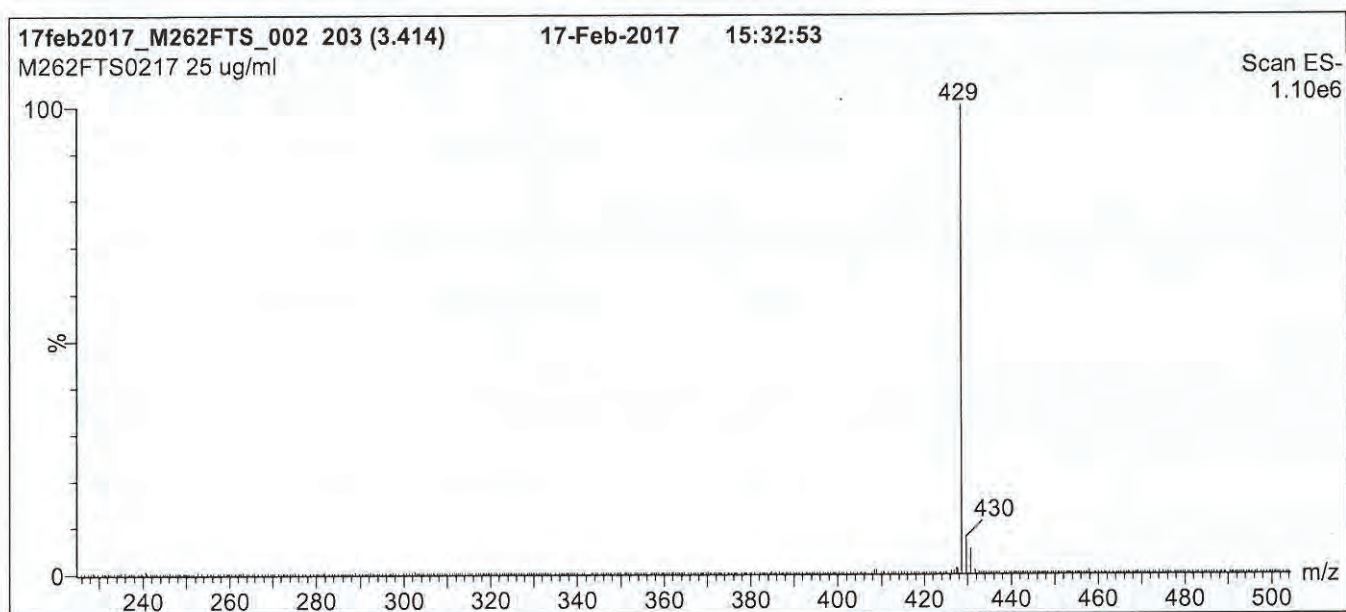
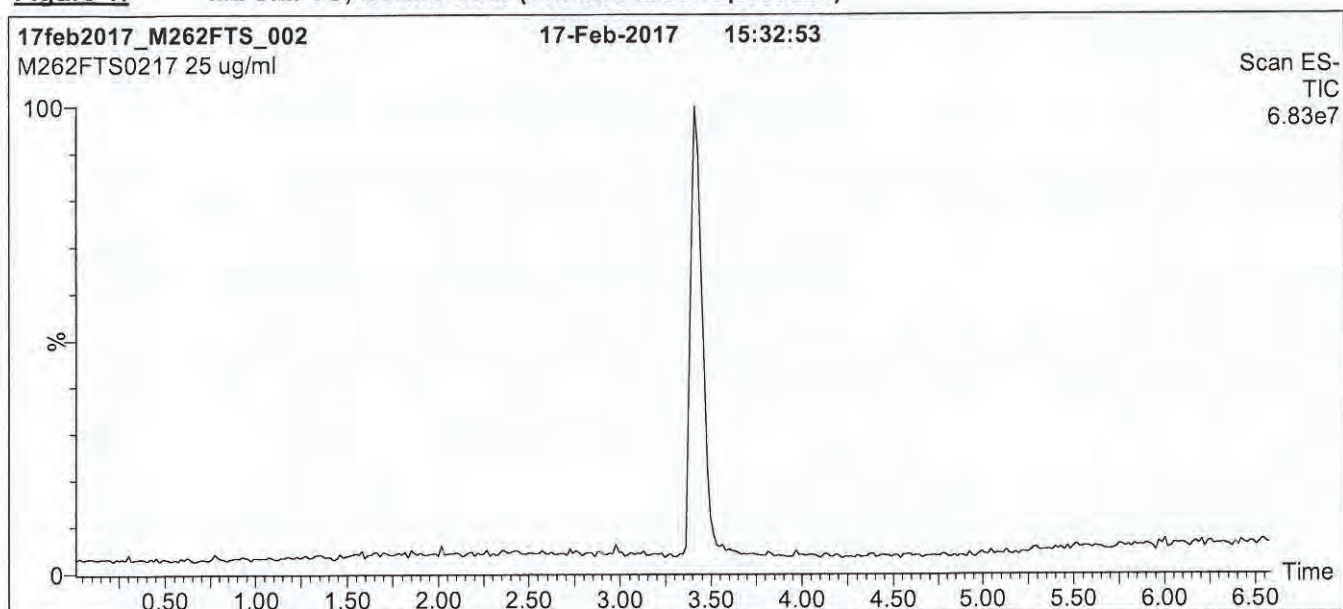
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17K0807

Figure 1: M2-6:2FTS; LC/MS Data (TIC and Mass Spectrum)



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LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

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Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

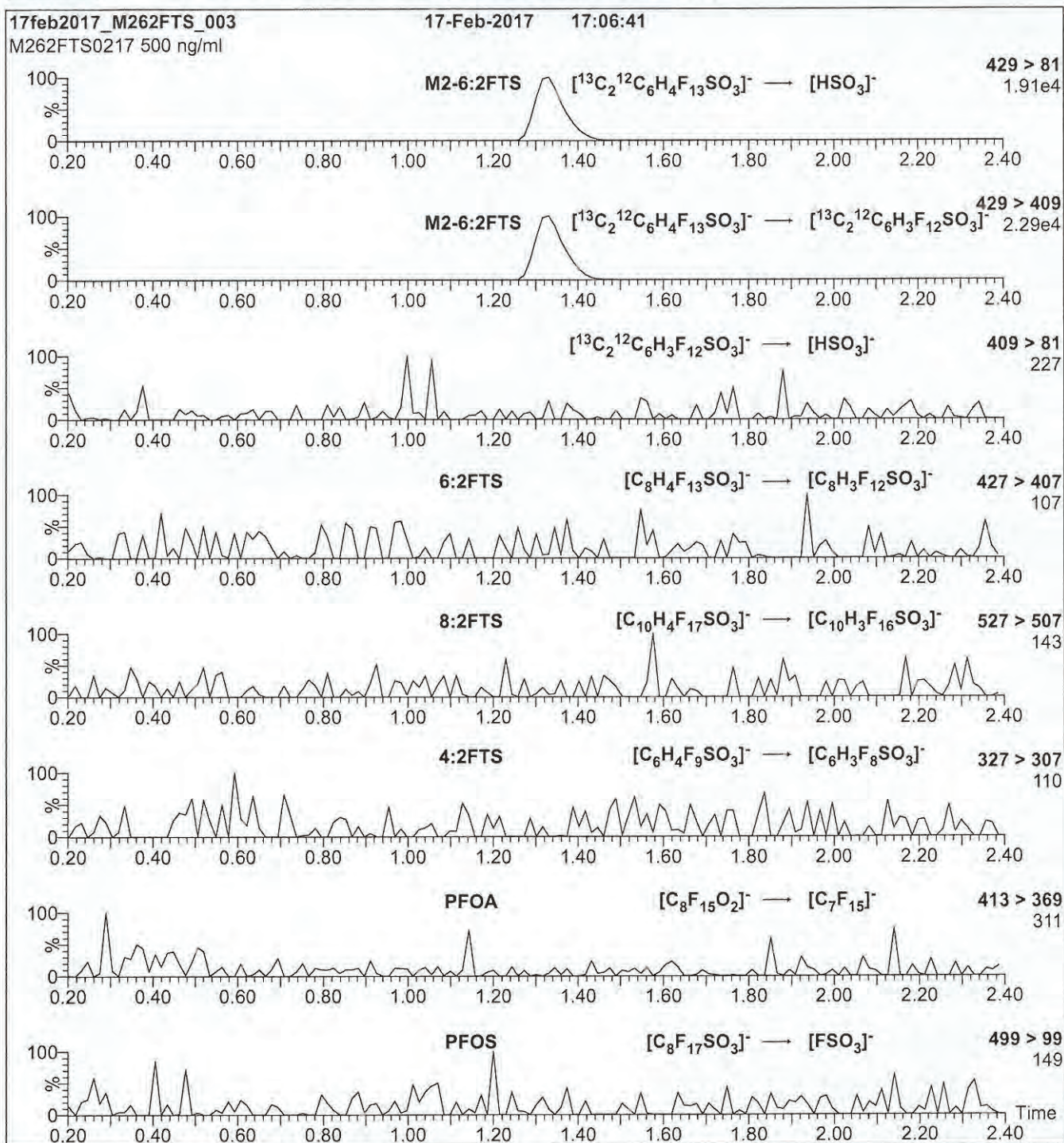
Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for 1 min
before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)
Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 30.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

17K0807

Figure 2: M2-6:2FTS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M2-6:2FTS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 25

17K0810



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

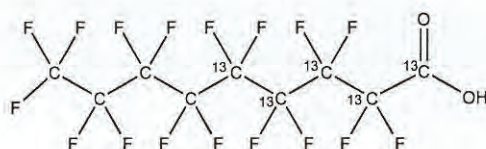
MPFNA

LOT NUMBER:

MPFNA0916

COMPOUND:Perfluoro-n-[1,2,3,4,5-¹³C₅]nonanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₅¹²C₄HF₁₇O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

469.04

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99%¹³C**LAST TESTED:** (mm/dd/yyyy)

09/30/2016

(1,2,3,4,5-¹³C₅)**EXPIRY DATE:** (mm/dd/yyyy)

09/30/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

10/11/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K0810

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

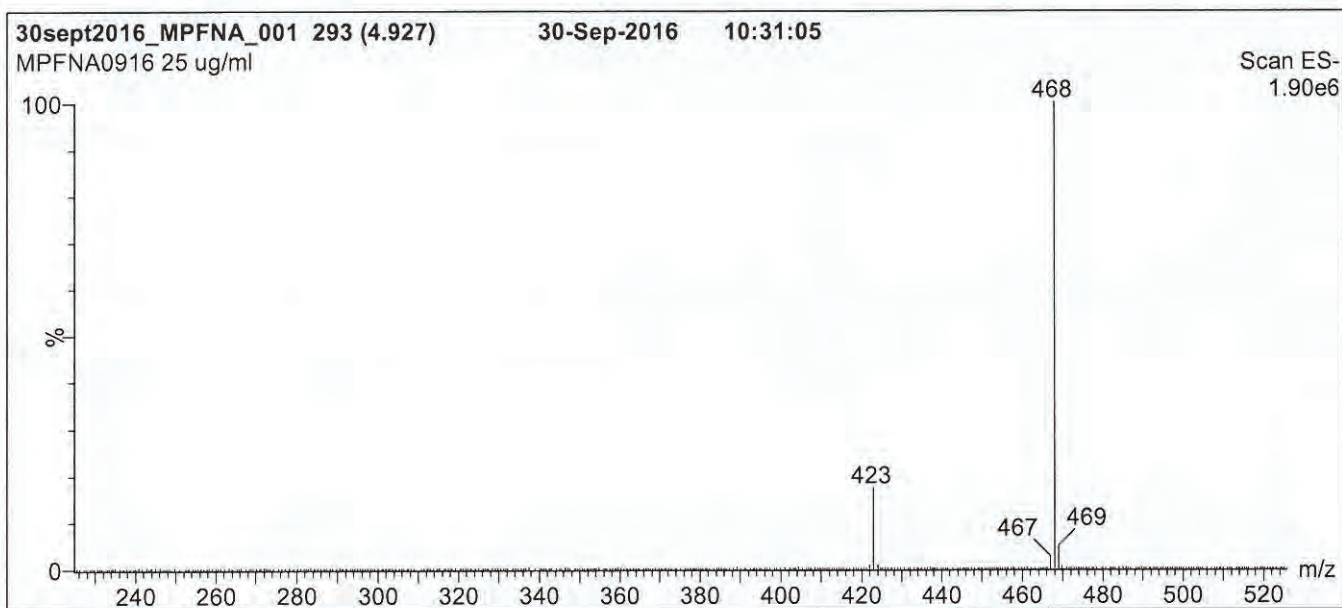
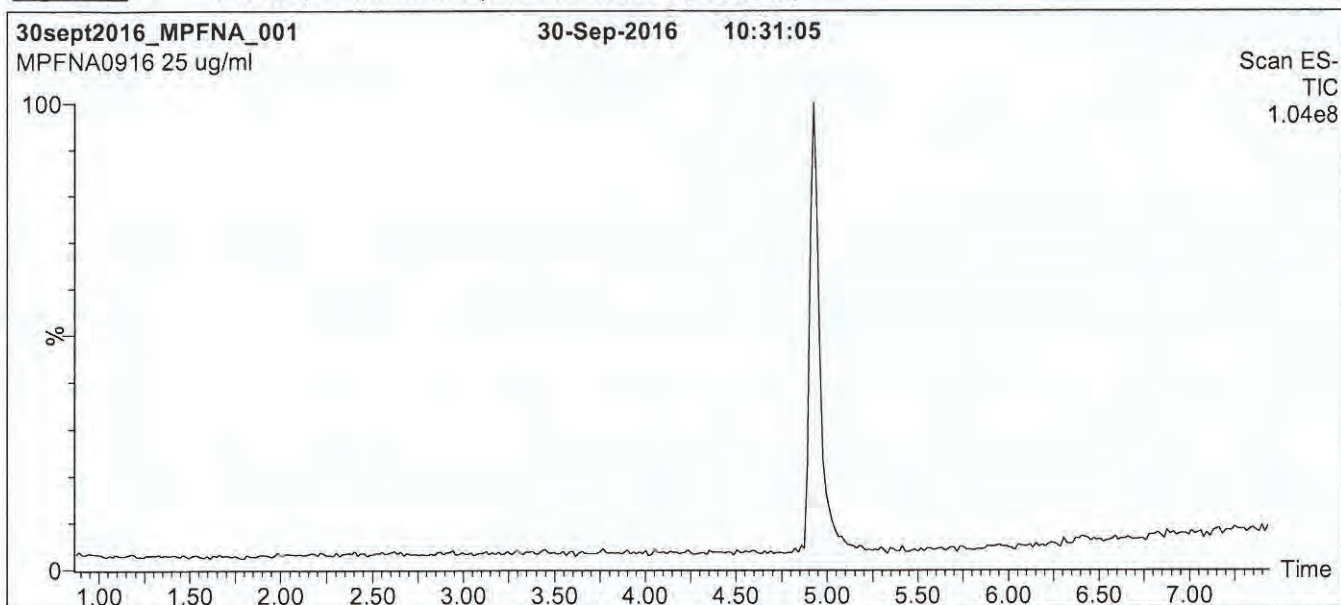
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

17K0810

Figure 1: MPFNA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

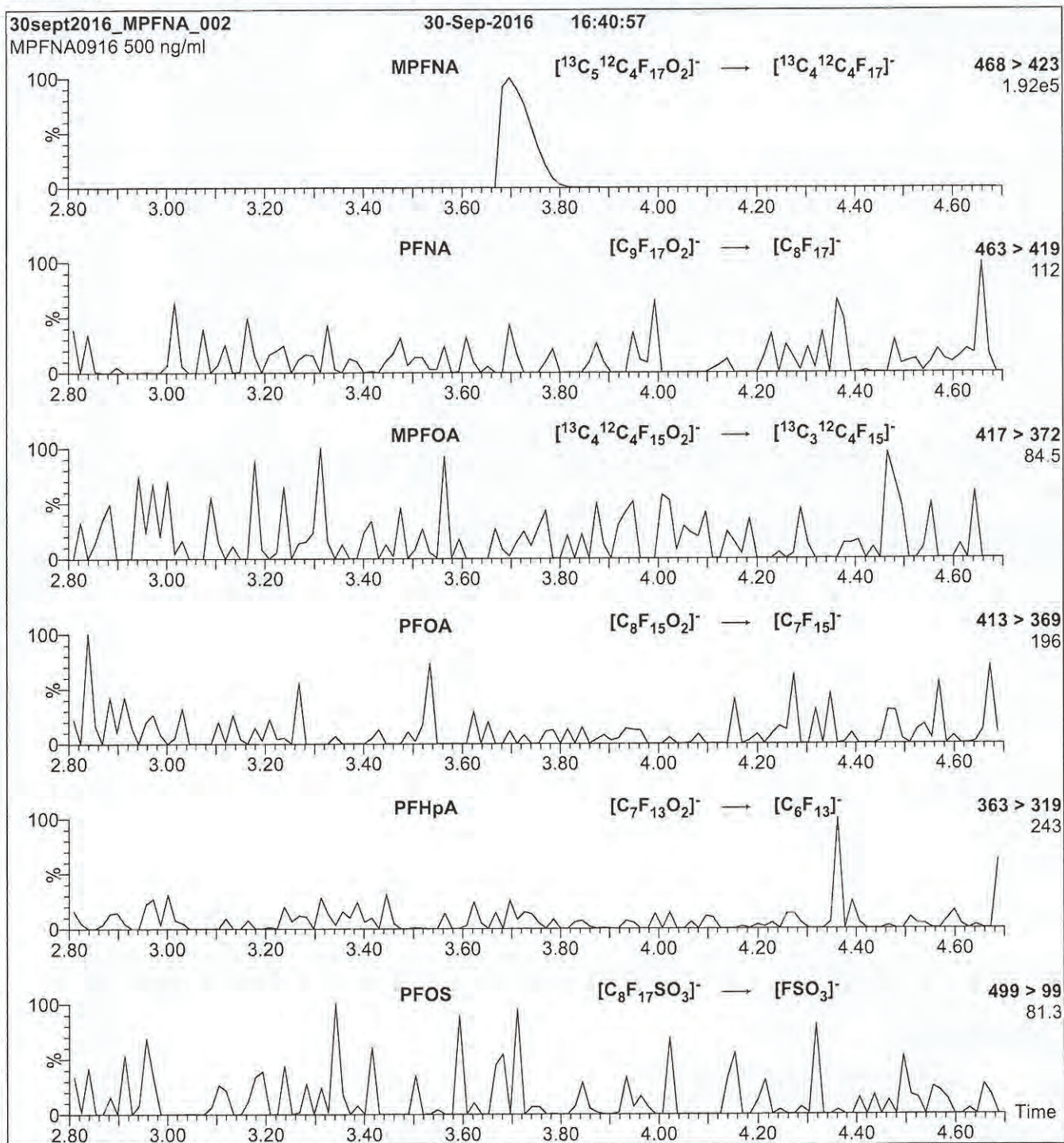
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 15.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17K0810

Figure 2: MPFNA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml MPFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 11

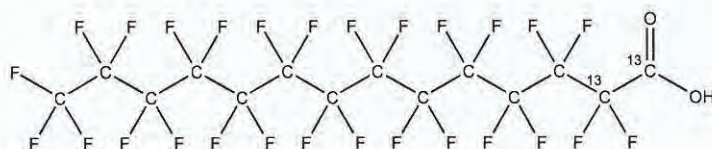
17K0812



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M2PFTeDA **LOT NUMBER:** M2PFTeDA0217
COMPOUND: Perfluoro-n-[1,2-¹³C₂]tetradecanoic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₂HF₂₇O₂ **MOLECULAR WEIGHT:** 716.10
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
 (1,2-¹³C₂)
LAST TESTED: (mm/dd/yyyy) 03/01/2017
EXPIRY DATE: (mm/dd/yyyy) 03/01/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

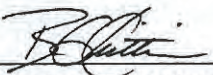
DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 03/07/2017
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K0812

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

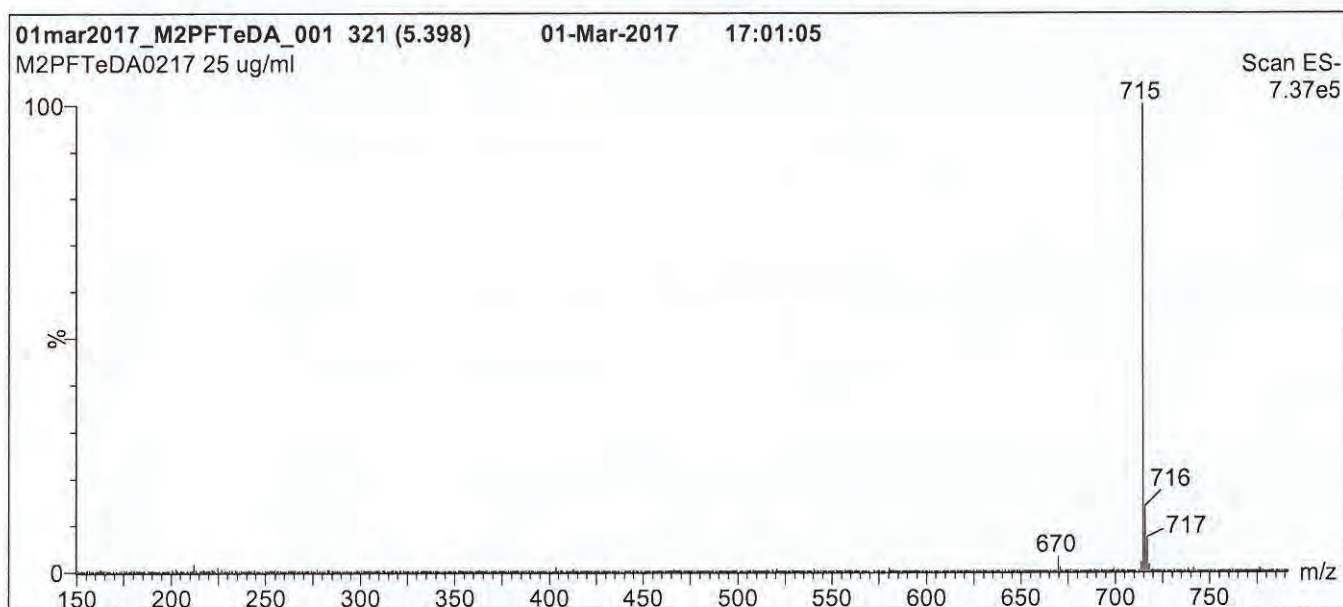
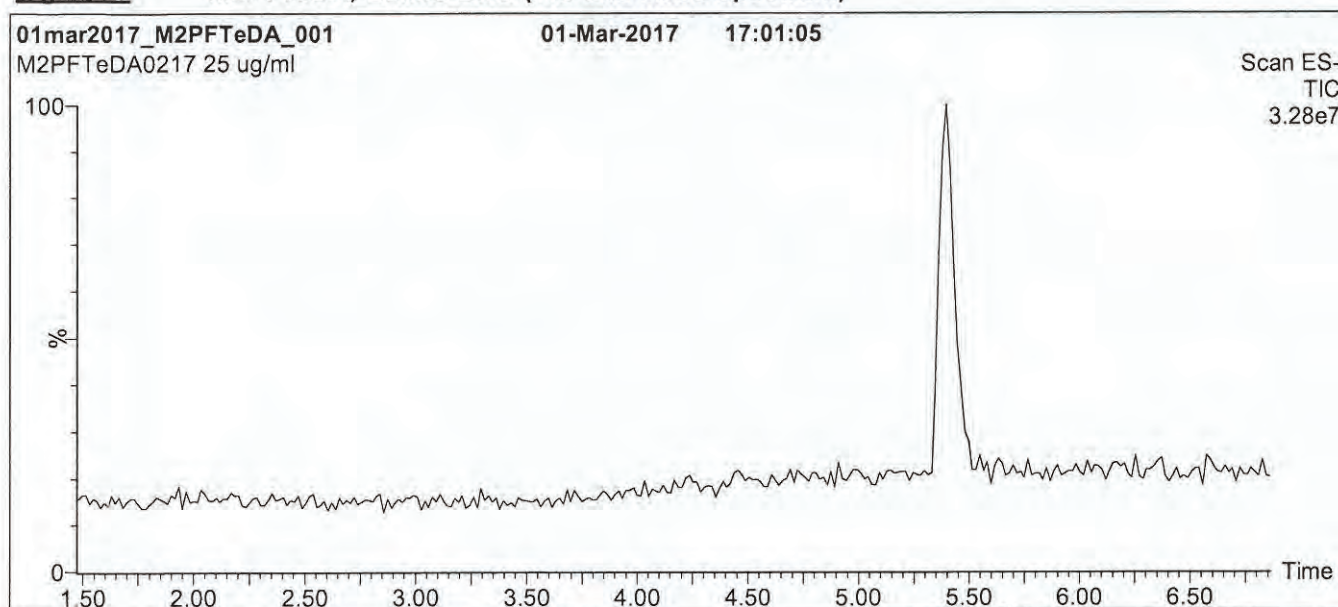
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

17K0812

Figure 1: M2PFTeDA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 65% (80:20 MeOH:ACN) / 35% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

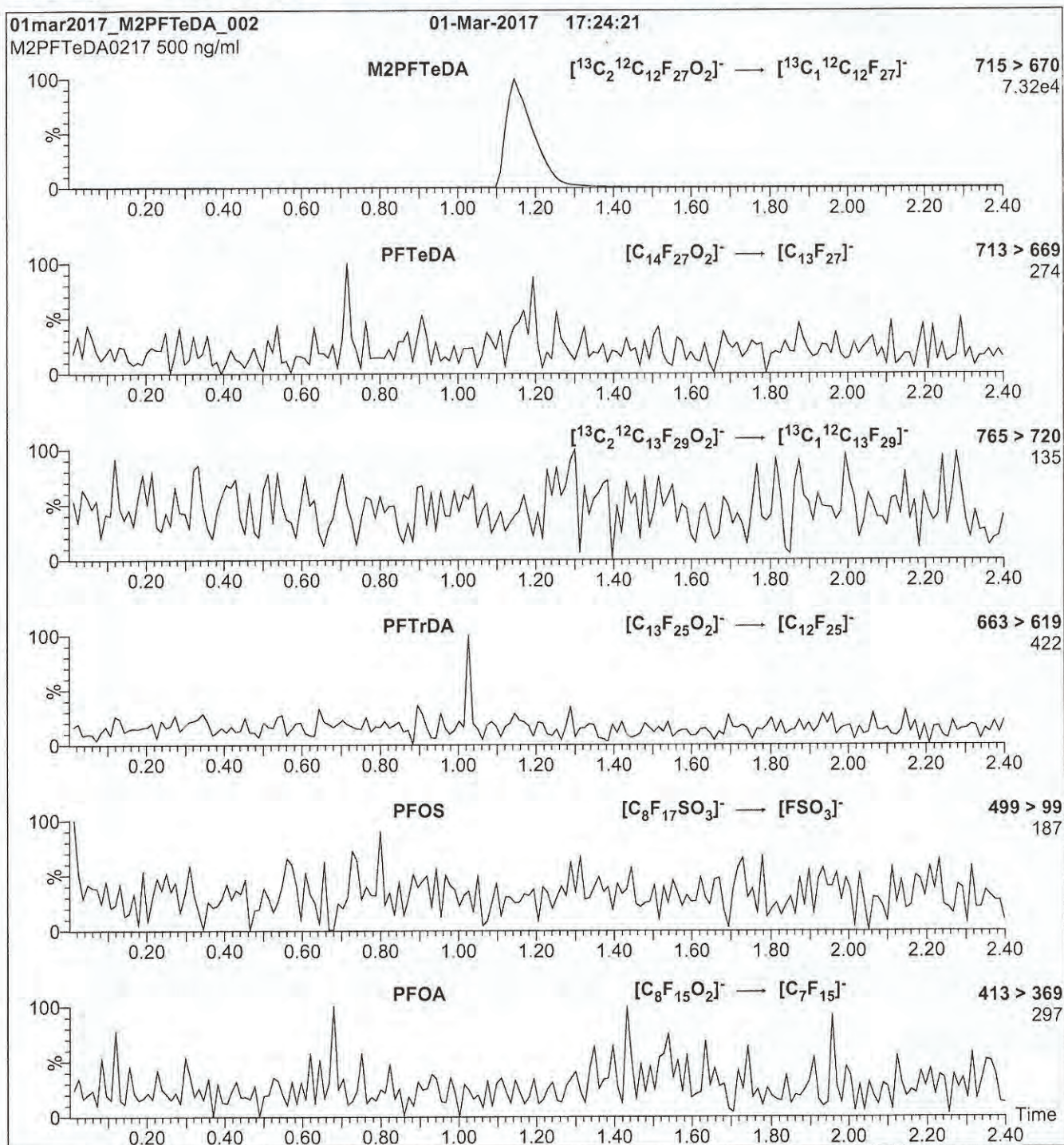
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

17K0812

Figure 2: M2PFTeDA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M2PFTeDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 14



17K0813

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

MPFUDa

LOT NUMBER:

MPFUDa1116

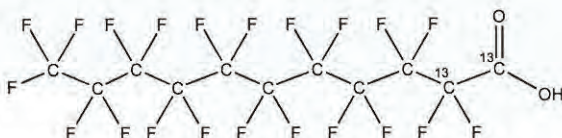
COMPOUND:

Perfluoro-n-[1,2-¹³C₂]undecanoic acid

STRUCTURE:

CAS #:

Not available



MOLECULAR FORMULA:

¹³C₂¹²C₉HF₂₁O₂

CONCENTRATION:

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

566.08

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:

≥99% ¹³C

LAST TESTED: (mm/dd/yyyy)

11/22/2016

(1,2-¹³C₂)

EXPIRY DATE: (mm/dd/yyyy)

11/22/2021

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Presence of 1-¹³C₁-PFUDa (~1%; see Figure 2), 2-¹³C₁-PFUDa (~1%), and PFUDa (~0.2%; see Figure 2) are due to the isotopic purity of the ¹³C-precursor.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

12/07/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17140813

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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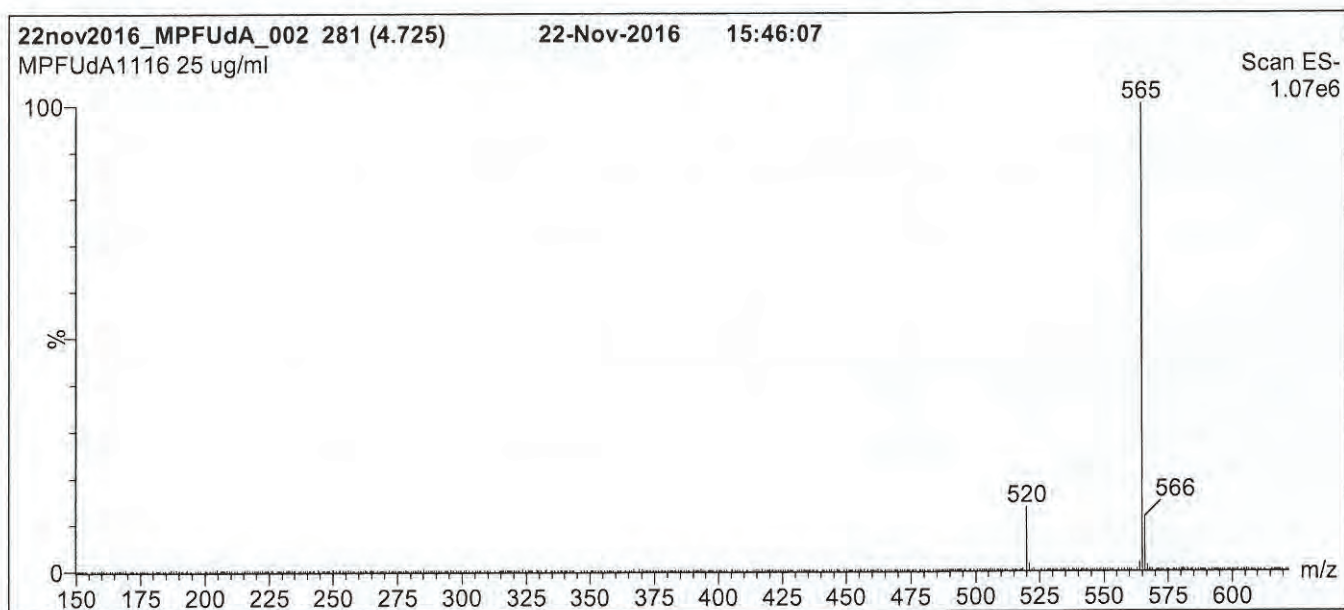
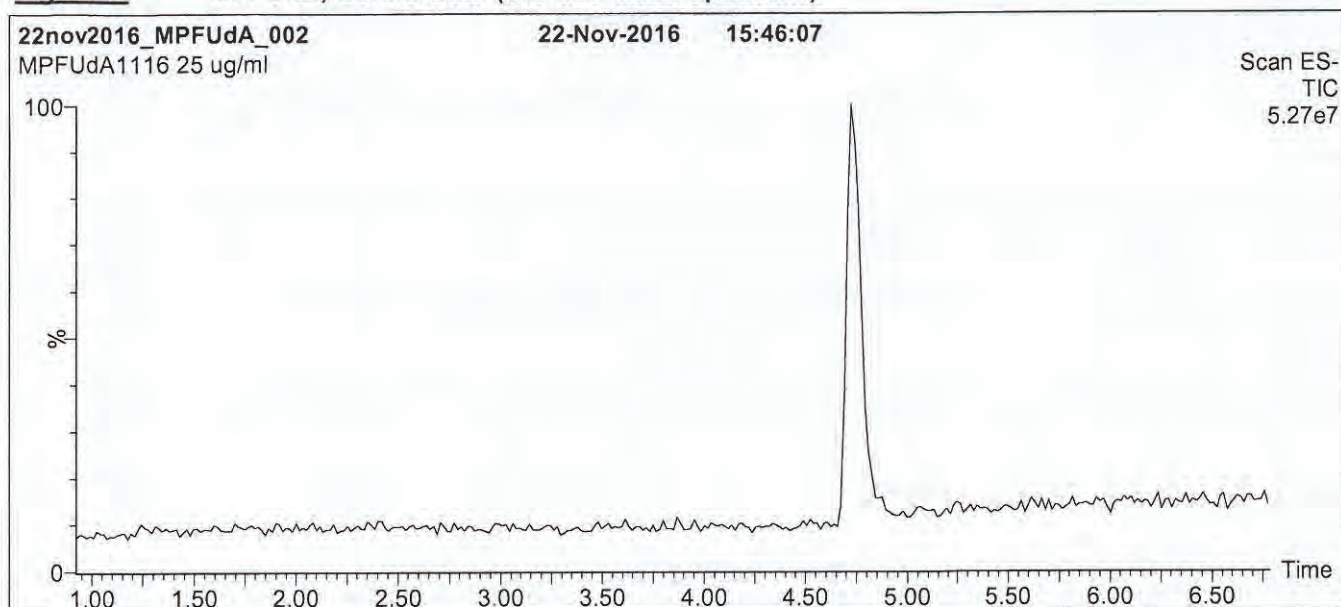
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17K0813

Figure 1: MPFUdA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 60% (80:20 MeOH:ACN) / 40% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for
 1.5 min before returning to initial conditions in 0.5 min.
 Time: 10 min

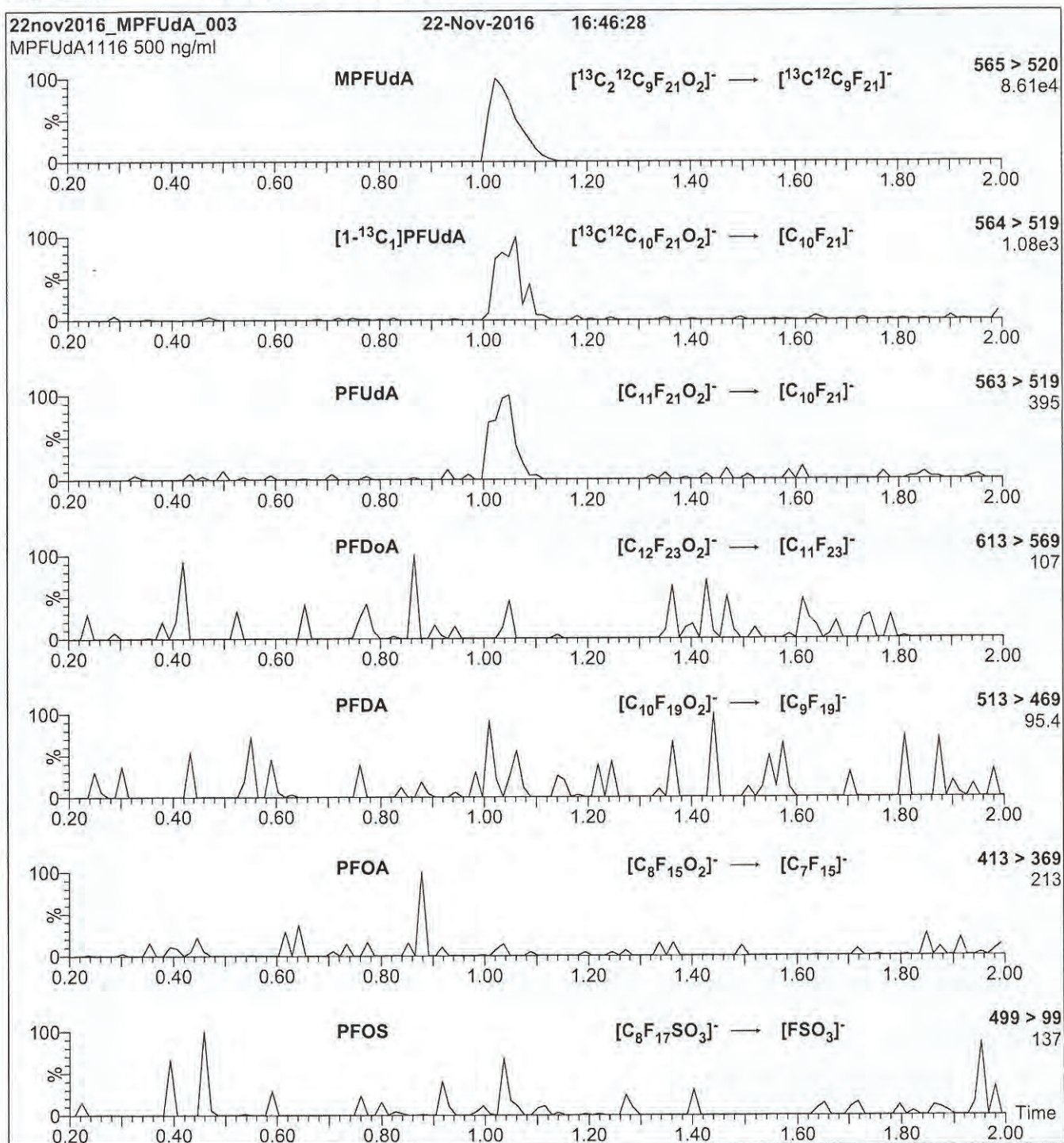
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 15.00
 Cone Gas Flow (l/hr) = 65
 Desolvation Gas Flow (l/hr) = 750

17K0813

Figure 2: MPFUDa; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml MPFUDa)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 11



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

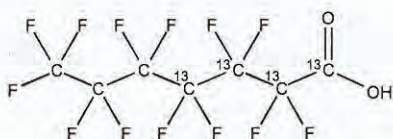
M4PFHpA

LOT NUMBER:

M4PFHpA0517

COMPOUND:Perfluoro-n-[1,2,3,4-¹³C₄]heptanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₄¹²C₃HF₁₃O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

368.03

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:>99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

05/03/2017

EXPIRY DATE: (mm/dd/yyyy)

05/03/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

(1,2,3,4-¹³C₄)**DOCUMENTATION/ DATA ATTACHED:**

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE**Certified By:**
B.G. Chittim, General Manager**Date:**05/11/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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17K0814

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

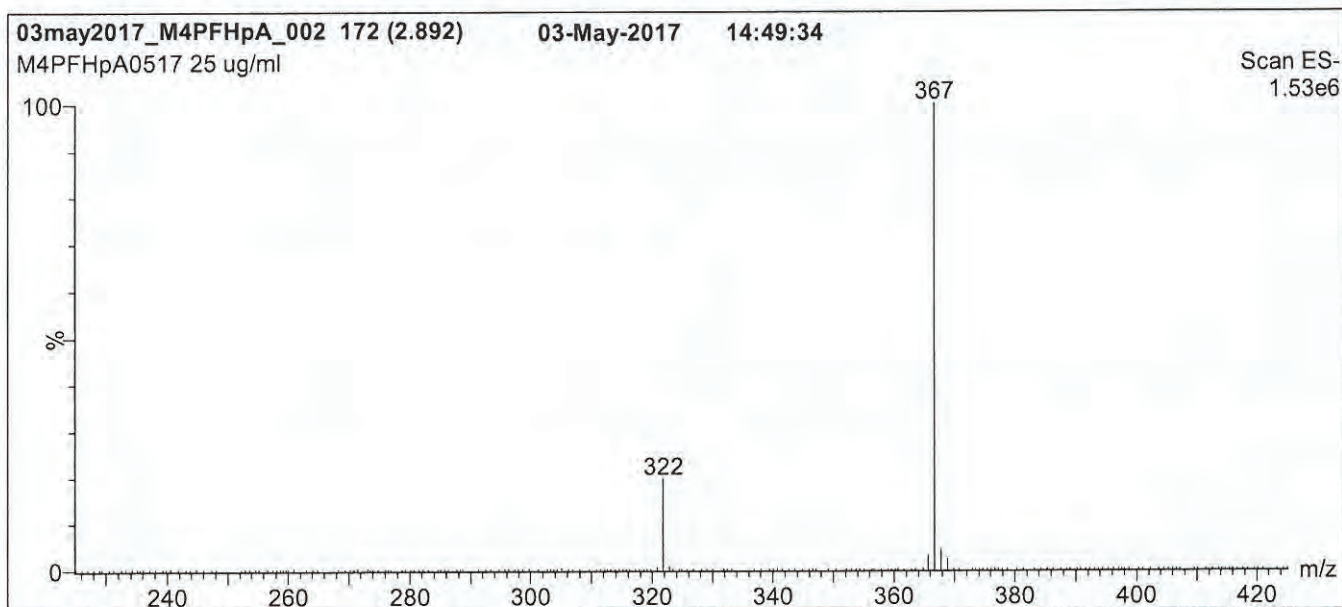
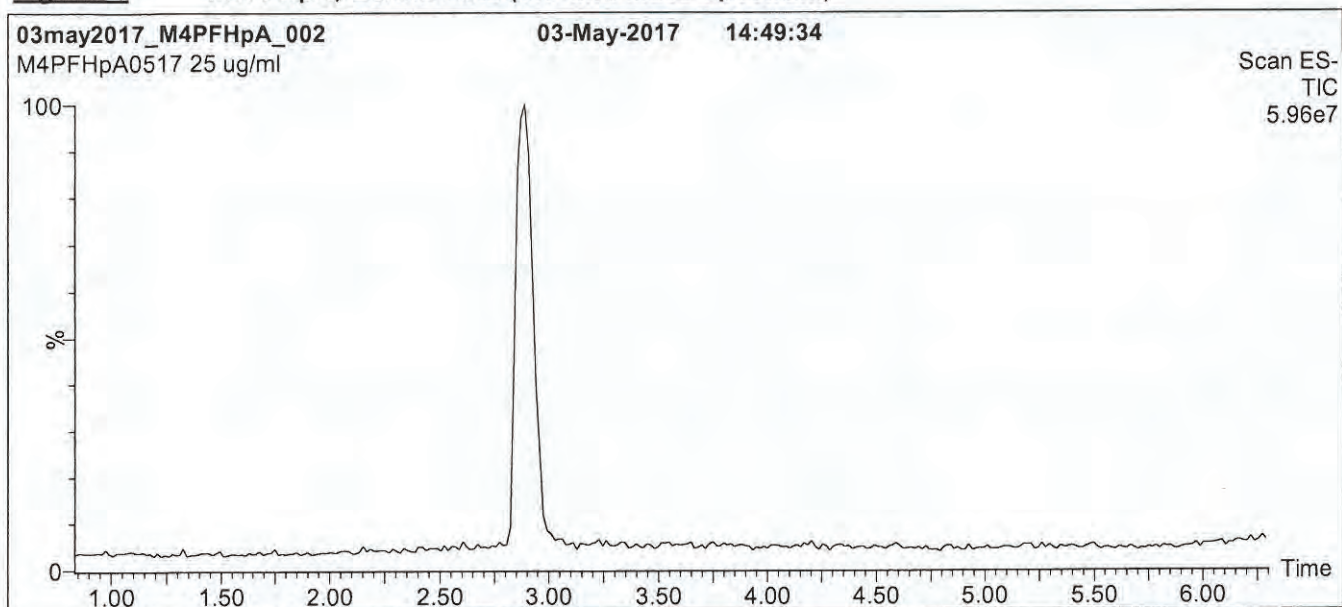
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17K0814

Figure 1: M4PFHpA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min and hold for 1 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

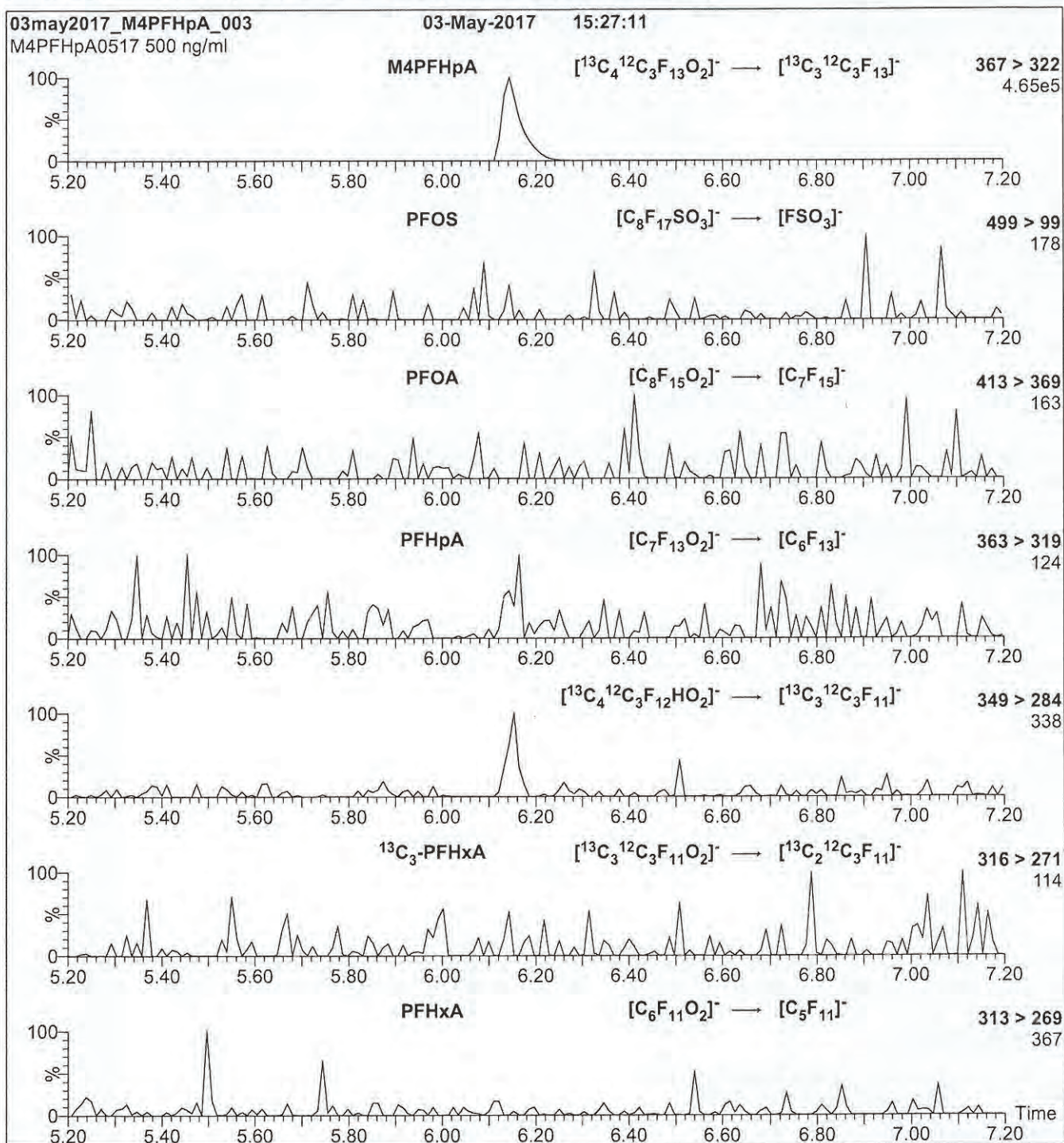
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 15.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17K0814

Figure 2: M4PFHpA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M4PFHpA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.46e-3
Collision Energy (eV) = 9



1710816

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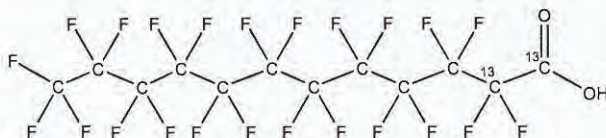
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFDoA
COMPOUND: Perfluoro-n-[1,2-¹³C₂]dodecanoic acid

LOT NUMBER: MPFDoA0517

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₂¹²C₁₀HF₂₃O₂
CONCENTRATION: 50 ± 2.5 µg/ml

MOLECULAR WEIGHT: 616.08
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 05/23/2017
EXPIRY DATE: (mm/dd/yyyy) 05/23/2022

ISOTOPIC PURITY: ≥99% ¹³C
(1,2-¹³C₂)

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:
B.G. Chittim, General Manager

Date: 05/26/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K0816

INTENDED USE:

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HAZARDS:

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LIMITED WARRANTY:

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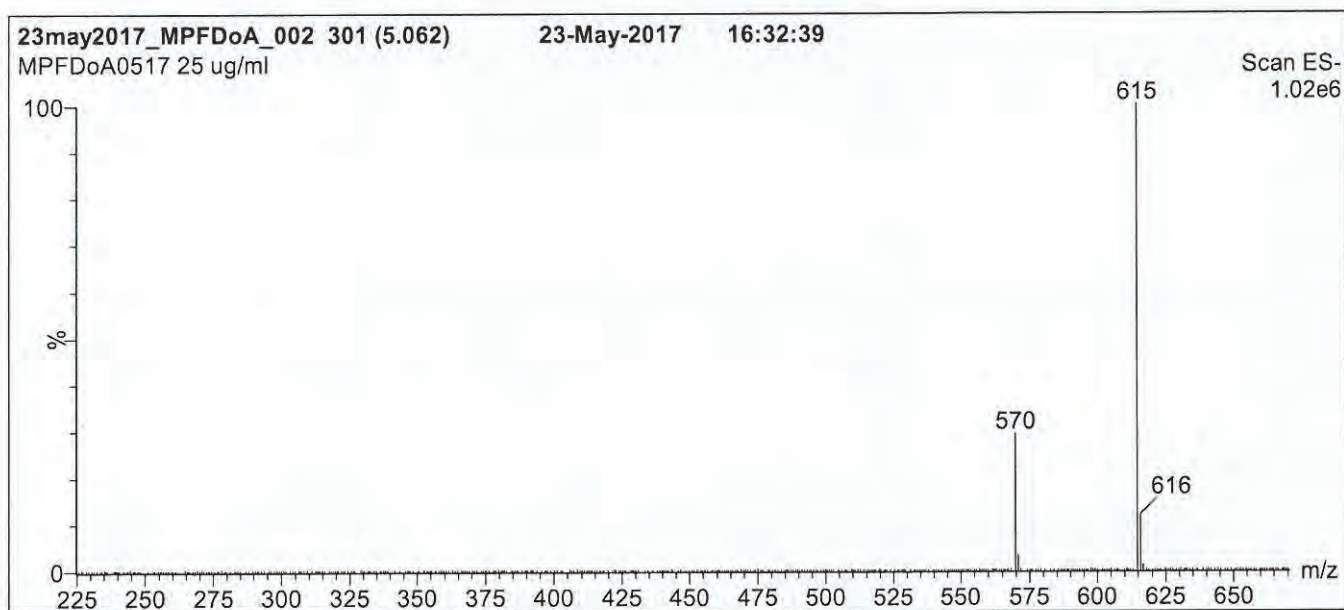
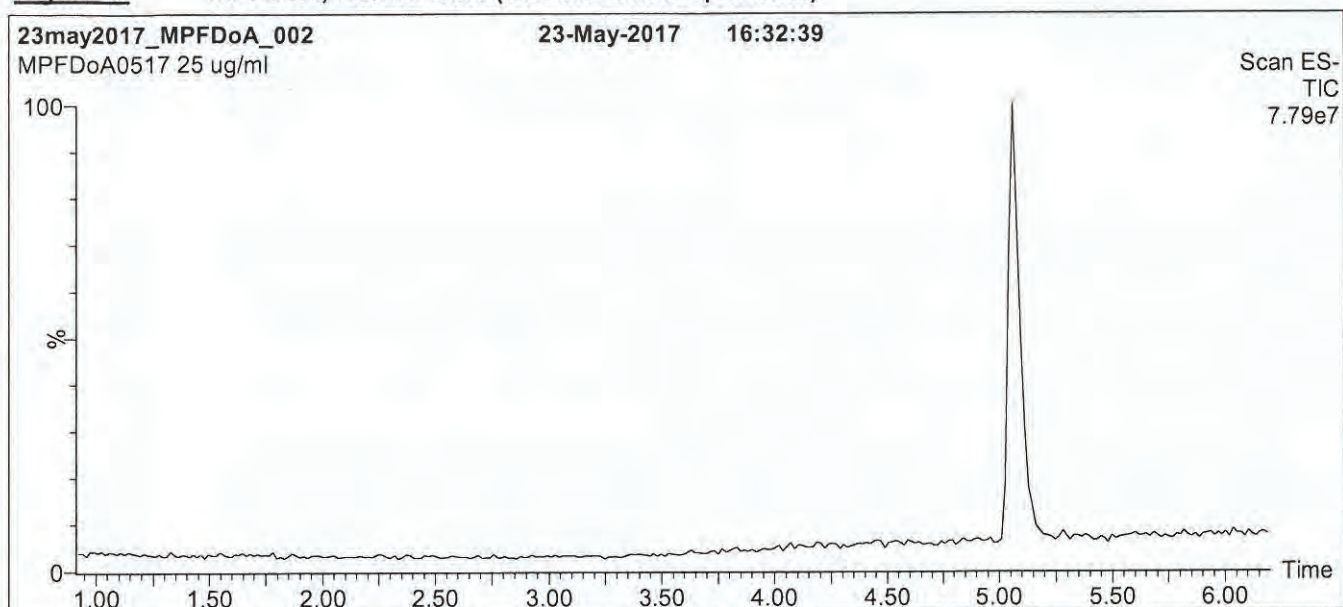
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17K0816

Figure 1: MPFDoA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 60% (80:20 MeOH:ACN) / 40% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

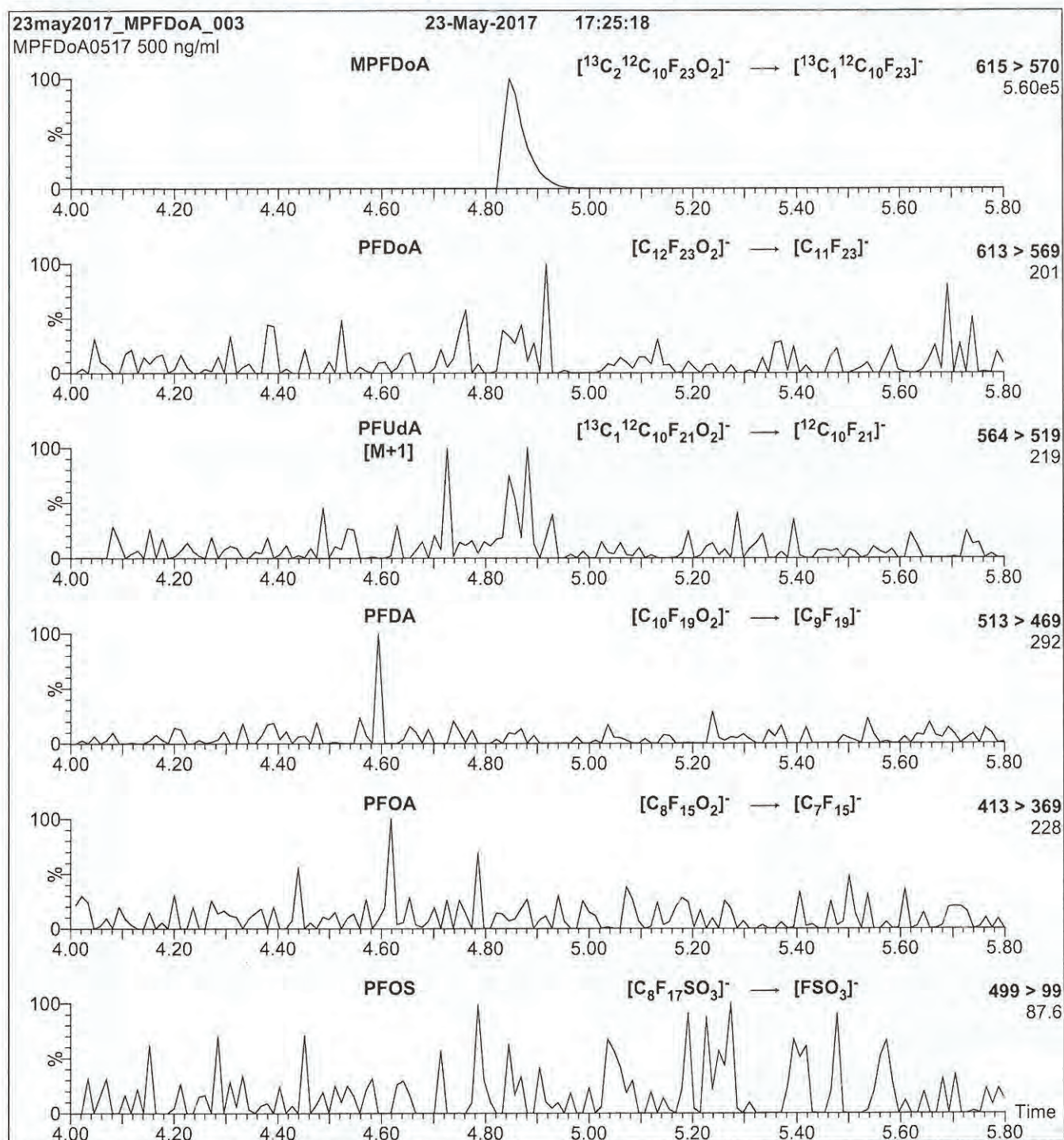
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 20.00
 Cone Gas Flow (l/hr) = 100
 Desolvation Gas Flow (l/hr) = 750

17K0816

Figure 2: MPFDoA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml MPFDoA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 13

17K0818

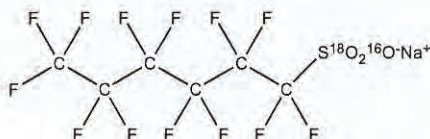


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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFHxS **LOT NUMBER:** MPFHxS0217
COMPOUND: Sodium perfluoro-1-hexane[¹⁸O₂]sulfonate

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: C₆F₁₃S¹⁸O₂¹⁶ONa **MOLECULAR WEIGHT:** 426.10
CONCENTRATION: 50.0 ± 2.5 µg/ml (Na salt) **SOLVENT(S):** Methanol
 47.3 ± 2.4 µg/ml (MPFHxS anion)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** >94% (¹⁸O₂)
LAST TESTED: (mm/dd/yyyy) 02/17/2017
EXPIRY DATE: (mm/dd/yyyy) 02/17/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The response factor for MPFHxS (C₆F₁₃S¹⁸O₂¹⁶O⁻) has been observed to be up to 10% lower than for PFHxS (C₆F₁₃S¹⁸O₃⁻) when both compounds are injected together. This difference may vary between instruments.
- Contains ~ 1.0% of sodium perfluoro-1-octane[¹⁸O₂]sulfonate (¹⁸O₂-PFOS).
- Due to the isotopic purity of the starting material (¹⁸O₂ >94%), MPFHxS contains ~ 0.3% of PFHxS. This value agrees with the theoretical percent relative abundance that is expected based on the stated isotopic purity.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 03/02/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K0818

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LIMITED WARRANTY:

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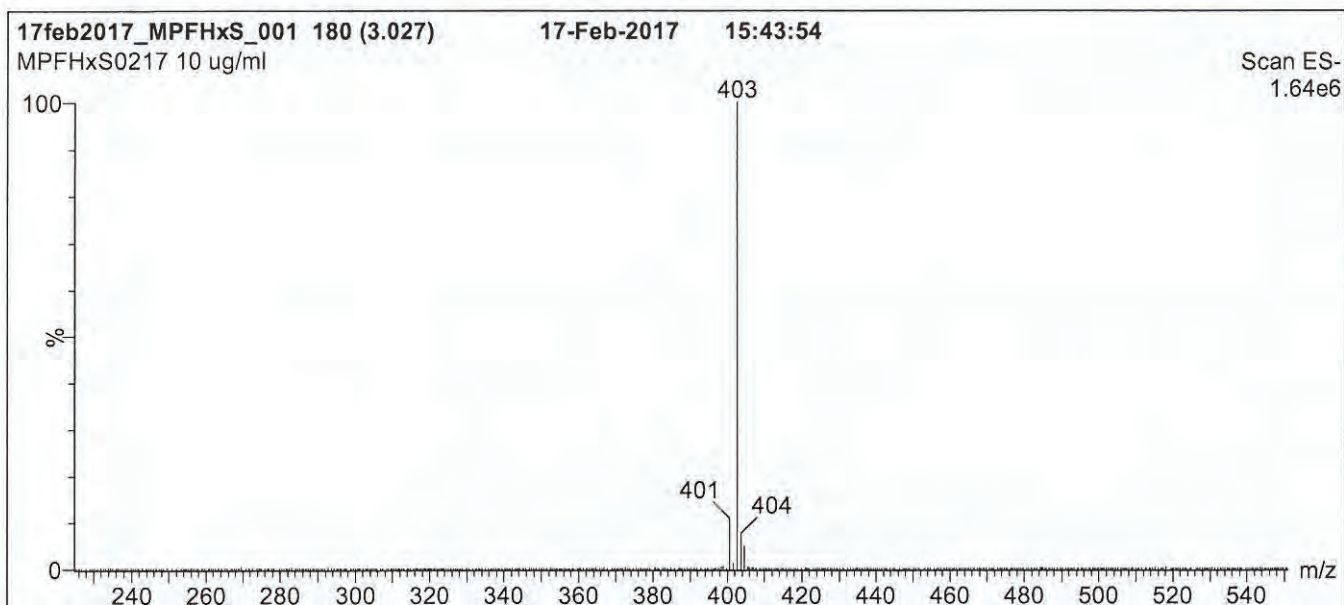
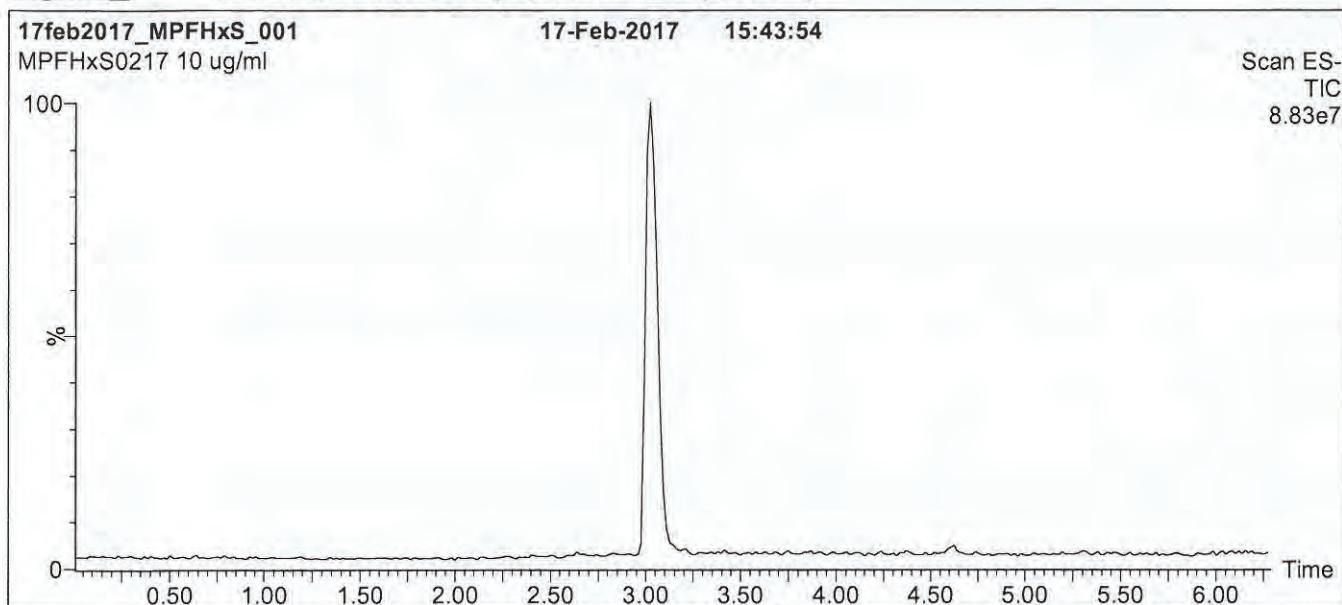
QUALITY MANAGEMENT:

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17K0818

Figure 1: MPFHxS; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min and hold for 1 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

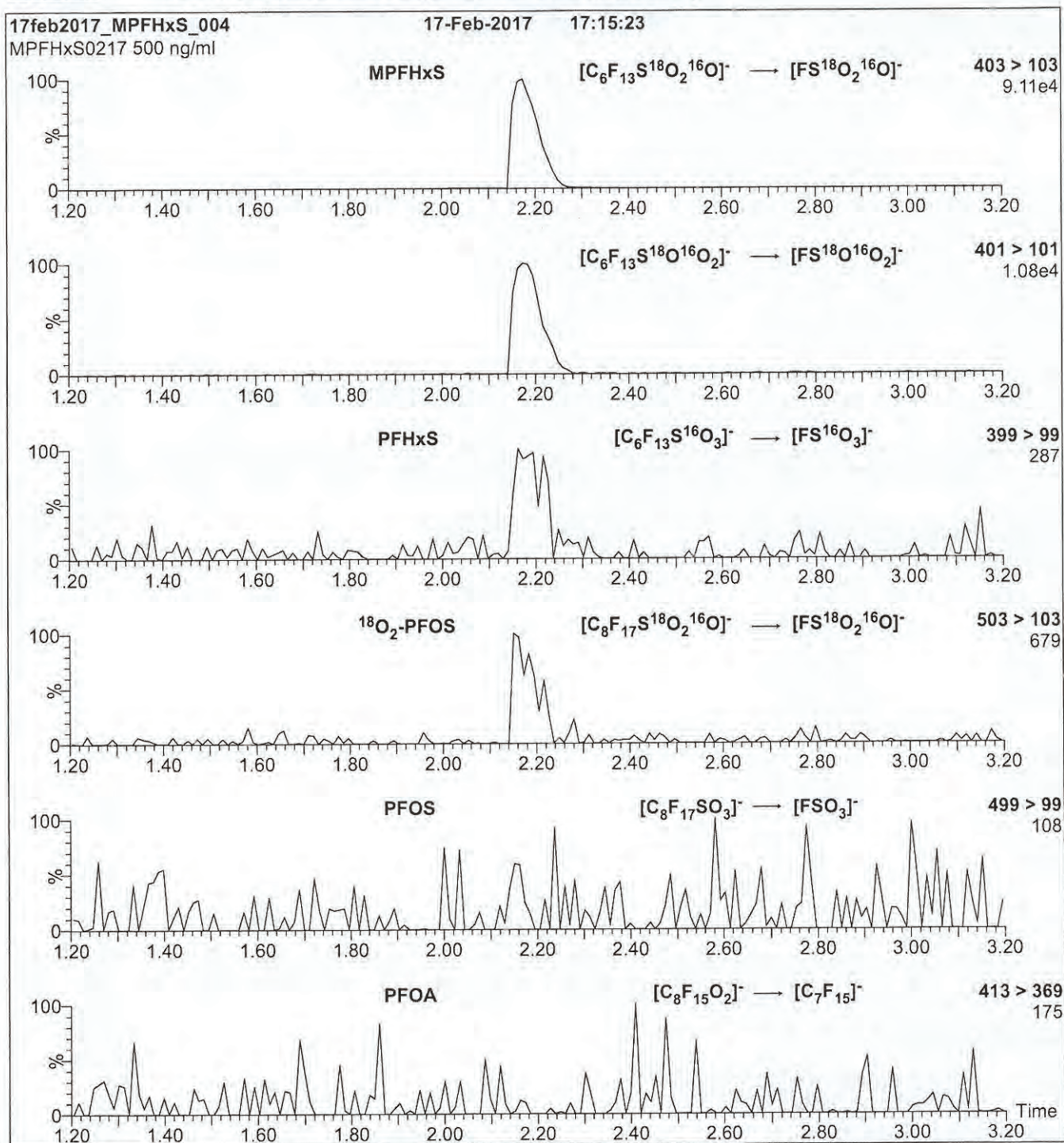
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 50.00
 Cone Gas Flow (l/hr) = 60
 Desolvation Gas Flow (l/hr) = 750

17K0818

Figure 2: MPFHxS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml MPFHxS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 30

17K0819



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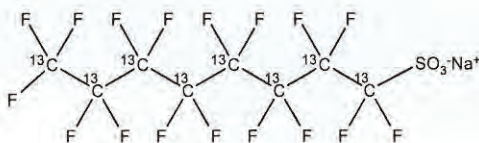
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M8PFOS
COMPOUND: Sodium perfluoro-1- $^{13}\text{C}_8$ octanesulfonate

LOT NUMBER: M8PFOS0916

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $^{13}\text{C}_8\text{F}_{17}\text{SO}_3\text{Na}$
CONCENTRATION: $48.5 \pm 2.4 \mu\text{g/ml}$ (Na salt)
 $46.4 \pm 2.3 \mu\text{g/ml}$ (M8PFOS anion)
CHEMICAL PURITY: >97%
LAST TESTED: (mm/dd/yyyy) 09/30/2016
EXPIRY DATE: (mm/dd/yyyy) 09/30/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 530.05
SOLVENT(S): Methanol
ISOTOPIC PURITY: >99% ^{13}C
($^{13}\text{C}_8$)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.6% of sodium perfluoro-1- $^{13}\text{C}_7$ heptanesulfonate ($^{13}\text{C}_7$ -PFHpS), ~ 1.0% of chlorohexadecafluoro-1- $^{13}\text{C}_8$ octanesulfonate, and ~ 1.5% of sodium perfluoro-1- $^{13}\text{C}_4$ octanesulfonate (MPFOS).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 10/11/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K0819

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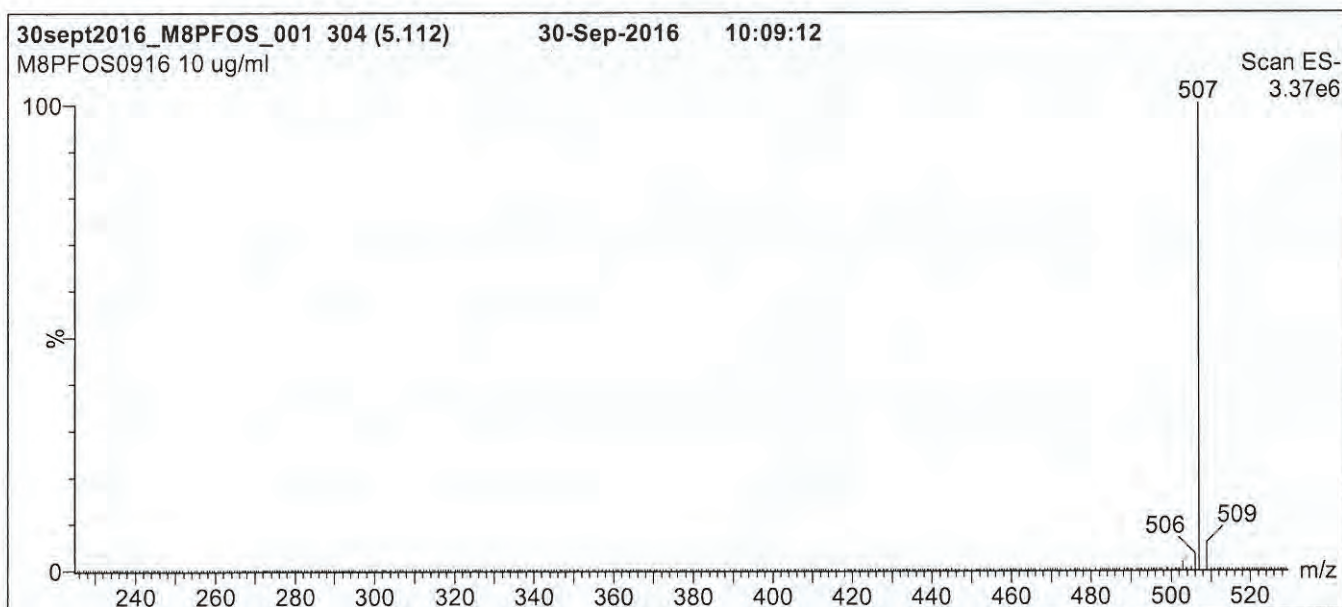
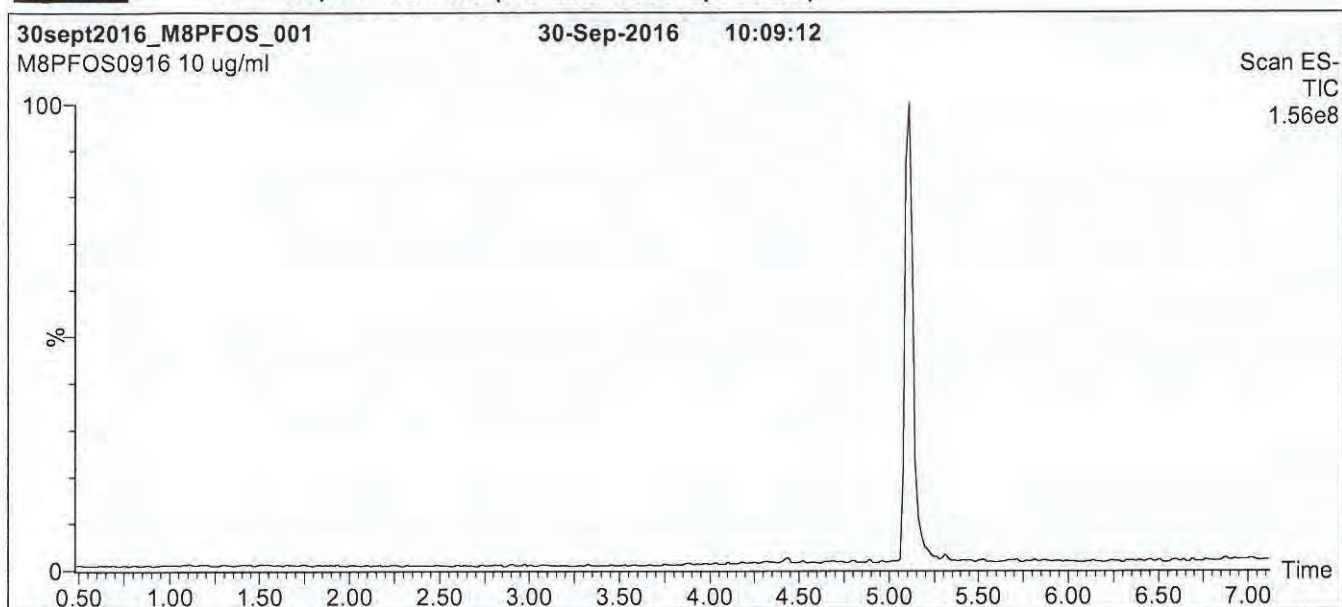
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17K0819

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Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

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 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

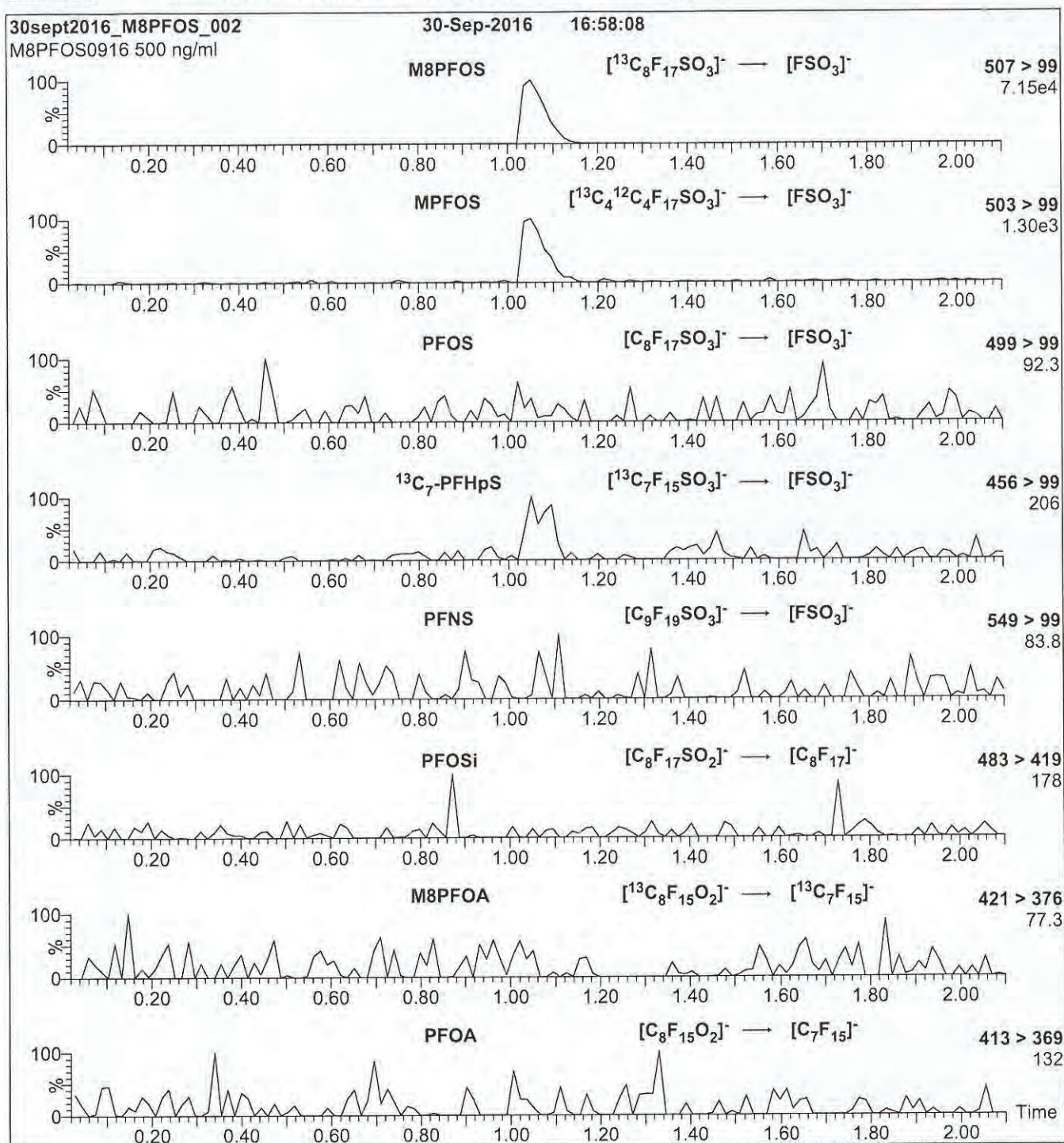
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 60.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17K0819

Figure 2: M8PFOS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M8PFOS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 40

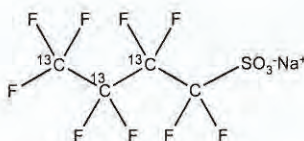
17K0821



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M3PFBS **LOT NUMBER:** M3PFBS0815
COMPOUND: Sodium perfluoro-1-[2,3,4-¹³C₃]butanesulfonate
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₃¹²CF₉SO₃Na **MOLECULAR WEIGHT:** 325.06
CONCENTRATION: 50.0 ± 2.5 µg/ml (Na salt) **SOLVENT(S):** Methanol
 46.5 ± 2.3 µg/ml (M3PFBS anion)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 05/24/2017 (2,3,4-¹³C₃)
EXPIRY DATE: (mm/dd/yyyy) 05/24/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:
 B.G. Chittim, General Manager

Date: 05/25/2017
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17140821

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

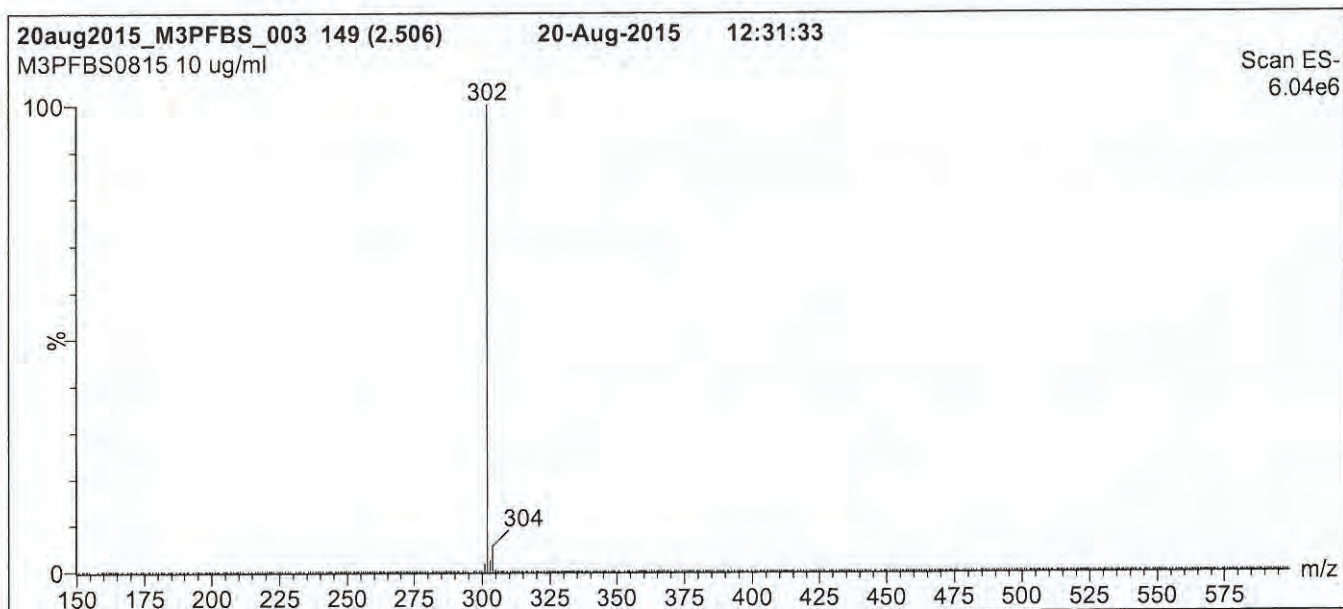
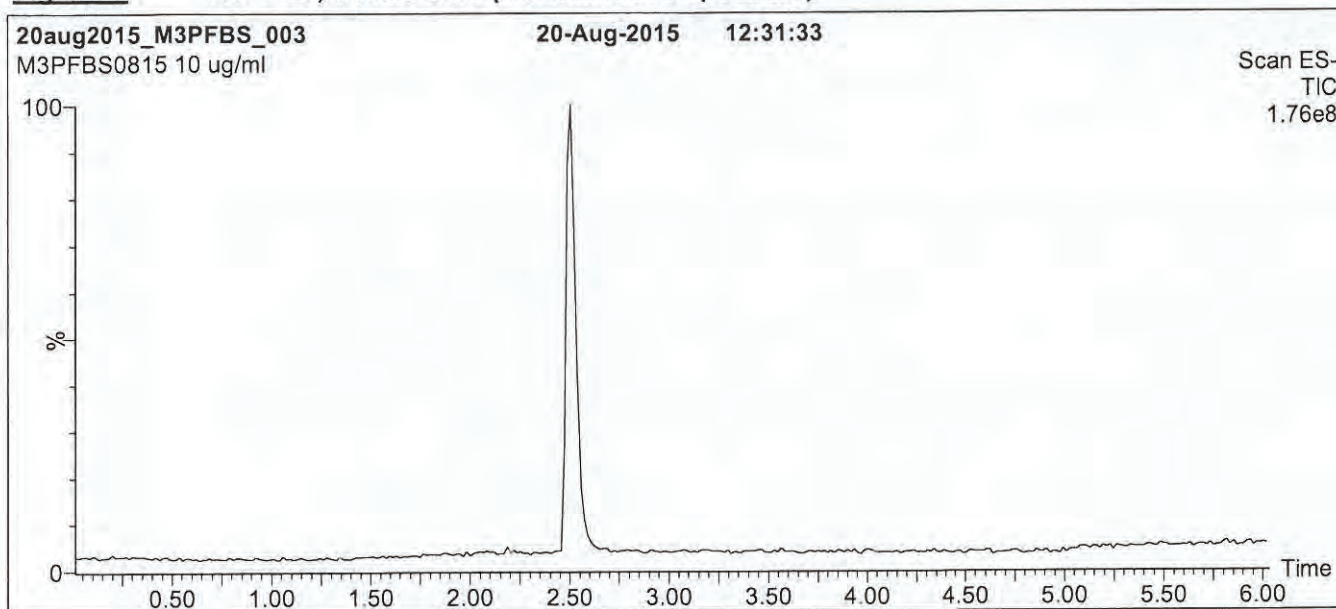
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

(710821)

Figure 1: M3PFBS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

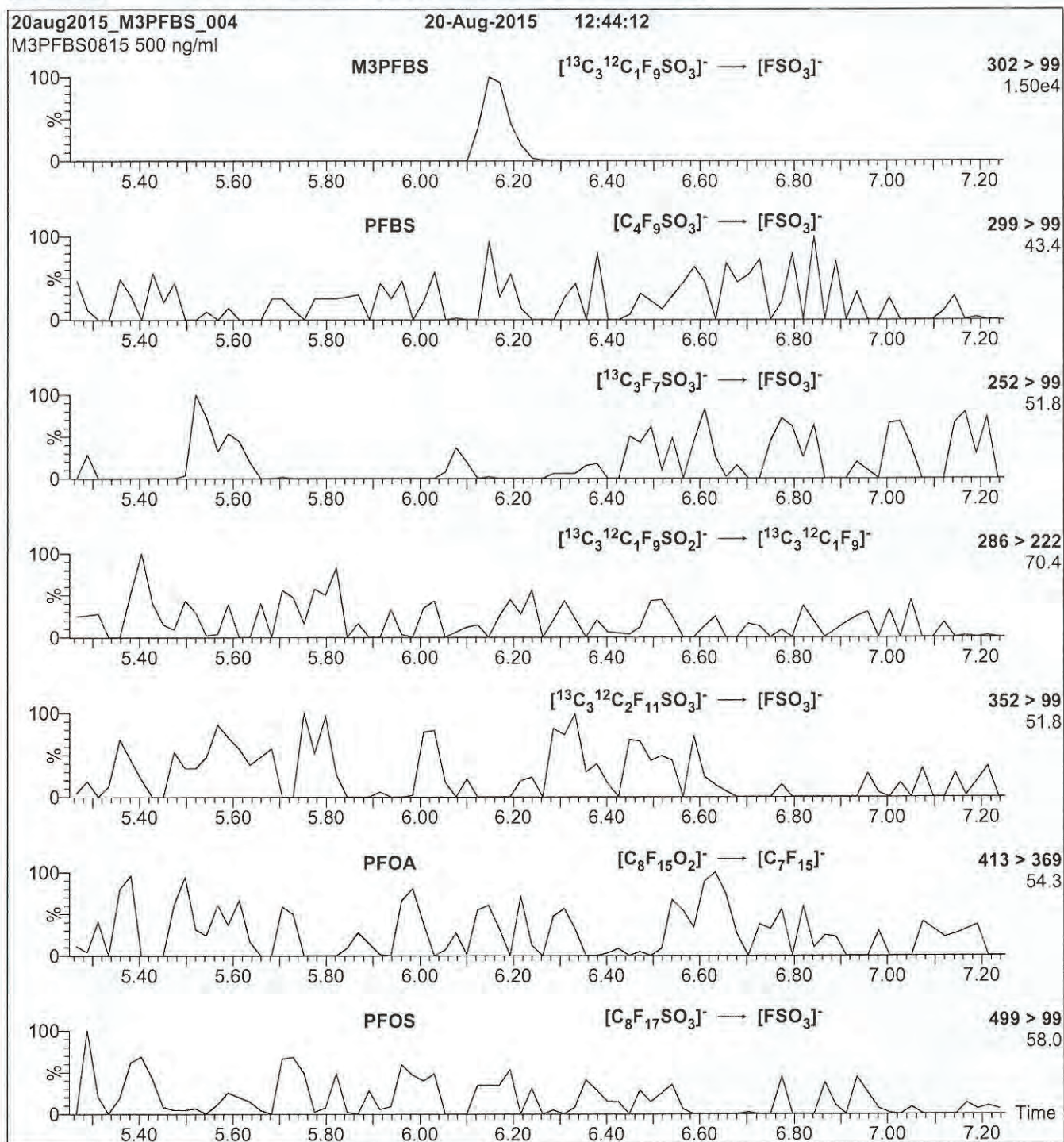
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 40.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

17K0821

Figure 2: M3PFBS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M3PFBS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 25

17K3038



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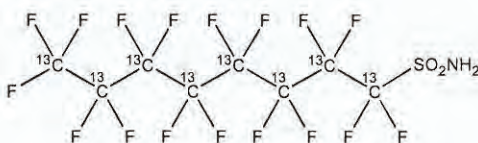
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M8FOSA-I
COMPOUND: Perfluoro-1-[$^{13}\text{C}_8$]octanesulfonamide

LOT NUMBER: M8FOSA10171

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $^{13}\text{C}_8\text{H}_2\text{F}_{17}\text{NO}_2\text{S}$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 10/11/2017
EXPIRY DATE: (mm/dd/yyyy) 10/11/2022
RECOMMENDED STORAGE: Refrigerate ampoule

MOLECULAR WEIGHT: 507.09
SOLVENT(S): Isopropanol
ISOTOPIC PURITY: $\geq 99\%$ ^{13}C ($^{13}\text{C}_8$)

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 1.1% of perfluoro-1-[$^{13}\text{C}_8$]octanesulfonamide and ~ 0.01% of perfluoro-1-[$^{13}\text{C}_7$]heptanesulfonamide.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 10/20/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K3038

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

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where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

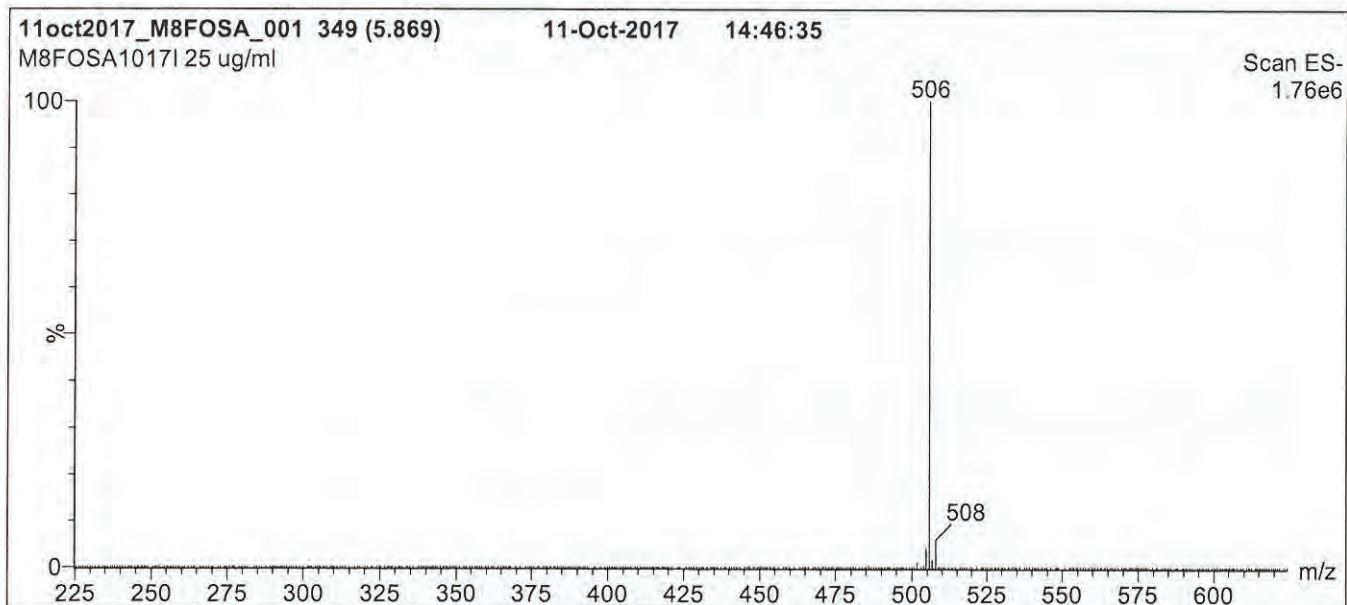
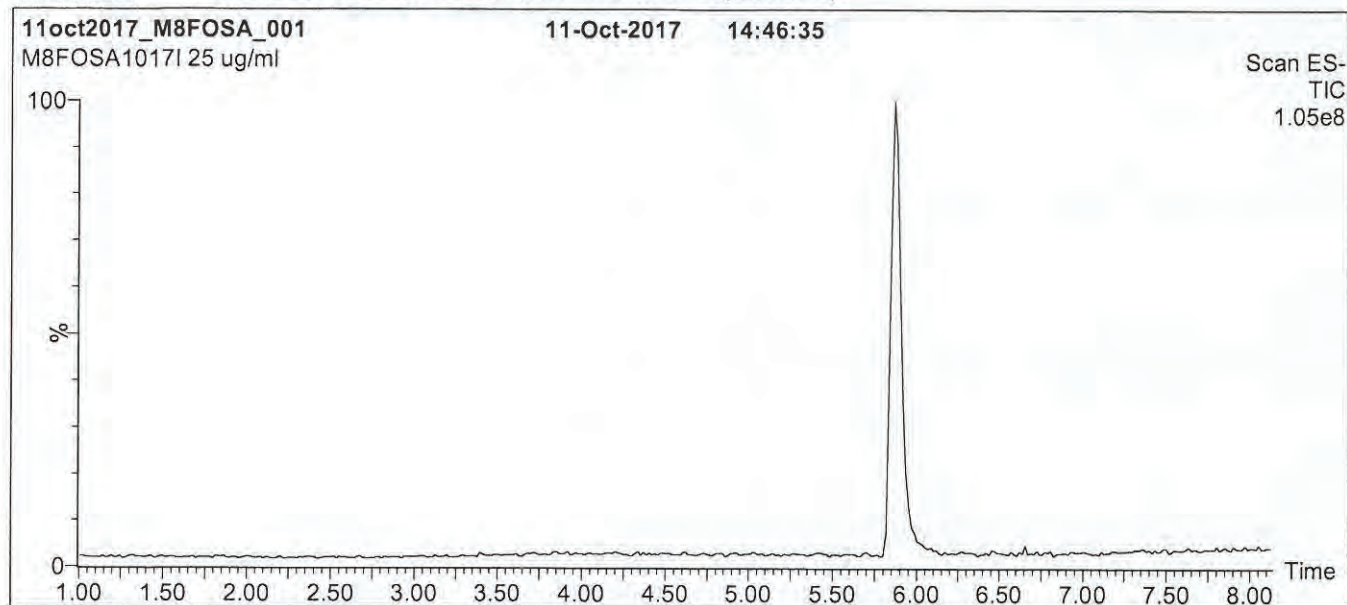
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

17K3038

Figure 1: M8FOSA-I; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 85% organic over 7.5 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

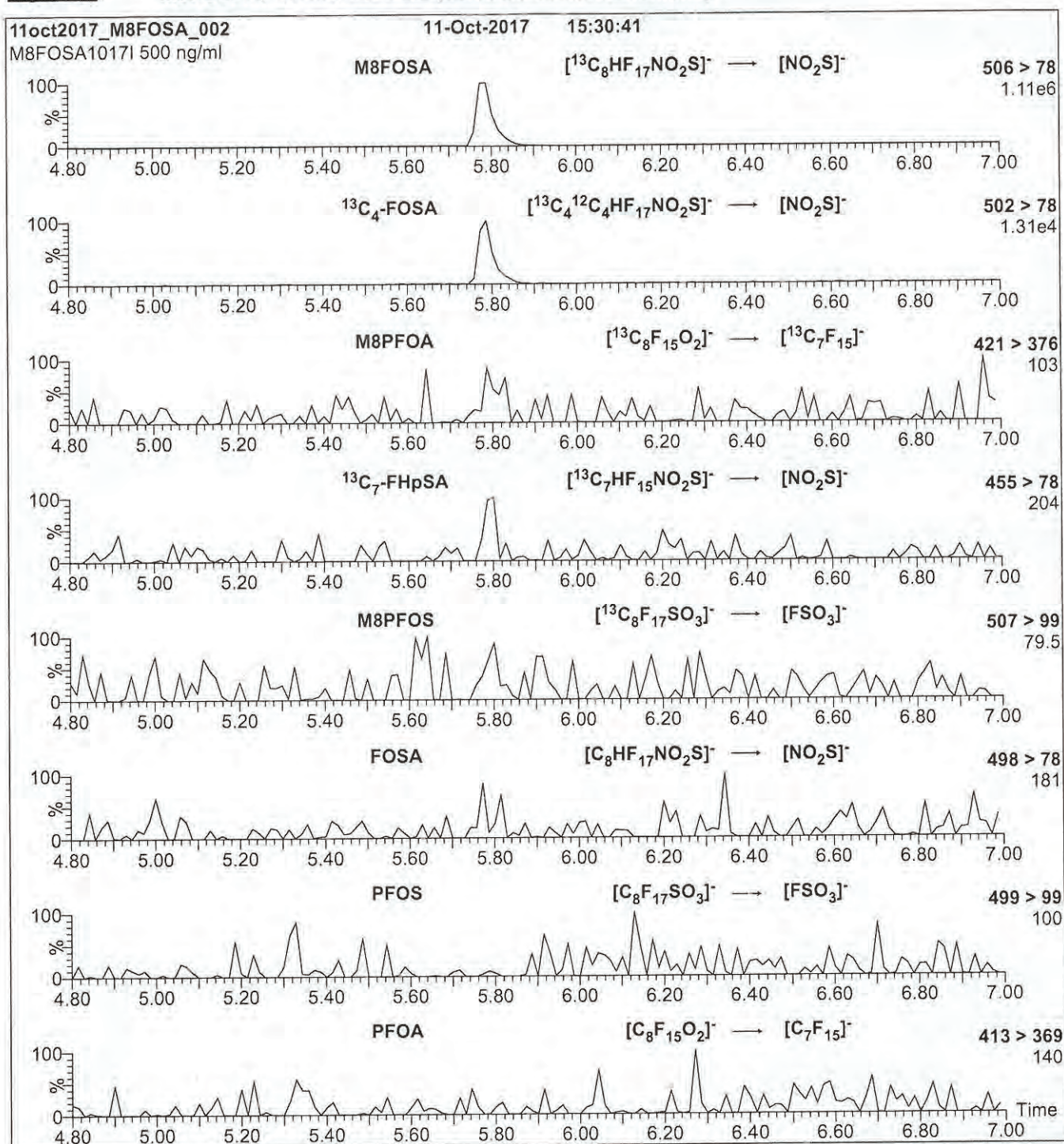
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.50
 Cone Voltage (V) = 40.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17K3038

Figure 2: M8FOSA-I; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M8FOSA-I)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 30

17K3039



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

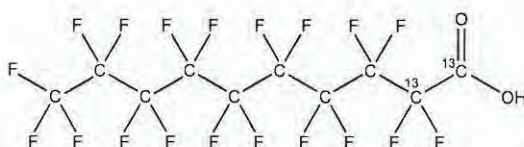
MPFDA

LOT NUMBER:

MPFDA0717

COMPOUND:Perfluoro-n-[1,2-¹³C₂]decanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₂¹²C₈HF₁₉O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

516.07

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

07/13/2017

(1,2-¹³C₂)**EXPIRY DATE:** (mm/dd/yyyy)

07/13/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of ¹³C₁-PFNA.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date: 07/14/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K3039

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

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where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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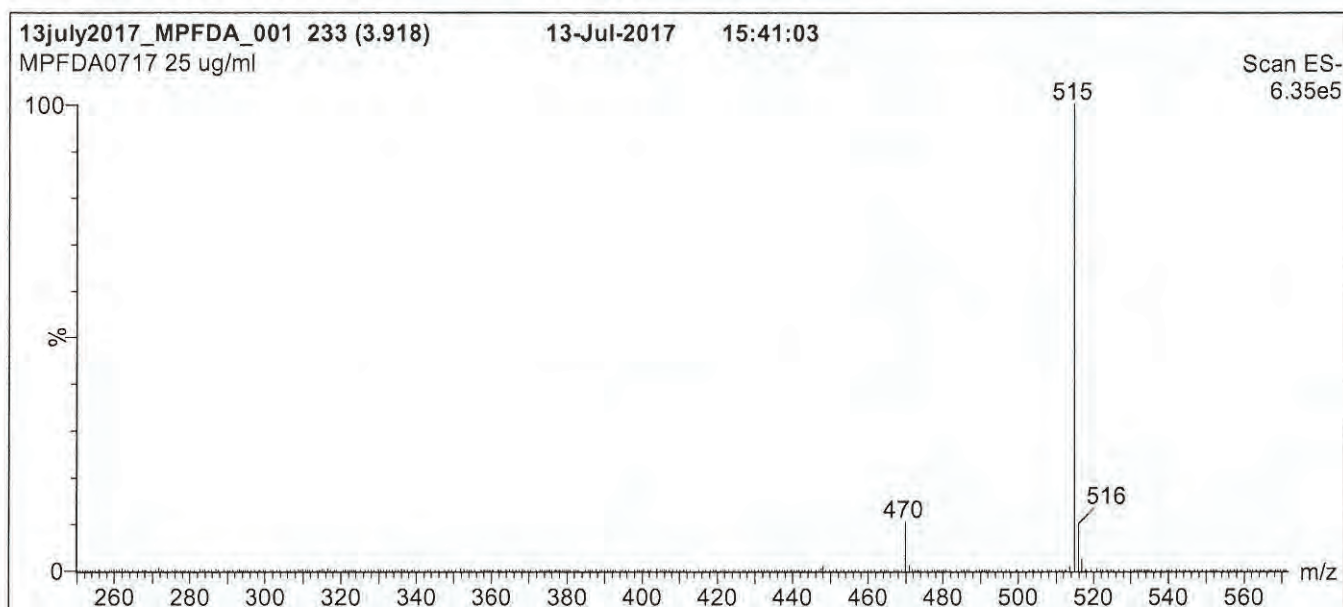
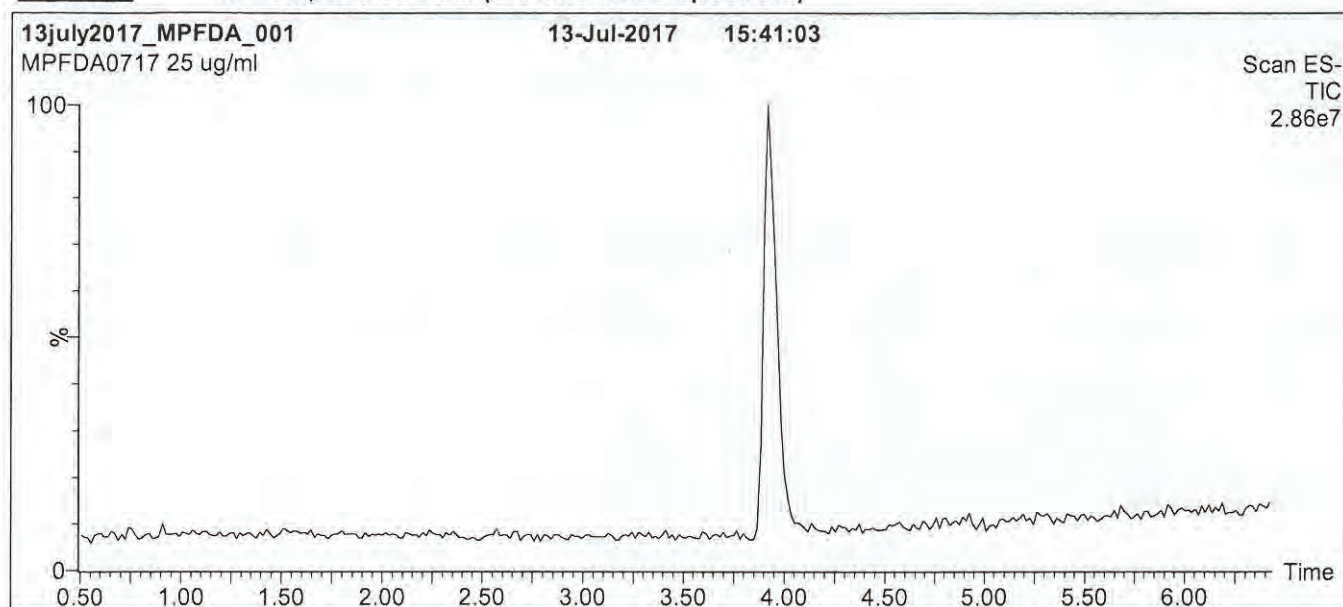
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17K3039

Figure 1: MPFDA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 55% (80:20 MeOH:ACN) / 45% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 2 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

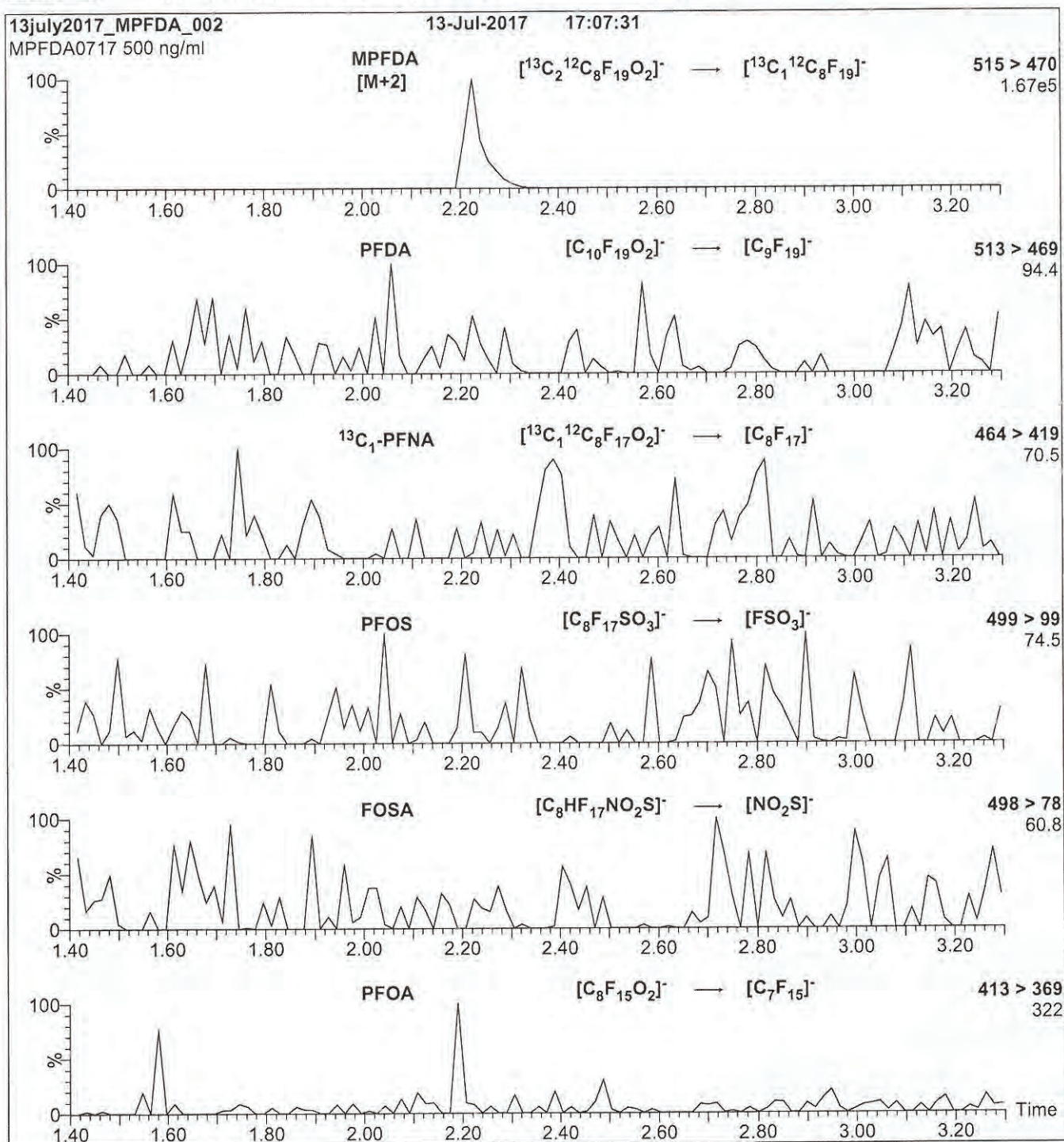
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 15.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

17K3039

Figure 2: MPFDA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μ l (500 ng/ml MPFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 μ l/min

MS Parameters

Collision Gas (mbar) = 3.17e-3
Collision Energy (eV) = 13

17K3040



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

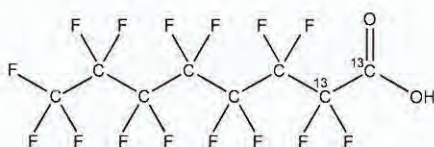
M2PFOA

LOT NUMBER:

M2PFOA1017

COMPOUND:Perfluoro-n-[1,2-¹³C₂]octanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₂¹²C₆HF₁₅O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

416.05

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

10/26/2017

(1,2-¹³C₂)**EXPIRY DATE:** (mm/dd/yyyy)

10/26/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date:

10/30/2017

(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K3040

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

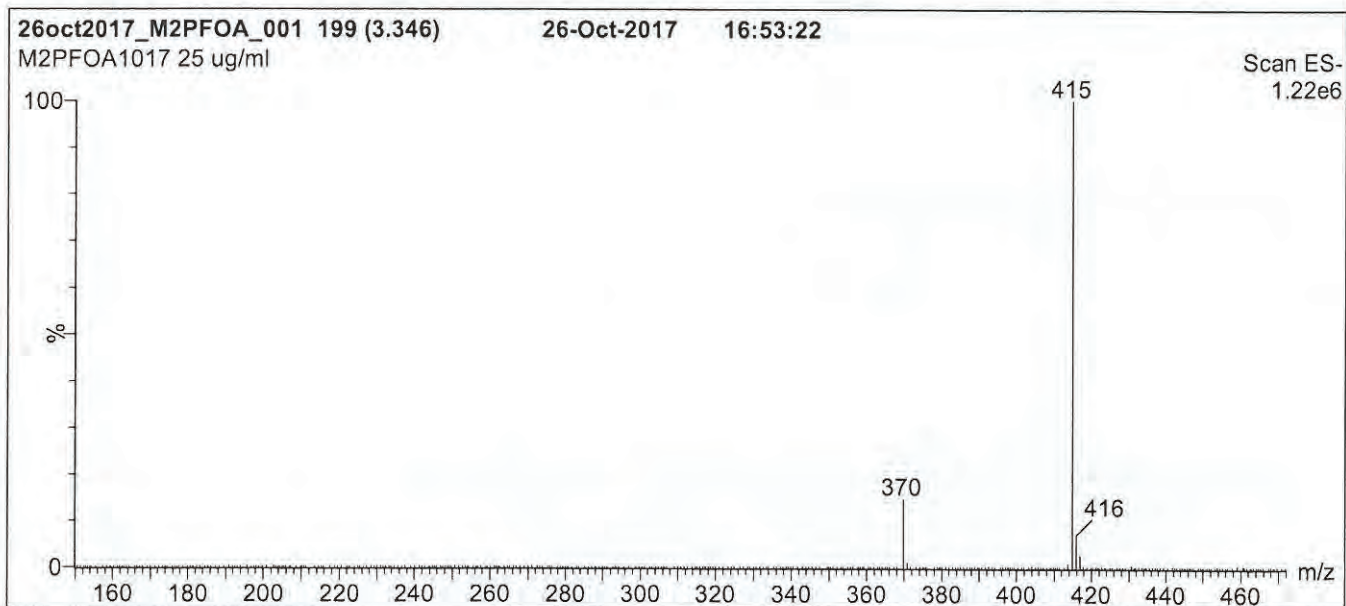
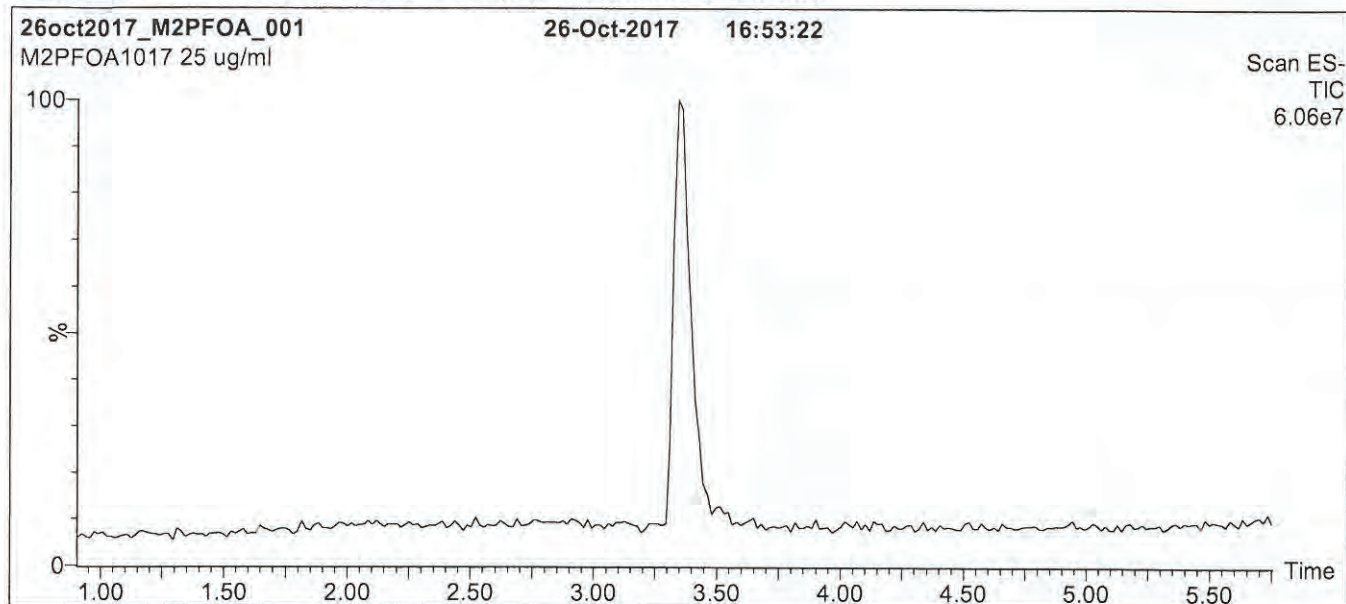
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17K3040

Figure 1: M2PFOA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 2 min
before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 μ l/min

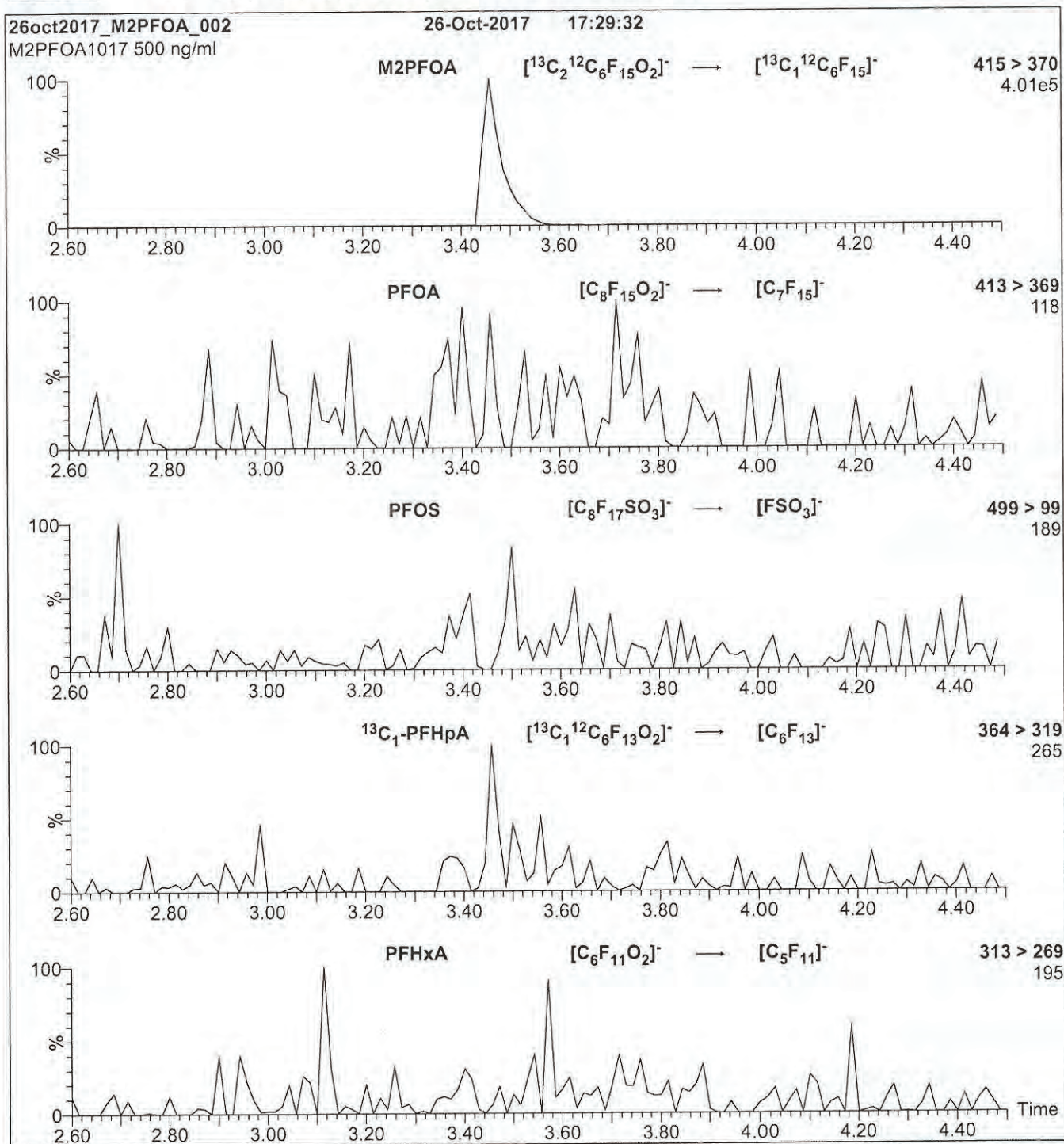
MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

17K 3040

Figure 2: M2PFOA; LC/MS/MS Data (Selected MRM Transitions)



Conditions for Figure 2:

Injection: Direct loop injection
10 μl (500 ng/ml M2PFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 10

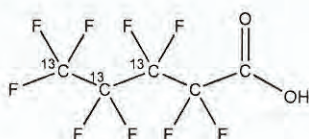
17K3041



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M3PFPeA **LOT NUMBER:** M3PFPeA0417
COMPOUND: Perfluoro-n-[3,4,5-¹³C₃]pentanoic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₃¹²C₂HF₉O₂ **MOLECULAR WEIGHT:** 267.02
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** >99% ¹³C
 (3,4,5-¹³C₃)
LAST TESTED: (mm/dd/yyyy) 04/20/2017
EXPIRY DATE: (mm/dd/yyyy) 04/20/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.95% of perfluoro-n-[¹³C₃]butanoic acid and 0.05% of perfluoro-1-pentanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 04/24/2017
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17K3041

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

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QUALITY MANAGEMENT:

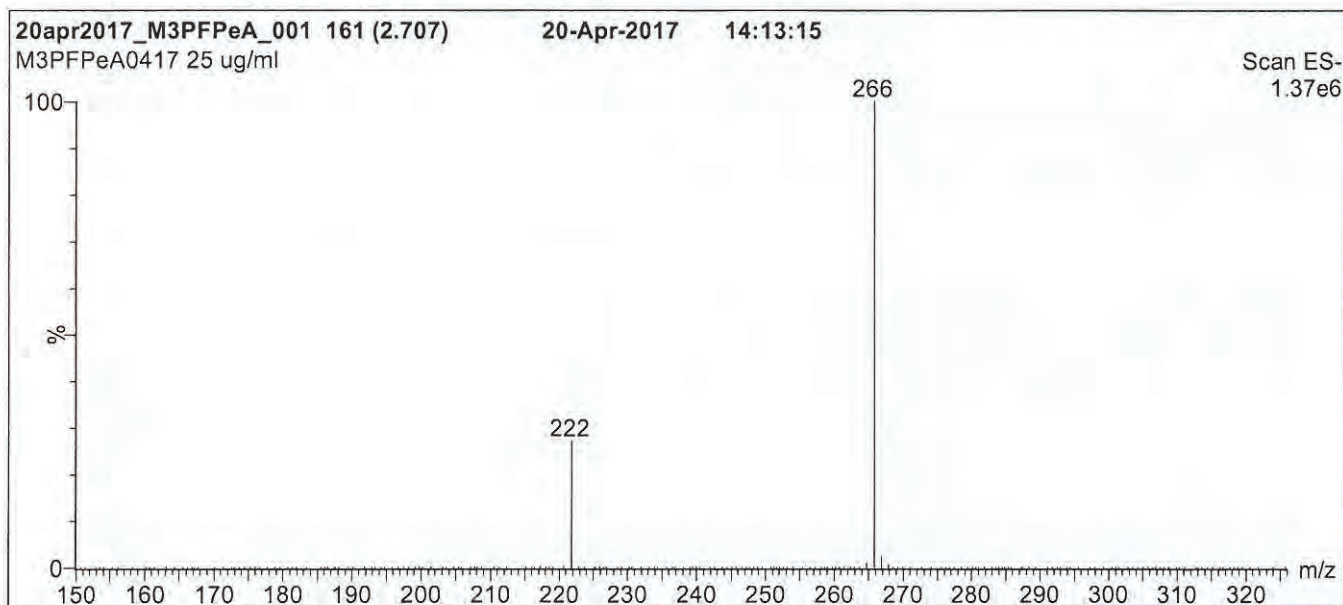
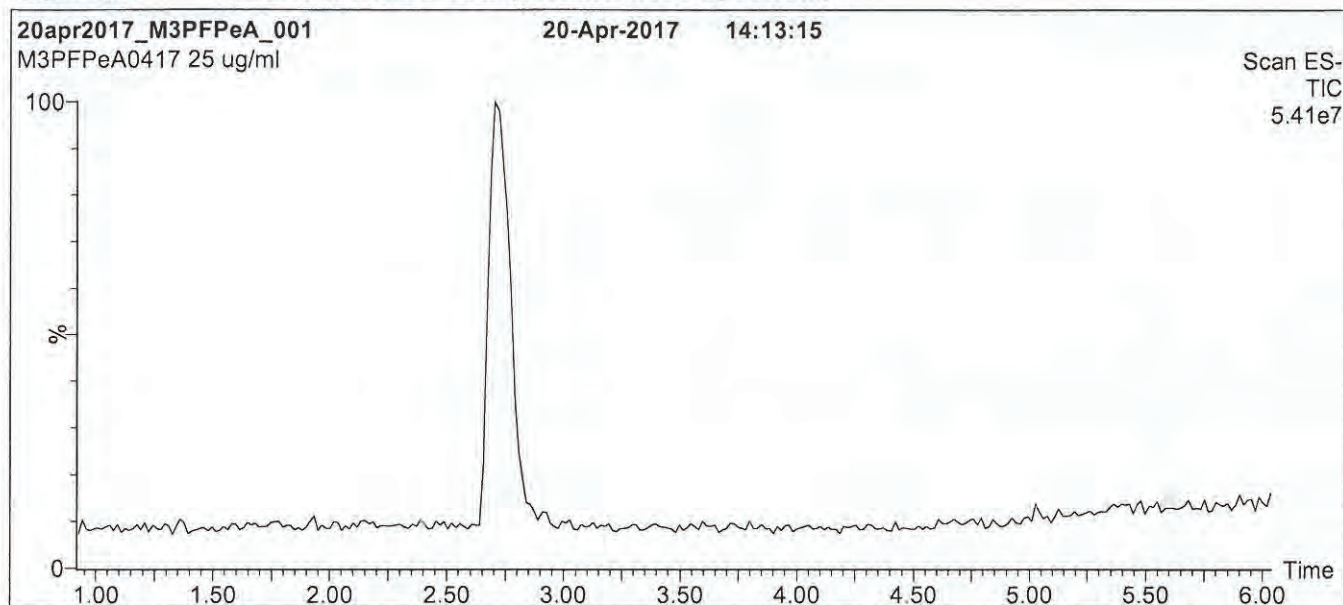
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17K3041

Figure 1: M3PFPeA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 10 min

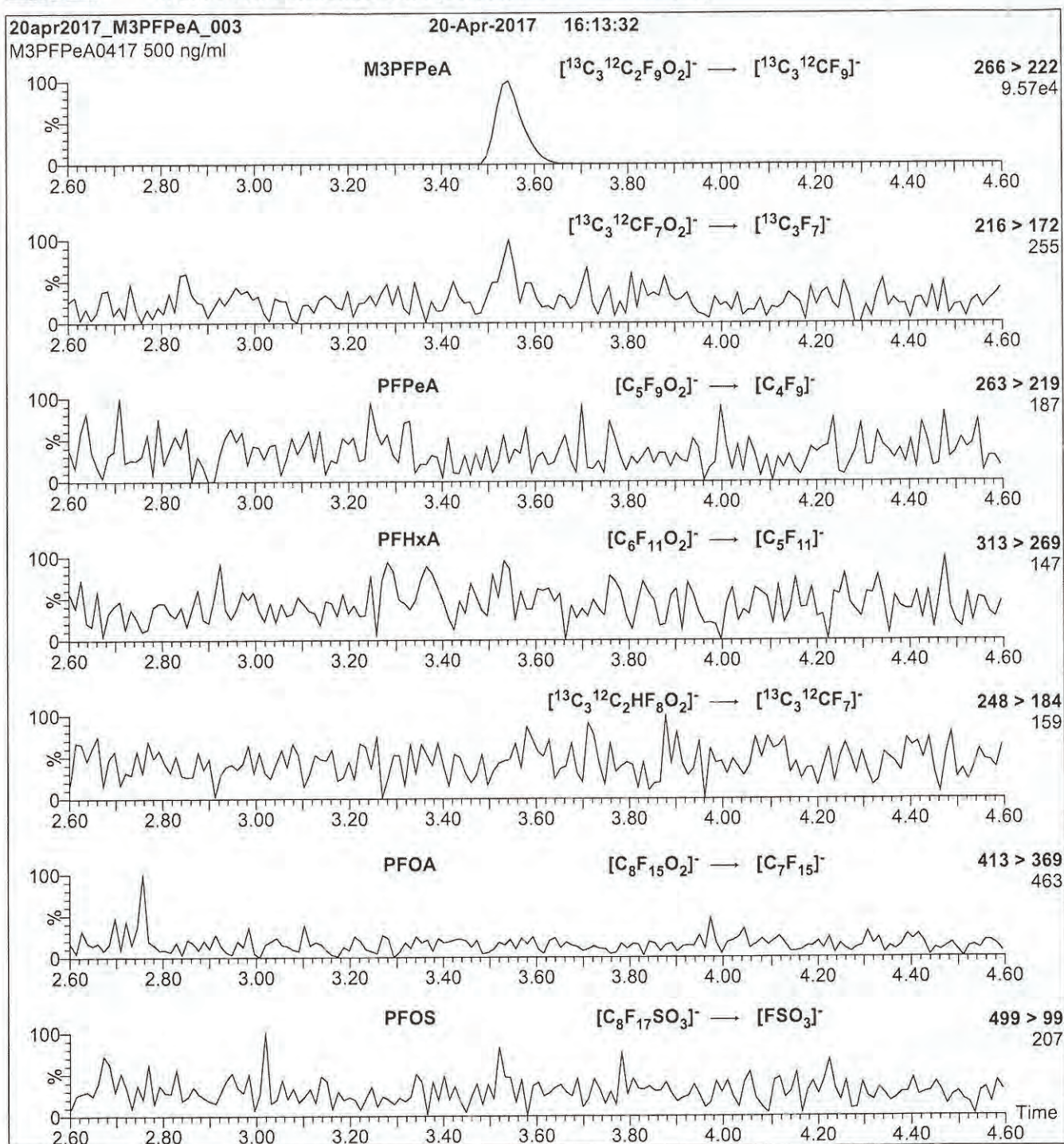
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

17K3041

Figure 2: M3PFPeA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M3PFPeA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.31\text{e-}3$
Collision Energy (eV) = 9

Analytical Standard Record

Vista Analytical Laboratory

17K2502

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	(mls)
17J0526	13C6-PFDA	05-Oct-17	** Vendor **	31-May-21	0.5
17J0527	13C8-PFOA	05-Oct-17	** Vendor **	05-Jul-22	0.51
17J1018	13C4-PFBA	10-Oct-17	** Vendor **	12-Apr-22	0.5
17J1019	13C5-PFHxA	10-Oct-17	** Vendor **	27-Aug-19	0.5
17J1020	13C9-PFNA	10-Oct-17	** Vendor **	23-May-22	0.5
17J1021	13C7-PFUDa	10-Oct-17	** Vendor **	13-Jul-22	0.5
17J1022	13C3-PFHxS	10-Oct-17	** Vendor **	05-Jul-22	0.53
17J1023	13C4-PFOS	10-Oct-17	** Vendor **	19-May-22	0.525
17J1024	13C2-FOUEA	10-Oct-17	** Vendor **	02-Aug-18	0.5

Description: PFC-RS

Expires: 25-Nov-19

Standard Type: Reagent

Prepared: 25-Nov-17

Solvent: MeOH

Prepared By: Isaac N. Johnson

Final Volume (mls): 20

Department: LCMS

Vials: 1

Last Edit: 25-Nov-17 10:25 by INJ

Analyte	CAS Number	Concentration	Units
13C9-PFNA		1.25	ug/mL
13C8-PFOA		1.25	ug/mL
13C7-PFUnA		1.25	ug/mL
13C6-PFDA		1.25	ug/mL
13C5-PFHxA		1.25	ug/mL
13C4-PFOS		1.25	ug/mL
13C4-PFBA		1.25	ug/mL
13C3-PFHxS		1.25	ug/mL
13C2-FOUEA		1.25	ug/mL

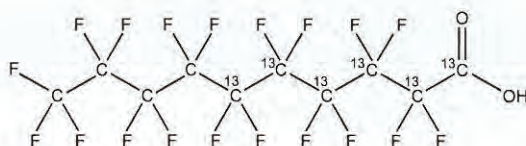
17J0526



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M6PFDA **LOT NUMBER:** M6PFDA0516
COMPOUND: Perfluoro-n-[1,2,3,4,5,6-¹³C₆]decanoic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₆¹²C₄HF₁₉O₂ **MOLECULAR WEIGHT:** 520.04
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
 (1,2,3,4,5,6-¹³C₆)
LAST TESTED: (mm/dd/yyyy) 05/31/2016
EXPIRY DATE: (mm/dd/yyyy) 05/31/2021
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date: 06/13/2016
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17J0526

INTENDED USE:

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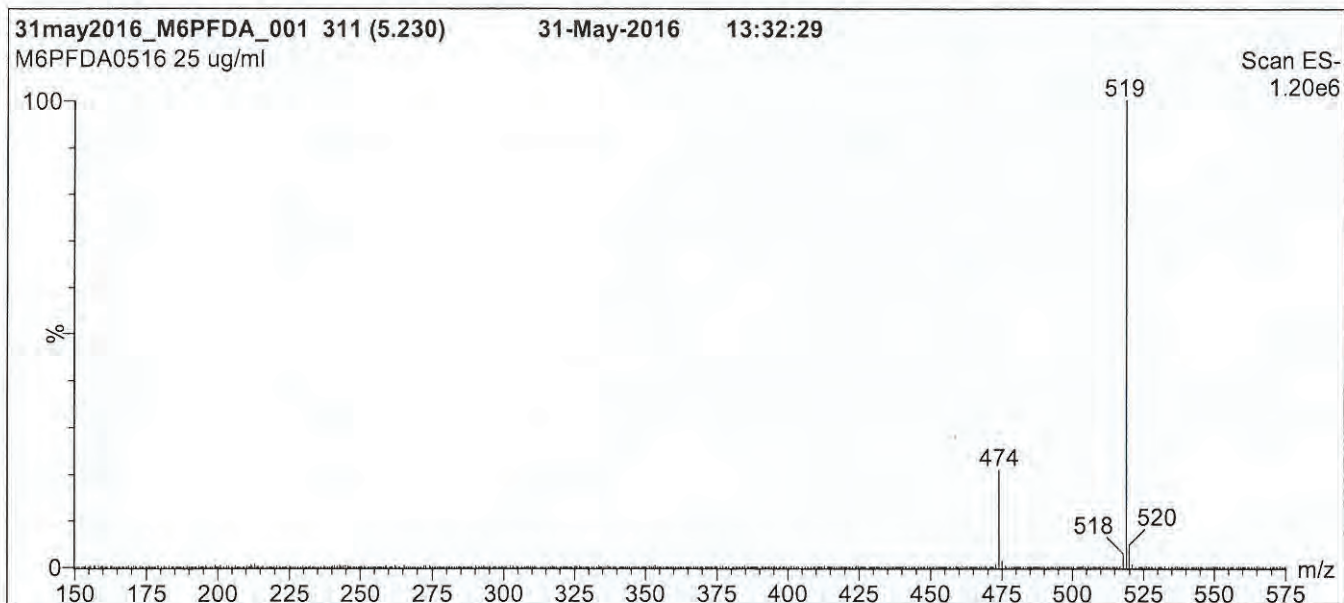
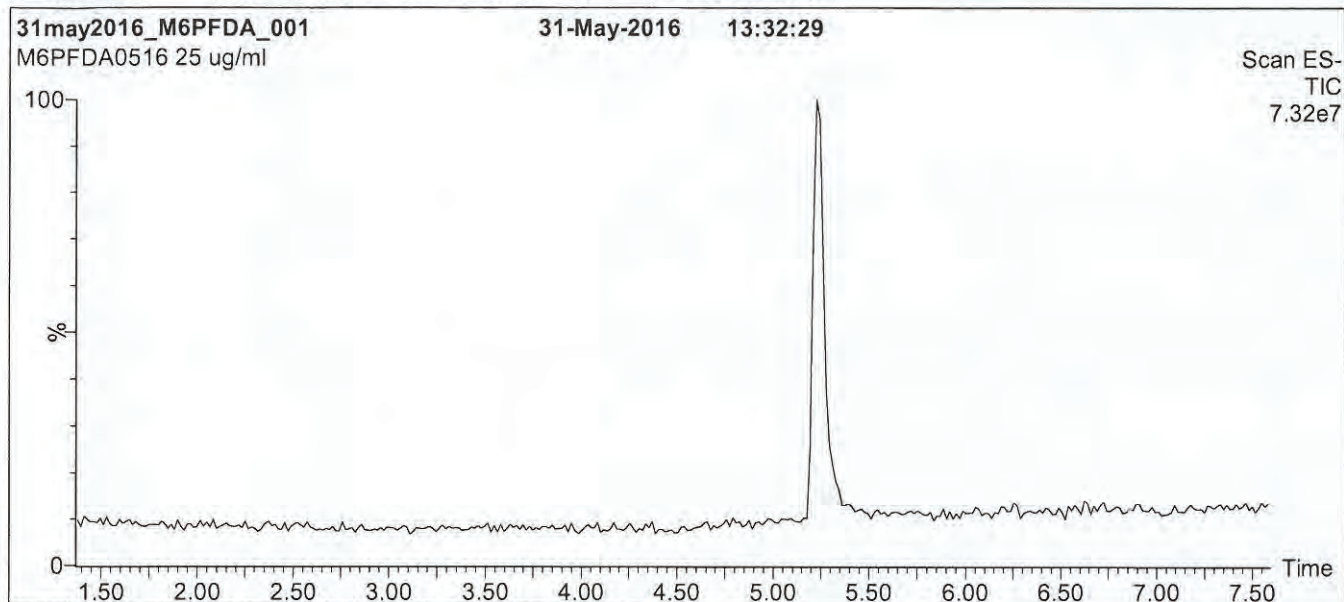
QUALITY MANAGEMENT:

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17J0526

Figure 1: M6PFDA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

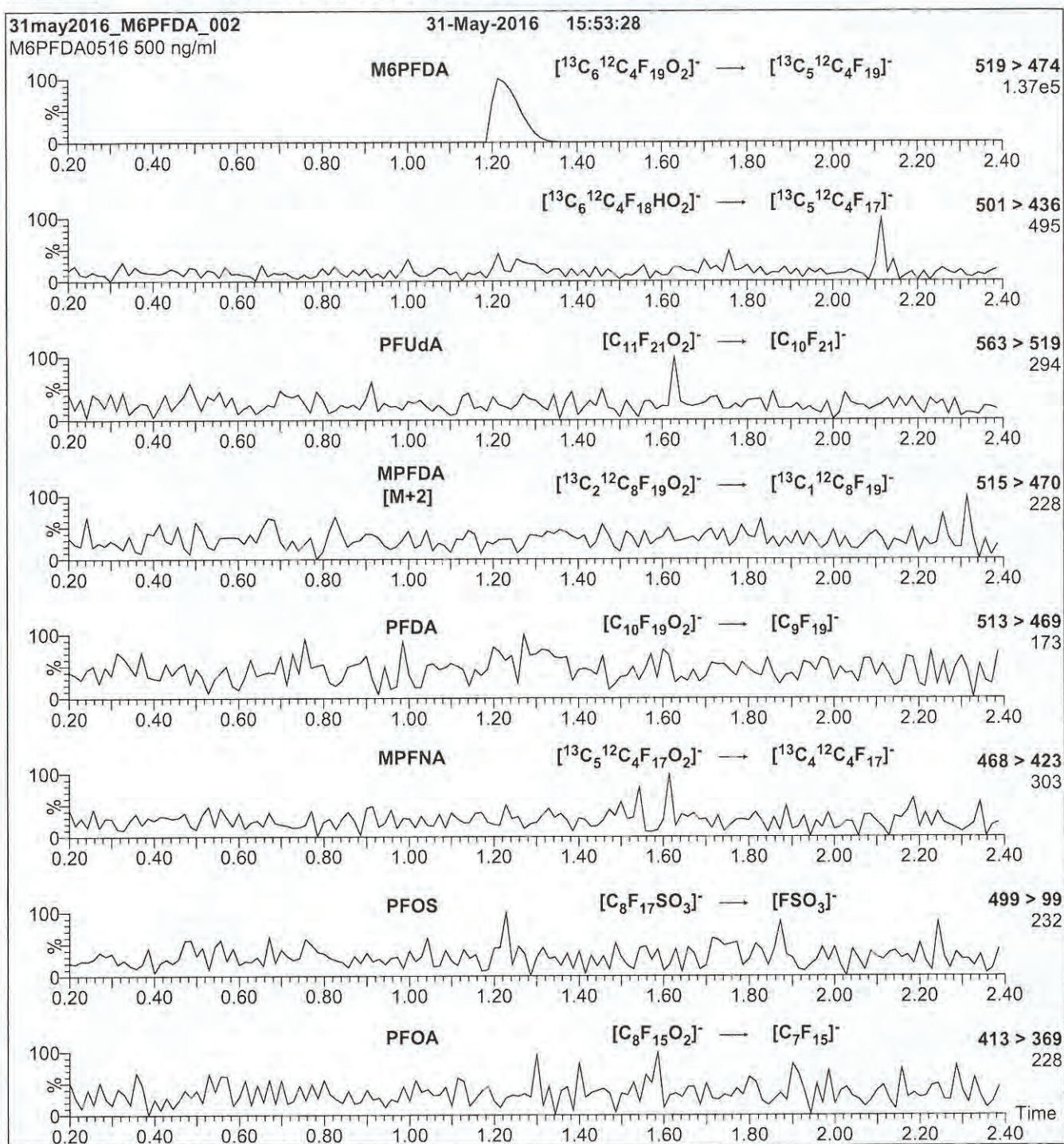
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

17 JU 526

Figure 2: M6PFDA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M6PFDA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.43\text{e-}3$
Collision Energy (eV) = 13



176 17J0527
ENJ 10/5/17

WELLINGTON LABORATORIES

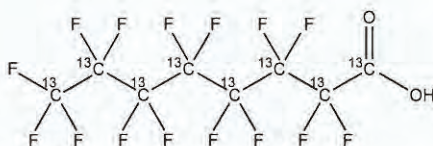
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M8PFOA
COMPOUND: Perfluoro-n-[¹³C₈]octanoic acid

LOT NUMBER: M8PFOA0717

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: ¹³C₈H₁₅O₂
CONCENTRATION: 49 ± 2.45 µg/ml

MOLECULAR WEIGHT: 422.01
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: 97.9% (M8PFOA)
2.1% (MPFOA [M+4])

ISOTOPIC PURITY: ≥99% ¹³C
(¹³C₈)

LAST TESTED: (mm/dd/yyyy) 07/05/2017

EXPIRY DATE: (mm/dd/yyyy) 07/05/2022

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains < 0.1% of native perfluoro-n-octanoic acid (PFOA) and ~ 2.1% of [M+4] perfluoro-n-octanoic acid.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date:

07/14/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17J0527

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QUALITY MANAGEMENT:

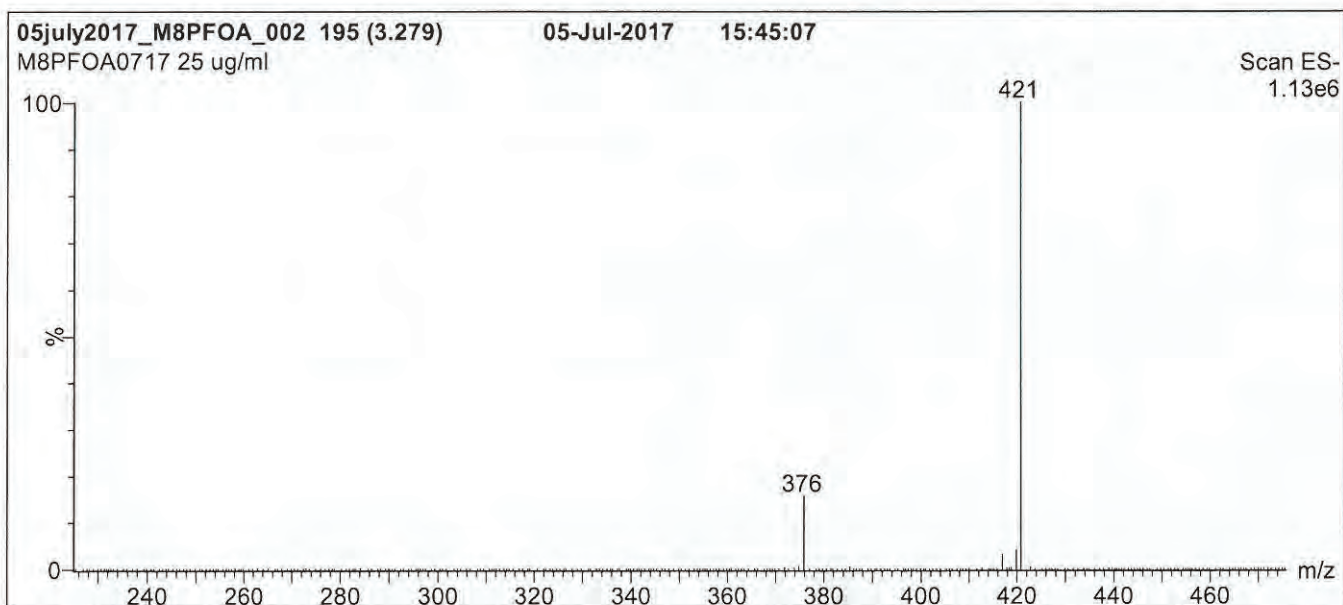
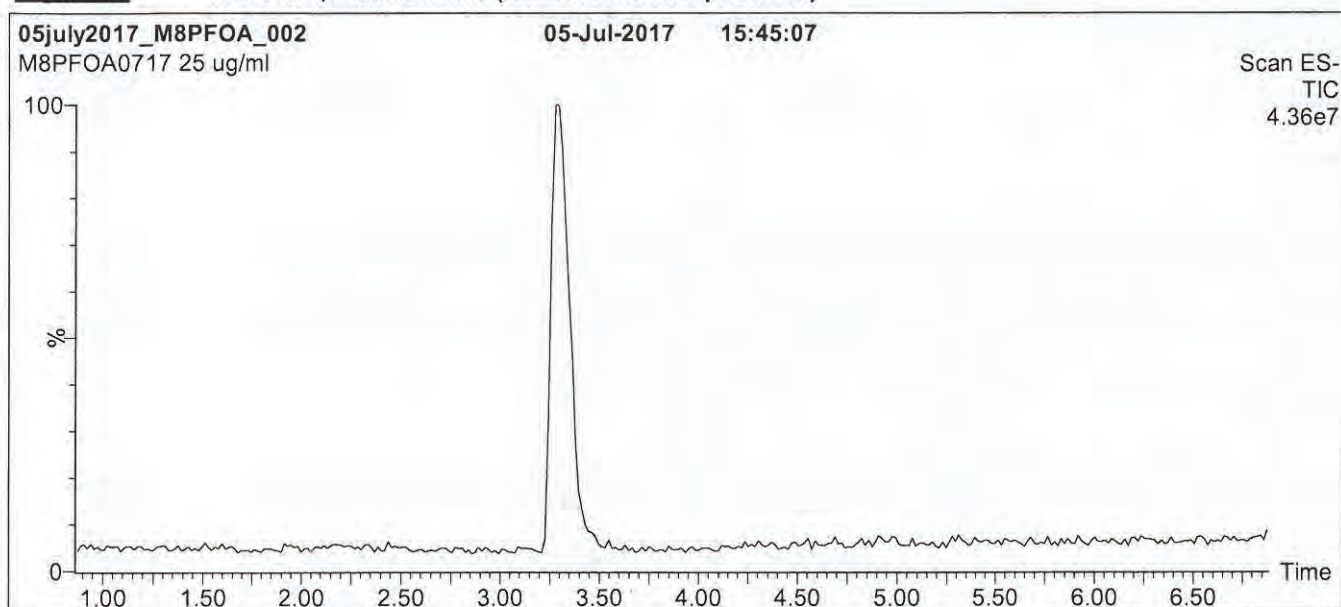
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17J0527

Figure 1: M8PFOA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7.5 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

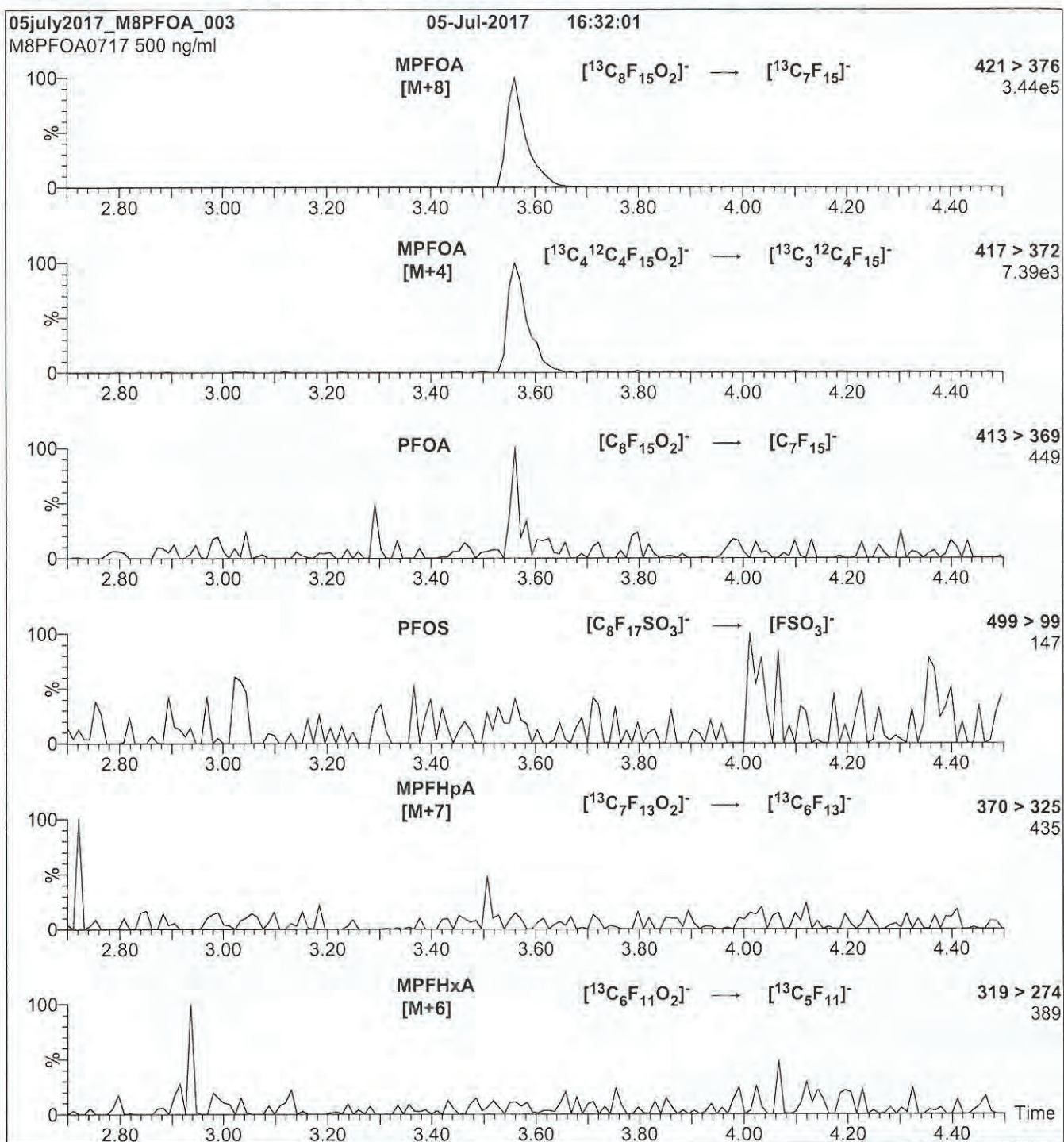
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

17J0527

Figure 2: M8PFOA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M8PFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 10

17J1018



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

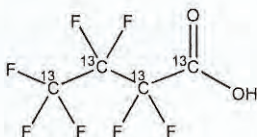
MPFBA

LOT NUMBER:

MPFBA0417

COMPOUND:Perfluoro-n-[1,2,3,4-¹³C₄]butanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₄HF₇O₂**MOLECULAR WEIGHT:**

218.01

CONCENTRATION:

50 ± 2.5 µg/ml

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

04/12/2017

(1,2,3,4-¹³C₄)**EXPIRY DATE:** (mm/dd/yyyy)

04/12/2022

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date:

 04/20/2017
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17J1018

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

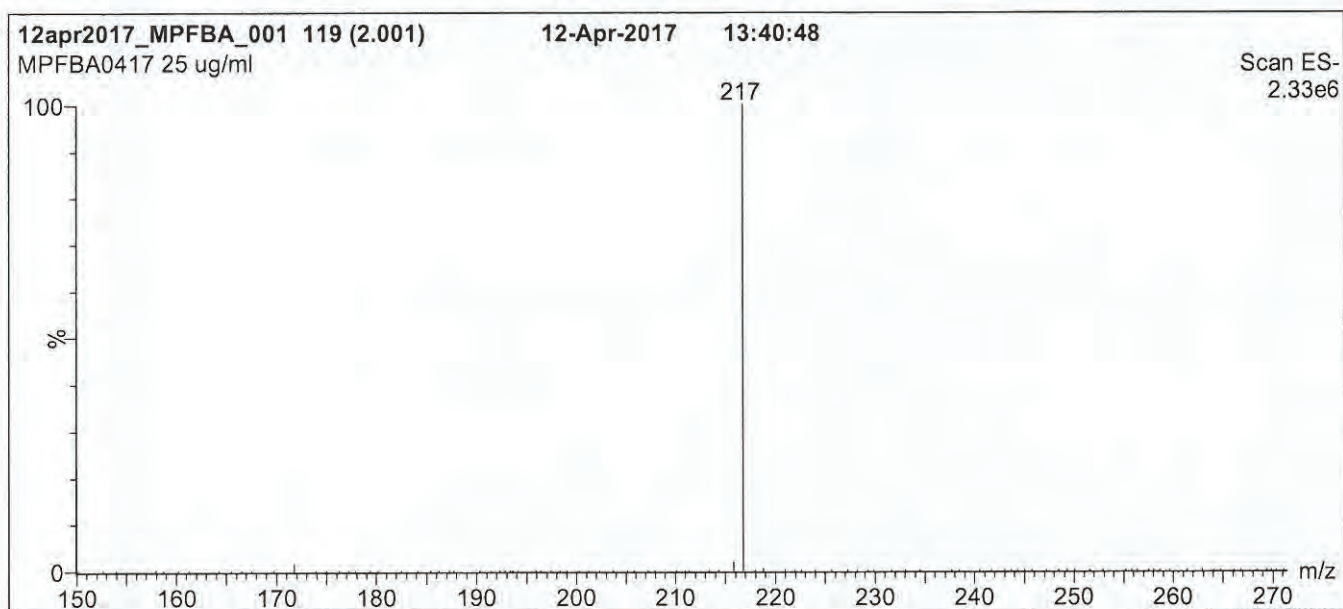
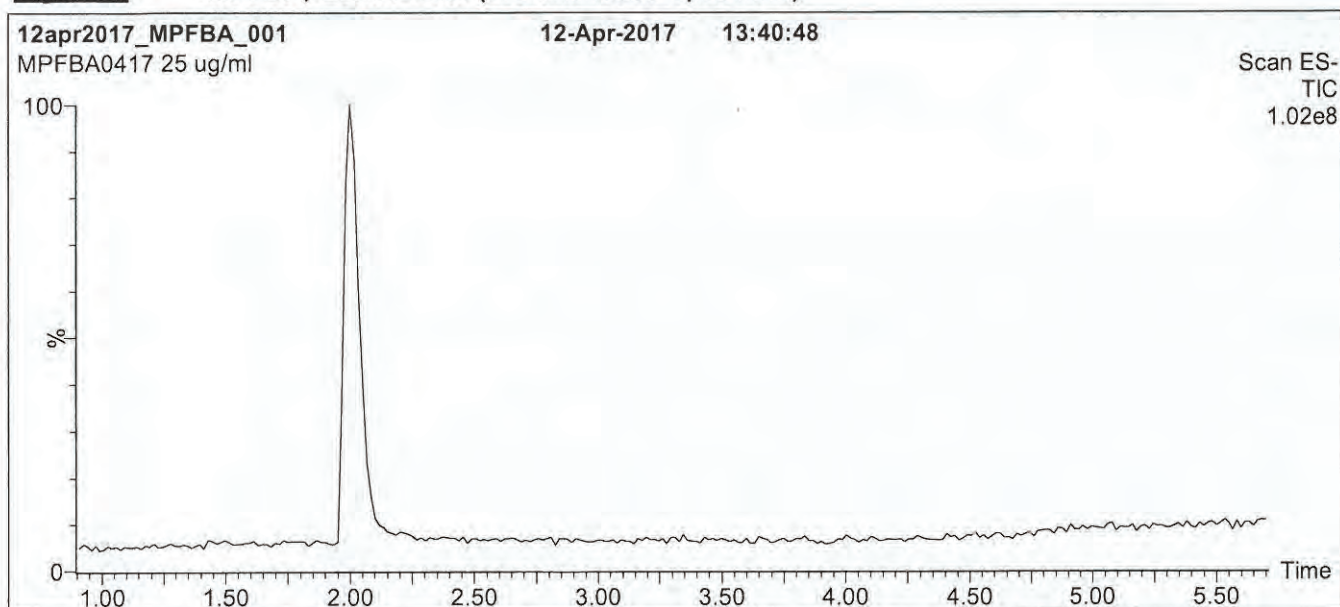
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17J1018

Figure 1: MPFBA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 30% (80:20 MeOH:ACN) / 70% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

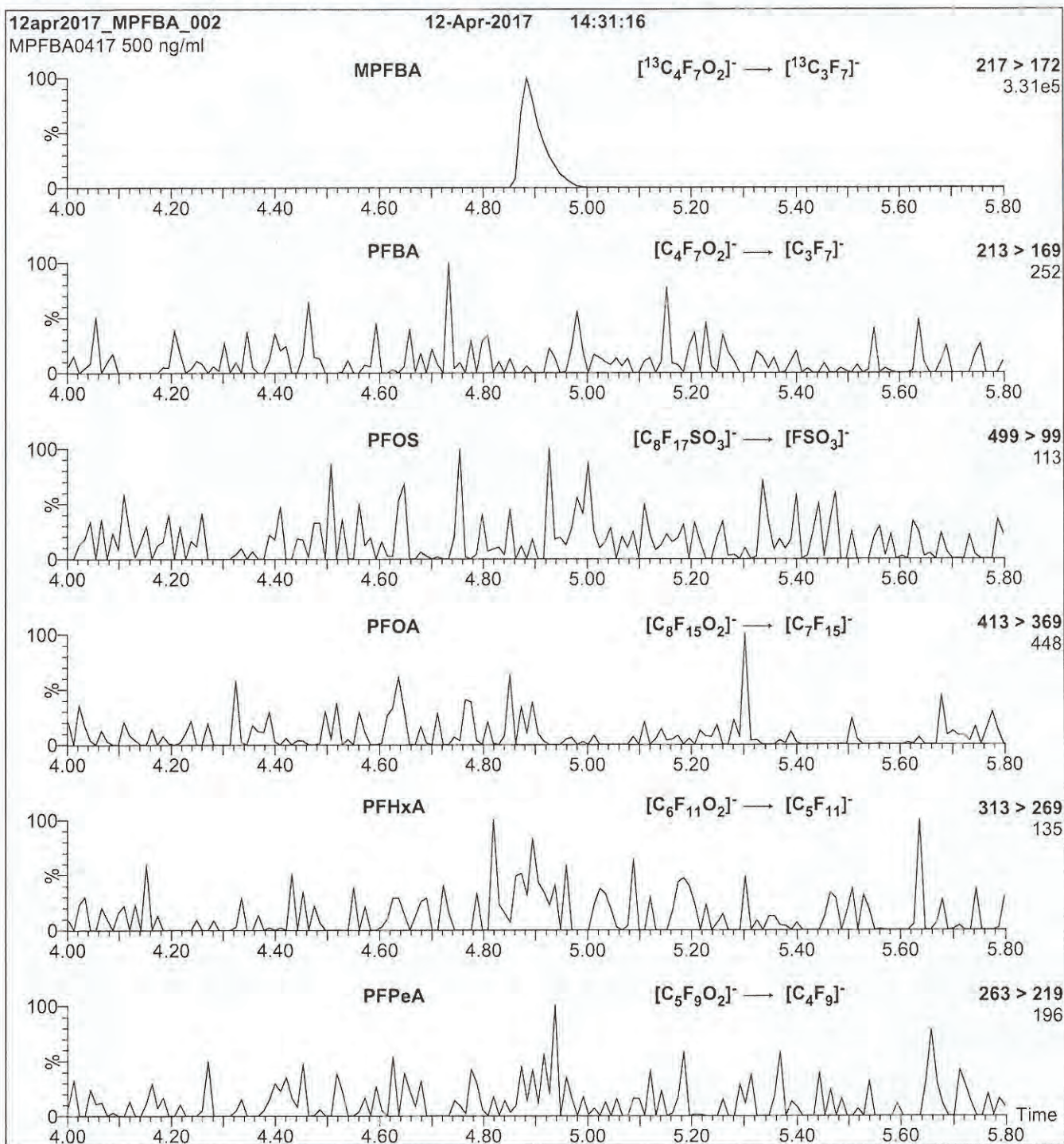
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 10.00
 Cone Gas Flow (l/hr) = 100
 Desolvation Gas Flow (l/hr) = 750

17J1018

Figure 2: MPFBA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml MPFBA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.35e-3
Collision Energy (eV) = 10

17J1019



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:

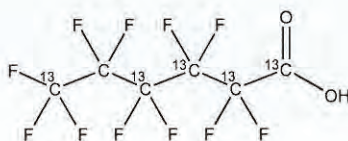
M5PFHxA

LOT NUMBER:

M5PFHxA0814

COMPOUND:Perfluoro-n-[1,2,3,4,6-¹³C₅]hexanoic acid**STRUCTURE:****CAS #:**

Not available

**MOLECULAR FORMULA:**¹³C₅¹²C₁HF₁₁O₂**CONCENTRATION:**

50 ± 2.5 µg/ml

MOLECULAR WEIGHT:

319.02

SOLVENT(S):

Methanol

Water (<1%)

CHEMICAL PURITY:

>98%

ISOTOPIC PURITY:≥99% ¹³C**LAST TESTED:** (mm/dd/yyyy)

08/27/2014

(1,2,3,4,6-¹³C₅)**EXPIRY DATE:** (mm/dd/yyyy)

08/27/2019

RECOMMENDED STORAGE:

Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim

Date:

03/31/2015
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17J1019

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using NIST and/or NRC traceable external weights. All volumetric glassware used is of Class A tolerance and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

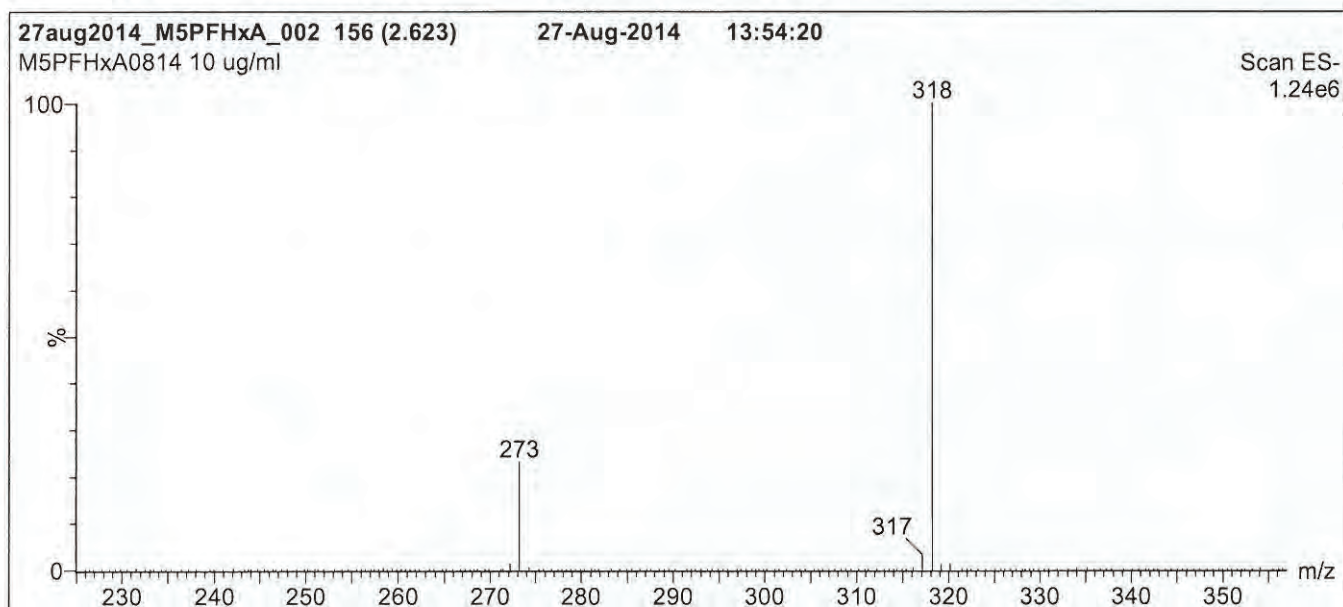
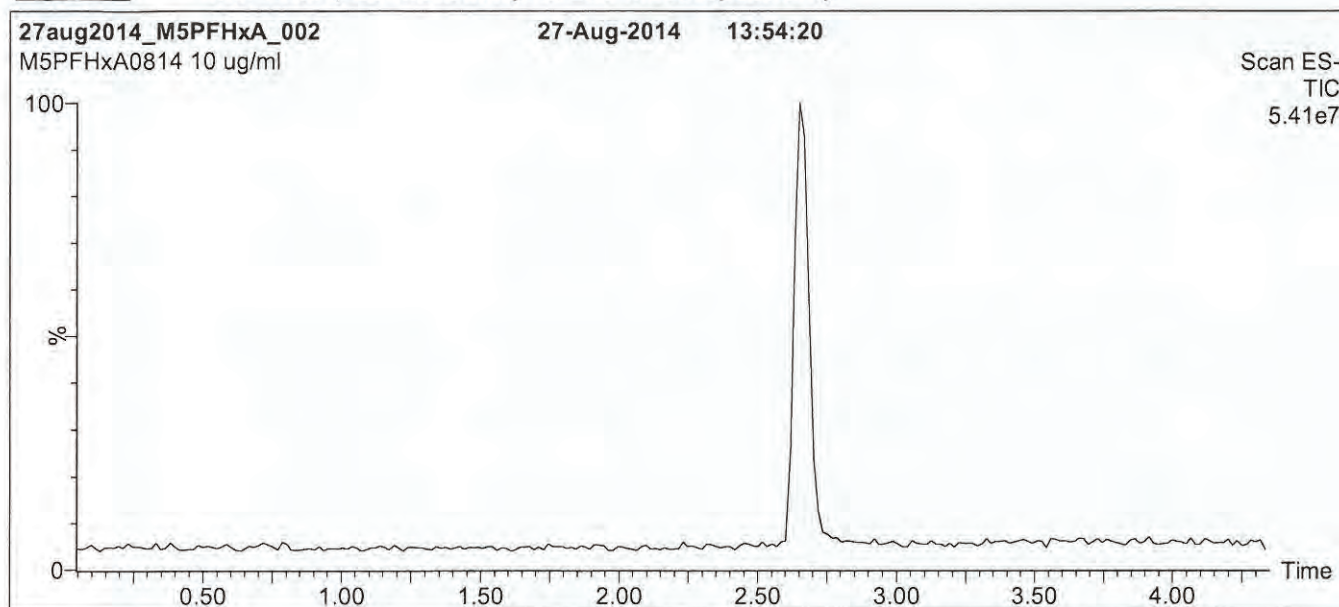
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17J1019

Figure 1: M5PFHxA; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 10 min

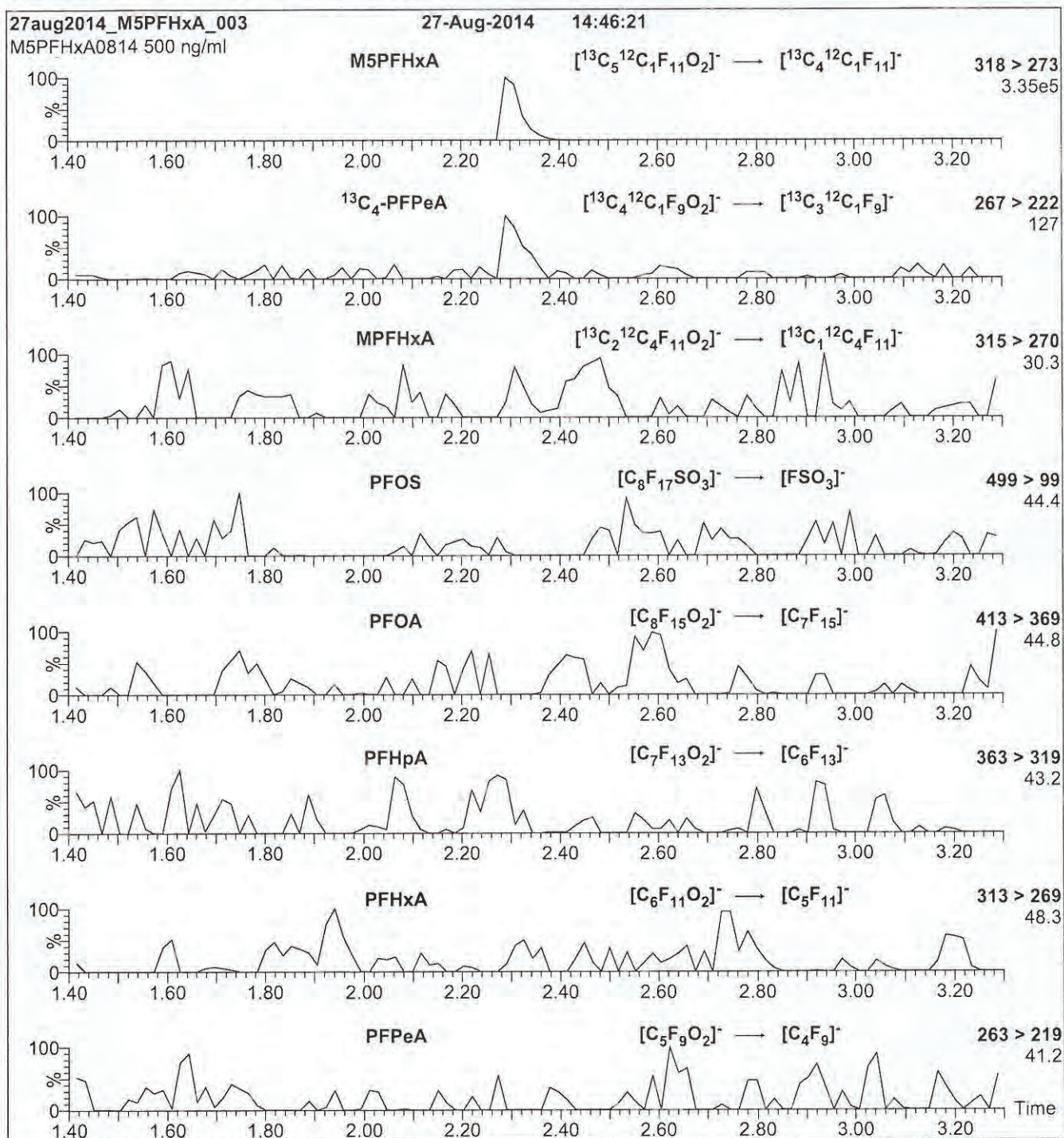
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 15.00
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

1751019

Figure 2: M5PFHxA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M5PFHxA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.54e-3
Collision Energy (eV) = 10

17J1020



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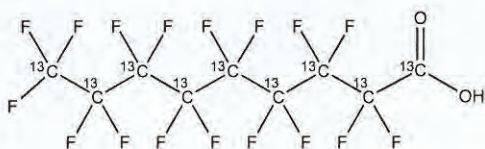
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M9PFNA
COMPOUND: Perfluoro-n-[$^{13}\text{C}_9$]nonanoic acid

LOT NUMBER: M9PFNA0517

STRUCTURE:

CAS #: Not available



MOLECULAR FORMULA: $^{13}\text{C}_9\text{HF}_{17}\text{O}_2$
CONCENTRATION: $50 \pm 2.5 \mu\text{g/ml}$

MOLECULAR WEIGHT: 473.01
SOLVENT(S): Methanol
Water (<1%)

CHEMICAL PURITY: >98%

ISOTOPIC PURITY: $\geq 99\%$ ^{13}C
($^{13}\text{C}_9$)

LAST TESTED: (mm/dd/yyyy) 05/23/2017

EXPIRY DATE: (mm/dd/yyyy) 05/23/2022

RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~ 0.9% of $^{13}\text{C}_5^{12}\text{C}_4\text{HF}_{17}\text{O}_2$ (MPFNA).

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
B.G. Chittim, General Manager

Date: 05/25/2017
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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1751020

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

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The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

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TRACEABILITY:

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LIMITED WARRANTY:

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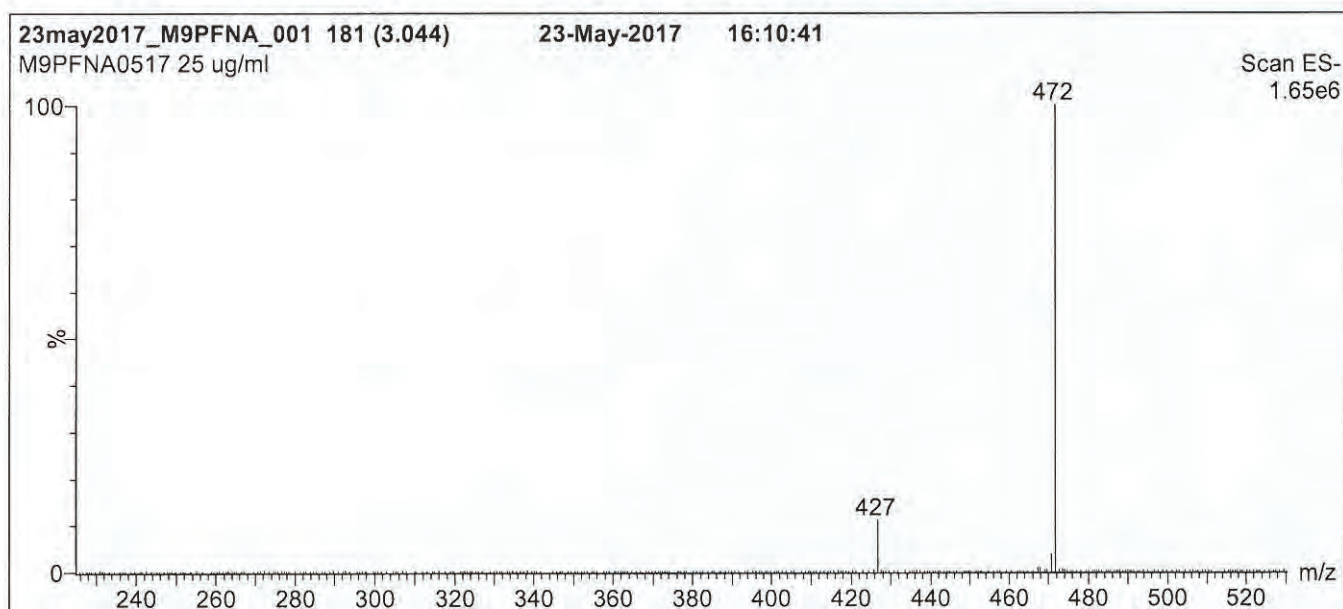
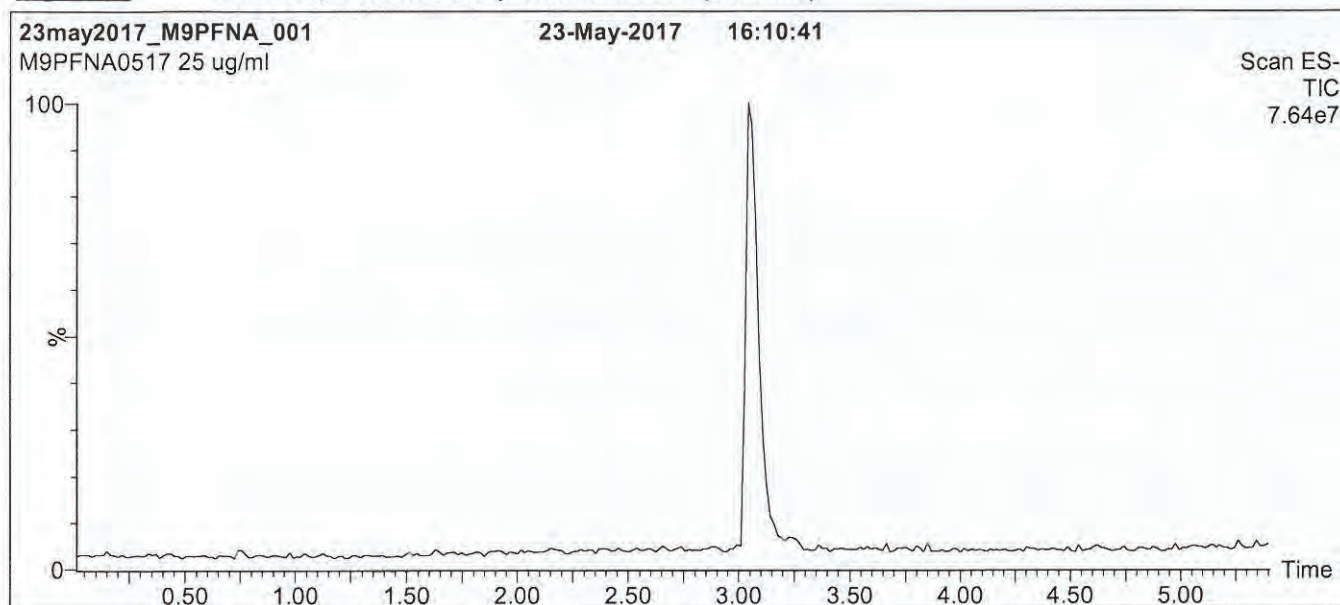
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17J1020

Figure 1: M9PFNA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 60% (80:20 MeOH:ACN) / 40% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 1.5 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

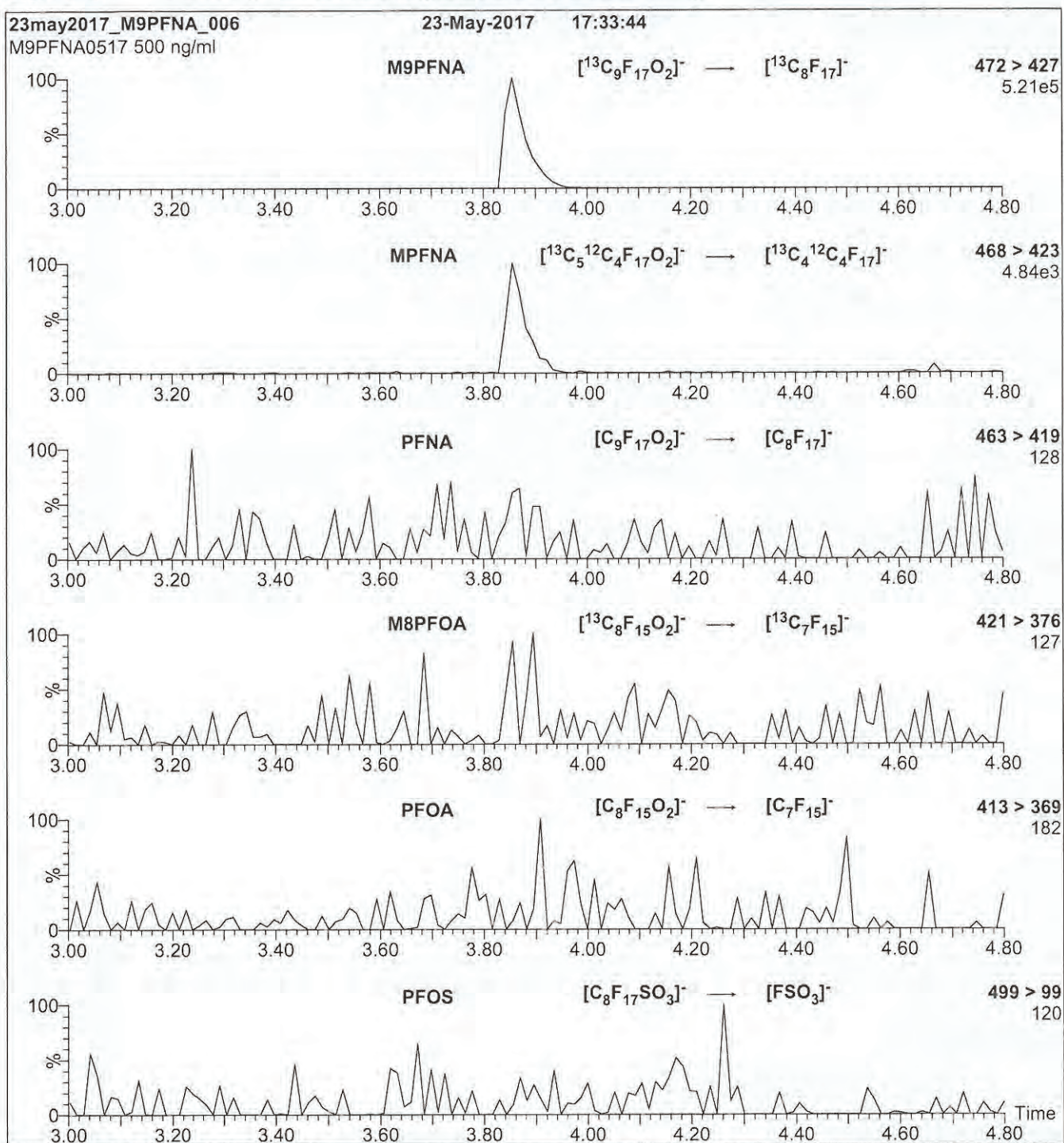
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = 15.00
 Cone Gas Flow (l/hr) = 50
 Desolvation Gas Flow (l/hr) = 750

1751020

Figure 2: M9PFNA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M9PFNA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.20e-3
Collision Energy (eV) = 11

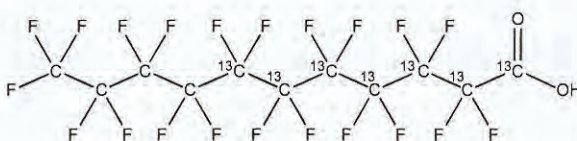
17J1021



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M7PFUdA **LOT NUMBER:** M7PFUdA0717
COMPOUND: Perfluoro-n-[1,2,3,4,5,6,7-¹³C₇]undecanoic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₇¹²C₄HF₂₁O₂ **MOLECULAR WEIGHT:** 571.04
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
 (1,2,3,4,5,6,7-¹³C₇)
LAST TESTED: (mm/dd/yyyy) 07/13/2017
EXPIRY DATE: (mm/dd/yyyy) 07/13/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:

B.G. Chittim, General Manager

Date: 07/14/2017
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17J 1021

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters $x_1, x_2, \dots, x_n$ on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly tested by an external ISO/IEC 17025 accredited calibration company. In addition, their calibration is verified prior to each weighing using calibrated NIST and/or NRC traceable external weights. All volumetric glassware used is calibrated, of Class A tolerance, and has been tested according to the appropriate ASTM procedures, which are ultimately traceable to NIST. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

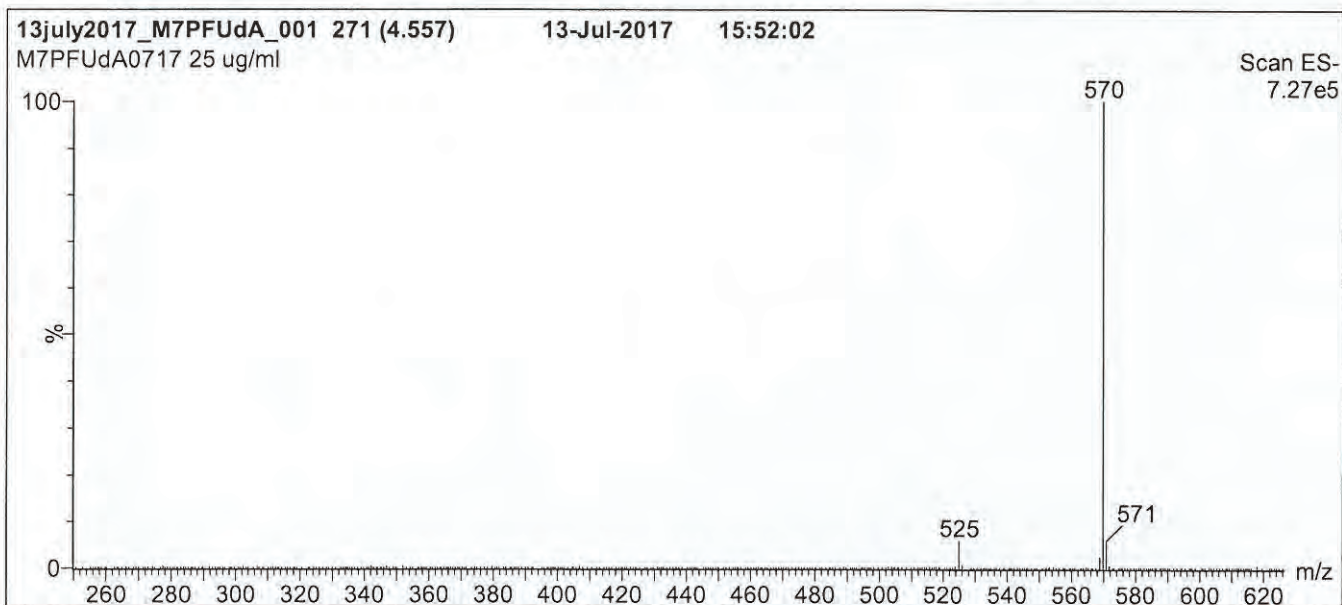
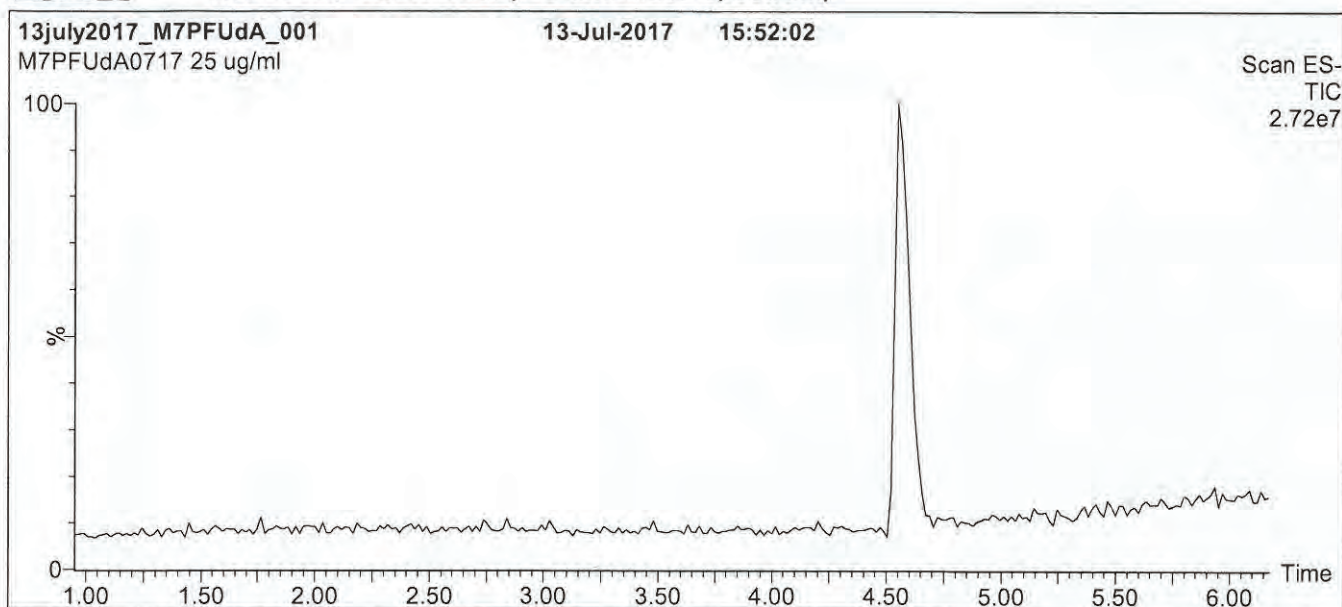
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

17J1021

Figure 1: M7PFUdA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 55% (80:20 MeOH:ACN) / 45% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for 2 min
 before returning to initial conditions in 0.5 min.
 Time: 10 min

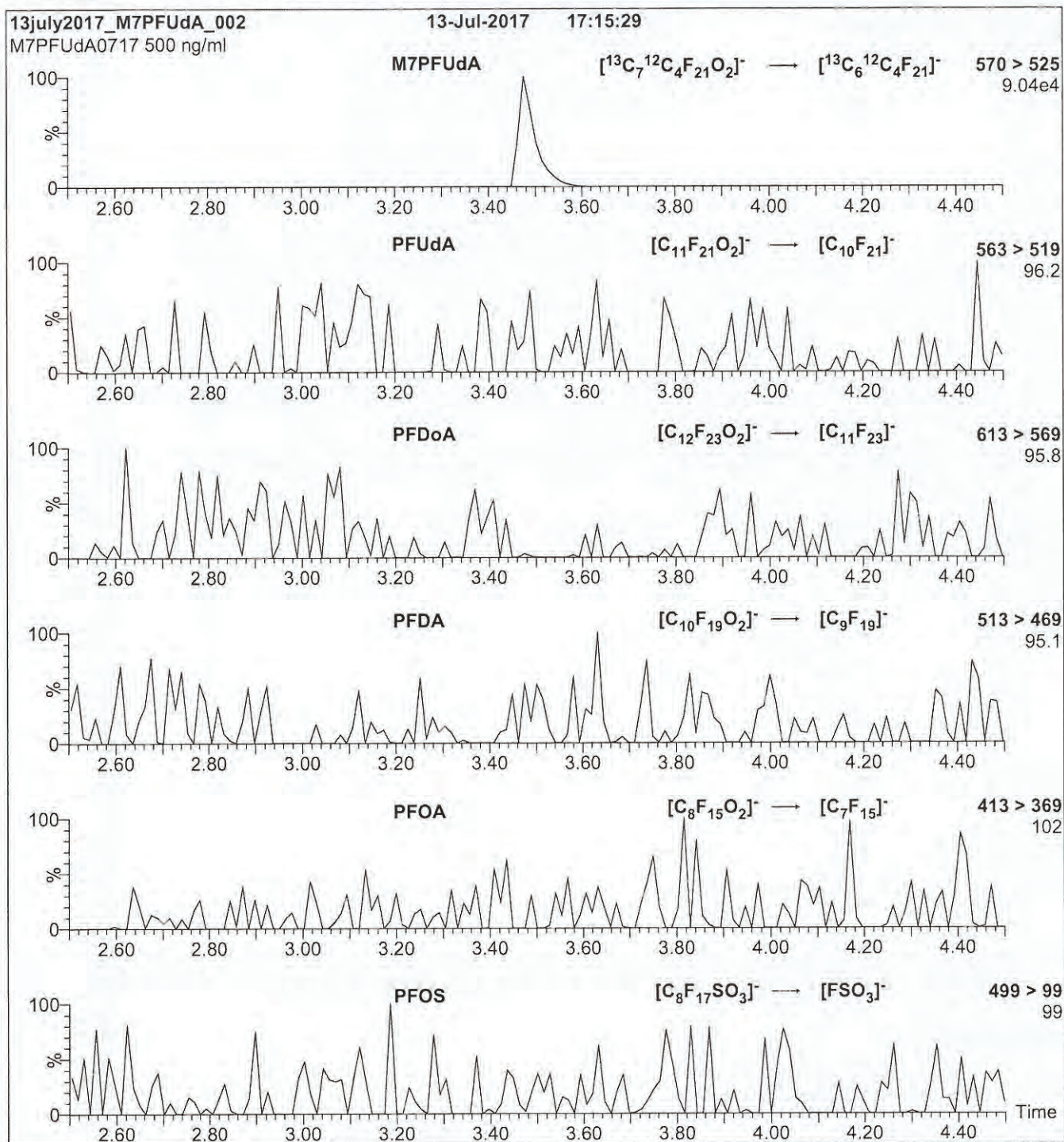
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (250 – 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 3.00
 Cone Voltage (V) = 15.00
 Cone Gas Flow (l/hr) = 65
 Desolvation Gas Flow (l/hr) = 750

17J1021

Figure 2: M7PFUdA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M7PFUdA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.28e-3
Collision Energy (eV) = 11

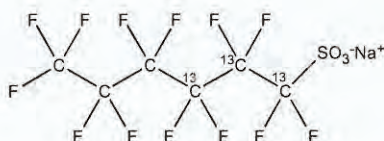
17J1022



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M3PFHxS **LOT NUMBER:** M3PFHxS0717
COMPOUND: Sodium perfluoro-1-[1,2,3-¹³C₃]hexanesulfonate
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₃¹²C₃F₁₃SO₃Na **MOLECULAR WEIGHT:** 425.07
CONCENTRATION: 50.0 ± 2.5 µg/ml (Na salt) **SOLVENT(S):** Methanol
 47.3 ± 2.4 µg/ml (M3PFHxS anion)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 07/05/2017 (1,2,3-¹³C₃)
EXPIRY DATE: (mm/dd/yyyy) 07/05/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

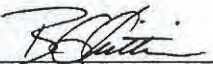
DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 07/14/2017
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17J1022

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Where possible, all of our products are synthesized using single-product unambiguous routes. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

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UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

$x_1, x_2, \dots, x_n$ on which it depends is:

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where x is expressed as a relative standard uncertainty of the individual parameter.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

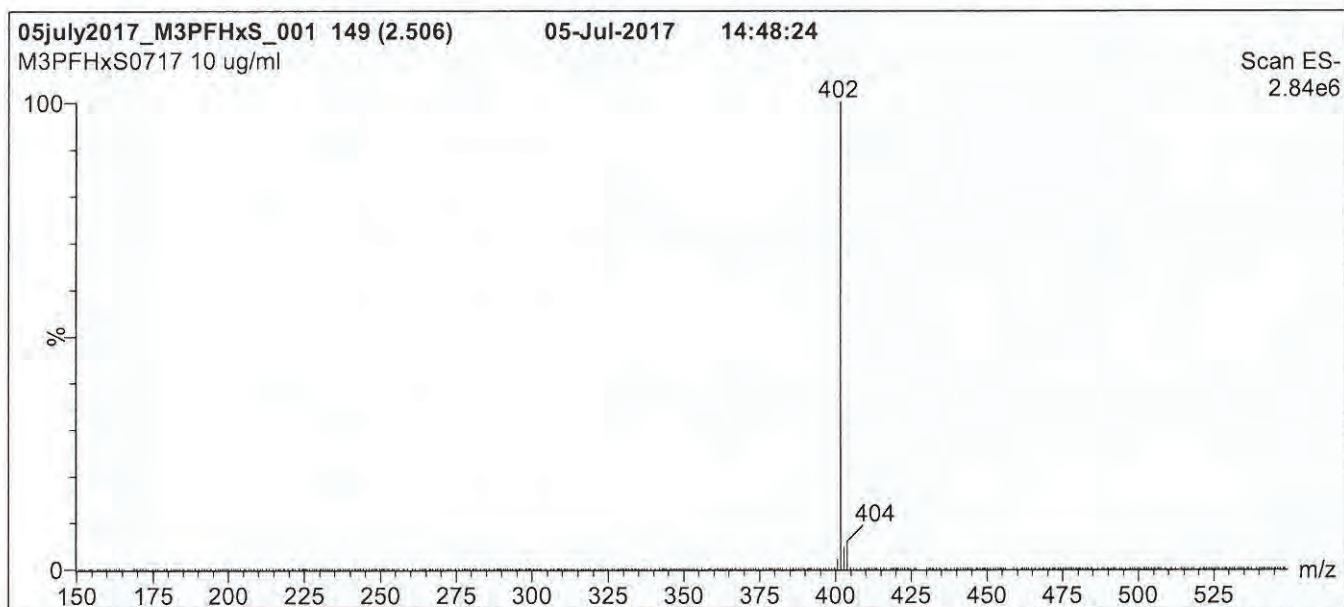
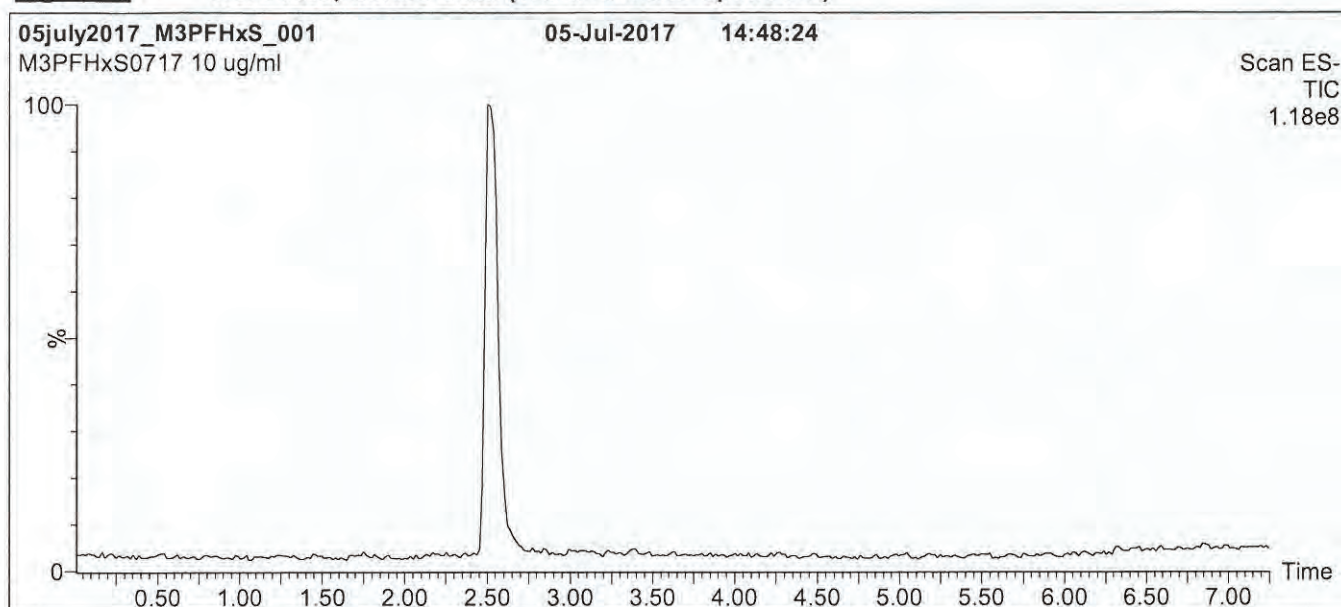
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17J1022

Figure 1: M3PFHxS; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)

Ramp to 90% organic over 7.5 min and hold for
1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (150 - 850 amu)

Source: Electrospray (negative)

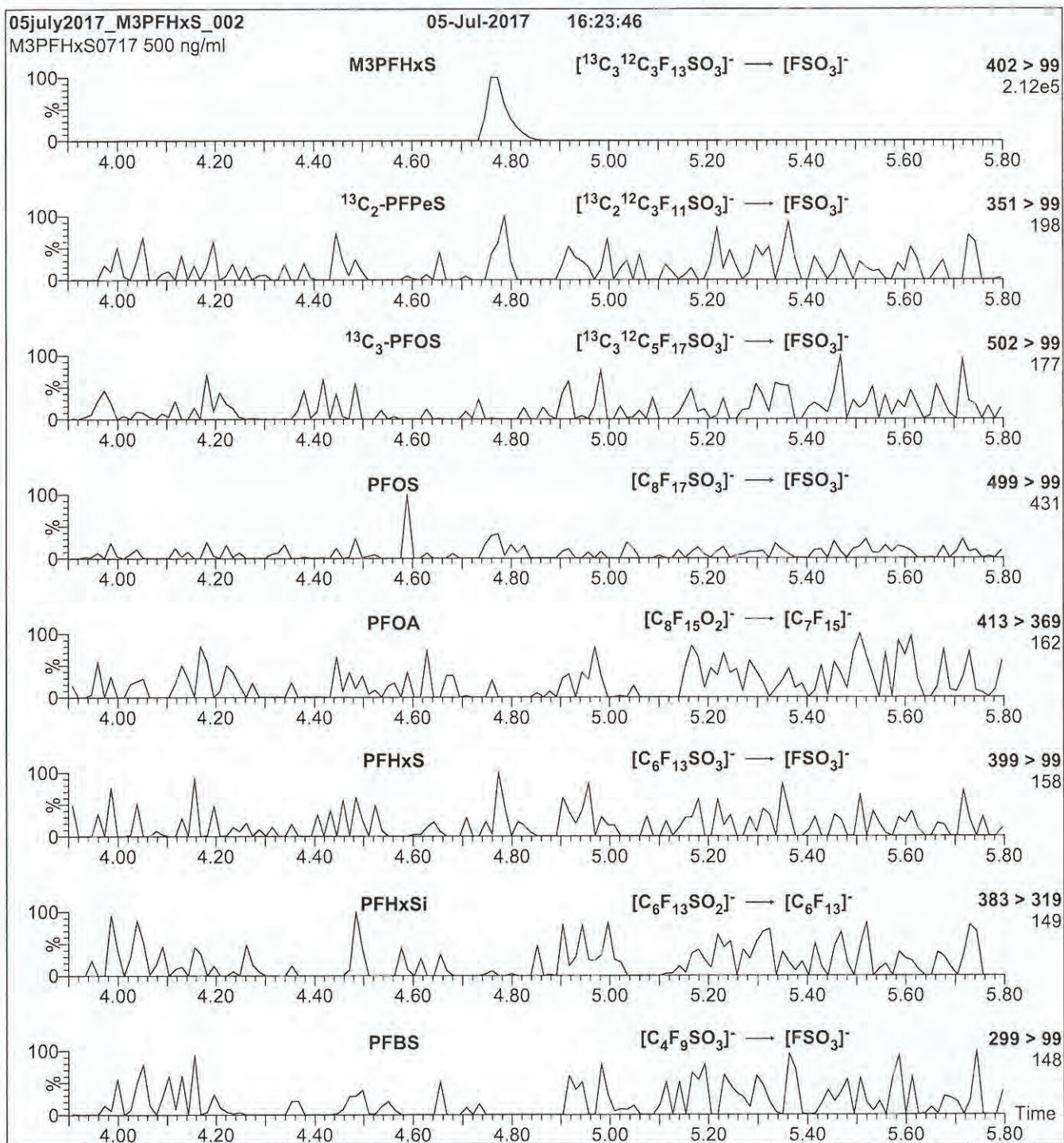
Capillary Voltage (kV) = 3.00

Cone Voltage (V) = 50.00

Cone Gas Flow (l/hr) = 60

Desolvation Gas Flow (l/hr) = 750

1751022

Figure 2: M3PFHxS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml M3PFHxS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.43e-3
Collision Energy (eV) = 30

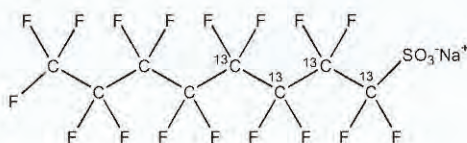
17J1023



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFOS **LOT NUMBER:** MPFOS0517
COMPOUND: Sodium perfluoro-1-[1,2,3,4-¹³C₄]octanesulfonate
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₄¹²C₄F₁₇SO₃Na **MOLECULAR WEIGHT:** 526.08
CONCENTRATION: 50.0 ± 2.5 µg/ml (Na salt) **SOLVENT(S):** Methanol
 47.8 ± 2.4 µg/ml (MPFOS anion)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 05/19/2017 (1,2,3,4-¹³C₄)
EXPIRY DATE: (mm/dd/yyyy) 05/19/2022
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~ 0.8% Sodium perfluoro-1-[1,2,3-¹³C₃]heptanesulfonate.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 05/30/2017
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17J1023

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

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where x is expressed as a relative standard uncertainty of the individual parameter.

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TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

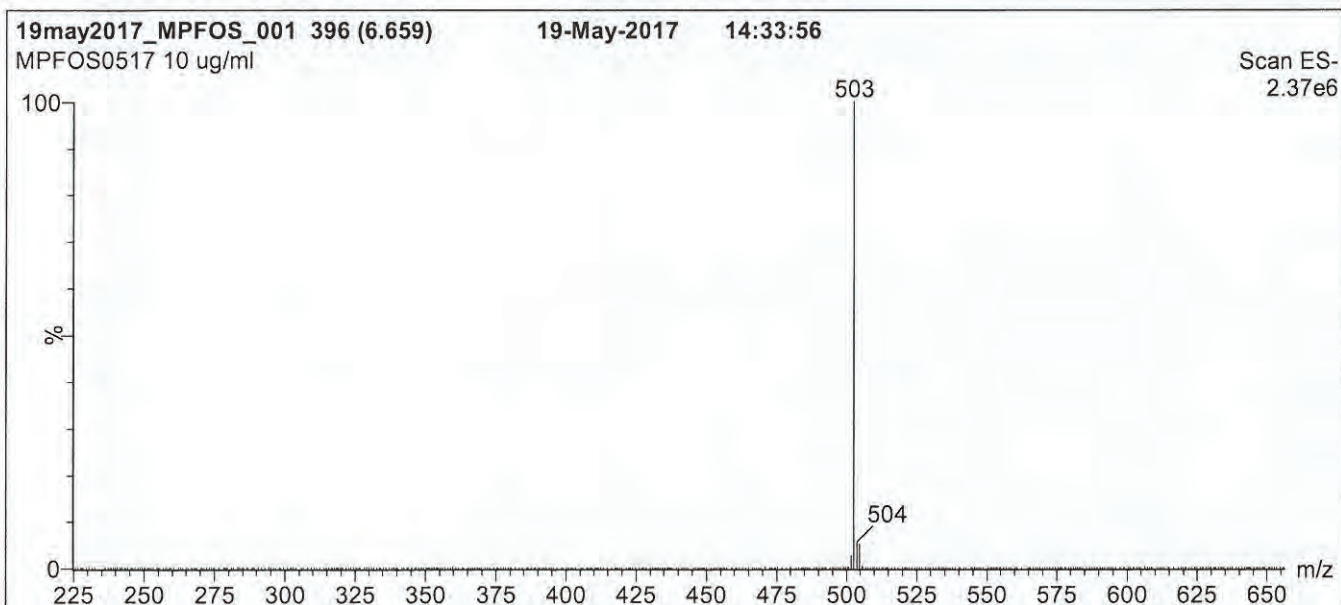
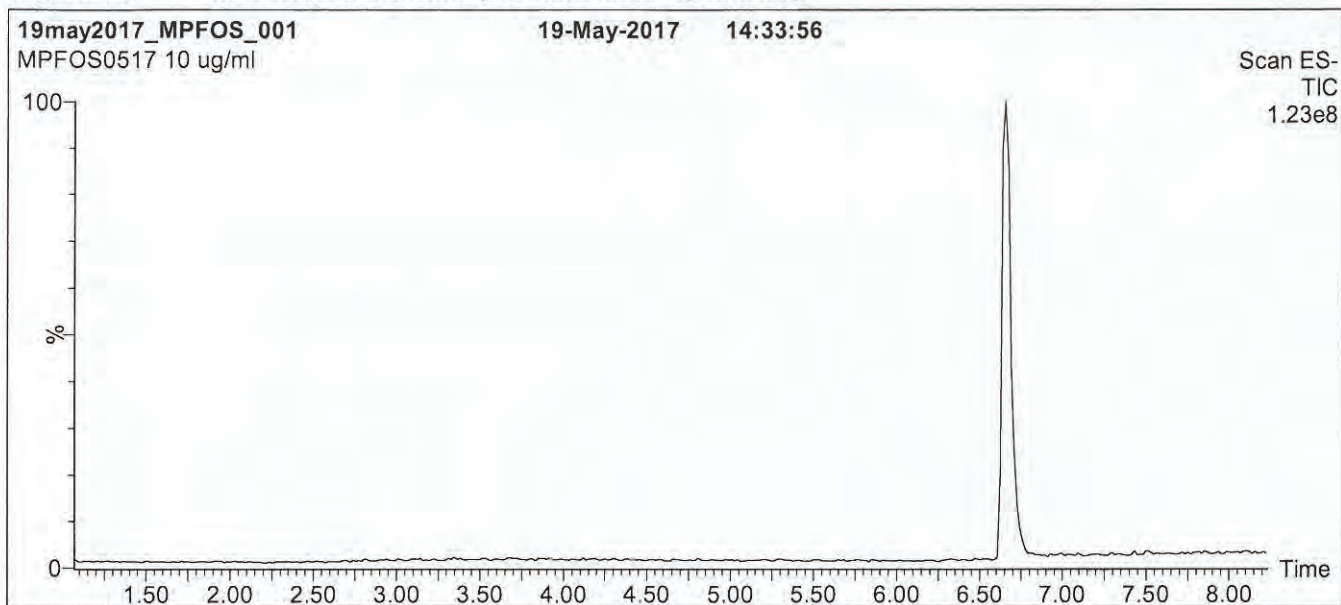
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17J1023

Figure 1: MPFOS; LC/MS Data (TIC and Mass Spectrum)



Conditions for Figure 1:

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for 1 min
before returning to initial conditions in 0.5 min.
Time: 10 min

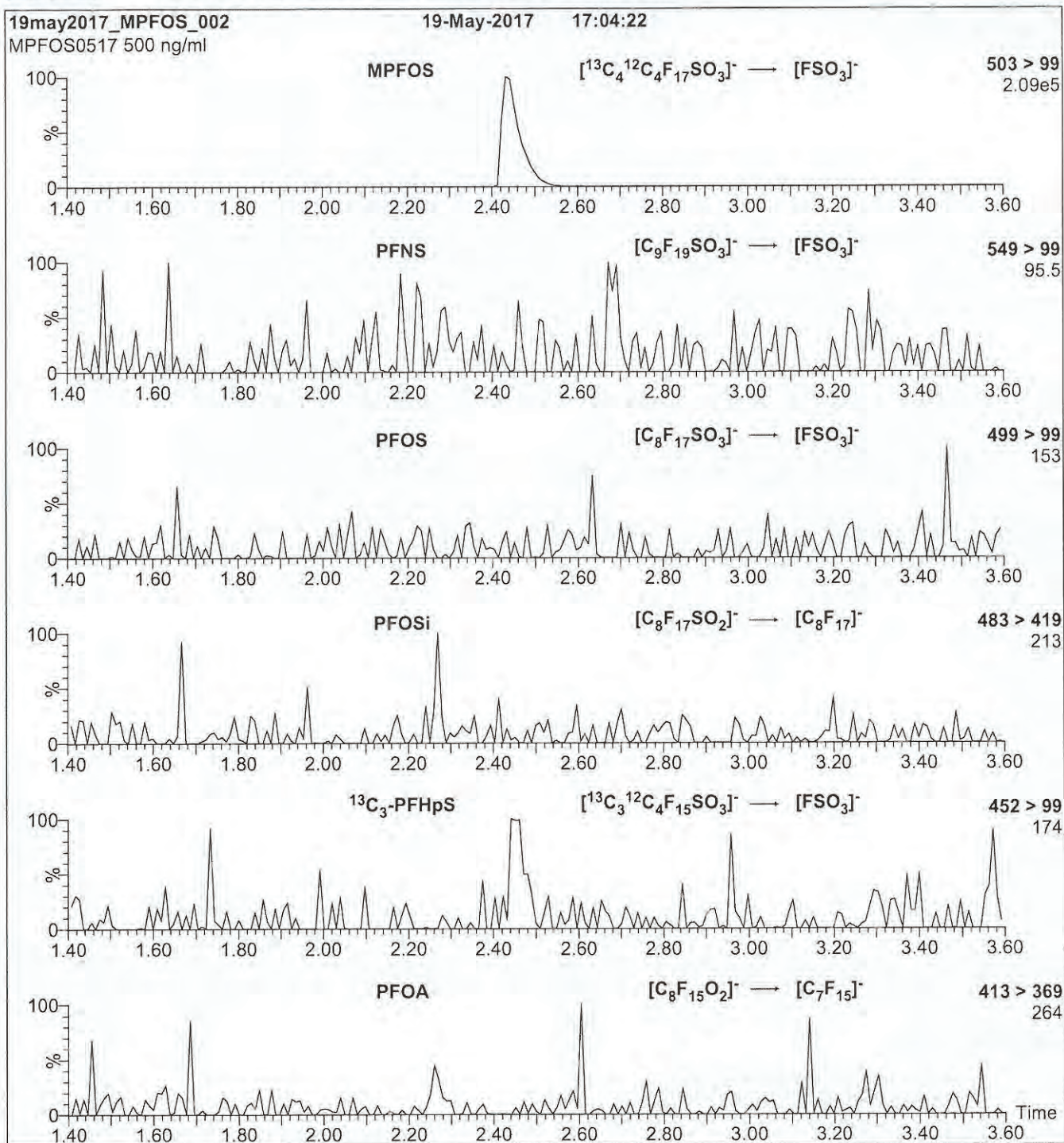
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

1751023

Figure 2: MPFOS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml MPFOS)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = $3.31\text{e-}3$
Collision Energy (eV) = 40

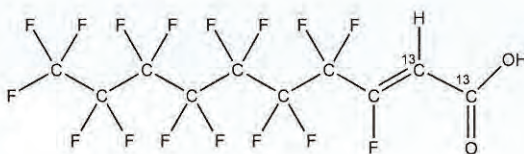
17J1024



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MFOUEA **LOT NUMBER:** MFOUEA0716
COMPOUND: 2H-Perfluoro-[1,2-¹³C₂]-2-decenoic acid
STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₂¹²C₈H₂F₁₈O₂ **MOLECULAR WEIGHT:** 460.08
CONCENTRATION: 50 ± 2.5 µg/ml **SOLVENT(S):** Anhydrous Isopropanol
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 08/02/2016 (1,2-¹³C₂)
EXPIRY DATE: (mm/dd/yyyy) 08/02/2018
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

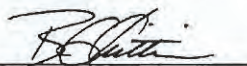
Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Dilution of this standard in methanol may lead to the formation of 2H-3-methoxy-perfluoro-[1,2-¹³C₂]-2-decenoic acid. This reaction can be catalyzed by the presence of acid or base. All dilutions should be routinely checked for degradation.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By:


 B.G. Chittim

Date: 08/19/2016
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

17J1024

INTENDED USE:

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HAZARDS:

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SYNTHESIS / CHARACTERIZATION:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

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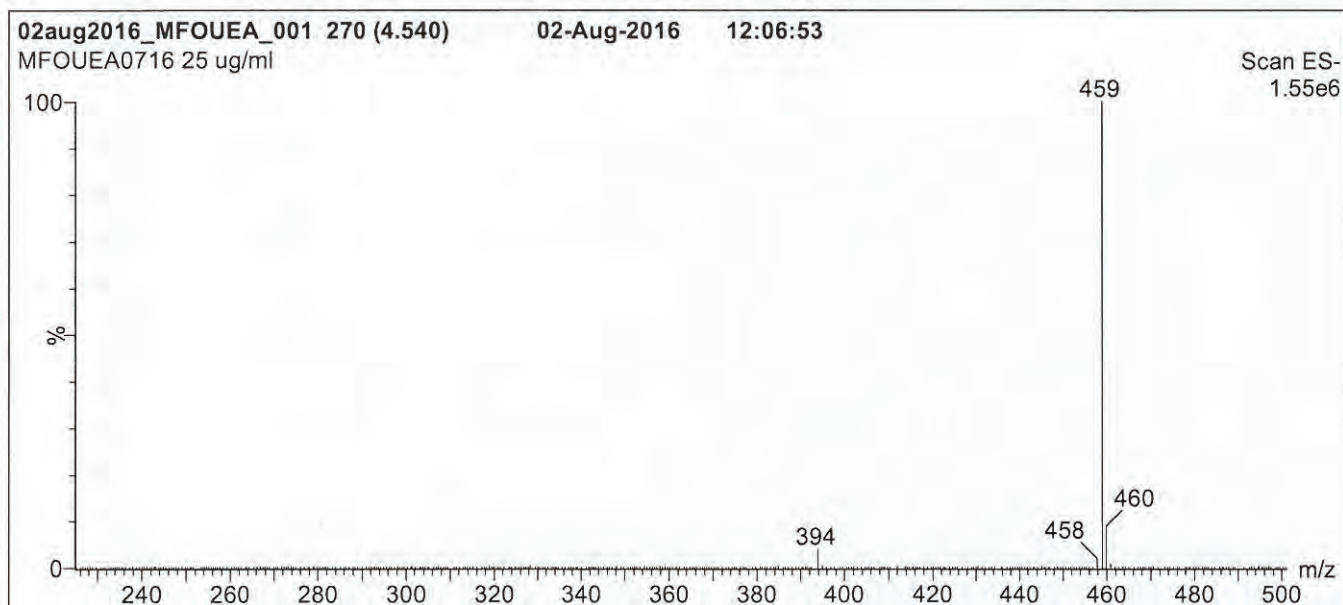
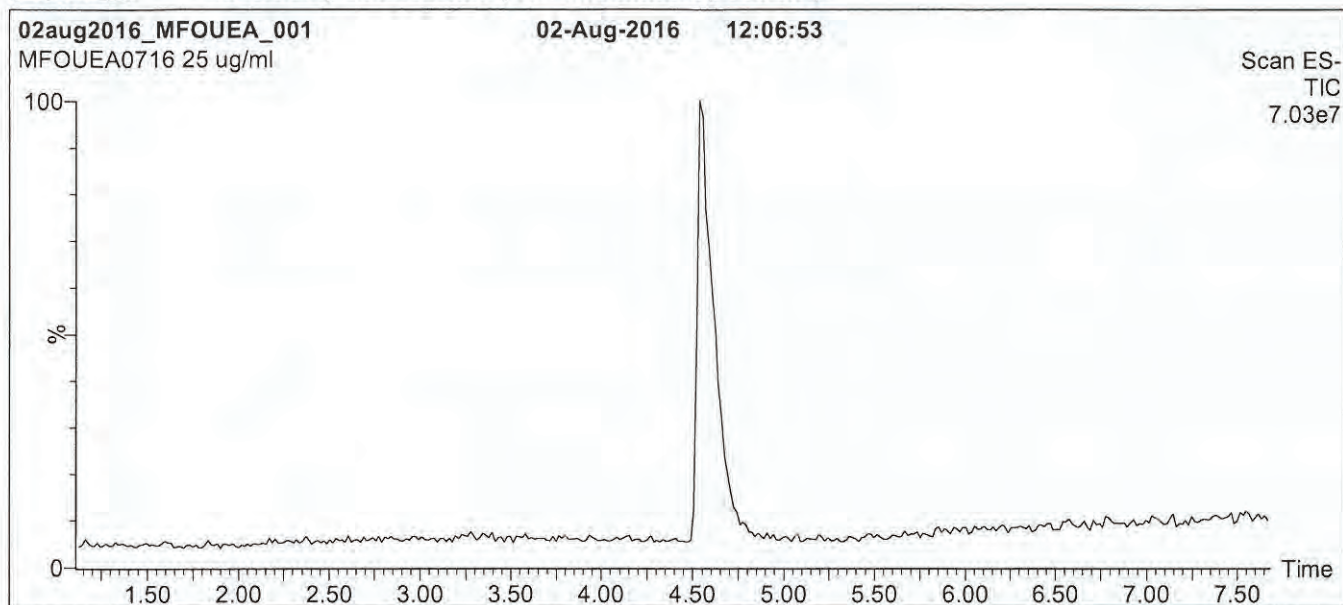
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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17J1024

Figure 1: MFOUEA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

LC: Waters Acquity Ultra Performance LC
MS: Micromass Quattro *micro* API MS

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold
for 1.5 min before returning to initial conditions in 0.5 min.
Time: 10 min

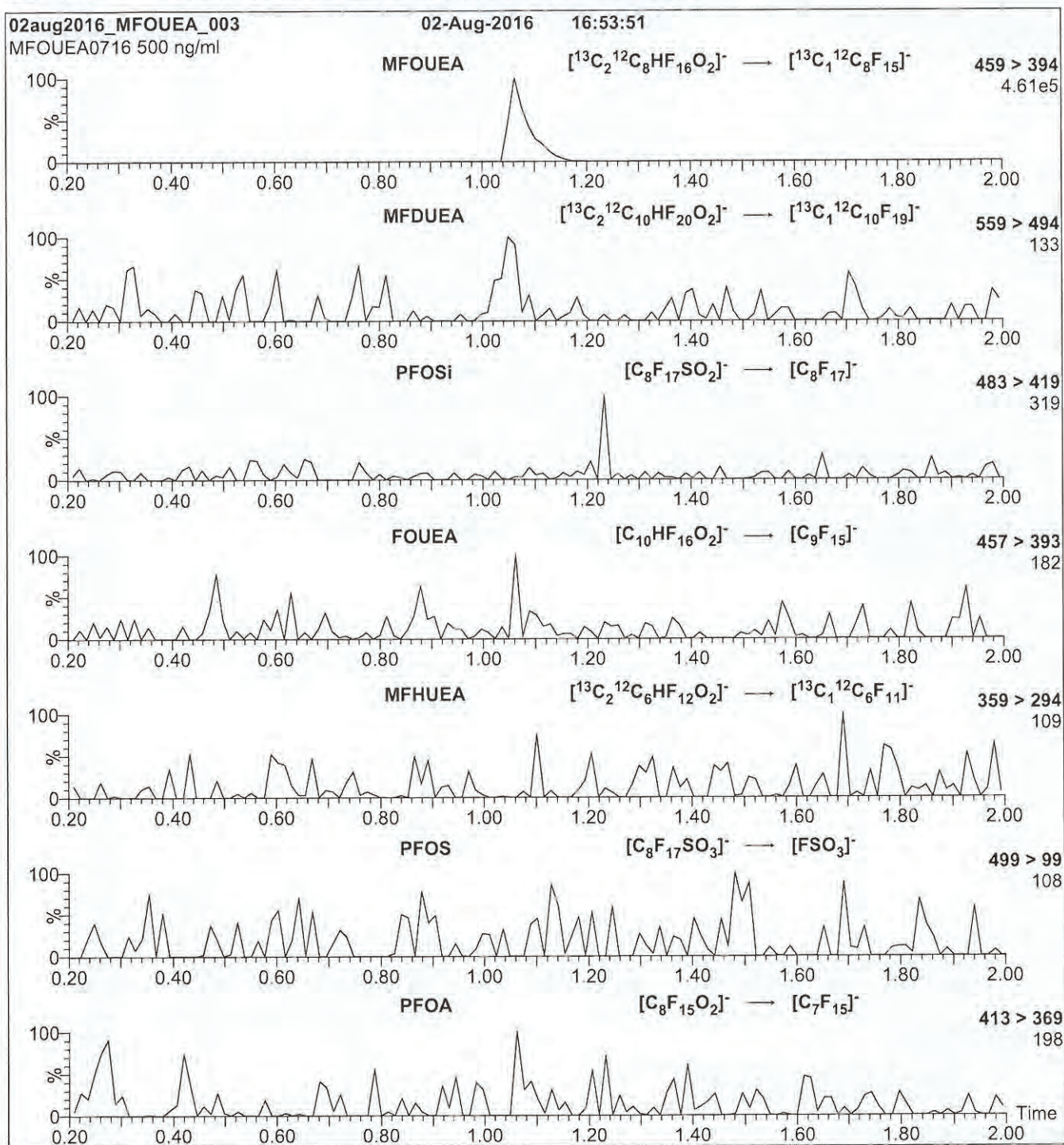
Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 14.00
Cone Gas Flow (l/hr) = 60
Desolvation Gas Flow (l/hr) = 750

17J1024

Figure 2: MFOUEA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: Direct loop injection
10 μl (500 ng/ml MFOUEA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 $\mu\text{l}/\text{min}$

MS Parameters

Collision Gas (mbar) = 3.39e-3
Collision Energy (eV) = 21