



**Groundwater Sample Results,
Level 2 Laboratory Report, Level 4 Laboratory Report,
Electronic Data Deliverable, Data Validation Report,
and the Sample Location Report, SDG 1700311**

*Naval Air Station Oceana
Virginia Beach, Virginia*

July 2019

March 23, 2017

Vista Work Order No. 1700311

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

Dear Ms. Hill,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on March 09, 2017. This sample set was analyzed on a rush turn-around time, under your Project Name 'Fentress Phase II PFC Investigation'.

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

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

Sincerely,



Martha Maier
Laboratory Director



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

Vista Work Order No. 1700311

Case Narrative

Sample Condition on Receipt:

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

Analytical Notes:

Modified EPA Method 537

The samples contained particulate and were centrifuged prior to extraction. The aqueous samples were extracted and analyzed for a selected list of 6 PFAS using Modified EPA Method 537.

Holding Times

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

Quality Control

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

Samples "OF-SOW-091D-0317", "OF-SOW-091DP-0317" and "OF-SOW-091M-0317" had high levels of interferences, which resulted in elevated internal standard recoveries. Additional dilutions were run and the quantification of the native compounds was consistent with the reported values. The labeled standard recoveries outside the acceptance criteria are listed in the table below.

As requested, an MS/MSD was performed on sample "OF-SOW-091L-0317".

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1700311-02	OF-SOW-091D-0317	Modified EPA Method 537	13C3-PFBS	H	186
1700311-02	OF-SOW-091D-0317	Modified EPA Method 537	13C4-PFHpA	H	175
1700311-03	OF-SOW-091DP-0317	Modified EPA Method 537	13C3-PFBS	H	192
1700311-03	OF-SOW-091DP-0317	Modified EPA Method 537	13C4-PFHpA	H	173
1700311-03	OF-SOW-091DP-0317	Modified EPA Method 537	13C8-PFOS	H	299
1700311-06	OF-SOW-091M-0317	Modified EPA Method 537	13C3-PFBS	H	178
1700311-06	OF-SOW-091M-0317	Modified EPA Method 537	13C4-PFHpA	H	163
1700311-06	OF-SOW-091M-0317	Modified EPA Method 537	13C8-PFOS	H	165

H = Recovery was outside laboratory acceptance criteria.

TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	3
Sample Inventory.....	4
Analytical Results.....	5
Qualifiers.....	18
Certifications.....	19
Sample Receipt.....	22

Sample Inventory Report

Vista Sample ID	Client Sample ID		Sampled	Received	Components/Containers
1700311-01	OF-SOW-091A-0317		08-Mar-17 10:05	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-02	OF-SOW-091D-0317		08-Mar-17 11:10	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-03	OF-SOW-091DP-0317		08-Mar-17 11:15	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-04	OF-EB030817		08-Mar-17 11:45	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-05	OF-SOW-091K-0317		08-Mar-17 11:55	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-06	OF-SOW-091M-0317		08-Mar-17 12:35	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-07	OF-FB030817		08-Mar-17 13:00	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-08	OF-SOW-091L-0317	MS/MSD	08-Mar-17 13:20	09-Mar-17 09:23	HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
1700311-09	OF14-GW05-0317		08-Mar-17 15:10	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL

ANALYTICAL RESULTS

Sample ID: Method Blank						Modified EPA Method 537			
Matrix: Aqueous		QC Batch: B7C0050		Lab Sample: B7C0050-BLK1		Date Analyzed: 16-Mar-17 14:48 Column: BEH C18			
Sample Size: 0.125 L		Date Extracted: 10-Mar-2017 9:14							
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	4.00	8.00		IS 13C3-PFBS	117	60 - 150	
PFHpA	ND	0.591	2.00	8.00		IS 13C4-PFHpA	116	60 - 150	
PFHxS	ND	0.947	2.00	8.00		IS 18O2-PFHxS	105	60 - 150	
PFOA	ND	0.651	2.00	8.00		IS 13C2-PFOA	98.1	60 - 150	
PFOS	ND	0.807	0.900	8.00		IS 13C8-PFOS	118	60 - 150	
PFNA	ND	0.810	2.00	8.00		IS 13C5-PFNA	98.9	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OPR**Modified EPA Method 537**Matrix: Aqueous
Sample Size: 0.125 LQC Batch: B7C0050
Date Extracted: 10-Mar-2017 9:14Lab Sample: B7C0050-BS1
Date Analyzed: 16-Mar-17 13:01 Column: BEH C18

Analyte	Amt Found (ng/L)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
PFBS	77.6	80.0	97.0	60 - 130	IS 13C3-PFBS	146	60 - 150
PFHpA	77.8	80.0	97.2	70 - 130	IS 13C4-PFHpA	120	60 - 150
PFHxS	77.6	80.0	97.0	70 - 130	IS 18O2-PFHxS	109	60 - 150
PFOA	77.3	80.0	96.6	70 - 130	IS 13C2-PFOA	103	60 - 150
PFOS	77.9	80.0	97.4	70 - 130	IS 13C8-PFOS	106	60 - 150
PFNA	73.8	80.0	92.3	50 - 130	IS 13C5-PFNA	123	50 - 150

LCL-UCL - Lower control limit - upper control limit

Sample ID: OF-SOW-091A-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-01	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.119 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 10:05			Date Analyzed:	17-Mar-17 17:53	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.88	4.20	8.42		IS 13C3-PFBS	107	60 - 150	
PFHpA	ND	0.622	2.10	8.42		IS 13C4-PFHpA	96.8	60 - 150	
PFHxS	4.10	0.997	2.10	8.42	J	IS 18O2-PFHxS	96.7	60 - 150	
PFOA	3.79	0.685	2.10	8.42	J	IS 13C2-PFOA	108	60 - 150	
PFOS	4.18	0.849	0.945	8.42	J	IS 13C8-PFOS	111	60 - 150	
PFNA	ND	0.852	2.10	8.42		IS 13C5-PFNA	112	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091D-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-02	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.123 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 11:10			Date Analyzed:	17-Mar-17 17:15	Column:	BEH C18
Location:					17-Mar-17 18:06	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	91.4	1.81	4.07	8.11		IS 13C3-PFBS	186	60 - 150	H
PFHpA	47.5	0.599	2.03	8.11		IS 13C4-PFHpA	175	60 - 150	H
PFHxS	2260	4.80	10.2	40.6	D	IS 18O2-PFHxS	97.8	60 - 150	D
PFOA	701	0.660	2.03	8.11		IS 13C2-PFOA	102	60 - 150	
PFOS	1940	4.09	4.57	40.6	D	IS 13C8-PFOS	108	60 - 150	D
PFNA	4.77	0.821	2.03	8.11	J	IS 13C5-PFNA	110	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091DP-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-03	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.124 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 11:15			Date Analyzed:	17-Mar-17 18:18	Column:	BEH C18
Location:					20-Mar-17 15:22	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	83.1	1.80	4.03	8.05		IS 13C3-PFBS	192	60 - 150	H
PFHpA	48.1	0.595	2.02	8.05		IS 13C4-PFHpA	173	60 - 150	H
PFHxS	2300	9.53	20.2	80.5	D	IS 18O2-PFHxS	114	60 - 150	D
PFOA	740	0.655	2.02	8.05		IS 13C2-PFOA	97.2	60 - 150	
PFOS	1650	8.12	9.07	80.5	D	IS 13C8-PFOS	299	60 - 150	D, H
PFNA	7.09	0.815	2.02	8.05	J	IS 13C5-PFNA	99.7	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-EB030817**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-04	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.122 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 11:45			Date Analyzed:	17-Mar-17 18:31	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.83	4.10	8.19		IS 13C3-PFBS	118	60 - 150	
PFHpA	ND	0.605	2.05	8.19		IS 13C4-PFHpA	112	60 - 150	
PFHxS	ND	0.969	2.05	8.19		IS 18O2-PFHxS	108	60 - 150	
PFOA	ND	0.666	2.05	8.19		IS 13C2-PFOA	106	60 - 150	
PFOS	1.54	0.826	0.922	8.19	J	IS 13C8-PFOS	113	60 - 150	
PFNA	ND	0.829	2.05	8.19		IS 13C5-PFNA	110	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091K-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-05	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.121 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 11:55			Date Analyzed:	17-Mar-17 19:21	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.85	4.13	8.26		IS 13C3-PFBS	118	60 - 150	
PFHpA	ND	0.610	2.07	8.26		IS 13C4-PFHpA	106	60 - 150	
PFHxS	7.48	0.977	2.07	8.26	J	IS 18O2-PFHxS	120	60 - 150	
PFOA	2.53	0.672	2.07	8.26	J	IS 13C2-PFOA	109	60 - 150	
PFOS	9.98	0.833	0.930	8.26		IS 13C8-PFOS	124	60 - 150	
PFNA	ND	0.836	2.07	8.26		IS 13C5-PFNA	116	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091M-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-06	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.128 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 12:35			Date Analyzed:	17-Mar-17 19:34	Column:	BEH C18
Location:					20-Mar-17 15:35	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	48.2	1.75	3.91	7.82		IS 13C3-PFBS	178	60 - 150	H
PFHpA	33.1	0.578	1.95	7.82		IS 13C4-PFHpA	163	60 - 150	H
PFHxS	1470	9.26	19.5	78.2	D	IS 18O2-PFHxS	113	60 - 150	D
PFOA	956	0.637	1.95	7.82		IS 13C2-PFOA	108	60 - 150	
PFOS	2350	7.89	8.79	78.2	D	IS 13C8-PFOS	165	60 - 150	D, H
PFNA	7.13	0.792	1.95	7.82	J	IS 13C5-PFNA	123	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-FB030817**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-07	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.125 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 13:00			Date Analyzed:	17-Mar-17 19:46	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	4.00	7.98		IS 13C3-PFBS	133	60 - 150	
PFHpA	ND	0.589	2.00	7.98		IS 13C4-PFHpA	125	60 - 150	
PFHxS	ND	0.945	2.00	7.98		IS 18O2-PFHxS	120	60 - 150	
PFOA	ND	0.649	2.00	7.98		IS 13C2-PFOA	109	60 - 150	
PFOS	1.67	0.805	0.900	7.98	J	IS 13C8-PFOS	110	60 - 150	
PFNA	ND	0.808	2.00	7.98		IS 13C5-PFNA	111	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091L-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-08	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.119 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 13:20			Date Analyzed:	17-Mar-17 19:59	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.87	4.20	8.37		IS 13C3-PFBS	115	60 - 150	
PFHpA	ND	0.618	2.10	8.37		IS 13C4-PFHpA	109	60 - 150	
PFHxS	1.28	0.991	2.10	8.37	J	IS 18O2-PFHxS	108	60 - 150	
PFOA	ND	0.681	2.10	8.37		IS 13C2-PFOA	110	60 - 150	
PFOS	2.43	0.844	0.945	8.37	J	IS 13C8-PFOS	106	60 - 150	
PFNA	ND	0.847	2.10	8.37		IS 13C5-PFNA	106	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Matrix Spike Results

Modified EPA Method 537

Source Client ID: OF-SOW-091L-0317	QC Batch: B7C0050	Lab Sample: B7C0050-MS1/B7C0050-MSD1
Source LabNumber: 1700311-08	Date Extracted: 10-Mar-2017 9:14	Date Analyzed: 17-Mar-17 22:17 Column: BEH C18
Matrix: Aqueous		17-Mar-17 22:29 Column: BEH C18
Sample Size: 0.121/0.119 L		

Analyte	Spike-MS (ng/L)	MS %R	MS Qual.	Spike-MSD (ng/L)	MSD %R	MSD RPD	MSD Qual.	%R Limit	%RPD Limit	Labeled Standard	MS %R	MS Qualifiers	MSD %R	MS Qual.
PFBS	82.9	98.8		83.7	91.1	8.11		60 - 130	25	IS 13C3-PFBS	121		116	
PFHpA	82.9	99.1		83.7	101	1.90		70 - 130	25	IS 13C4-PFHpA	113		104	
PFHxS	82.9	94.9		83.7	92.8	2.24		70 - 130	25	IS 18O2-PFHxS	115		112	
PFOA	82.9	94.7		83.7	101	6.44		70 - 130	25	IS 13C2-PFOA	111		117	
PFOS	82.9	88.5		83.7	81.3	8.48		70 - 130	25	IS 13C8-PFOS	108		110	
PFNA	82.9	107		83.7	107	0		50 - 130	25	IS 13C5-PFNA	105		104	

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

Sample ID: OF14-GW05-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-09	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.122 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 15:10			Date Analyzed:	17-Mar-17 20:11	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.83	4.10	8.18		IS 13C3-PFBS	120	60 - 150	
PFHpA	ND	0.604	2.05	8.18		IS 13C4-PFHpA	114	60 - 150	
PFHxS	7.76	0.968	2.05	8.18	J	IS 18O2-PFHxS	118	60 - 150	
PFOA	2.55	0.666	2.05	8.18	J	IS 13C2-PFOA	101	60 - 150	
PFOS	ND	0.825	0.922	8.18		IS 13C8-PFOS	100	60 - 150	
PFNA	ND	0.828	2.05	8.18		IS 13C5-PFNA	110	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

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

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

CERTIFICATIONS

Accrediting Authority	Certificate Number
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2014022
Nevada Division of Environmental Protection	CA004132015-1
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-004
Pennsylvania Department of Environmental Protection	012
South Carolina Department of Health	87002001
Texas Commission on Environmental Quality	T104704189-15-6
Virginia Department of General Services	7923
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

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

NELAP Accredited Test Methods

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

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

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

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

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

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

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

SHIP TO: 621 Mainstream Drive, Suite 270 ♦ Nashville, TN 37228 ♦ 877-345-1113 ♦ (fax) 866-417-0548

32399

Send Results to:		Send Invoice to:		Analysis Requirements:								Lab Use Only:			
Name <u>Tiffany Hill</u>		Name _____		1700311, 0.7°C								VOA Headspace Y N NA			
Company <u>CH2M Hill</u>		Company _____										Field Filtered Y N NA			
Address <u>5701 Cleveland St., Ste. 200</u>		Address _____										Correct Containers Y N NA			
City <u>Virginia Beach,</u>		City _____										Discrepancies Y N NA			
State, Zip <u>Virginia 23462</u>		State, Zip _____		Cust. Seals Intact Y N NA											
Phone <u>541-768-3109</u>		Phone _____		Containers Intact Y N NA											
Fax _____		Fax _____		Airbill #: _____											
E-mail <u>tiffany.hill@ch2m.com</u>		E-mail _____		CAR #: _____											
Project No./Name:		Sampler's (Signature):		PFC5											
<u>SLCIB Water Samples at Ferris</u>		<u>[Signature]</u>													
Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix									Comments	No. of Bottles	Lab Use Only Containers/Pres.	
	3/8/17 1005	OF-SOW-091A-0317	AQ	X									2		
	3/8/17 1110	OF-SOW-091D-0317	AQ										2		
	3/8/17 1115	OF-SOW-091DP-0317	AQ										2		
	3/8/17 1145	OF-EB030817	AQ										2		
	3/8/17 1155	OF-SOW-091K-0317	AQ										2		
	3/8/17 1235	OF-SOW-091M-0317	AQ										2		
	3/8/17 1300	OF-FB030817	AQ										2		
	3/8/17 1320	OF-SOW-091L-0317	AQ	↓									2		
	3/8/17	OF-SOW-091L-0317 CC 3/8/17			—————→										
	3/8/17 1510	OF14-6W05-0317	AQ	X									2		
	3/8/17 1320	OF-SOW-091L-0317-MS	AQ	X									2		
	3/8/17 1320	OF-SOW-091L-0317-SD	AQ	X									2		
Sample Kit Prep'd by: (Signature)		Date/Time	Received By: (Signature)		REMARKS:								Details:		
<u>[Signature]</u>		3/8/17 1650	<u>[Signature]</u> 3/9/17 0927										Page <u>1</u> of <u>1</u>		
Relinquished by: (Signature)		Date/Time	Received By: (Signature)										Cooler No. <u>1</u> of <u>1</u>		
Relinquished by: (Signature)		Date/Time	Received By: (Signature)										Date Shipped <u>3/8/17</u>		
Received for Laboratory by: (Signature)		Date/Time	Temperature										Shipped By <u>CC</u>		
													Turnaround _____		

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

SAMPLE LOG-IN CHECKLIST



Vista Project #: 1700311 TAT 14

Samples Arrival:	Date/Time <u>03/09/17 0923</u>	Initials: <u>WJS</u>	Location: <u>WR-2</u> Shelf/Rack: <u>N/2</u>
Logged In:	Date/Time <u>03/09/17 1118</u>	Initials: <u>SR JBP</u>	Location: <u>WR-2</u> Shelf/Rack: <u>F6</u>
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac
	<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
	<input type="checkbox"/> None		
Temp °C: <u>0.4</u> (uncorrected)	Time: <u>0926</u>	Thermometer ID: <u>IR-1 WJS 3/9/17</u>	
Temp °C: <u>0.7</u> (corrected)	Probe used: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Thermometer ID: <u>DT-3</u>	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill	✓		
Trk # <u>8088 4437 0340</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:	Yes	<input checked="" type="radio"/> No	NA
Shipping Container	<input checked="" type="radio"/> Vista	<input type="radio"/> Client	<input checked="" type="radio"/> Retain
	Return	Dispose	

Comments:

March 23, 2017

Vista Work Order No. 1700311

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

Dear Ms. Hill,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on March 09, 2017. This sample set was analyzed on a rush turn-around time, under your Project Name 'Fentress Phase II PFC Investigation'.

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

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

Sincerely,



Martha Maier
Laboratory Director



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

Vista Work Order No. 1700311

Case Narrative

Sample Condition on Receipt:

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

Analytical Notes:

Modified EPA Method 537

The samples contained particulate and were centrifuged prior to extraction. The aqueous samples were extracted and analyzed for a selected list of 6 PFAS using Modified EPA Method 537.

Holding Times

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

Quality Control

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

Samples "OF-SOW-091D-0317", "OF-SOW-091DP-0317" and "OF-SOW-091M-0317" had high levels of interferences, which resulted in elevated internal standard recoveries. Additional dilutions were run and the quantification of the native compounds was consistent with the reported values. The labeled standard recoveries outside the acceptance criteria are listed in the table below.

As requested, an MS/MSD was performed on sample "OF-SOW-091L-0317".

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1700311-02	OF-SOW-091D-0317	Modified EPA Method 537	13C3-PFBS	H	186
1700311-02	OF-SOW-091D-0317	Modified EPA Method 537	13C4-PFHpA	H	175
1700311-03	OF-SOW-091DP-0317	Modified EPA Method 537	13C3-PFBS	H	192
1700311-03	OF-SOW-091DP-0317	Modified EPA Method 537	13C4-PFHpA	H	173
1700311-03	OF-SOW-091DP-0317	Modified EPA Method 537	13C8-PFOS	H	299
1700311-06	OF-SOW-091M-0317	Modified EPA Method 537	13C3-PFBS	H	178
1700311-06	OF-SOW-091M-0317	Modified EPA Method 537	13C4-PFHpA	H	163
1700311-06	OF-SOW-091M-0317	Modified EPA Method 537	13C8-PFOS	H	165

H = Recovery was outside laboratory acceptance criteria.

TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	3
Sample Inventory.....	4
Analytical Results.....	5
Qualifiers.....	18
Certifications.....	19
Sample Receipt.....	22
Extraction Information.....	24
Sample Data - Modified EPA Method 537.....	28
Continuing Calibration.....	149
Initial Calibration.....	214

Sample Inventory Report

Vista Sample ID	Client Sample ID		Sampled	Received	Components/Containers
1700311-01	OF-SOW-091A-0317		08-Mar-17 10:05	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-02	OF-SOW-091D-0317		08-Mar-17 11:10	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-03	OF-SOW-091DP-0317		08-Mar-17 11:15	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-04	OF-EB030817		08-Mar-17 11:45	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-05	OF-SOW-091K-0317		08-Mar-17 11:55	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-06	OF-SOW-091M-0317		08-Mar-17 12:35	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-07	OF-FB030817		08-Mar-17 13:00	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL
1700311-08	OF-SOW-091L-0317	MS/MSD	08-Mar-17 13:20	09-Mar-17 09:23	HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
		MS/MSD			HDPE Bottle, 125 mL
1700311-09	OF14-GW05-0317		08-Mar-17 15:10	09-Mar-17 09:23	HDPE Bottle, 125 mL HDPE Bottle, 125 mL

ANALYTICAL RESULTS

Sample ID: Method Blank						Modified EPA Method 537			
Matrix: Aqueous		QC Batch: B7C0050		Lab Sample: B7C0050-BLK1					
Sample Size: 0.125 L		Date Extracted: 10-Mar-2017 9:14		Date Analyzed: 16-Mar-17 14:48 Column: BEH C18					
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	4.00	8.00		IS 13C3-PFBS	117	60 - 150	
PFHpA	ND	0.591	2.00	8.00		IS 13C4-PFHpA	116	60 - 150	
PFHxS	ND	0.947	2.00	8.00		IS 18O2-PFHxS	105	60 - 150	
PFOA	ND	0.651	2.00	8.00		IS 13C2-PFOA	98.1	60 - 150	
PFOS	ND	0.807	0.900	8.00		IS 13C8-PFOS	118	60 - 150	
PFNA	ND	0.810	2.00	8.00		IS 13C5-PFNA	98.9	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OPR**Modified EPA Method 537**Matrix: Aqueous
Sample Size: 0.125 LQC Batch: B7C0050
Date Extracted: 10-Mar-2017 9:14Lab Sample: B7C0050-BS1
Date Analyzed: 16-Mar-17 13:01 Column: BEH C18

Analyte	Amt Found (ng/L)	Spike Amt	%R	Limits	Labeled Standard	%R	LCL-UCL
PFBS	77.6	80.0	97.0	60 - 130	IS 13C3-PFBS	146	60 - 150
PFHpA	77.8	80.0	97.2	70 - 130	IS 13C4-PFHpA	120	60 - 150
PFHxS	77.6	80.0	97.0	70 - 130	IS 18O2-PFHxS	109	60 - 150
PFOA	77.3	80.0	96.6	70 - 130	IS 13C2-PFOA	103	60 - 150
PFOS	77.9	80.0	97.4	70 - 130	IS 13C8-PFOS	106	60 - 150
PFNA	73.8	80.0	92.3	50 - 130	IS 13C5-PFNA	123	50 - 150

LCL-UCL - Lower control limit - upper control limit

Sample ID: OF-SOW-091A-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-01	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.119 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 10:05			Date Analyzed:	17-Mar-17 17:53	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.88	4.20	8.42		IS 13C3-PFBS	107	60 - 150	
PFHpA	ND	0.622	2.10	8.42		IS 13C4-PFHpA	96.8	60 - 150	
PFHxS	4.10	0.997	2.10	8.42	J	IS 18O2-PFHxS	96.7	60 - 150	
PFOA	3.79	0.685	2.10	8.42	J	IS 13C2-PFOA	108	60 - 150	
PFOS	4.18	0.849	0.945	8.42	J	IS 13C8-PFOS	111	60 - 150	
PFNA	ND	0.852	2.10	8.42		IS 13C5-PFNA	112	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091D-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-02	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.123 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 11:10			Date Analyzed:	17-Mar-17 17:15	Column:	BEH C18
Location:					17-Mar-17 18:06	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	91.4	1.81	4.07	8.11		IS 13C3-PFBS	186	60 - 150	H
PFHpA	47.5	0.599	2.03	8.11		IS 13C4-PFHpA	175	60 - 150	H
PFHxS	2260	4.80	10.2	40.6	D	IS 18O2-PFHxS	97.8	60 - 150	D
PFOA	701	0.660	2.03	8.11		IS 13C2-PFOA	102	60 - 150	
PFOS	1940	4.09	4.57	40.6	D	IS 13C8-PFOS	108	60 - 150	D
PFNA	4.77	0.821	2.03	8.11	J	IS 13C5-PFNA	110	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091DP-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-03	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.124 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 11:15			Date Analyzed:	17-Mar-17 18:18	Column:	BEH C18
Location:					20-Mar-17 15:22	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	83.1	1.80	4.03	8.05		IS 13C3-PFBS	192	60 - 150	H
PFHpA	48.1	0.595	2.02	8.05		IS 13C4-PFHpA	173	60 - 150	H
PFHxS	2300	9.53	20.2	80.5	D	IS 18O2-PFHxS	114	60 - 150	D
PFOA	740	0.655	2.02	8.05		IS 13C2-PFOA	97.2	60 - 150	
PFOS	1650	8.12	9.07	80.5	D	IS 13C8-PFOS	299	60 - 150	D, H
PFNA	7.09	0.815	2.02	8.05	J	IS 13C5-PFNA	99.7	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-EB030817**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-04	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.122 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 11:45			Date Analyzed:	17-Mar-17 18:31	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.83	4.10	8.19		IS 13C3-PFBS	118	60 - 150	
PFHpA	ND	0.605	2.05	8.19		IS 13C4-PFHpA	112	60 - 150	
PFHxS	ND	0.969	2.05	8.19		IS 18O2-PFHxS	108	60 - 150	
PFOA	ND	0.666	2.05	8.19		IS 13C2-PFOA	106	60 - 150	
PFOS	1.54	0.826	0.922	8.19	J	IS 13C8-PFOS	113	60 - 150	
PFNA	ND	0.829	2.05	8.19		IS 13C5-PFNA	110	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091K-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-05	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.121 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 11:55			Date Analyzed:	17-Mar-17 19:21	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.85	4.13	8.26		IS 13C3-PFBS	118	60 - 150	
PFHpA	ND	0.610	2.07	8.26		IS 13C4-PFHpA	106	60 - 150	
PFHxS	7.48	0.977	2.07	8.26	J	IS 18O2-PFHxS	120	60 - 150	
PFOA	2.53	0.672	2.07	8.26	J	IS 13C2-PFOA	109	60 - 150	
PFOS	9.98	0.833	0.930	8.26		IS 13C8-PFOS	124	60 - 150	
PFNA	ND	0.836	2.07	8.26		IS 13C5-PFNA	116	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091M-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-06	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.128 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 12:35			Date Analyzed:	17-Mar-17 19:34	Column:	BEH C18
Location:					20-Mar-17 15:35	Column:	BEH C18

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	48.2	1.75	3.91	7.82		IS 13C3-PFBS	178	60 - 150	H
PFHpA	33.1	0.578	1.95	7.82		IS 13C4-PFHpA	163	60 - 150	H
PFHxS	1470	9.26	19.5	78.2	D	IS 18O2-PFHxS	113	60 - 150	D
PFOA	956	0.637	1.95	7.82		IS 13C2-PFOA	108	60 - 150	
PFOS	2350	7.89	8.79	78.2	D	IS 13C8-PFOS	165	60 - 150	D, H
PFNA	7.13	0.792	1.95	7.82	J	IS 13C5-PFNA	123	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-FB030817**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-07	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.125 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 13:00			Date Analyzed:	17-Mar-17 19:46	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	4.00	7.98		IS 13C3-PFBS	133	60 - 150	
PFHpA	ND	0.589	2.00	7.98		IS 13C4-PFHpA	125	60 - 150	
PFHxS	ND	0.945	2.00	7.98		IS 18O2-PFHxS	120	60 - 150	
PFOA	ND	0.649	2.00	7.98		IS 13C2-PFOA	109	60 - 150	
PFOS	1.67	0.805	0.900	7.98	J	IS 13C8-PFOS	110	60 - 150	
PFNA	ND	0.808	2.00	7.98		IS 13C5-PFNA	111	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Sample ID: OF-SOW-091L-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-08	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.119 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 13:20			Date Analyzed:	17-Mar-17 19:59	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.87	4.20	8.37		IS 13C3-PFBS	115	60 - 150	
PFHpA	ND	0.618	2.10	8.37		IS 13C4-PFHpA	109	60 - 150	
PFHxS	1.28	0.991	2.10	8.37	J	IS 18O2-PFHxS	108	60 - 150	
PFOA	ND	0.681	2.10	8.37		IS 13C2-PFOA	110	60 - 150	
PFOS	2.43	0.844	0.945	8.37	J	IS 13C8-PFOS	106	60 - 150	
PFNA	ND	0.847	2.10	8.37		IS 13C5-PFNA	106	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

Matrix Spike Results

Modified EPA Method 537

Source Client ID: OF-SOW-091L-0317	QC Batch: B7C0050	Lab Sample: B7C0050-MS1/B7C0050-MSD1
Source LabNumber: 1700311-08	Date Extracted: 10-Mar-2017 9:14	Date Analyzed: 17-Mar-17 22:17 Column: BEH C18
Matrix: Aqueous		17-Mar-17 22:29 Column: BEH C18
Sample Size: 0.121/0.119 L		

Analyte	Spike-MS (ng/L)	MS %R	MS Qual.	Spike-MSD (ng/L)	MSD %R	RPD	MSD Qual.	%R Limit	%RPD Limit	Labeled Standard	MS %R	MS Qualifiers	MSD %R	MS Qual.
PFBS	82.9	98.8		83.7	91.1	8.11		60 - 130	25	IS 13C3-PFBS	121		116	
PFHpA	82.9	99.1		83.7	101	1.90		70 - 130	25	IS 13C4-PFHpA	113		104	
PFHxS	82.9	94.9		83.7	92.8	2.24		70 - 130	25	IS 18O2-PFHxS	115		112	
PFOA	82.9	94.7		83.7	101	6.44		70 - 130	25	IS 13C2-PFOA	111		117	
PFOS	82.9	88.5		83.7	81.3	8.48		70 - 130	25	IS 13C8-PFOS	108		110	
PFNA	82.9	107		83.7	107	0		50 - 130	25	IS 13C5-PFNA	105		104	

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

Sample ID: OF14-GW05-0317**Modified EPA Method 537**

Client Data		Sample Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-09	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.122 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 15:10			Date Analyzed:	17-Mar-17 20:11	Column:	BEH C18
Location:							

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.83	4.10	8.18		IS 13C3-PFBS	120	60 - 150	
PFHpA	ND	0.604	2.05	8.18		IS 13C4-PFHpA	114	60 - 150	
PFHxS	7.76	0.968	2.05	8.18	J	IS 18O2-PFHxS	118	60 - 150	
PFOA	2.55	0.666	2.05	8.18	J	IS 13C2-PFOA	101	60 - 150	
PFOS	ND	0.825	0.922	8.18		IS 13C8-PFOS	100	60 - 150	
PFNA	ND	0.828	2.05	8.18		IS 13C5-PFNA	110	50 - 150	

LCL-UCL - Lower control limit - upper control limit

Results reported to DL.

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

Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

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

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

CERTIFICATIONS

Accrediting Authority	Certificate Number
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2014022
Nevada Division of Environmental Protection	CA004132015-1
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-004
Pennsylvania Department of Environmental Protection	012
South Carolina Department of Health	87002001
Texas Commission on Environmental Quality	T104704189-15-6
Virginia Department of General Services	7923
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

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

NELAP Accredited Test Methods

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

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

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

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

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

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

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

SHIP TO: 621 Mainstream Drive, Suite 270 ♦ Nashville, TN 37228 ♦ 877-345-1113 ♦ (fax) 866-417-0548

32399

Send Results to:		Send Invoice to:		Analysis Requirements:								Lab Use Only:			
Name <u>Tiffany Hill</u>		Name _____		1700311, 0.7°C								VOA Headspace Y N NA			
Company <u>CH2M Hill</u>		Company _____										Field Filtered Y N NA			
Address <u>5701 Cleveland St., Ste. 200</u>		Address _____										Correct Containers Y N NA			
City <u>Virginia Beach,</u>		City _____										Discrepancies Y N NA			
State, Zip <u>Virginia 23462</u>		State, Zip _____		Cust. Seals Intact Y N NA											
Phone <u>541-768-3109</u>		Phone _____		Containers Intact Y N NA											
Fax _____		Fax _____		Airbill #: _____											
E-mail <u>tiffany.hill@ch2m.com</u>		E-mail _____		CAR #: _____											
Project No./Name:		Sampler's (Signature):		PFC5											
<u>SLCIB Water Samples at Feartress</u>		<u>[Signature]</u>													
Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix									Comments	No. of Bottles	Lab Use Only Containers/Pres.	
	3/8/17 1005	OF-SOW-091A-0317	AQ	X									2		
	3/8/17 1110	OF-SOW-091D-0317	AQ										2		
	3/8/17 1115	OF-SOW-091DP-0317	AQ										2		
	3/8/17 1145	OF-EB030817	AQ										2		
	3/8/17 1155	OF-SOW-091K-0317	AQ										2		
	3/8/17 1235	OF-SOW-091M-0317	AQ										2		
	3/8/17 1300	OF-FB030817	AQ										2		
	3/8/17 1320	OF-SOW-091L-0317	AQ										2		
	3/8/17	OF-SOW-091L-0317 CC 3/8/17													
	3/8/17 1510	OF14-6W05-0317	AQ	X									2		
	3/8/17 1320	OF-SOW-091L-0317-MS	AQ	X									2		
	3/8/17 1320	OF-SOW-091L-0317-SD	AQ	X									2		
Sample Kit Prep'd by: (Signature)		Date/Time	Received By: (Signature)		REMARKS:								Details:		
<u>[Signature]</u>		3/8/17 1650	<u>[Signature]</u> 3/9/17 0927												
Relinquished by: (Signature)		Date/Time	Received By: (Signature)												
Relinquished by: (Signature)		Date/Time	Received By: (Signature)												
Received for Laboratory by: (Signature)		Date/Time	Temperature												

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

SAMPLE LOG-IN CHECKLIST



Vista Project #: 1700311 TAT 14

Samples Arrival:	Date/Time <u>03/09/17 0923</u>	Initials: <u>WJS</u>	Location: <u>WR-2</u> Shelf/Rack: <u>N/2</u>
Logged In:	Date/Time <u>03/09/17 1118</u>	Initials: <u>SR JBP</u>	Location: <u>WR-2</u> Shelf/Rack: <u>F6</u>
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> On Trac
	<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
	<input type="checkbox"/> None		
Temp °C: <u>0.4</u> (uncorrected)	Time: <u>0926</u>	Thermometer ID: <u>IR-1 WJS 3/9/17</u>	
Temp °C: <u>0.7</u> (corrected)	Probe used: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Thermometer ID: <u>DT-3</u>	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill	✓		
Trk # <u>8088 4437 0340</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:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
Shipping Container	<input checked="" type="checkbox"/> Vista	<input type="checkbox"/> Client	<input checked="" type="checkbox"/> Retain
	<input type="checkbox"/> Return	<input type="checkbox"/> Dispose	

Comments:

EXTRACTION INFORMATION

Process Sheet
Workorder: 1700311

Prep Expiration: 2017-Mar-22
 Client: CH2M Hill

Workorder Due: 23-Mar-17 00:00

TAT: 14

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

Prep Batch: B7C0050

Prep Data Entered: 3/13/17 JK
Date and Initials

Version: UCMR 3 (6 Analyte)

Initial Sequence: _____

LabSampleID	Recon	ClientSampleID	Date Received	Location	Comments
1700311-01	<input checked="" type="checkbox"/>	OF-SOW-091A-0317	09-Mar-17 09:23	WR-2 F-6	
1700311-02	<input checked="" type="checkbox"/>	OF-SOW-091D-0317	09-Mar-17 09:23	WR-2 F-6	
1700311-03	<input checked="" type="checkbox"/>	OF-SOW-091DP-0317	09-Mar-17 09:23	WR-2 F-6	
1700311-04	<input checked="" type="checkbox"/>	OF-EB030817	09-Mar-17 09:23	WR-2 F-6	
1700311-05	<input checked="" type="checkbox"/>	OF-SOW-091K-0317	09-Mar-17 09:23	WR-2 F-6	
1700311-06	<input checked="" type="checkbox"/>	OF-SOW-091M-0317	09-Mar-17 09:23	WR-2 F-6	
1700311-07	<input checked="" type="checkbox"/>	OF-FB030817	09-Mar-17 09:23	WR-2 F-6	
1700311-08	<input checked="" type="checkbox"/>	OF-SOW-091L-0317	09-Mar-17 09:23	WR-2 F-6	MS/MSD
1700311-09	<input checked="" type="checkbox"/>	OF14-GW05-0317	09-Mar-17 09:23	WR-2 F-6	

WO Comments: List of 6.

Vista PM: Martha Maier

Vial Box ID: Earthworm

Sample Reconciled By: JK 3/10/17

Percent Solids



Project: B7C050

Balance ID: HRMS-8

Sample ID	Chemist: <u>N/A</u> Date: <u>↓</u> Time: <u>↓</u>		Chemist: <u>N/A</u> Date: <u>↓</u> Time: <u>↓</u>		Chemist/Date <u>JC 3/10/17</u>	
	Boat Wt.	Sample + Boat Wt.	Residue + Boat Wt.	pH before	pH* after	CF
1700299-01 (C)				7	2	0
1700299-02 (C)				7	2	0
1700299-03 (B)				7	2	0
1700311-01 (C)				7	2	0
-02 (B)				6	2	0
-03 (B)				6	2	0
-04 (A)				4	2	0
-05 (C)				7	2	0
-06 (B)				6	2	0
-07 (A)				4	2	0
-08A (B)				6	2	0
-08B (B)				6	2	0
-08C (A)				6	2	0
-09 (A)				4	2	0

JC 3/10/17

Procedure:

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

Notes:

- Ⓐ 2 drops of HCl added to adjust pH to 2
- Ⓑ 3 drops of HCl added to adjust pH to 2
- Ⓒ 4 drops of HCl added to adjust pH to 2
- Methods 8280, 613, 1613, 8290, 1614 - pH < 9 JC 3/10/17
- Methods 1668/PCN - pH 2-3
- NCASI 551 - pH 1

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537 PFAS DOD (LOO as mRL)

B7C0050

Chemist: E. Schneider

Prep Date/Time: 10-Mar-17 09:14

Prepared using: LCMS - SPE Extraction-LCMS

						C7C0050	
C	VISTA Sample ID	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
<input type="checkbox"/>	B7C0050-BLK1 (A)	NA	NA	(0.125)	ES HC 3/10/17	BP HC 3-10-17	Am BP 3/10/17
<input type="checkbox"/>	B7C0050-BS1 (A)	↓	↓	↓	↓	↓	↓
<input type="checkbox"/>	B7C0050-MS1 1700311-08 (B)	147.67	27.01	0.125 0.1206			
<input type="checkbox"/>	B7C0050-MSD1 1700311-08 (B)	146.45	26.96	0.11949			
<input type="checkbox"/>	1700299-01	149.94	27.07	0.12287			
<input type="checkbox"/>	1700299-02	141.65	27.01	0.11464			
<input type="checkbox"/>	1700299-03	152.12	26.94	0.12518			
<input type="checkbox"/>	1700311-01 (B)	145.87	27.08	0.11879 ✓			
<input type="checkbox"/>	1700311-02	150.22	26.93	0.12329 ✓			
<input type="checkbox"/>	1700311-03	151.08	26.87	0.12421 ✓			
<input type="checkbox"/>	1700311-04	149.12	27.00	0.12212 ✓			
<input type="checkbox"/>	1700311-05	148.10	26.98	0.12112 ✓			
<input type="checkbox"/>	1700311-06	154.79	26.96	0.12783 ✓			
<input type="checkbox"/>	1700311-07	152.43	27.10	0.12533 ✓			
<input type="checkbox"/>	1700311-08	146.46	27.01 26.98	0.11948 ✓			
<input type="checkbox"/>	1700311-09 ↓	149.18	26.95	0.12223	↓	↓	↓

IS Name 16L1920, 10µl (B)	NS Name 16I2905, 10µl (V) HC 3/10/17 (V)	RS Name (V3) 17A1201, 10µl	SPE Chem: <u>Strota X-AW 33um 200mg/L</u>	Check Out: HC 3/10/17 Chemist/Date:
			Ele SOLV: <u>0.5% NH4OH in MeOH/MeOH</u>	Check In: NA Chemist/Date:
			Final Volume(s) <u>1ml</u>	Balance ID: <u>HAMS-8</u>

Comments: Assume 1 g = 1 mL
 (A) Added 0.625g Trizma to QC; BP 3-10-17
 (B) Centrifuged samples to remove particulate/gelatinous substance
 Work Order 1700311

SAMPLE DATA – MODIFIED EPA METHOD 537

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-19.qld

Last Altered: Monday, March 20, 2017 15:51:56 Pacific Daylight Time

Printed: Monday, March 20, 2017 15:54:44 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: B7C0050-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170316G1_19, Date: 16-Mar-2017, Time: 14:48:20

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7		8.552e3		0.125			
2	2 PFHpA	363 > 318.9		2.094e4		0.125			
3	3 PFHxS	398.9 > 79.6	5.508e1	7.598e3		0.125	4.01	0.00870	
4	4 PFOA	413 > 368.7	2.254e2	2.839e4		0.125	4.29		
5	5 PFNA	463 > 418.8		9.800e3		0.125			
6	6 PFOS	499 > 79.9		9.807e3		0.125			
7	7 13C3-PFBS	302.0 > 98.8	8.552e3	1.460e4	0.501	0.125	3.03	117	117
8	8 13C4-PFHpA	367.2 > 321.8	2.094e4	1.460e4	1.237	0.125	3.90	116	116
9	9 18O2-PFHxS	403 > 102.6	7.598e3	1.460e4	0.495	0.125	4.01	105	105
10	10 13C2-PFOA	414.9 > 369.7	2.839e4	8.985e3	3.221	0.125	4.30	98.1	98.1
11	11 13C5-PFNA	468.2 > 422.9	9.800e3	1.012e4	0.979	0.125	4.63	98.9	98.9
12	12 13C8-PFOS	507.0 > 79.9	9.807e3	7.676e3	1.080	0.125	4.69	118	118
13	13 13C5-PFHxA	318>272.9	2.363e4	2.363e4	1.000	0.125	3.38	100	100
14	14 13C3-PFHxS	401.9 > 79.9	1.460e4	1.460e4	1.000	0.125	4.01	100	100
15	15 13C8-PFOA	421.3 > 376	8.985e3	8.985e3	1.000	0.125	4.30	100	100
16	16 13C9-PFNA	472.2 > 426.9	1.012e4	1.012e4	1.000	0.125	4.63	100	100
17	17 13C4-PFOS	503.0 > 79.9	7.676e3	7.676e3	1.000	0.125	4.69	100	100
18	18 Total PFBS	299 > 79.7		7.598e3		0.125			
19	19 Total PFHxS	398.9 > 79.6		7.598e3		0.125		0.00870	
20	20 Total PFOA	413 > 368.7		2.839e4		0.125			
21	21 Total PFOS	499 > 79.9		9.807e3		0.125			

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-19.qld

Last Altered: Monday, March 20, 2017 15:51:56 Pacific Daylight Time

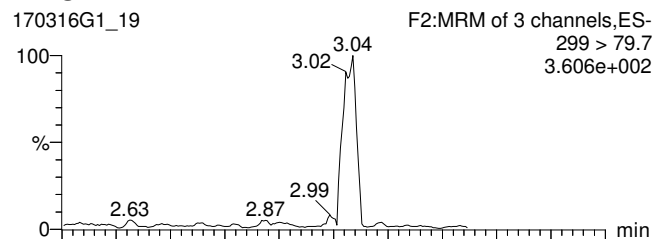
Printed: Monday, March 20, 2017 15:54:44 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

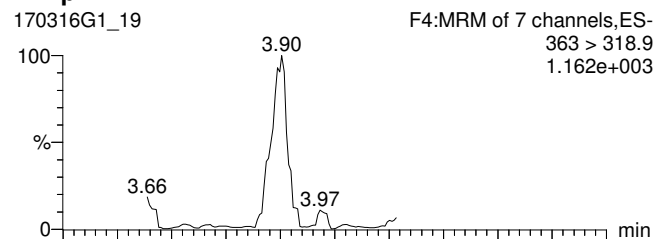
Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: B7C0050-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170316G1_19, Date: 16-Mar-2017, Time: 14:48:20, Instrument: , Lab: , User:

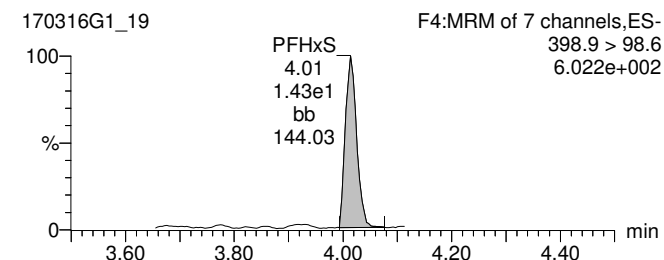
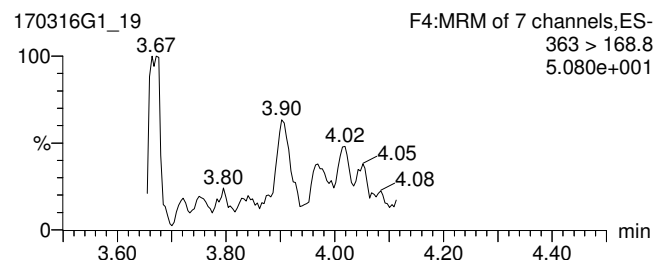
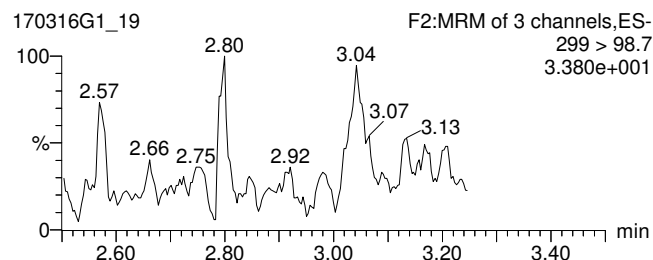
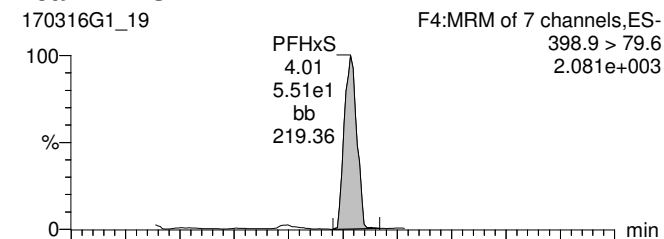
PFBS



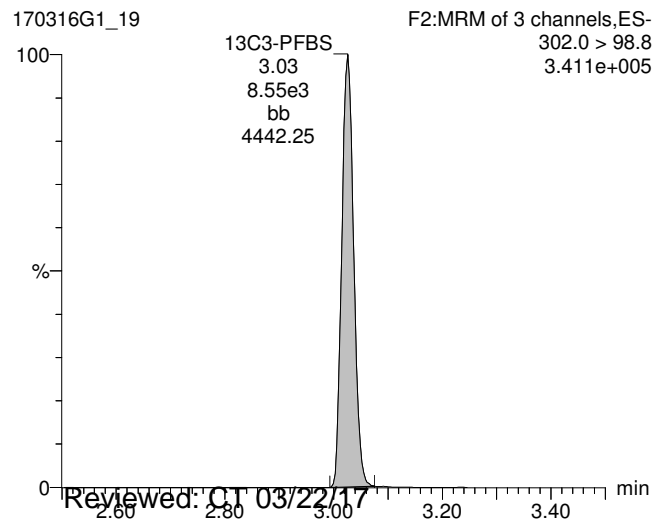
PFHpA



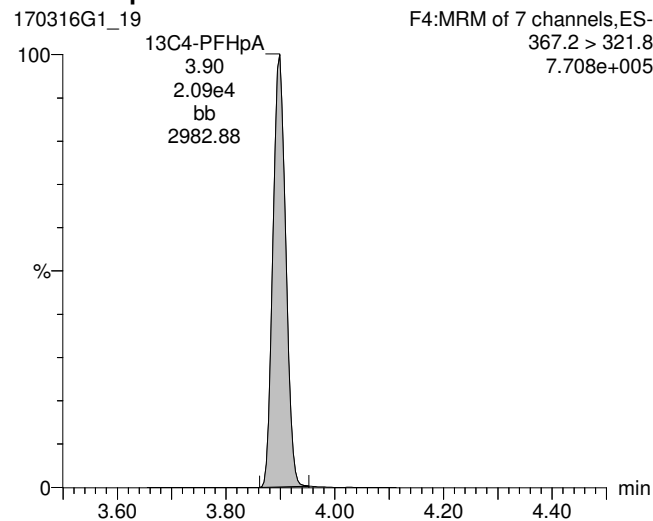
Total PFHxS



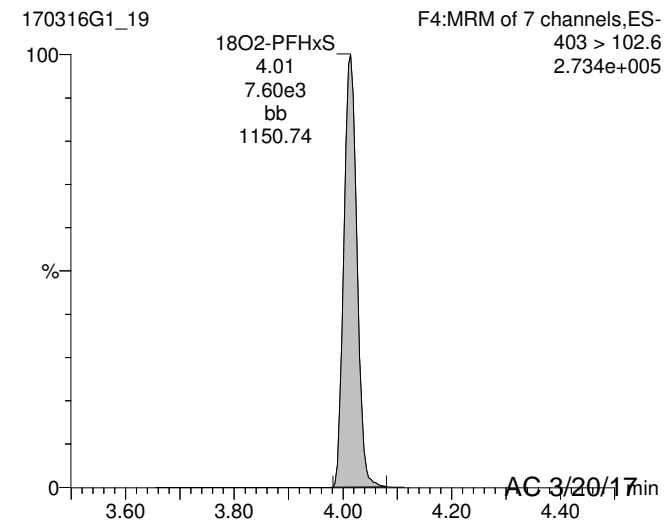
13C3-PFBS



13C4-PFHpA



18O2-PFHxS



Reviewed: 01/03/2017

Work Order 1700311

AC 3/20/17

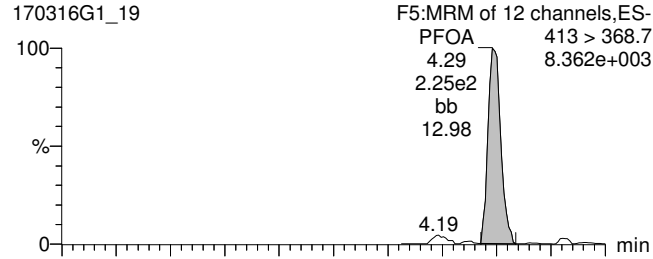
Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-19.qld

Last Altered: Monday, March 20, 2017 15:51:56 Pacific Daylight Time

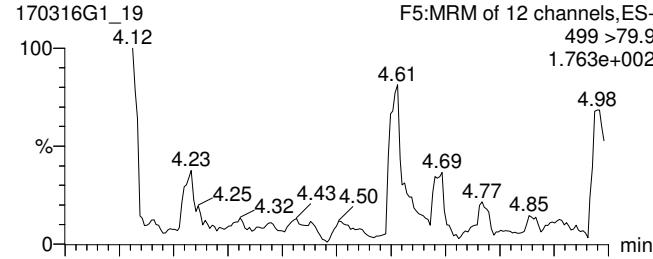
Printed: Monday, March 20, 2017 15:54:44 Pacific Daylight Time

ID: B7C0050-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170316G1_19, Date: 16-Mar-2017, Time: 14:48:20, Instrument: , Lab: , User:

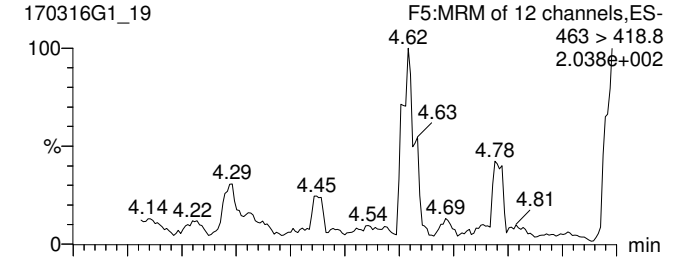
Total PFOA



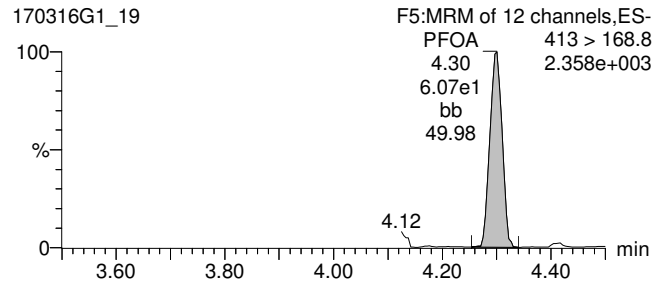
Total PFOS



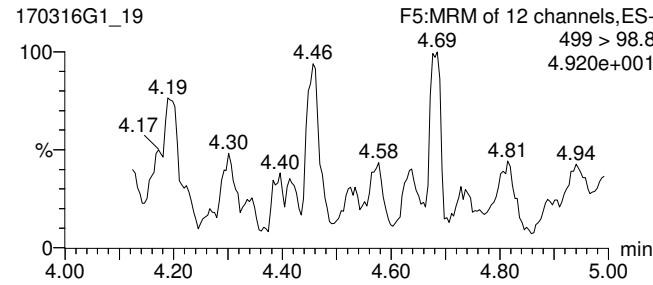
PFNA



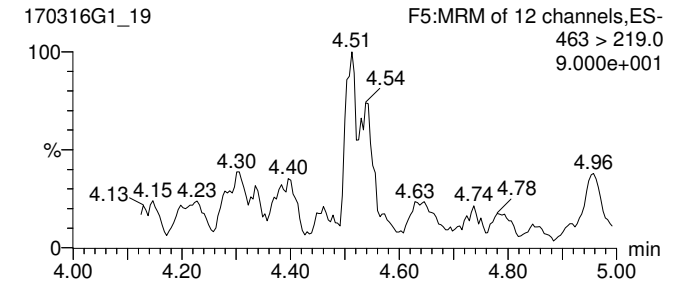
170316G1_19



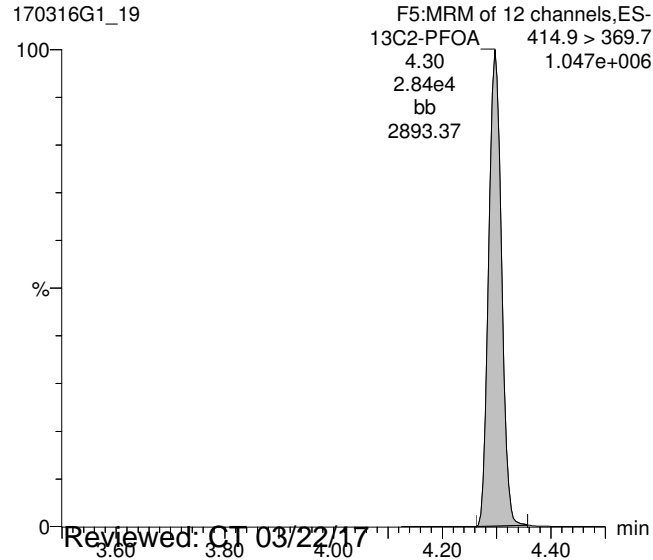
170316G1_19



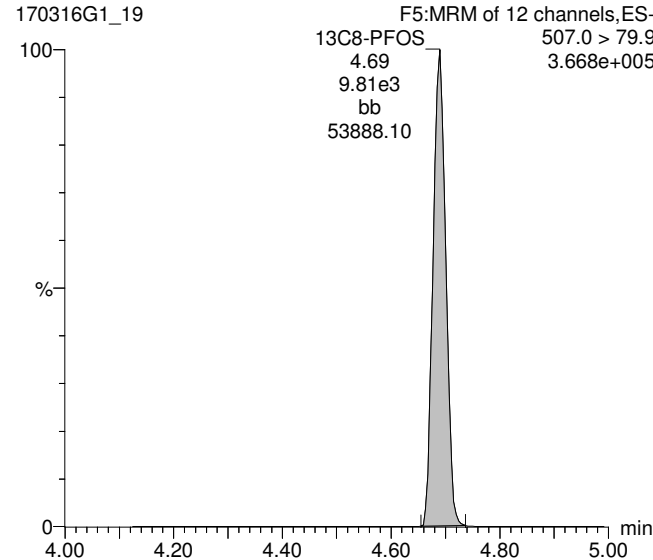
170316G1_19



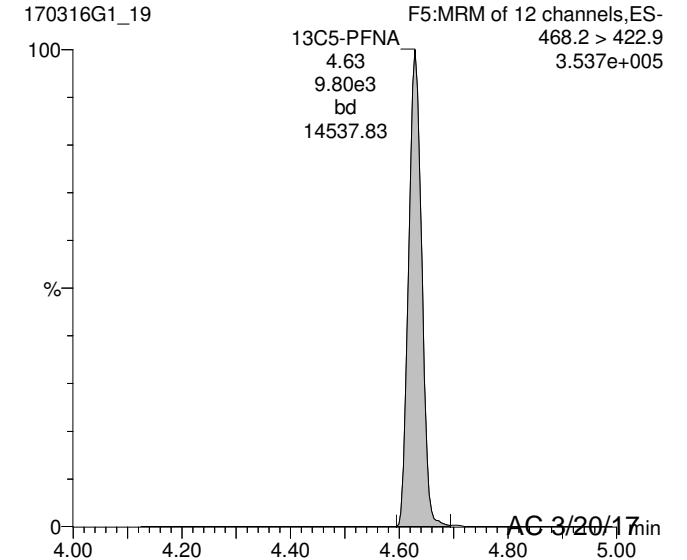
13C2-PFOA



13C8-PFOS



13C5-PFNA

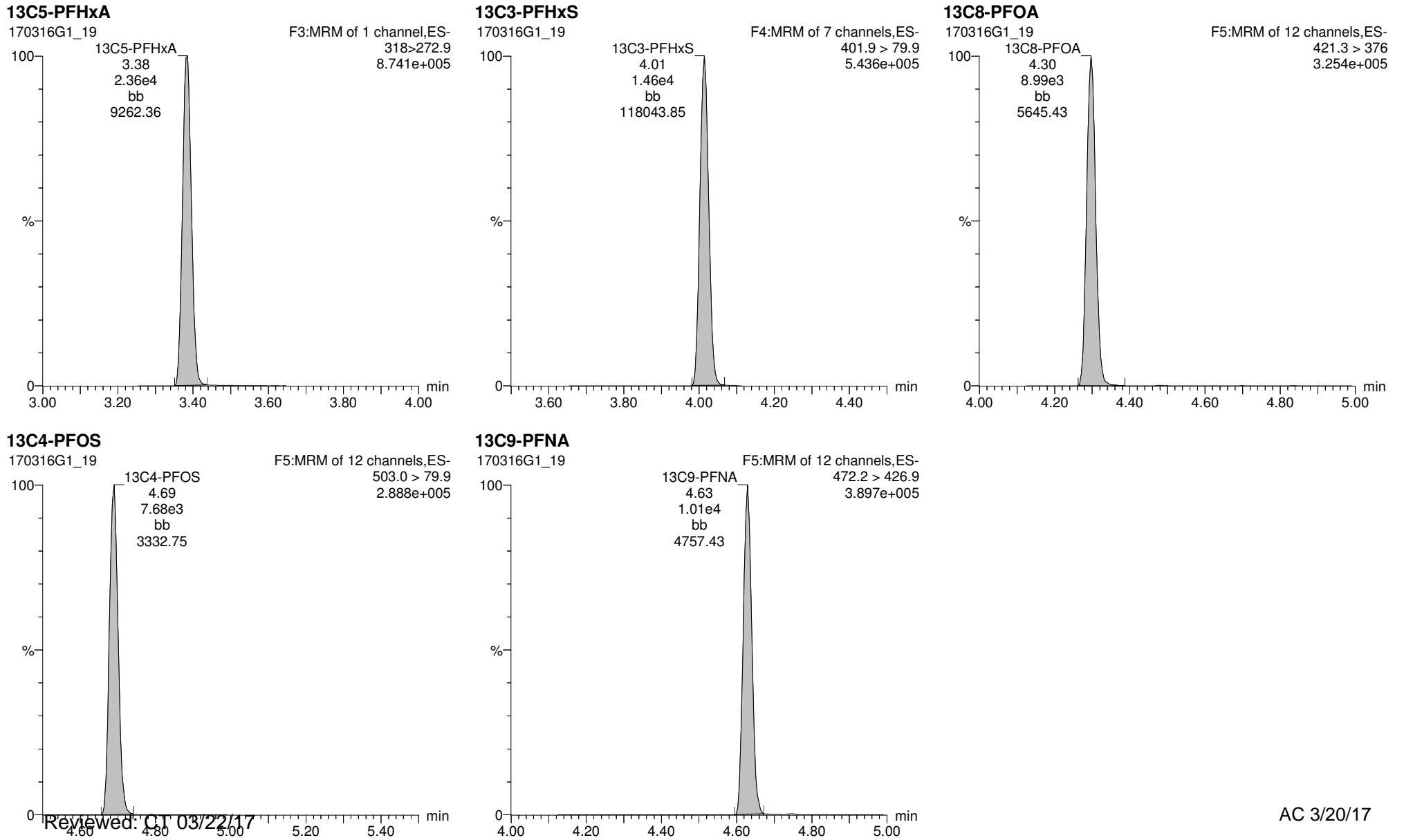


Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-19.qld

Last Altered: Monday, March 20, 2017 15:51:56 Pacific Daylight Time

Printed: Monday, March 20, 2017 15:54:44 Pacific Daylight Time

ID: B7C0050-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170316G1_19, Date: 16-Mar-2017, Time: 14:48:20, Instrument: , Lab: , User:



Reviewed: 01/03/22/17

Work Order 1700311

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-14.qld

Last Altered: Monday, March 20, 2017 15:47:06 Pacific Daylight Time

Printed: Monday, March 20, 2017 15:48:03 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: B7C0050-BS1 OPR 0.125, Description: OPR, Name: 170316G1_14, Date: 16-Mar-2017, Time: 13:01:10

	# Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	1.365e4	7.723e3		0.125	3.03	77.6	97.0
2	2 PFHpA	363 > 318.9	2.113e4	1.562e4		0.125	3.89	77.8	97.2
3	3 PFHxS	398.9 > 79.6	7.943e3	5.713e3		0.125	4.01	77.6	97.1
4	4 PFOA	413 > 368.7	1.543e4	2.253e4		0.125	4.29	77.3	96.6
5	5 PFNA	463 > 418.8	1.324e4	8.201e3		0.125	4.62	73.8	92.3
6	6 PFOS	499 > 79.9	2.322e3	5.464e3		0.125	4.69	77.9	97.4
7	7 13C3-PFBS	302.0 > 98.8	7.723e3	1.057e4	0.501	0.125	3.03	146	146
8	8 13C4-PFHpA	367.2 > 321.8	1.562e4	1.057e4	1.237	0.125	3.89	120	120
9	9 18O2-PFHxS	403 > 102.6	5.713e3	1.057e4	0.495	0.125	4.01	109	109
10	10 13C2-PFOA	414.9 > 369.7	2.253e4	6.767e3	3.221	0.125	4.29	103	103
11	11 13C5-PFNA	468.2 > 422.9	8.201e3	6.819e3	0.979	0.125	4.62	123	123
12	12 13C8-PFOS	507.0 > 79.9	5.464e3	4.752e3	1.080	0.125	4.68	106	106
13	13 13C5-PFHxA	318 > 272.9	2.205e4	2.205e4	1.000	0.125	3.38	100	100
14	14 13C3-PFHxS	401.9 > 79.9	1.057e4	1.057e4	1.000	0.125	4.01	100	100
15	15 13C8-PFOA	421.3 > 376	6.767e3	6.767e3	1.000	0.125	4.29	100	100
16	16 13C9-PFNA	472.2 > 426.9	6.819e3	6.819e3	1.000	0.125	4.62	100	100
17	17 13C4-PFOS	503.0 > 79.9	4.752e3	4.752e3	1.000	0.125	4.69	100	100
18	18 Total PFBS	299 > 79.7		5.713e3		0.125		77.6	
19	19 Total PFHxS	398.9 > 79.6		5.713e3		0.125		77.6	
20	20 Total PFOA	413 > 368.7		2.253e4		0.125		77.3	
21	21 Total PFOS	499 > 79.9		5.464e3		0.125		77.9	

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-14.qld

Last Altered: Monday, March 20, 2017 15:47:06 Pacific Daylight Time

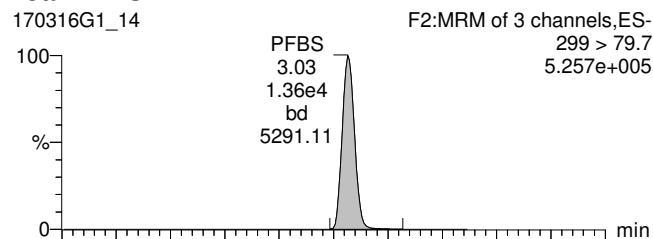
Printed: Monday, March 20, 2017 15:48:03 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

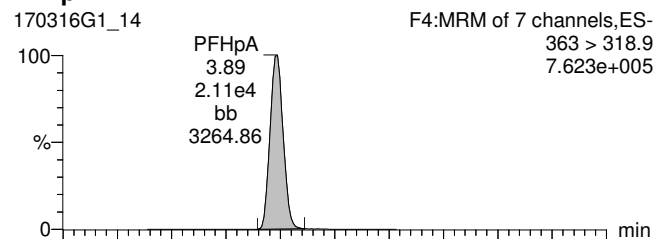
Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: B7C0050-BS1 OPR 0.125, Description: OPR, Name: 170316G1_14, Date: 16-Mar-2017, Time: 13:01:10, Instrument: , Lab: , User:

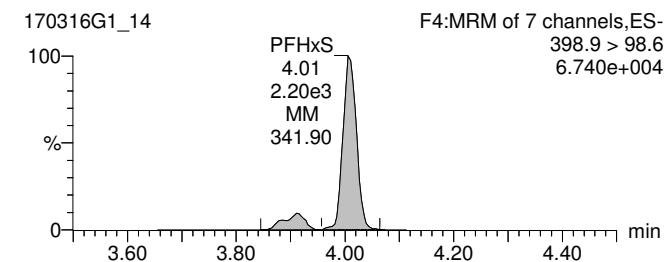
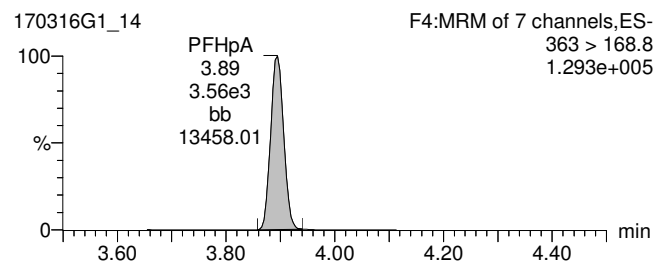
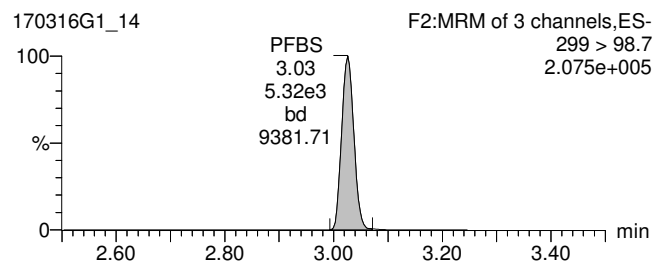
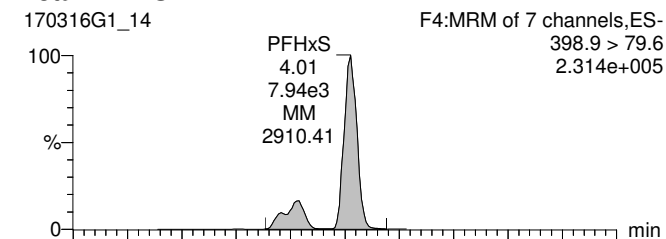
Total PFBS



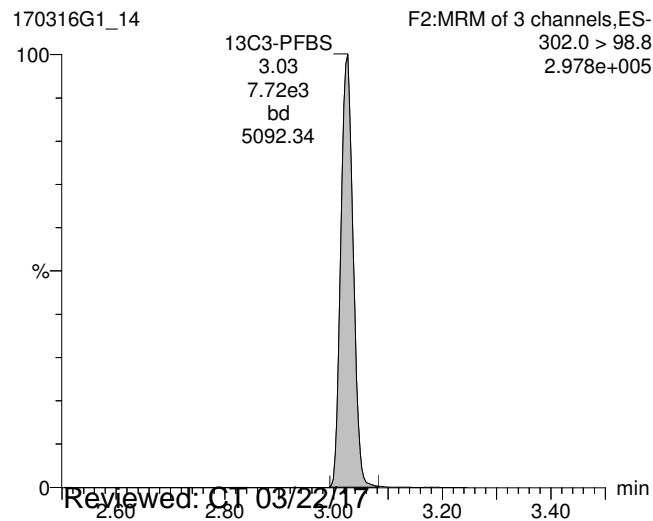
PFHpA



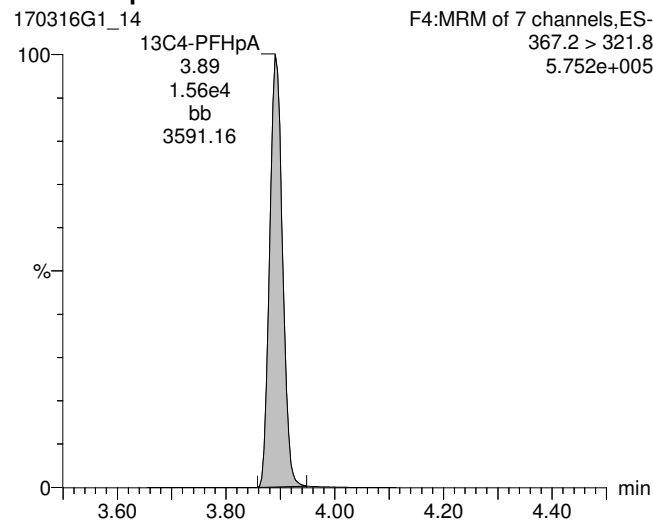
Total PFHxS



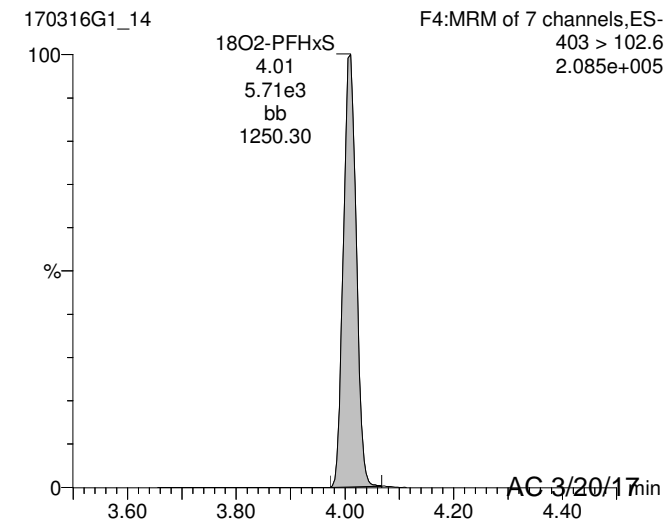
13C3-PFBS



13C4-PFHpA



18O2-PFHxS



Reviewed: 01/03/2017

AC 3/20/17

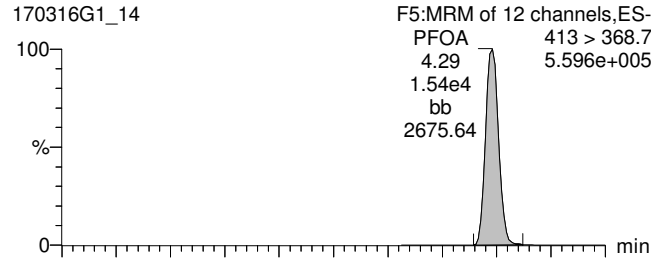
Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-14.qld

Last Altered: Monday, March 20, 2017 15:47:06 Pacific Daylight Time

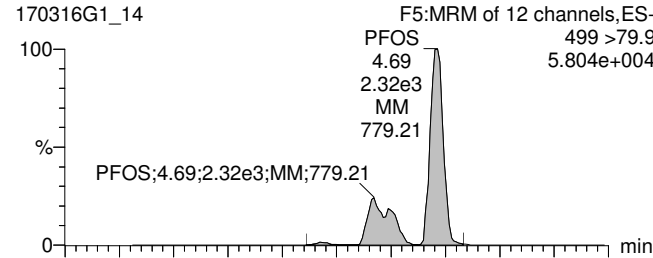
Printed: Monday, March 20, 2017 15:48:03 Pacific Daylight Time

ID: B7C0050-BS1 OPR 0.125, Description: OPR, Name: 170316G1_14, Date: 16-Mar-2017, Time: 13:01:10, Instrument: , Lab: , User:

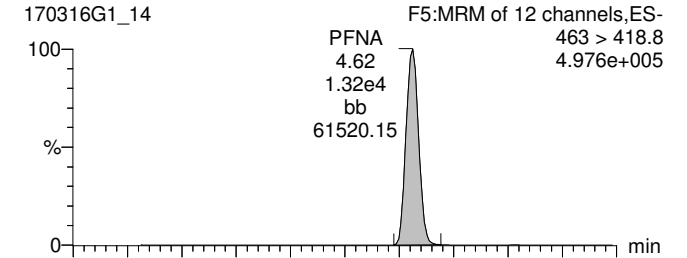
Total PFOA



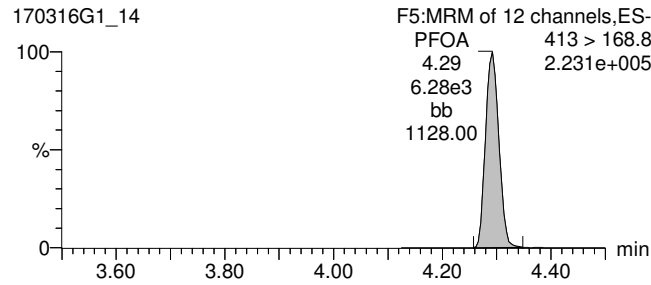
Total PFOS



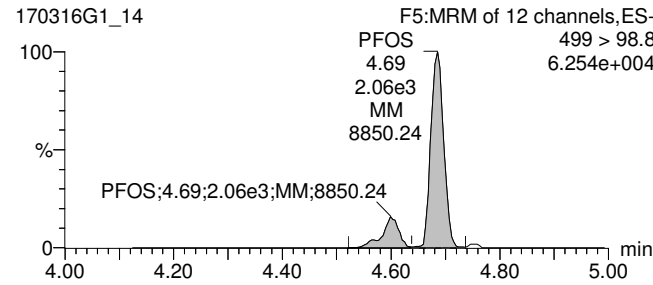
PFNA



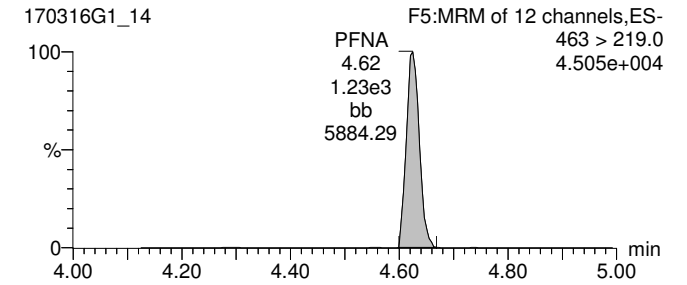
170316G1_14



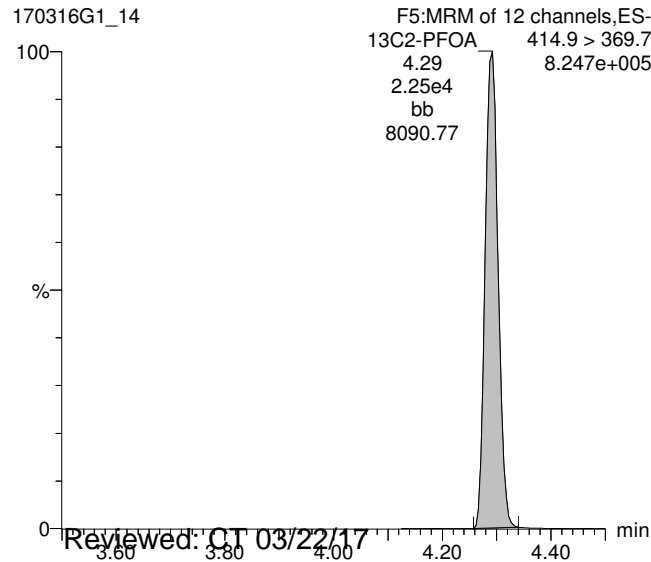
170316G1_14



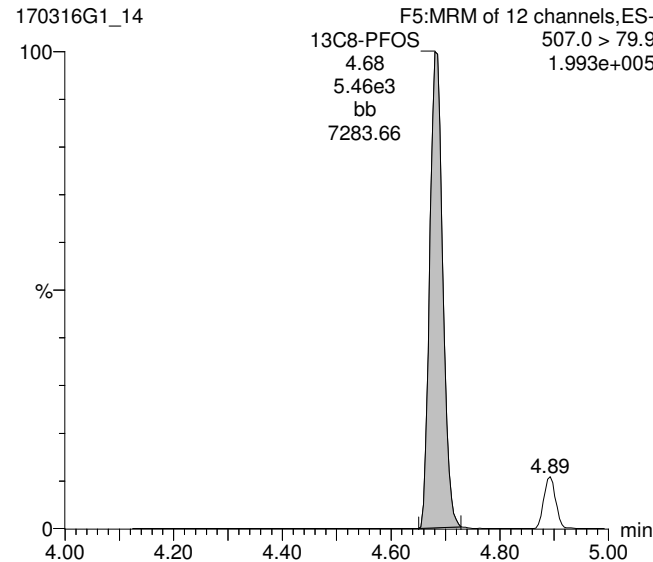
170316G1_14



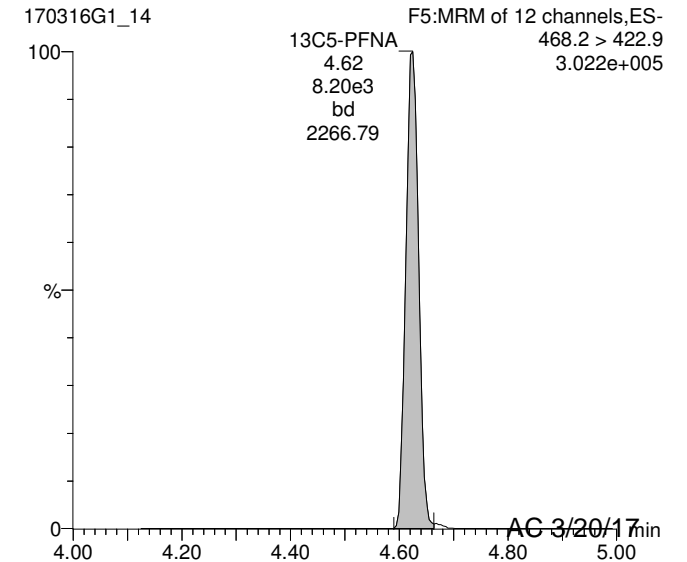
13C2-PFOA



13C8-PFOS



13C5-PFNA



Reviewed: 01/03/22/17

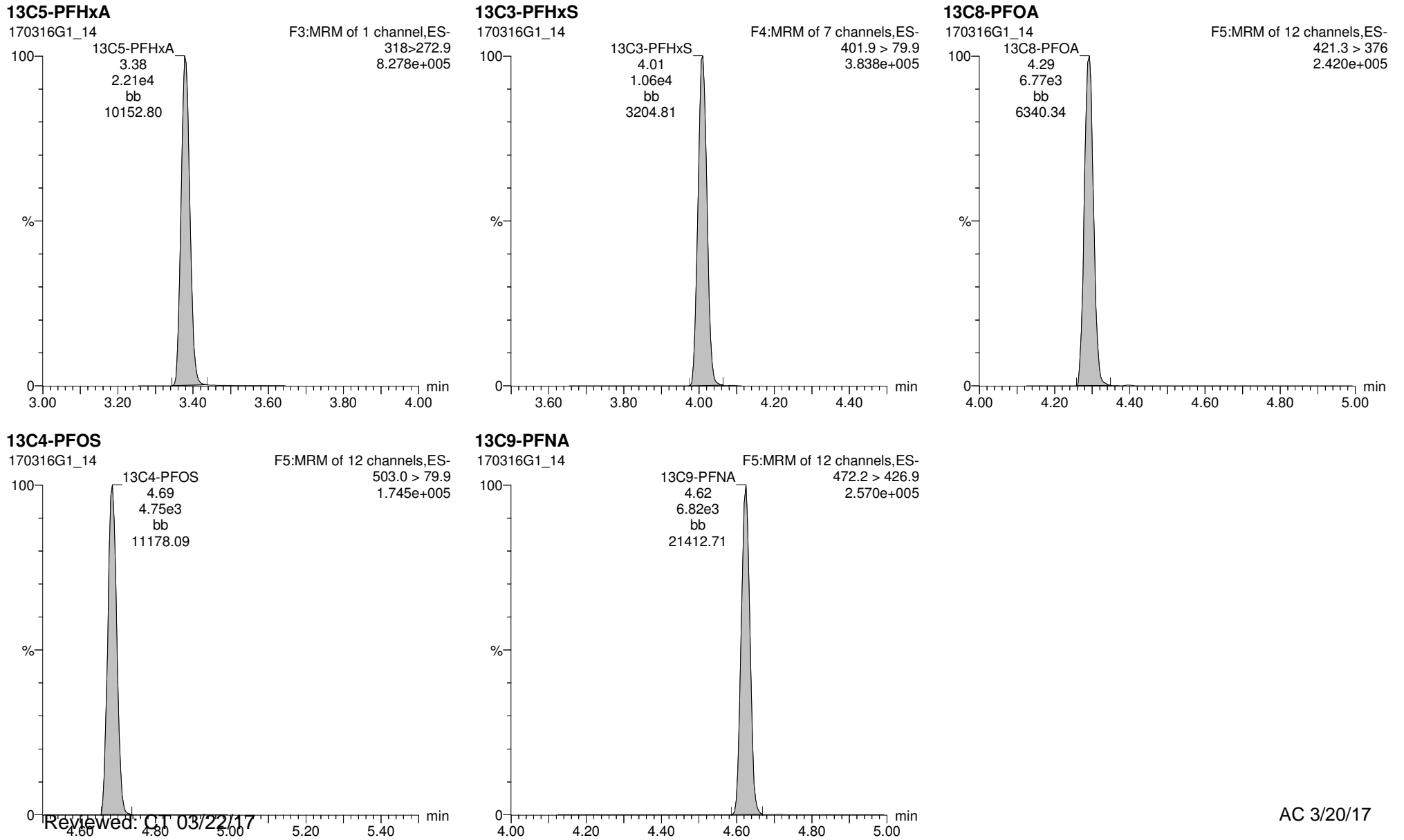
AC 3/20/17

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-14.qld

Last Altered: Monday, March 20, 2017 15:47:06 Pacific Daylight Time

Printed: Monday, March 20, 2017 15:48:03 Pacific Daylight Time

ID: B7C0050-BS1 OPR 0.125, Description: OPR, Name: 170316G1_14, Date: 16-Mar-2017, Time: 13:01:10, Instrument: , Lab: , User:



Reviewed: 01/03/22/17

Work Order 1700311

AC 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-11.qld

Last Altered: Monday, March 20, 2017 3:37:23 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 3:37:43 PM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-01 OF-SOW-091A-0317 0.11879, Description: OF-SOW-091A-0317, Name: 170317G2_11, Date: 17-Mar-2017, Time: 17:53:36

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	3.607e1	8.298e3		0.119	2.97		
2	2 PFHpA	363 > 318.9	7.359e1	1.861e4		0.119	3.82		
3	3 PFHxS	398.9 > 79.6	5.683e2	7.436e3		0.119	3.96	4.10	
4	4 PFOA	413 > 368.7	1.296e3	3.034e4		0.119	4.23	3.79	
5	5 PFNA	463 > 418.8		9.866e3		0.119			
6	6 PFOS	499 > 79.9	1.228e2	7.740e3		0.119	4.64	4.18	
7	7 13C3-PFBS	302.0 > 98.8	8.298e3	1.555e4	0.501	0.119	2.97	112	106
8	8 13C4-PFHpA	367.2 > 321.8	1.861e4	1.555e4	1.237	0.119	3.83	102	96.8
9	9 18O2-PFHxS	403 > 102.6	7.436e3	1.555e4	0.495	0.119	3.95	102	96.7
10	10 13C2-PFOA	414.9 > 369.7	3.034e4	8.709e3	3.221	0.119	4.23	114	108
11	11 13C5-PFNA	468.2 > 422.9	9.866e3	9.011e3	0.979	0.119	4.57	118	112
12	12 13C8-PFOS	507.0 > 79.9	7.740e3	6.479e3	1.080	0.119	4.64	116	111
13	13 13C5-PFHxA	318 > 272.9	2.246e4	2.246e4	1.000	0.119	3.33	105	100
14	14 13C3-PFHxS	401.9 > 79.9	1.555e4	1.555e4	1.000	0.119	3.95	105	100
15	15 13C8-PFOA	421.3 > 376	8.709e3	8.709e3	1.000	0.119	4.23	105	100
16	16 13C9-PFNA	472.2 > 426.9	9.011e3	9.011e3	1.000	0.119	4.57	105	100
17	17 13C4-PFOS	503.0 > 79.9	6.479e3	6.479e3	1.000	0.119	4.64	105	100
18	18 Total PFBS	299 > 79.7		7.436e3		0.119			
19	19 Total PFHxS	398.9 > 79.6		7.436e3		0.119		4.10	
20	20 Total PFOA	413 > 368.7		3.034e4		0.119		3.79	
21	21 Total PFOS	499 > 79.9		7.740e3		0.119		4.18	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-11.qld

Last Altered: Monday, March 20, 2017 3:37:23 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 3:37:43 PM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-01 OF-SOW-091A-0317 0.11879, Description: OF-SOW-091A-0317, Name: 170317G2_11, Date: 17-Mar-2017, Time: 17:53:36

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.97	36.067	8297.545	

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.96	568.325	7436.249	4.1

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.23	1296.453	30337.133	3.8
2	20 Total PFOA	413 > 368.7	4.13	236.004	30337.133	
3	20 Total PFOA	413 > 368.7	4.10	33.275	30337.133	

Total PFOS

	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.64	122.834	7740.113	4.2

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-11.qld

Last Altered: Monday, March 20, 2017 3:37:23 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 3:37:43 PM Pacific Daylight Time

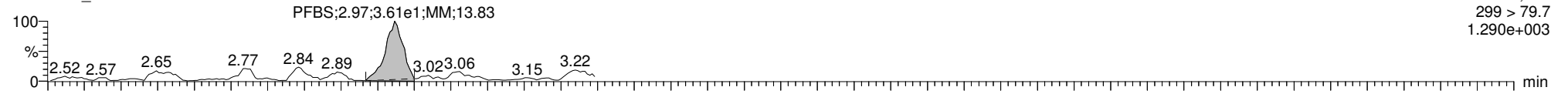
Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

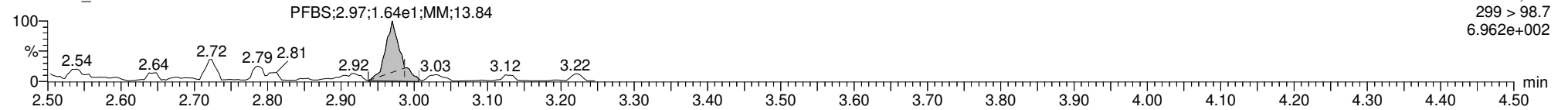
ID: 1700311-01 OF-SOW-091A-0317 0.11879, Description: OF-SOW-091A-0317, Name: 170317G2_11, Date: 17-Mar-2017, Time: 17:53:36, Instrument: , Lab: , User:

PFBS

170317G2_11

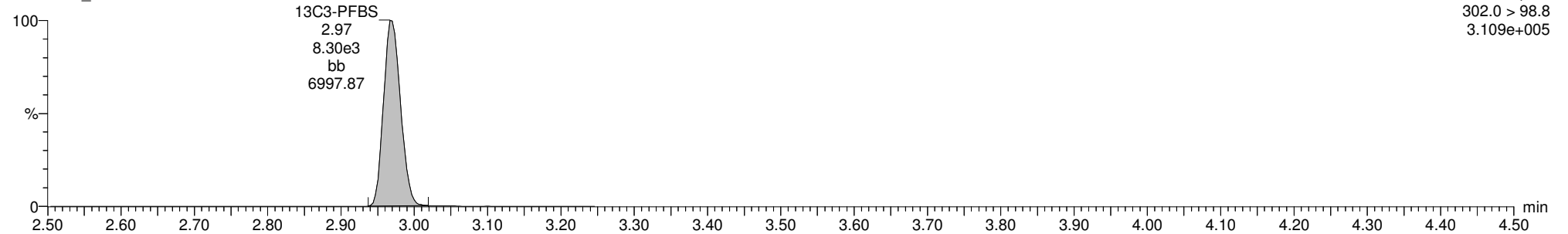


170317G2_11



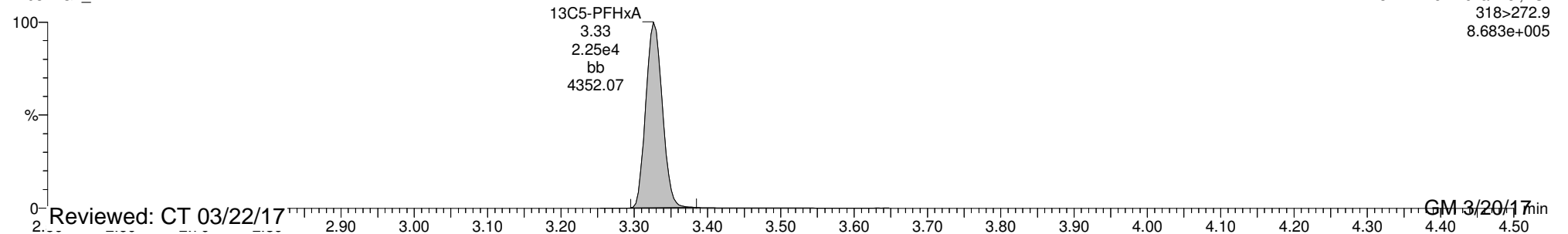
13C3-PFBS

170317G2_11



13C5-PFHxA

170317G2_11



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-11.qld

Last Altered: Monday, March 20, 2017 3:37:23 PM Pacific Daylight Time

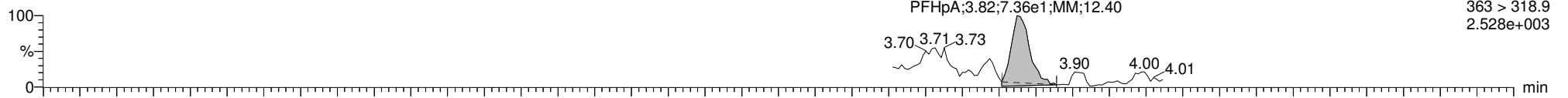
Printed: Monday, March 20, 2017 3:37:43 PM Pacific Daylight Time

ID: 1700311-01 OF-SOW-091A-0317 0.11879, Description: OF-SOW-091A-0317, Name: 170317G2_11, Date: 17-Mar-2017, Time: 17:53:36, Instrument: , Lab: , User:

PFHpA

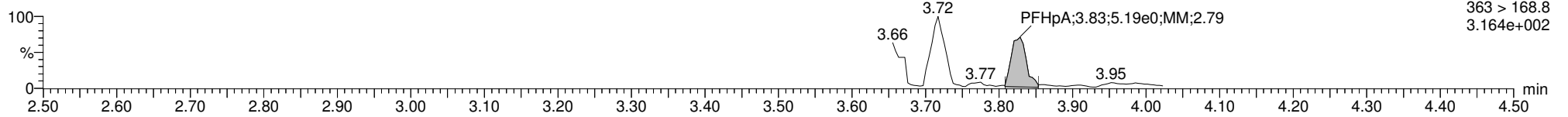
170317G2_11

F4:MRM of 7 channels,ES-
363 > 318.9
2.528e+003



170317G2_11

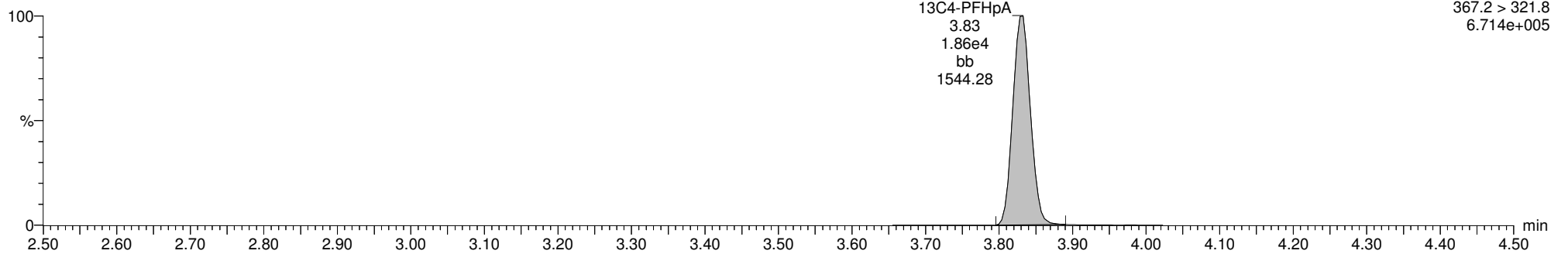
F4:MRM of 7 channels,ES-
363 > 168.8
3.164e+002



13C4-PFHpA

170317G2_11

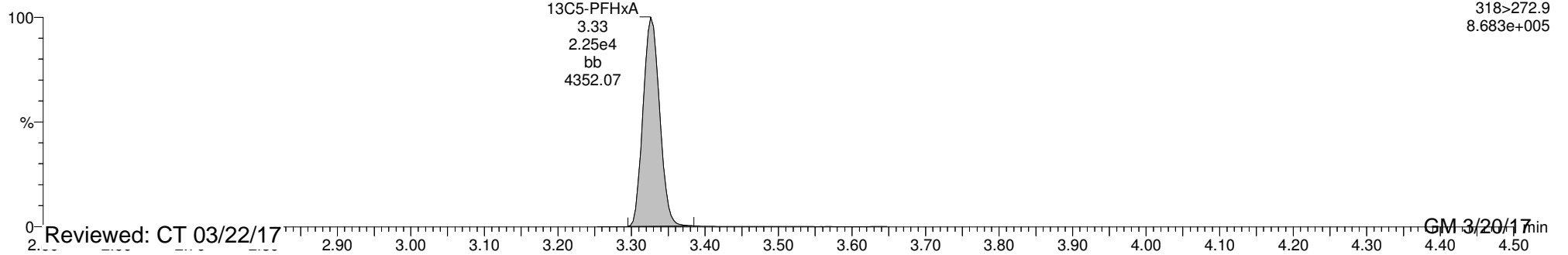
F4:MRM of 7 channels,ES-
367.2 > 321.8
6.714e+005



13C5-PFHxA

170317G2_11

F3:MRM of 1 channel,ES-
318>272.9
8.683e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-11.qld

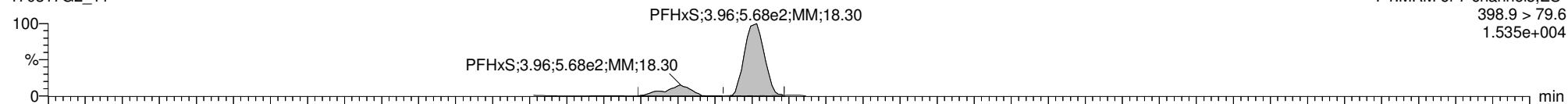
Last Altered: Monday, March 20, 2017 3:37:23 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 3:37:43 PM Pacific Daylight Time

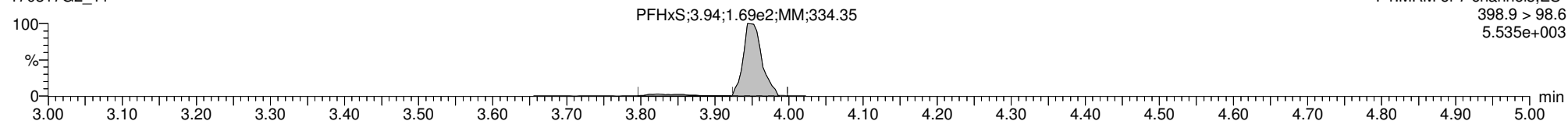
ID: 1700311-01 OF-SOW-091A-0317 0.11879, Description: OF-SOW-091A-0317, Name: 170317G2_11, Date: 17-Mar-2017, Time: 17:53:36, Instrument: , Lab: , User:

Total PFHxS

170317G2_11

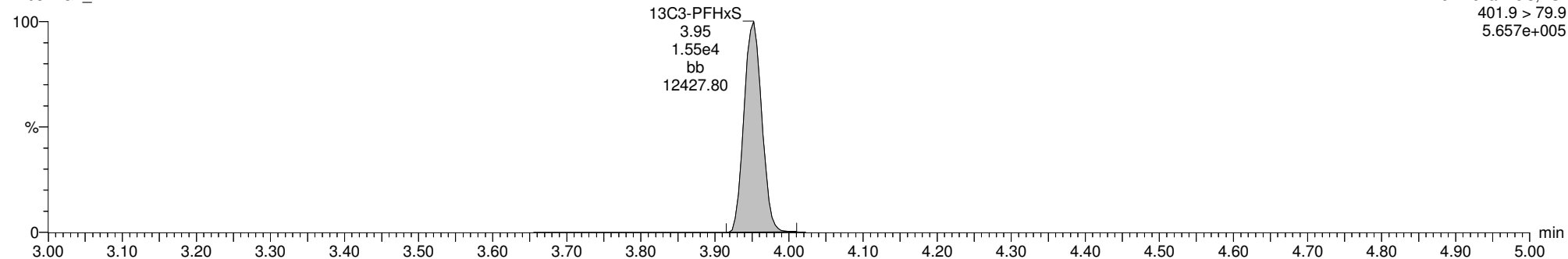


170317G2_11



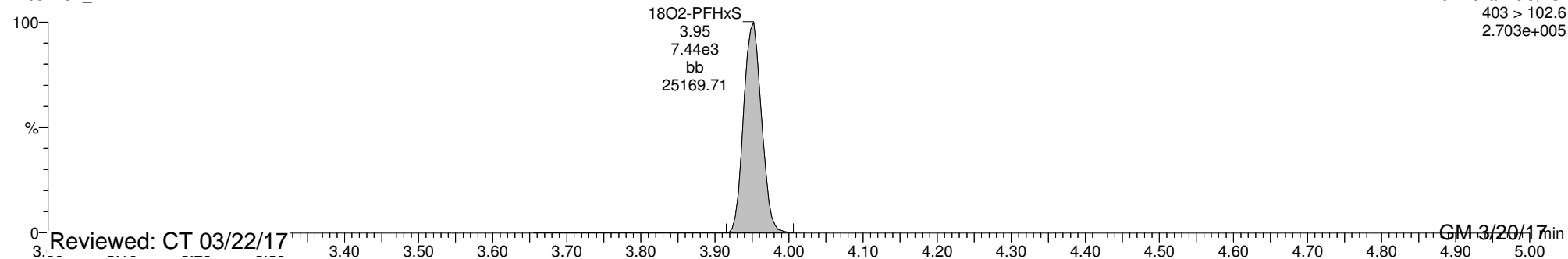
13C3-PFHxS

170317G2_11



18O2-PFHxS

170317G2_11



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-11.qld

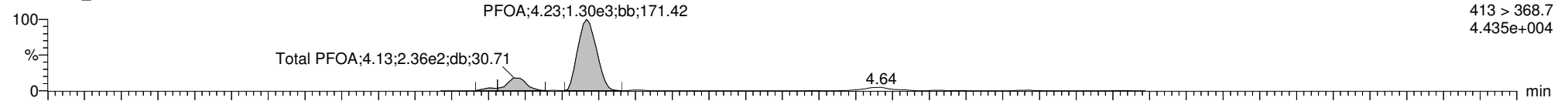
Last Altered: Monday, March 20, 2017 3:37:23 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 3:37:43 PM Pacific Daylight Time

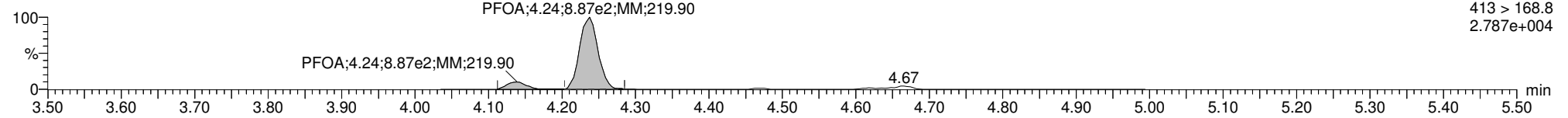
ID: 1700311-01 OF-SOW-091A-0317 0.11879, Description: OF-SOW-091A-0317, Name: 170317G2_11, Date: 17-Mar-2017, Time: 17:53:36, Instrument: , Lab: , User:

Total PFOA

170317G2_11

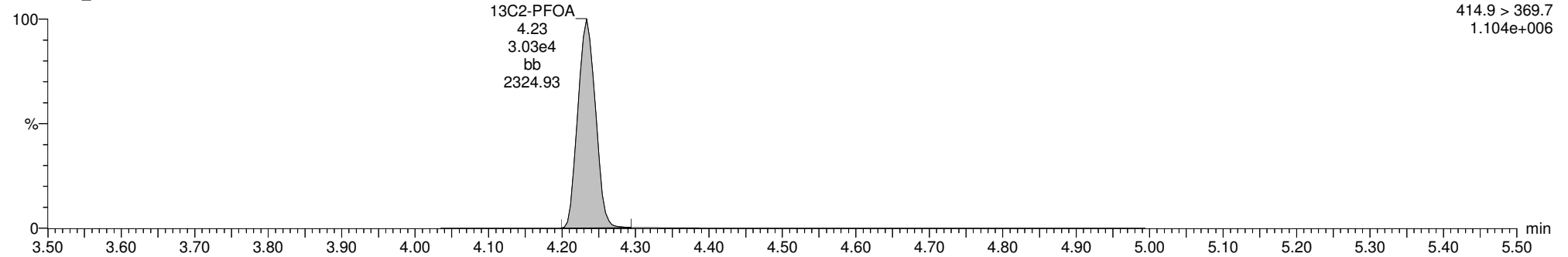


170317G2_11



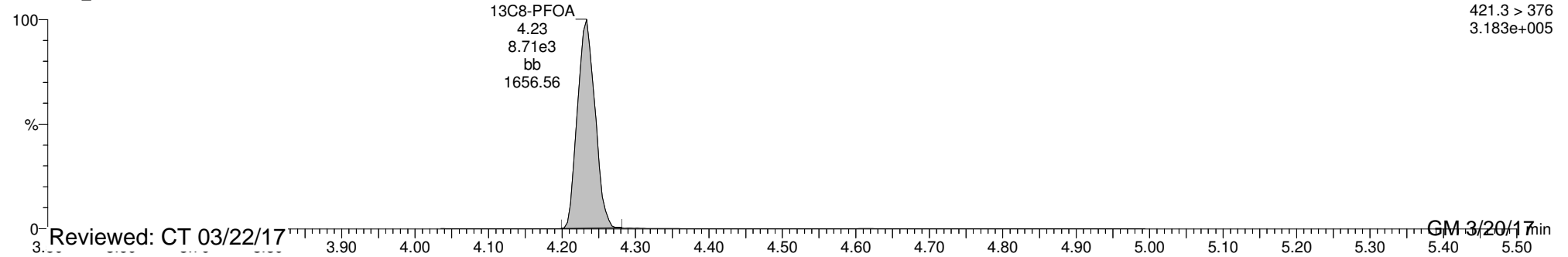
13C2-PFOA

170317G2_11



13C8-PFOA

170317G2_11



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-11.qld

Last Altered: Monday, March 20, 2017 3:37:23 PM Pacific Daylight Time

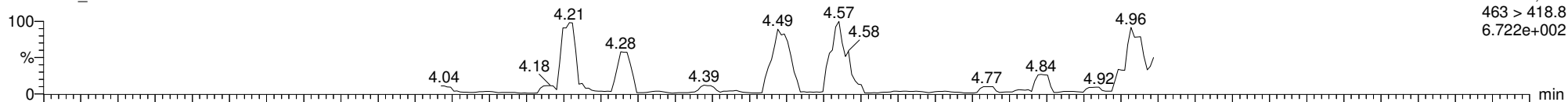
Printed: Monday, March 20, 2017 3:37:43 PM Pacific Daylight Time

ID: 1700311-01 OF-SOW-091A-0317 0.11879, Description: OF-SOW-091A-0317, Name: 170317G2_11, Date: 17-Mar-2017, Time: 17:53:36, Instrument: , Lab: , User:

PFNA

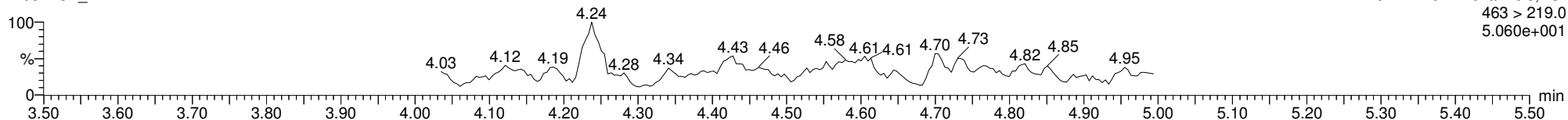
170317G2_11

F5:MRM of 12 channels,ES-
463 > 418.8
6.722e+002



170317G2_11

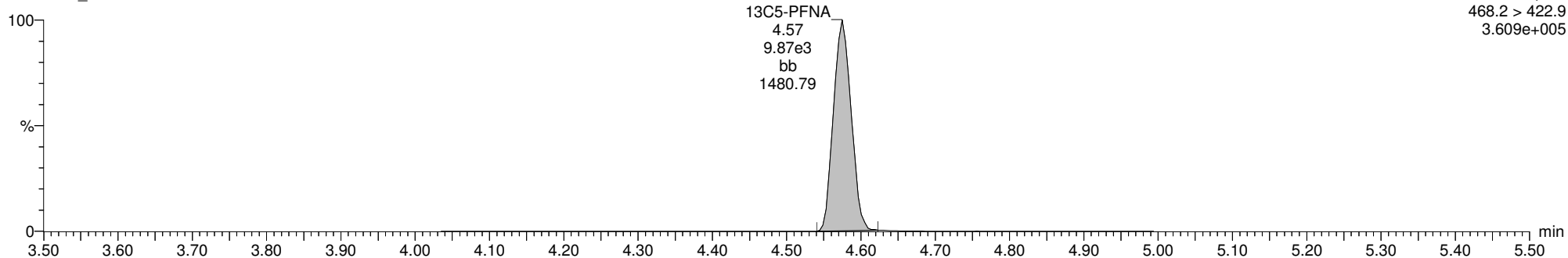
F5:MRM of 12 channels,ES-
463 > 219.0
5.060e+001



13C5-PFNA

170317G2_11

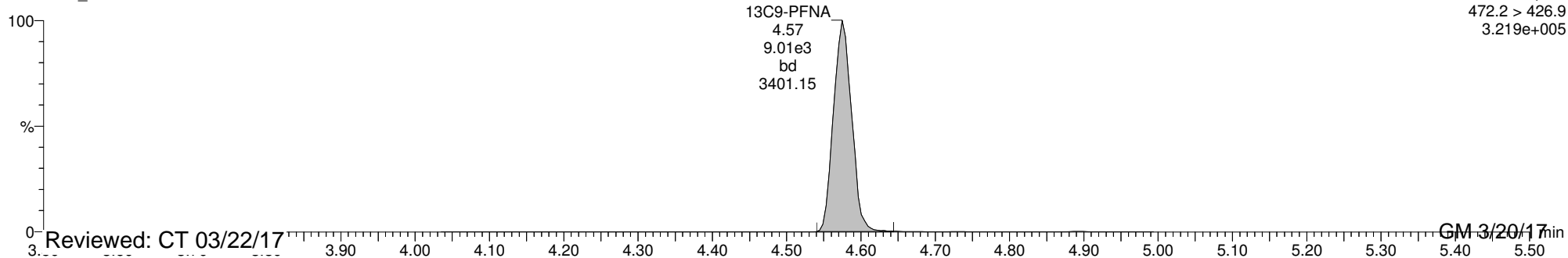
F5:MRM of 12 channels,ES-
468.2 > 422.9
3.609e+005



13C9-PFNA

170317G2_11

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.219e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-11.qld

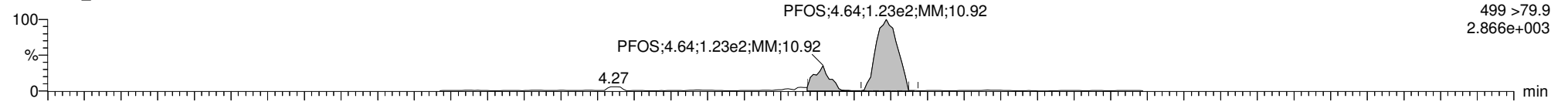
Last Altered: Monday, March 20, 2017 3:37:23 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 3:37:43 PM Pacific Daylight Time

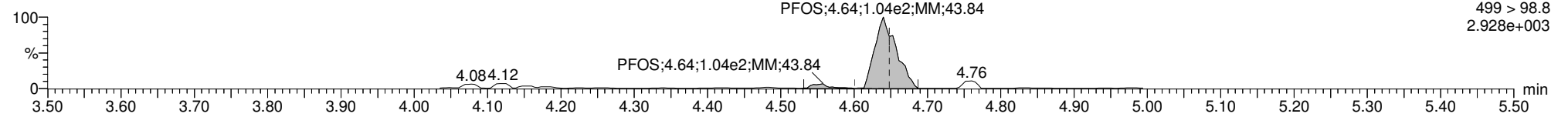
ID: 1700311-01 OF-SOW-091A-0317 0.11879, Description: OF-SOW-091A-0317, Name: 170317G2_11, Date: 17-Mar-2017, Time: 17:53:36, Instrument: , Lab: , User:

Total PFOS

170317G2_11

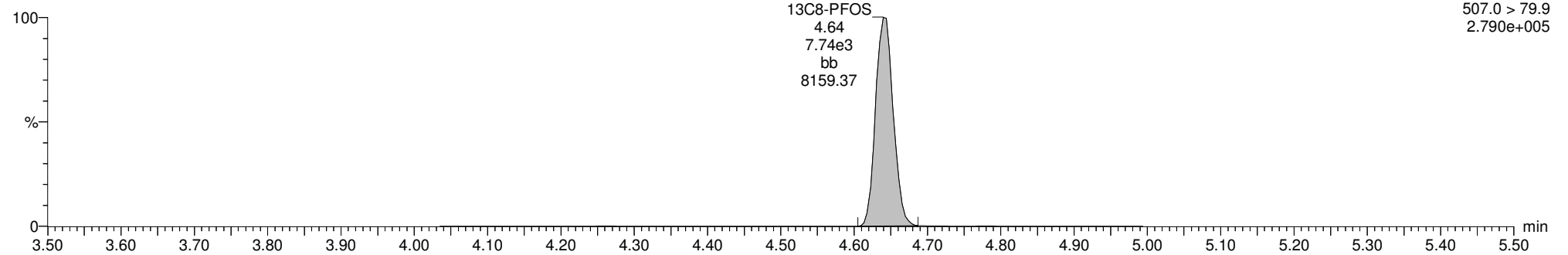


170317G2_11



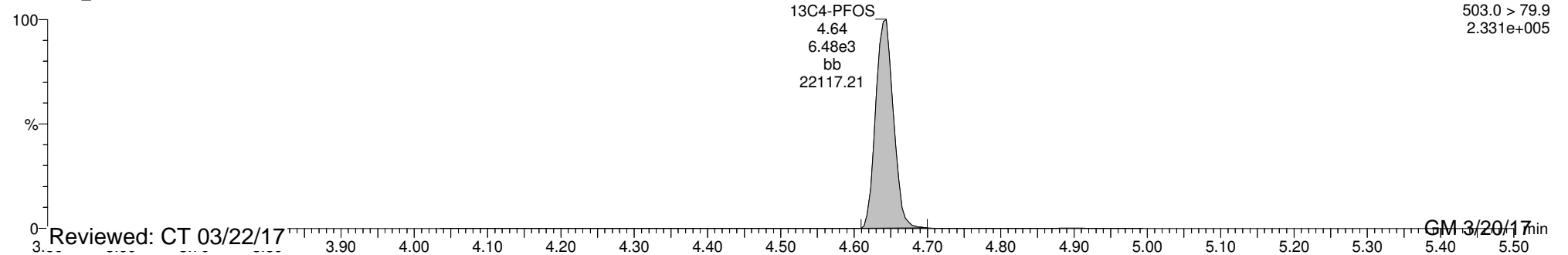
13C8-PFOS

170317G2_11



13C4-PFOS

170317G2_11



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-12.qld

Last Altered: Monday, March 20, 2017 10:32:53 Pacific Daylight Time

Printed: Monday, March 20, 2017 10:33:41 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-02 OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_12, Date: 17-Mar-2017, Time: 18:06:04

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	1.539e4	7.497e3		0.123	2.97	91.4	
2	2 PFHpA	363 > 318.9	1.420e4	1.733e4		0.123	3.83	47.5	
3	3 PFHxS	398.9 > 79.6	1.796e5	4.569e3		0.123	3.95	2240 E*	
4	4 PFOA	413 > 368.7	1.115e5	2.300e4		0.123	4.23	562	
5	5 PFNA	463 > 418.8	9.717e2	8.324e3		0.123	4.57	4.77	
6	6 PFOS	499 > 79.9	4.131e4	4.486e3		0.123	4.64	1690 E*	
7	7 13C3-PFBS	302.0 > 98.8	7.497e3	8.027e3	0.501	0.123	2.97	189	186 H
8	8 13C4-PFHpA	367.2 > 321.8	1.733e4	8.027e3	1.237	0.123	3.83	177	175 H
9	9 18O2-PFHxS	403 > 102.6	4.569e3	8.027e3	0.495	0.123	3.95	117	115
10	10 13C2-PFOA	414.9 > 369.7	2.300e4	7.012e3	3.221	0.123	4.23	103	102
11	11 13C5-PFNA	468.2 > 422.9	8.324e3	7.754e3	0.979	0.123	4.57	111	110
12	12 13C8-PFOS	507.0 > 79.9	4.486e3	3.532e3	1.080	0.123	4.64	119	118
13	13 13C5-PFHxA	318 > 272.9	2.054e4	2.054e4	1.000	0.123	3.33	101	100
14	14 13C3-PFHxS	401.9 > 79.9	8.027e3	8.027e3	1.000	0.123	3.95	101	100
15	15 13C8-PFOA	421.3 > 376	7.012e3	7.012e3	1.000	0.123	4.23	101	100
16	16 13C9-PFNA	472.2 > 426.9	7.754e3	7.754e3	1.000	0.123	4.57	101	100
17	17 13C4-PFOS	503.0 > 79.9	3.532e3	3.532e3	1.000	0.123	4.64	101	100
18	18 Total PFBS	299 > 79.7		4.569e3		0.123		91.4	
19	19 Total PFHxS	398.9 > 79.6		4.569e3		0.123		2240	
20	20 Total PFOA	413 > 368.7		2.300e4		0.123		701	
21	21 Total PFOS	499 > 79.9		4.486e3		0.123		1690	

*See dilution.

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-12.qld

Last Altered: Monday, March 20, 2017 10:32:53 Pacific Daylight Time

Printed: Monday, March 20, 2017 10:33:41 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-02 OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_12, Date: 17-Mar-2017, Time: 18:06:04

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.97	15390.329	7496.793	91.4

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.95	179570.906	4568.804	2236.3

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.23	111476.234	23003.689	562.5
2	20 Total PFOA	413 > 368.7	4.14	27608.932	23003.689	138.3

Total PFOS

	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.64	41311.871	4485.725	1689.2

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-12.qld

Last Altered: Monday, March 20, 2017 10:32:53 Pacific Daylight Time

Printed: Monday, March 20, 2017 10:33:41 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

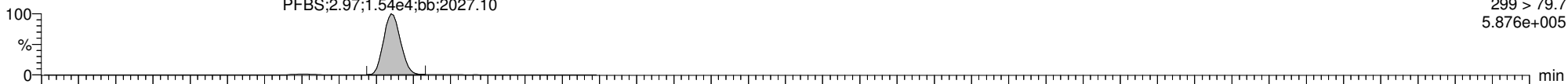
ID: 1700311-02 OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_12, Date: 17-Mar-2017, Time: 18:06:04, Instrument: , Lab: , User:

PFBS

170317G2_12

PFBS;2.97;1.54e4;bb;2027.10

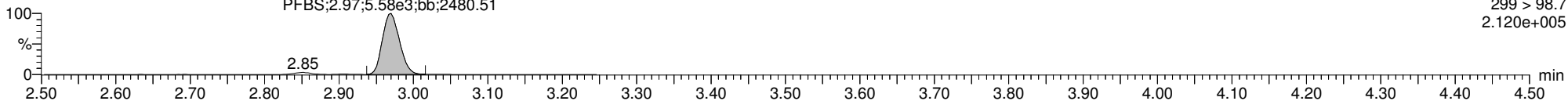
F2:MRM of 3 channels,ES-
299 > 79.7
5.876e+005



170317G2_12

PFBS;2.97;5.58e3;bb;2480.51

F2:MRM of 3 channels,ES-
299 > 98.7
2.120e+005

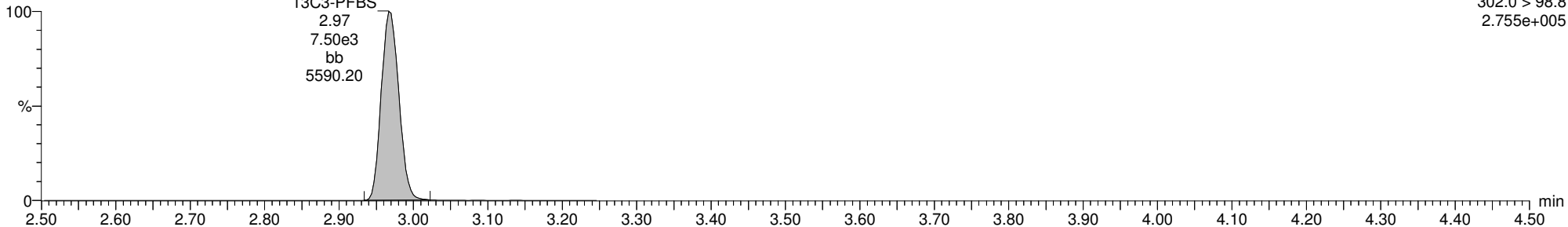


13C3-PFBS

170317G2_12

13C3-PFBS
2.97
7.50e3
bb
5590.20

F2:MRM of 3 channels,ES-
302.0 > 98.8
2.755e+005

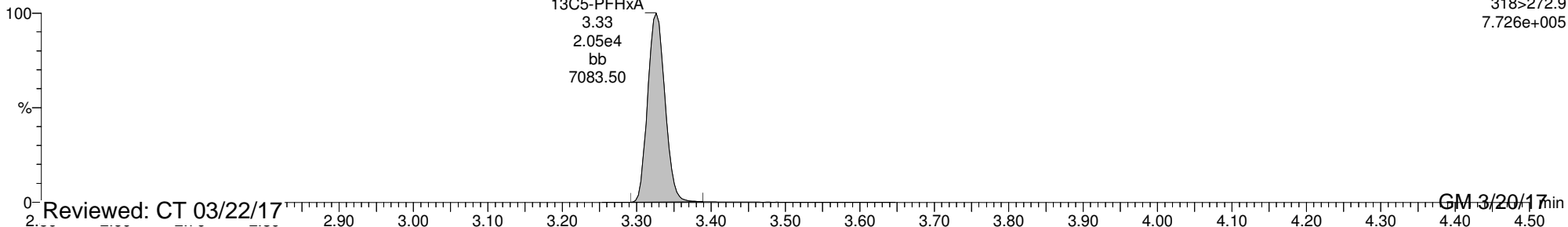


13C5-PFHxA

170317G2_12

13C5-PFHxA
3.33
2.05e4
bb
7083.50

F3:MRM of 1 channel,ES-
318>272.9
7.726e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-12.qld

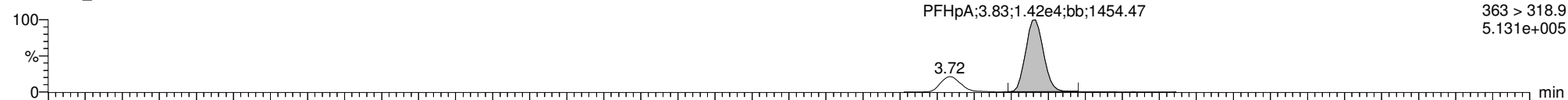
Last Altered: Monday, March 20, 2017 10:32:53 Pacific Daylight Time

Printed: Monday, March 20, 2017 10:33:41 Pacific Daylight Time

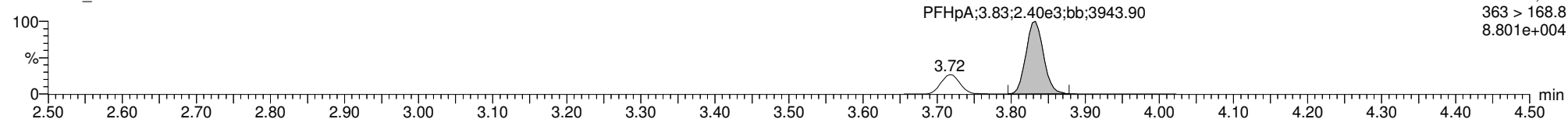
ID: 1700311-02 OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_12, Date: 17-Mar-2017, Time: 18:06:04, Instrument: , Lab: , User:

PFHpA

170317G2_12

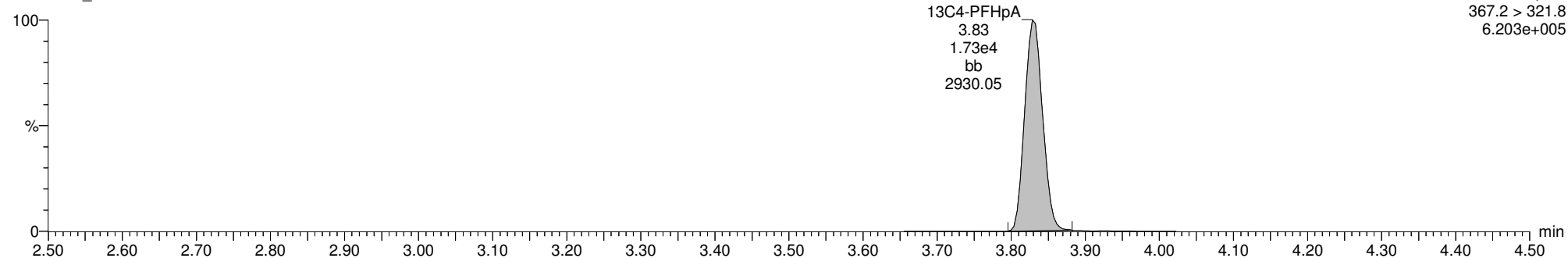


170317G2_12



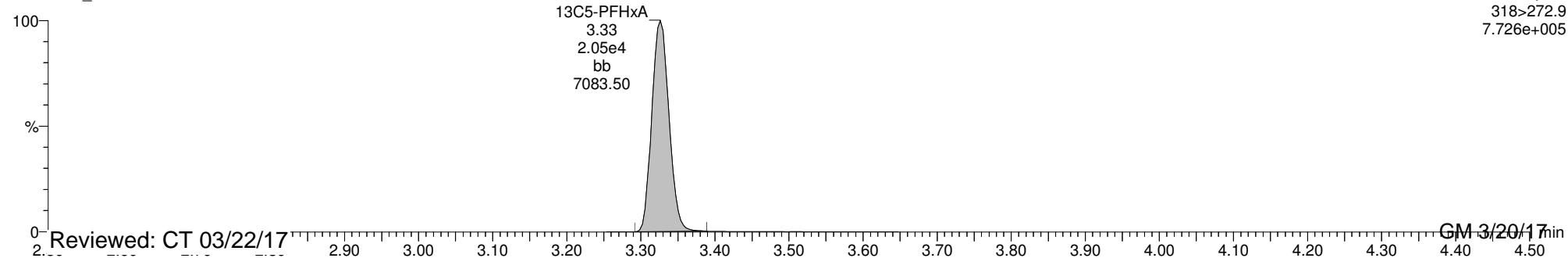
13C4-PFHpA

170317G2_12



13C5-PFHxA

170317G2_12



Reviewed: CT 03/22/17

Work Order 1700311

GM 3/20/17

Page 48 of 304

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-12.qld

Last Altered: Monday, March 20, 2017 10:32:53 Pacific Daylight Time

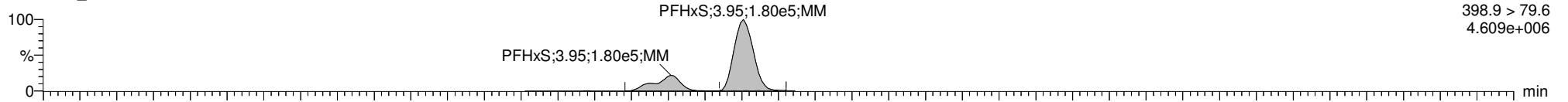
Printed: Monday, March 20, 2017 10:33:41 Pacific Daylight Time

ID: 1700311-02 OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_12, Date: 17-Mar-2017, Time: 18:06:04, Instrument: , Lab: , User:

Total PFHxS

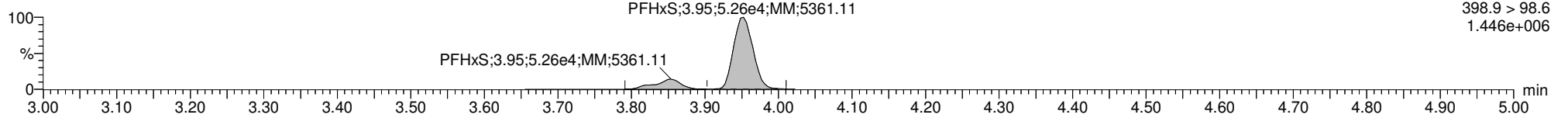
170317G2_12

F4:MRM of 7 channels,ES-
398.9 > 79.6
4.609e+006



170317G2_12

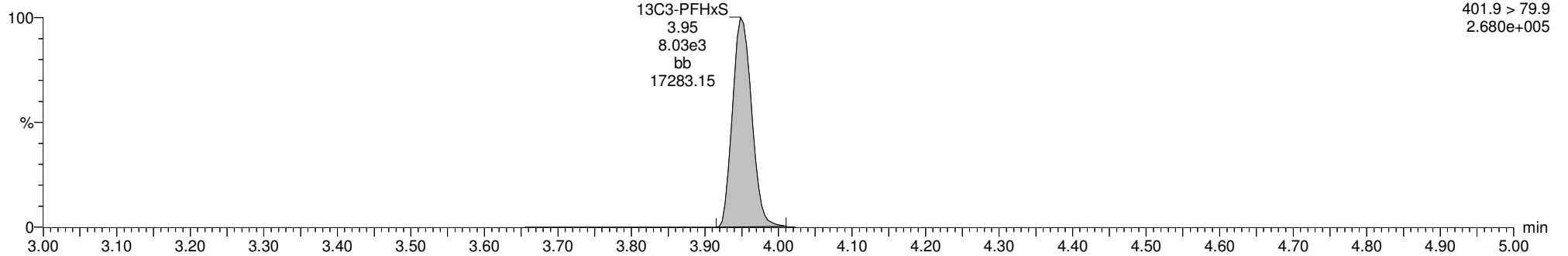
F4:MRM of 7 channels,ES-
398.9 > 98.6
1.446e+006



13C3-PFHxS

170317G2_12

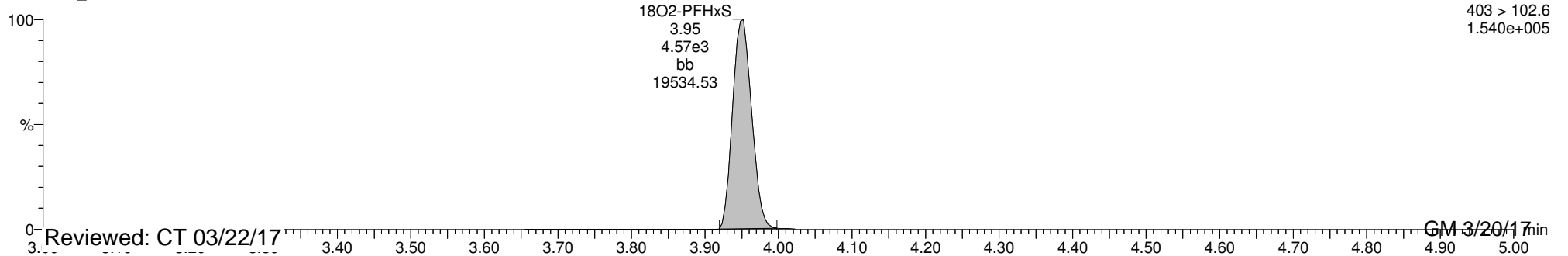
F4:MRM of 7 channels,ES-
401.9 > 79.9
2.680e+005



18O2-PFHxS

170317G2_12

F4:MRM of 7 channels,ES-
403 > 102.6
1.540e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-12.qld

Last Altered: Monday, March 20, 2017 10:32:53 Pacific Daylight Time

Printed: Monday, March 20, 2017 10:33:41 Pacific Daylight Time

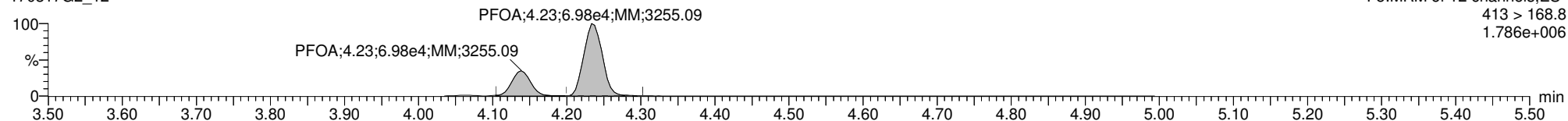
ID: 1700311-02 OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_12, Date: 17-Mar-2017, Time: 18:06:04, Instrument: , Lab: , User:

Total PFOA

170317G2_12

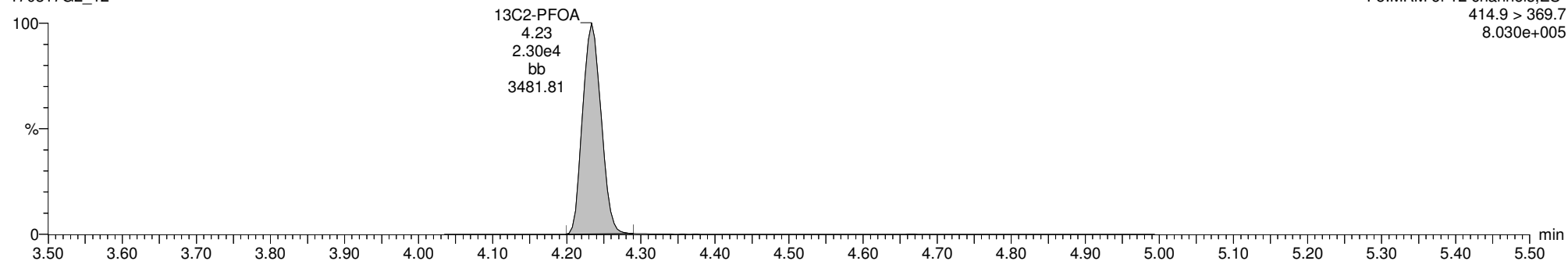


170317G2_12



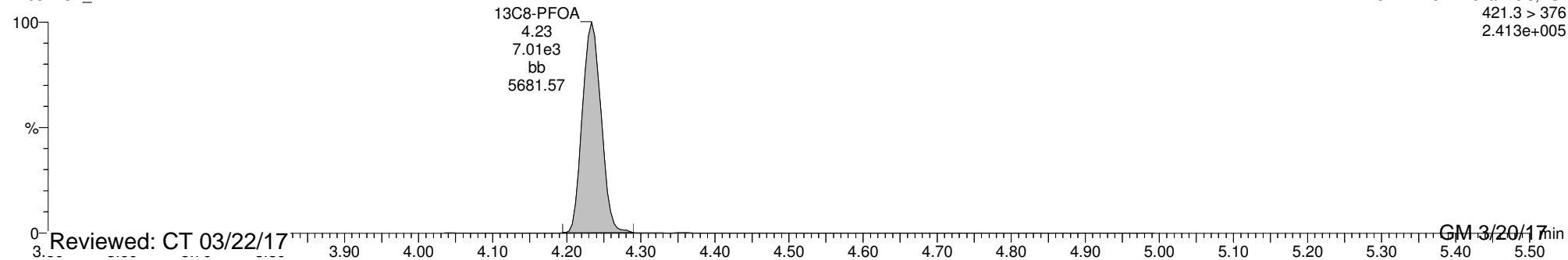
13C2-PFOA

170317G2_12



13C8-PFOA

170317G2_12



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-12.qld

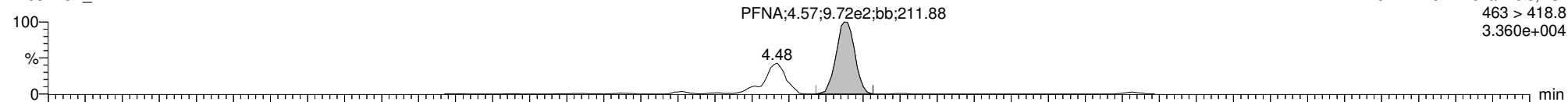
Last Altered: Monday, March 20, 2017 10:32:53 Pacific Daylight Time

Printed: Monday, March 20, 2017 10:33:41 Pacific Daylight Time

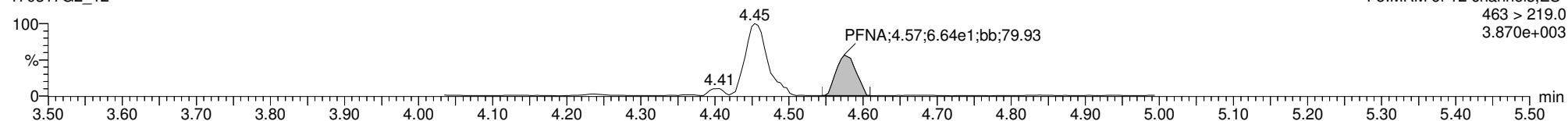
ID: 1700311-02 OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_12, Date: 17-Mar-2017, Time: 18:06:04, Instrument: , Lab: , User:

PFNA

170317G2_12

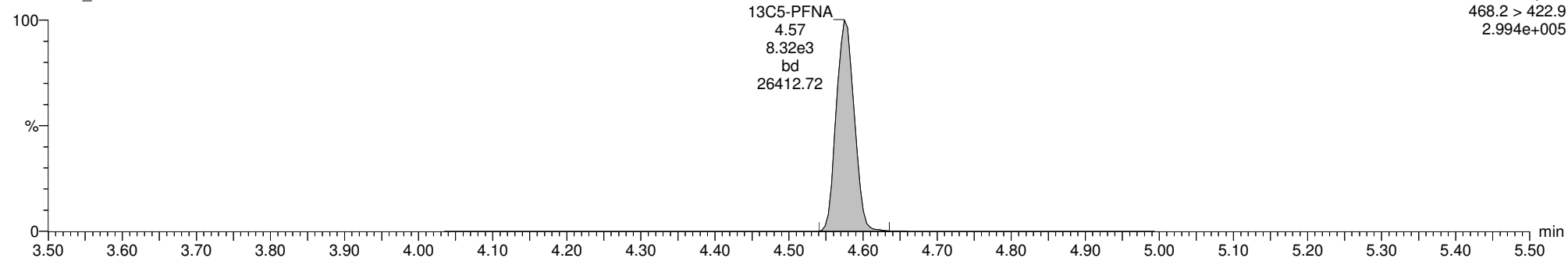


170317G2_12



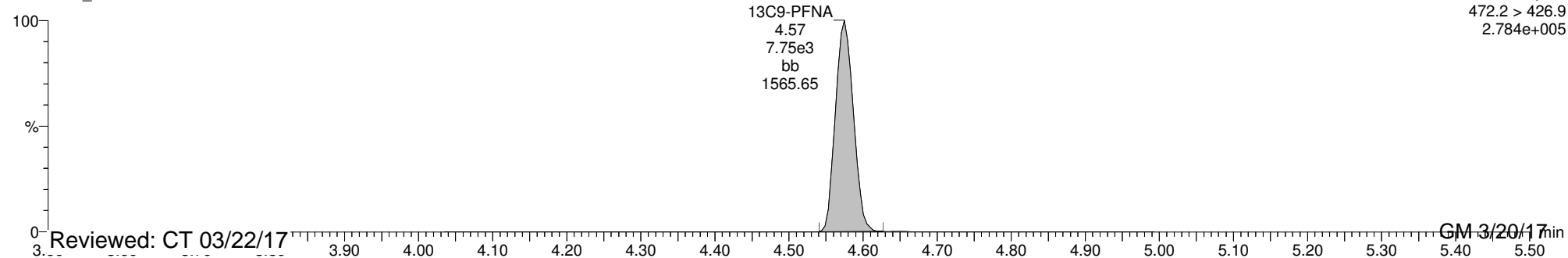
13C5-PFNA

170317G2_12



13C9-PFNA

170317G2_12



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-12.qld

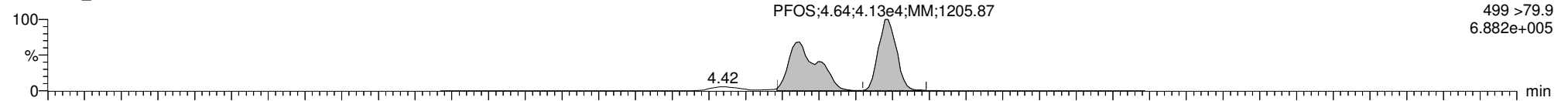
Last Altered: Monday, March 20, 2017 10:32:53 Pacific Daylight Time

Printed: Monday, March 20, 2017 10:33:41 Pacific Daylight Time

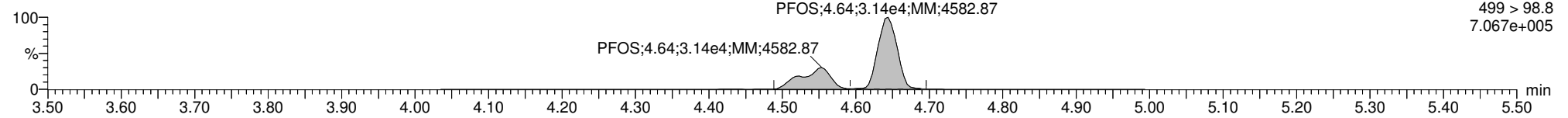
ID: 1700311-02 OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_12, Date: 17-Mar-2017, Time: 18:06:04, Instrument: , Lab: , User:

Total PFOS

170317G2_12

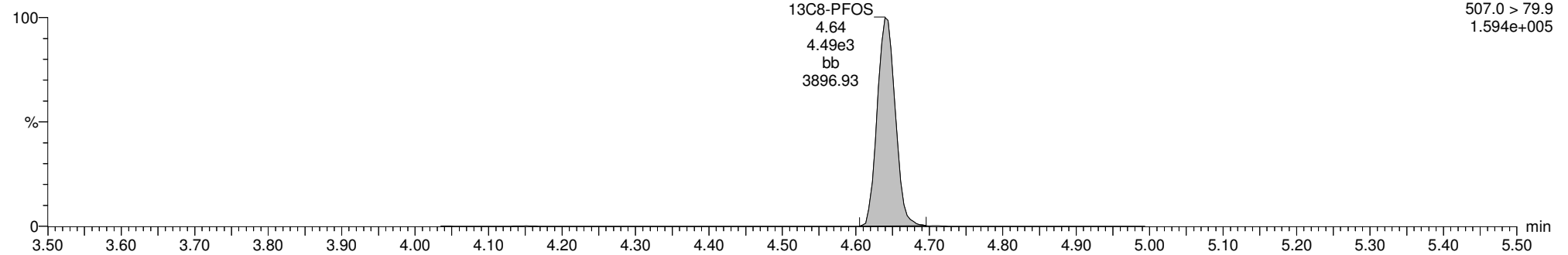


170317G2_12



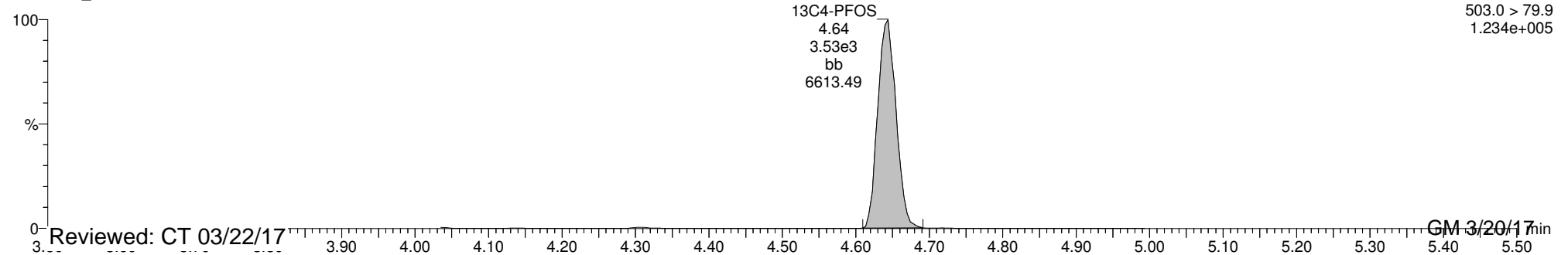
13C8-PFOS

170317G2_12



13C4-PFOS

170317G2_12



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-8.qld

Last Altered: Monday, March 20, 2017 10:02:35 Pacific Daylight Time

Printed: Wednesday, March 22, 2017 08:39:24 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-02@5X OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_8, Date: 17-Mar-2017, Time: 17:15:57

	# Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	3 PFHxS	398.9 > 79.6	1.584e4	3.988e2		0.123	3.95	2260	
2	6 PFOS	499 >79.9	2.905e2	2.741e1		0.123	4.52	1940	
3	9 18O2-PFHxS	403 > 102.6	3.988e2	8.243e2	0.495	0.123	3.95	99.2	97.8
4	12 13C8-PFOS	507.0 > 79.9	2.741e1	2.359e1	1.080	0.123	4.64	109	108
5	14 13C3-PFHxS	401.9 > 79.9	8.243e2	8.243e2	1.000	0.123	3.95	101	100
6	17 13C4-PFOS	503.0 > 79.9	2.359e1	2.359e1	1.000	0.123	4.64	101	100
7	19 Total PFHxS	398.9 > 79.6		3.988e2		0.123		2260	
8	21 Total PFOS	499 > 79.9		2.741e1		0.123		1940	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-8.qld

Last Altered: Monday, March 20, 2017 10:02:35 Pacific Daylight Time

Printed: Wednesday, March 22, 2017 08:39:24 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-02@5X OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_8, Date: 17-Mar-2017, Time: 17:15:57

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.97	2564.844	1341.167	85.2

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.95	15843.450	398.824	2260.3

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.23	7546.751	1283.090	683.0
2	20 Total PFOA	413 > 368.7	4.13	1949.817	1283.090	175.5

Total PFOS

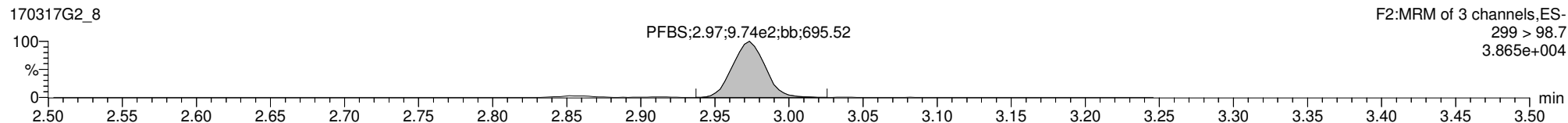
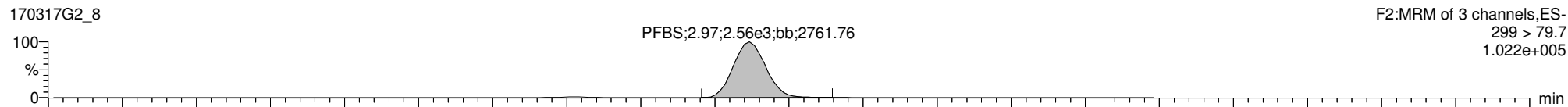
	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.52	290.500	27.407	1944.0

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-8.qld
Last Altered: Monday, March 20, 2017 10:02:35 Pacific Daylight Time
Printed: Wednesday, March 22, 2017 08:39:24 Pacific Daylight Time

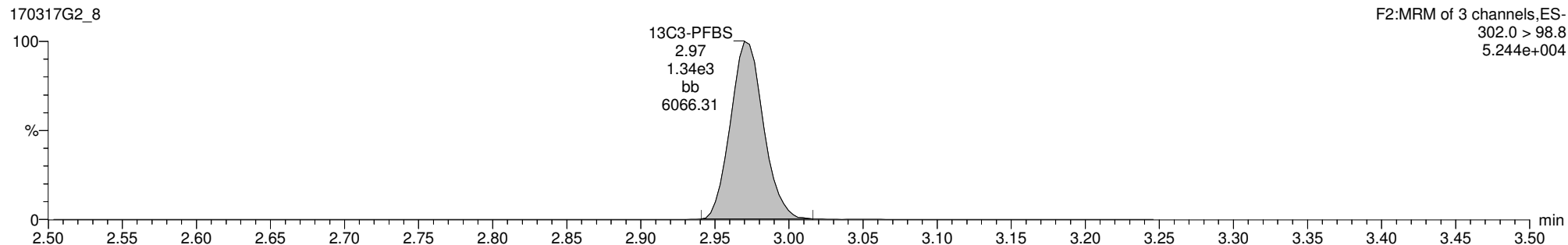
Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-02@5X OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_8, Date: 17-Mar-2017, Time: 17:15:57, Instrument: , Lab: , User:

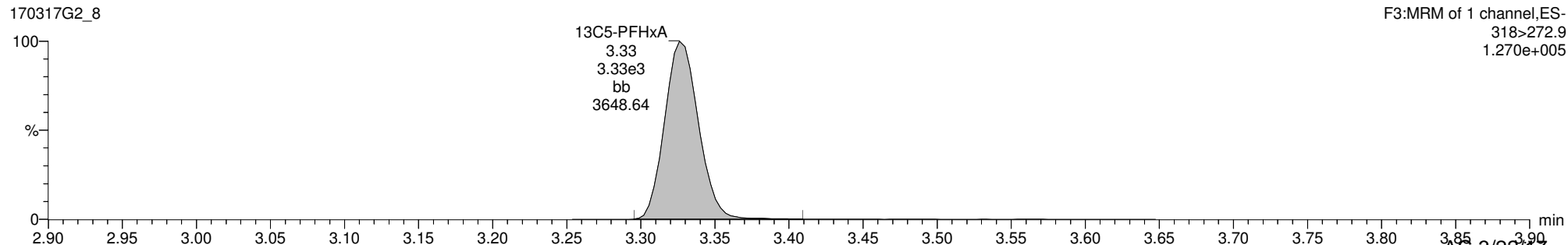
PFBS



13C3-PFBS



13C5-PFHxA

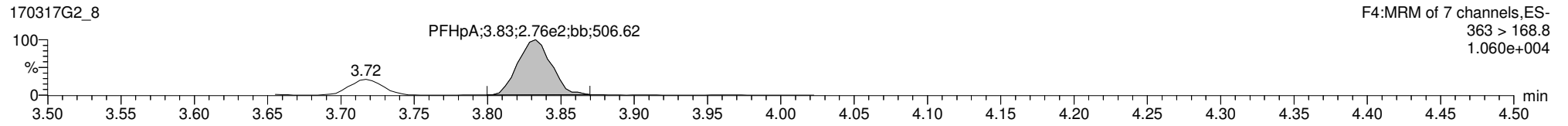
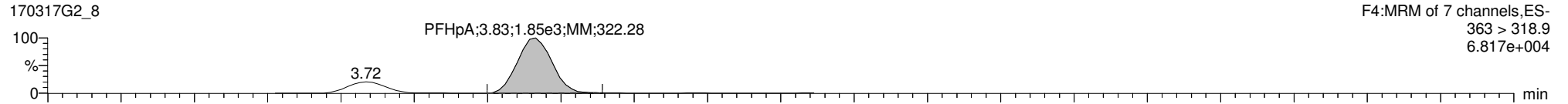


Reviewed: CT 03/22/17

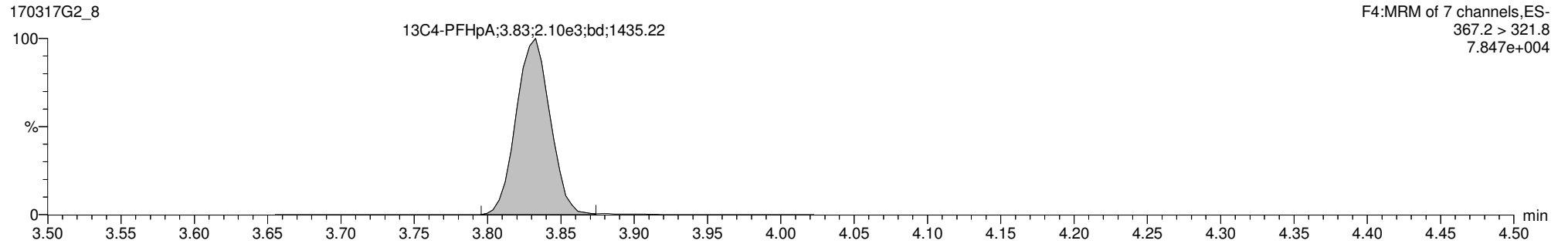
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-8.qld
Last Altered: Monday, March 20, 2017 10:02:35 Pacific Daylight Time
Printed: Wednesday, March 22, 2017 08:39:24 Pacific Daylight Time

ID: 1700311-02@5X OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_8, Date: 17-Mar-2017, Time: 17:15:57, Instrument: , Lab: , User:

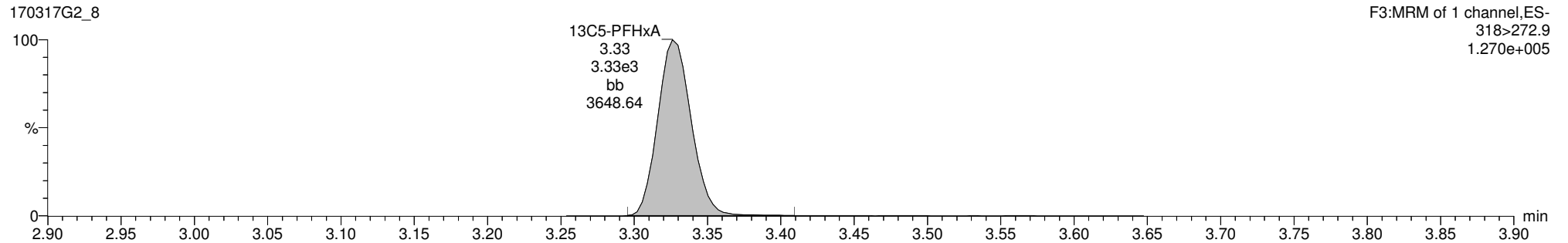
PFHpA



13C4-PFHpA



13C5-PFHxA



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-8.qld

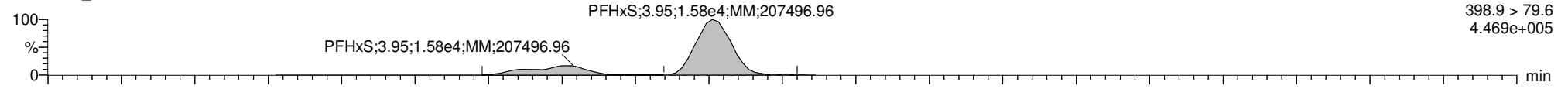
Last Altered: Monday, March 20, 2017 10:02:35 Pacific Daylight Time

Printed: Wednesday, March 22, 2017 08:39:24 Pacific Daylight Time

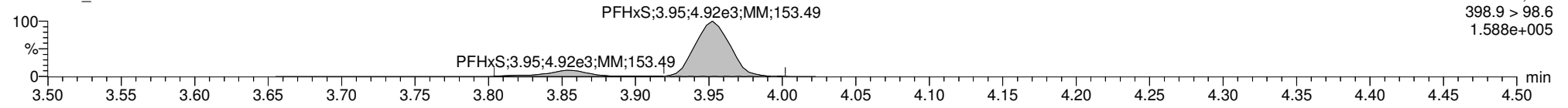
ID: 1700311-02@5X OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_8, Date: 17-Mar-2017, Time: 17:15:57, Instrument: , Lab: , User:

PFHxS

170317G2_8

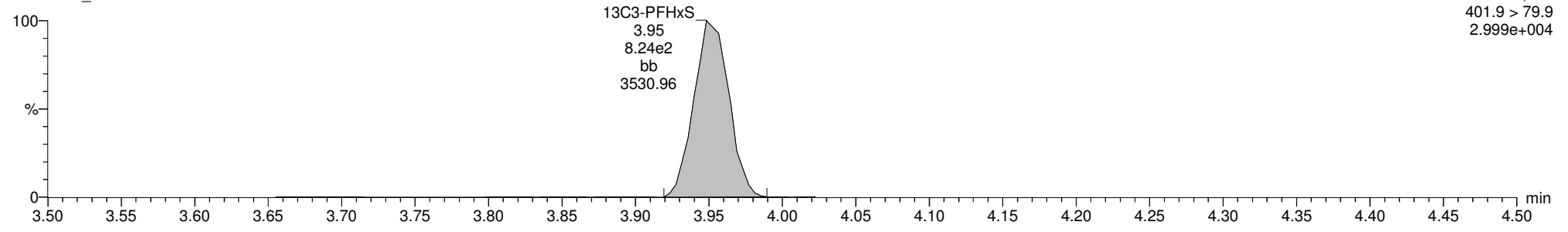


170317G2_8



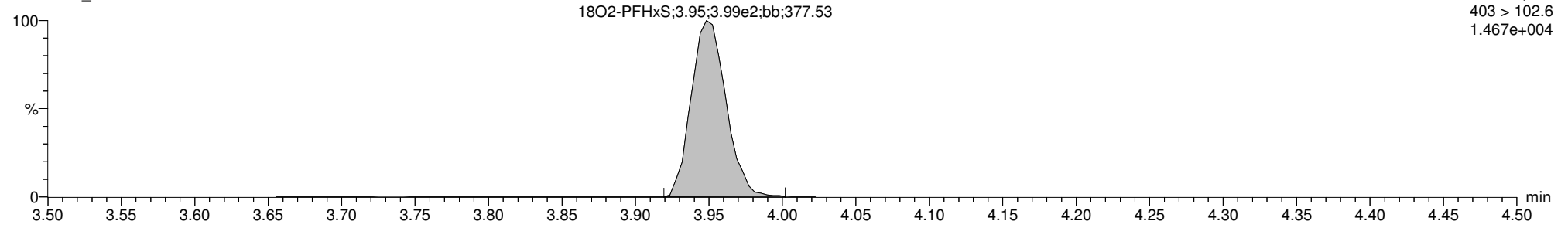
13C3-PFHxS

170317G2_8



18O2-PFHxS

170317G2_8



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-8.qld

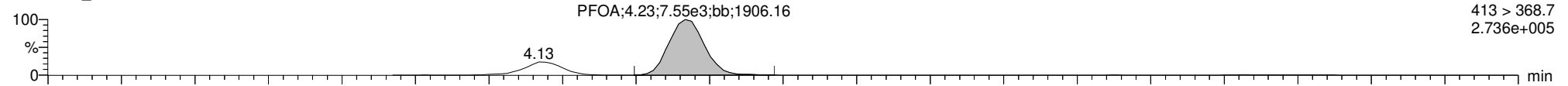
Last Altered: Monday, March 20, 2017 10:02:35 Pacific Daylight Time

Printed: Wednesday, March 22, 2017 08:39:24 Pacific Daylight Time

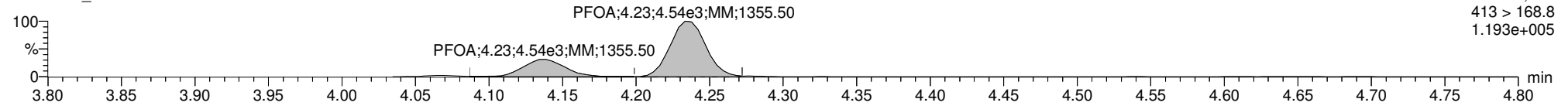
ID: 1700311-02@5X OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_8, Date: 17-Mar-2017, Time: 17:15:57, Instrument: , Lab: , User:

PFOA

170317G2_8

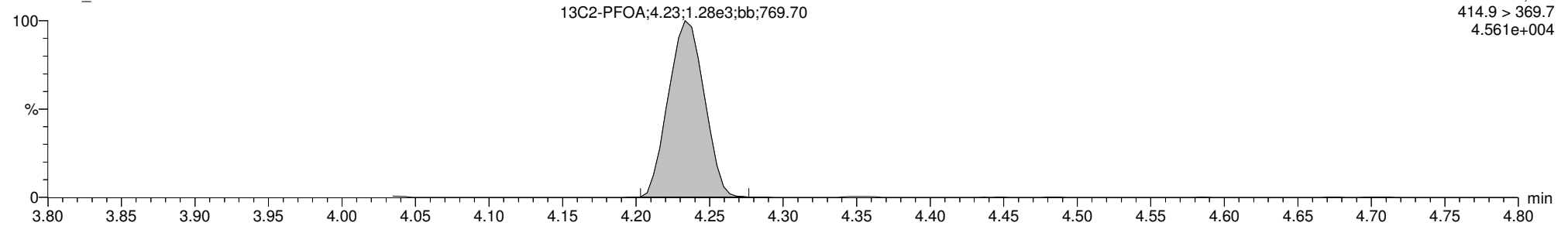


170317G2_8



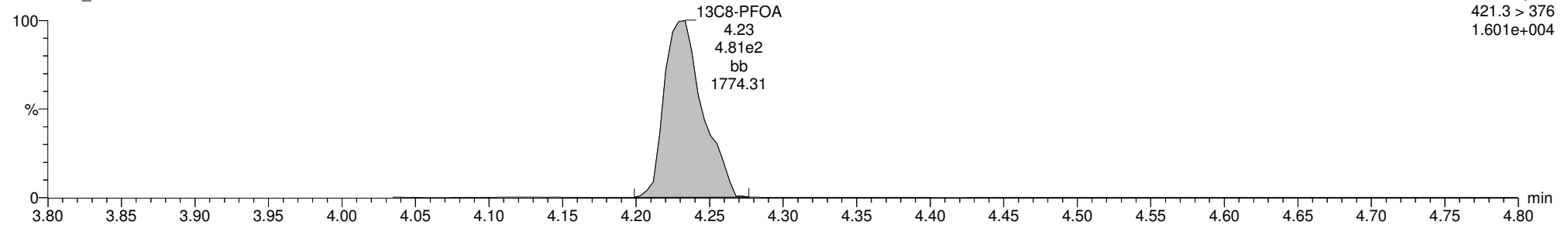
13C2-PFOA

170317G2_8



13C8-PFOA

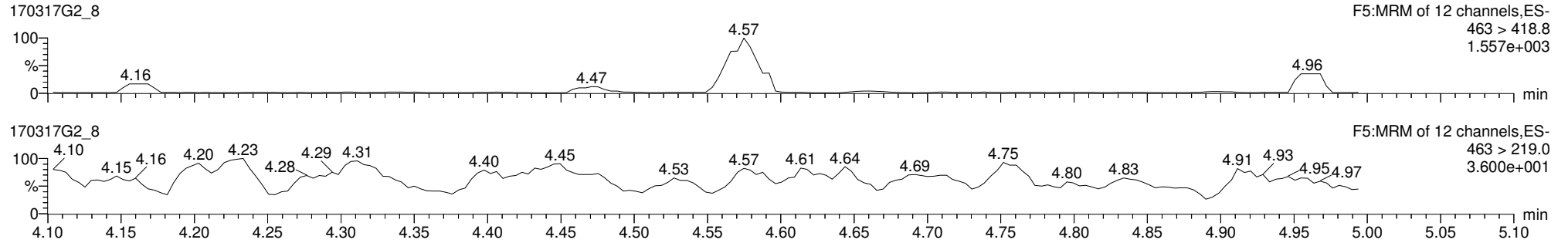
170317G2_8



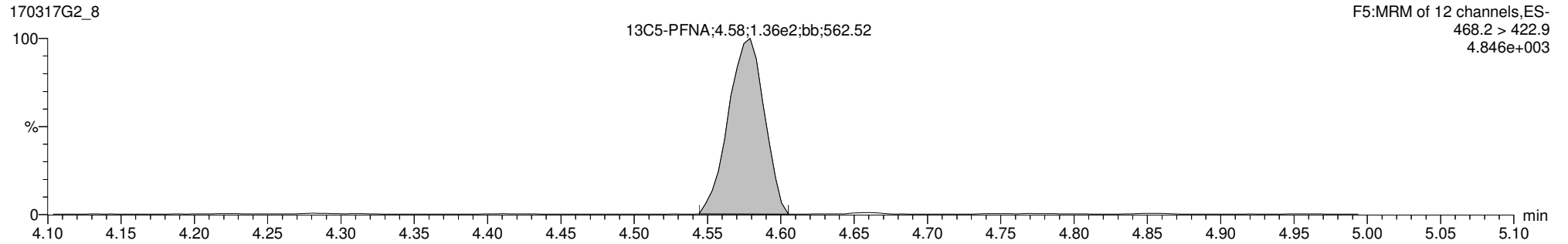
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-8.qld
Last Altered: Monday, March 20, 2017 10:02:35 Pacific Daylight Time
Printed: Wednesday, March 22, 2017 08:39:24 Pacific Daylight Time

ID: 1700311-02@5X OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_8, Date: 17-Mar-2017, Time: 17:15:57, Instrument: , Lab: , User:

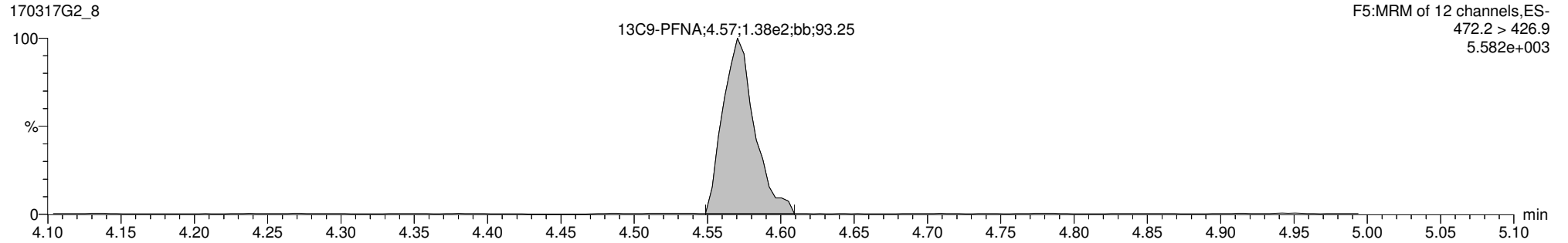
PFNA



13C5-PFNA



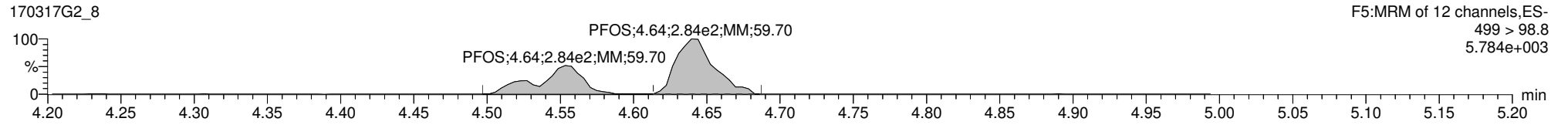
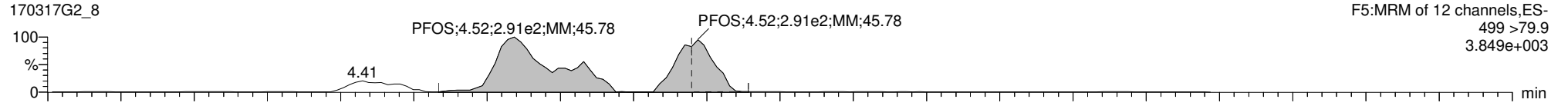
13C9-PFNA



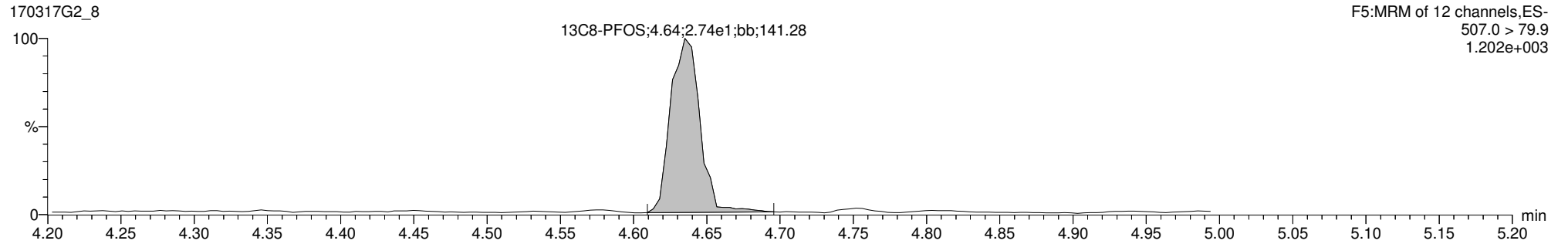
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-8.qld
Last Altered: Monday, March 20, 2017 10:02:35 Pacific Daylight Time
Printed: Wednesday, March 22, 2017 08:39:24 Pacific Daylight Time

ID: 1700311-02@5X OF-SOW-091D-0317 0.12329, Description: OF-SOW-091D-0317, Name: 170317G2_8, Date: 17-Mar-2017, Time: 17:15:57, Instrument: , Lab: , User:

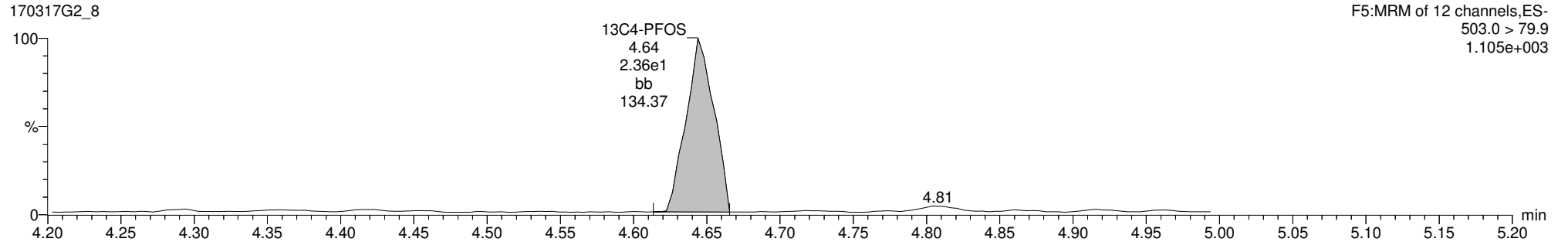
PFOS



13C8-PFOS



13C4-PFOS



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-13.qld

Last Altered: Monday, March 20, 2017 10:46:02 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:47:50 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-03 OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170317G2_13, Date: 17-Mar-2017, Time: 18:18:38

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	1.552e4	8.259e3		0.124	2.97	83.1	*
2	2 PFHpA	363 > 318.9	1.534e4	1.837e4		0.124	3.83	48.1	*
3	3 PFHxS	398.9 > 79.6	1.928e5	4.905e3		0.124	3.95	2220	
4	4 PFOA	413 > 368.7	1.311e5	2.516e4		0.124	4.23	600	
5	5 PFNA	463 > 418.8	1.524e3	9.108e3		0.124	4.57	7.09	
6	6 PFOS	499 > 79.9	5.751e4	5.754e3		0.124	4.64	1820	
7	7 13C3-PFBS	302.0 > 98.8	8.259e3	8.604e3	0.501	0.124	2.97	193	192 *
8	8 13C4-PFHpA	367.2 > 321.8	1.837e4	8.604e3	1.237	0.124	3.83	174	173 *
9	9 18O2-PFHxS	403 > 102.6	4.905e3	8.604e3	0.495	0.124	3.95	116	115
10	10 13C2-PFOA	414.9 > 369.7	2.516e4	8.039e3	3.221	0.124	4.23	97.8	97.2
11	11 13C5-PFNA	468.2 > 422.9	9.108e3	9.327e3	0.979	0.124	4.57	100	99.7
12	12 13C8-PFOS	507.0 > 79.9	5.754e3	4.761e3	1.080	0.124	4.64	113	112
13	13 13C5-PFHxA	318 > 272.9	2.052e4	2.052e4	1.000	0.124	3.33	101	100
14	14 13C3-PFHxS	401.9 > 79.9	8.604e3	8.604e3	1.000	0.124	3.95	101	100
15	15 13C8-PFOA	421.3 > 376	8.039e3	8.039e3	1.000	0.124	4.23	101	100
16	16 13C9-PFNA	472.2 > 426.9	9.327e3	9.327e3	1.000	0.124	4.57	101	100
17	17 13C4-PFOS	503.0 > 79.9	4.761e3	4.761e3	1.000	0.124	4.64	101	100
18	18 Total PFBS	299 > 79.7		4.905e3		0.124		83.1	
19	19 Total PFHxS	398.9 > 79.6		4.905e3		0.124		2220	
20	20 Total PFOA	413 > 368.7		2.516e4		0.124		740	
21	21 Total PFOS	499 > 79.9		5.754e3		0.124		1820	

*See dilution.

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-13.qld

Last Altered: Monday, March 20, 2017 10:46:02 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:47:50 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-03 OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170317G2_13, Date: 17-Mar-2017, Time: 18:18:38

Total PFBS

#	Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.97	15516.863	8259.045	83.1

Total PFHxS

#	Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.95	192849.375	4904.567	2220.7

Total PFOA

#	Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.23	131137.672	25164.568	600.5
2	20 Total PFOA	413 > 368.7	4.14	30669.348	25164.568	139.4

Total PFOS

#	Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.64	57506.379	5754.067	1819.4

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-13.qld

Last Altered: Monday, March 20, 2017 10:46:02 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:47:50 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

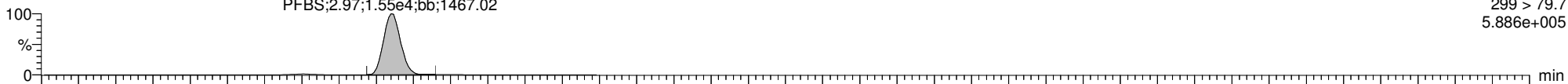
ID: 1700311-03 OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170317G2_13, Date: 17-Mar-2017, Time: 18:18:38, Instrument: , Lab: , User:

PFBS

170317G2_13

PFBS;2.97;1.55e4;bb;1467.02

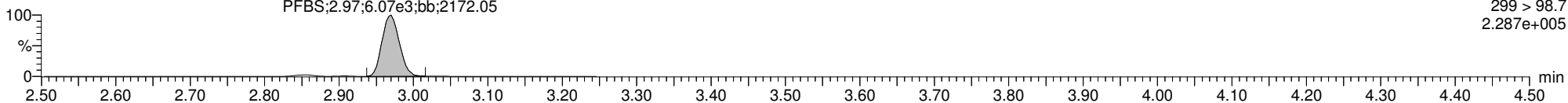
F2:MRM of 3 channels,ES-
299 > 79.7
5.886e+005



170317G2_13

PFBS;2.97;6.07e3;bb;2172.05

F2:MRM of 3 channels,ES-
299 > 98.7
2.287e+005

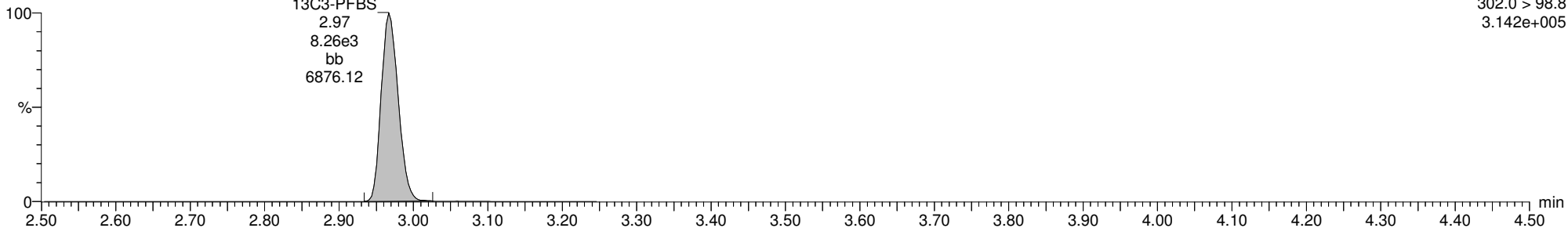


13C3-PFBS

170317G2_13

13C3-PFBS
2.97
8.26e3
bb
6876.12

F2:MRM of 3 channels,ES-
302.0 > 98.8
3.142e+005

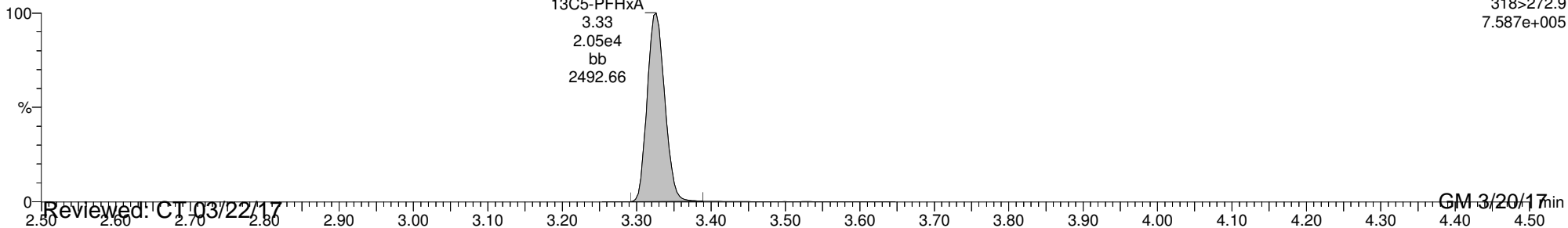


13C5-PFHxA

170317G2_13

13C5-PFHxA
3.33
2.05e4
bb
2492.66

F3:MRM of 1 channel,ES-
318>272.9
7.587e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-13.qld

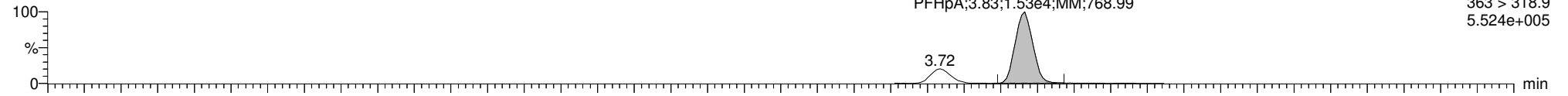
Last Altered: Monday, March 20, 2017 10:46:02 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:47:50 AM Pacific Daylight Time

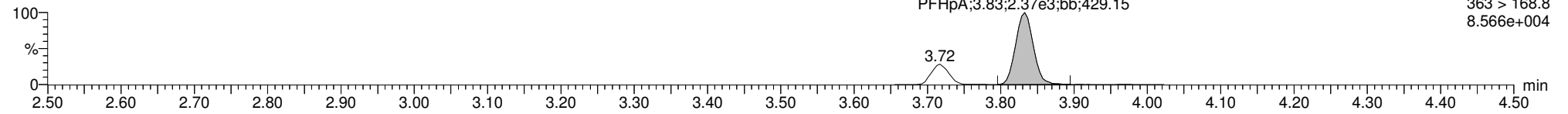
ID: 1700311-03 OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170317G2_13, Date: 17-Mar-2017, Time: 18:18:38, Instrument: , Lab: , User:

PFHpA

170317G2_13

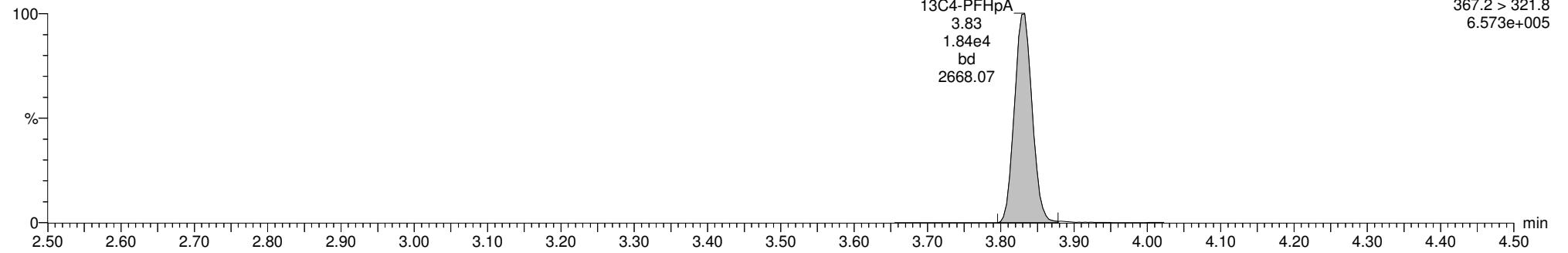


170317G2_13



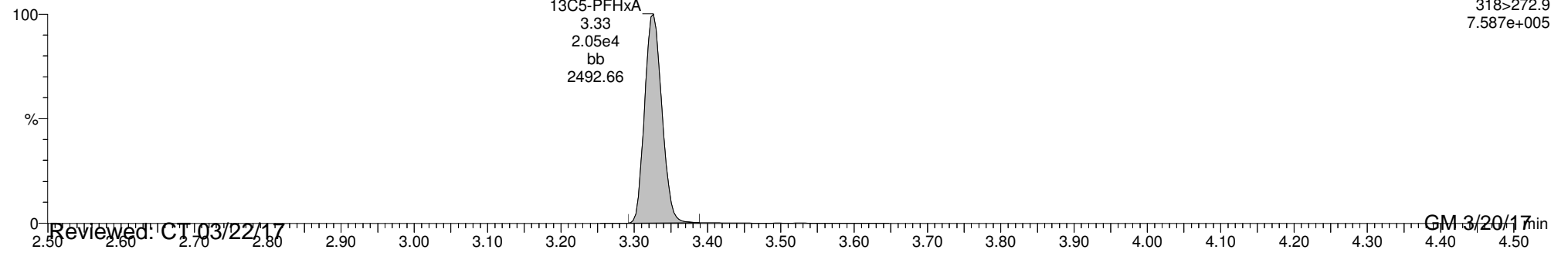
13C4-PFHpA

170317G2_13



13C5-PFHxA

170317G2_13



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-13.qld

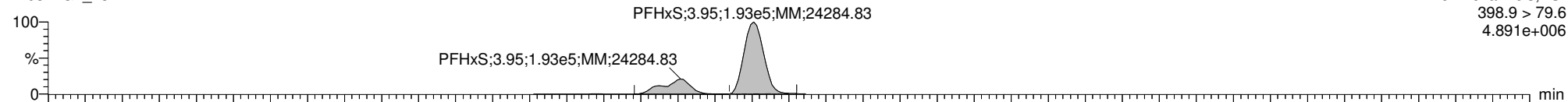
Last Altered: Monday, March 20, 2017 10:46:02 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:47:50 AM Pacific Daylight Time

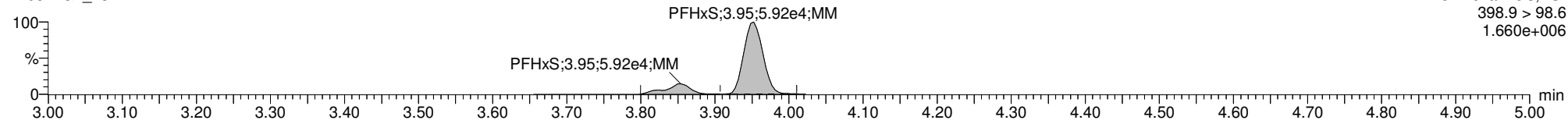
ID: 1700311-03 OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170317G2_13, Date: 17-Mar-2017, Time: 18:18:38, Instrument: , Lab: , User:

Total PFHxS

170317G2_13

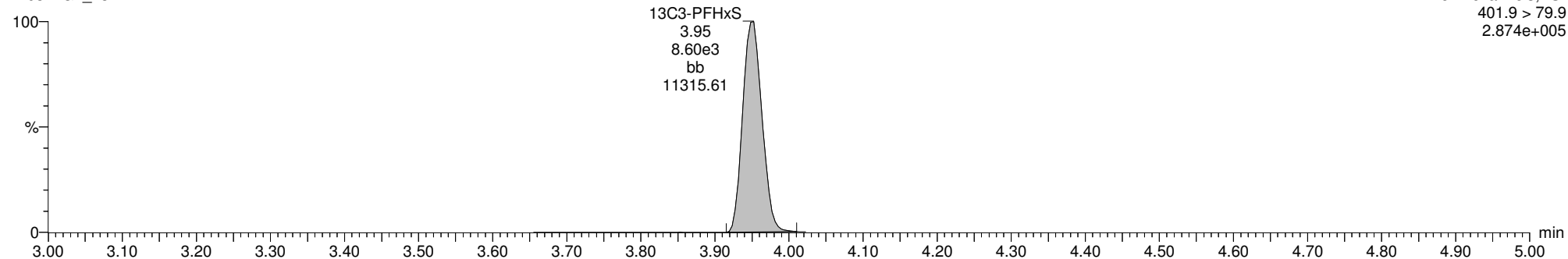


170317G2_13



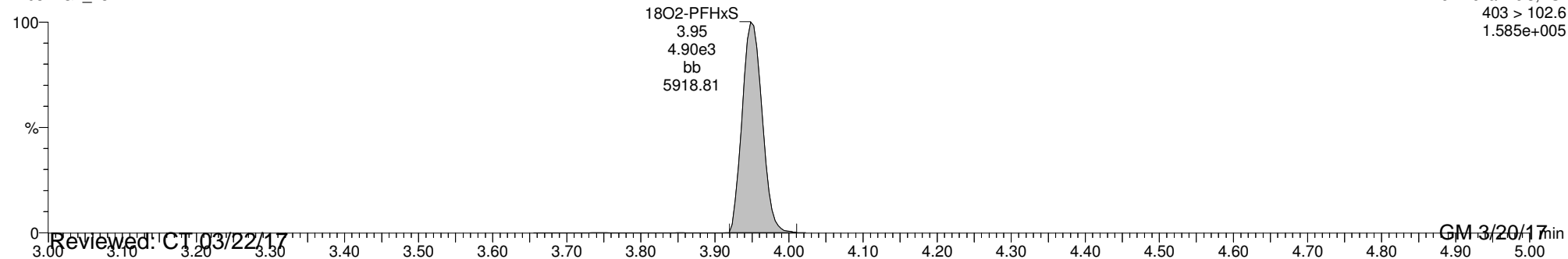
13C3-PFHxS

170317G2_13



18O2-PFHxS

170317G2_13



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-13.qld

Last Altered: Monday, March 20, 2017 10:46:02 AM Pacific Daylight Time

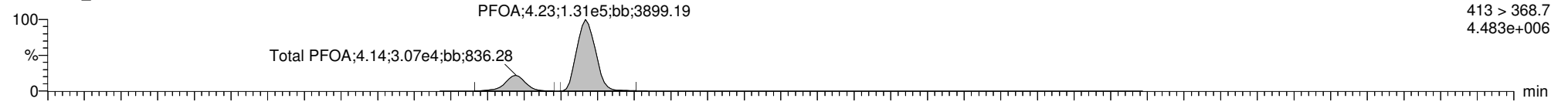
Printed: Monday, March 20, 2017 10:47:50 AM Pacific Daylight Time

ID: 1700311-03 OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170317G2_13, Date: 17-Mar-2017, Time: 18:18:38, Instrument: , Lab: , User:

Total PFOA

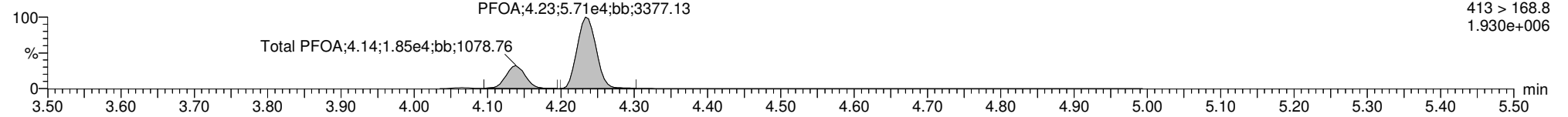
170317G2_13

F5:MRM of 12 channels,ES-
413 > 368.7
4.483e+006



170317G2_13

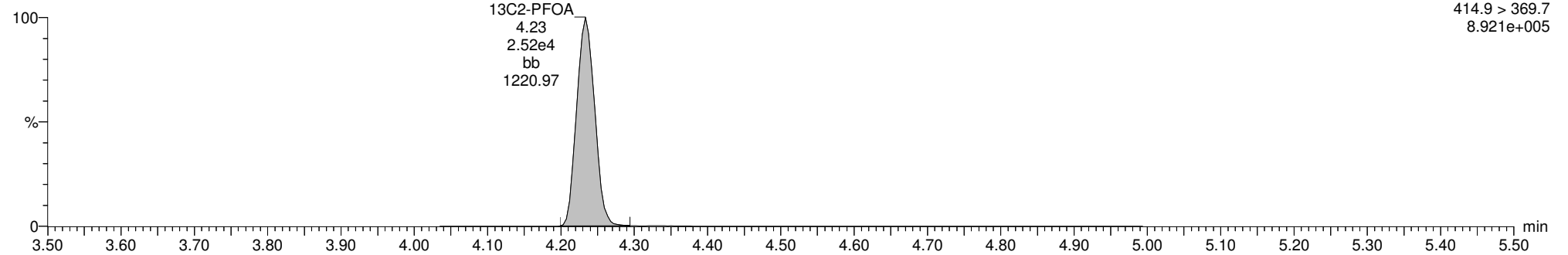
F5:MRM of 12 channels,ES-
413 > 168.8
1.930e+006



13C2-PFOA

170317G2_13

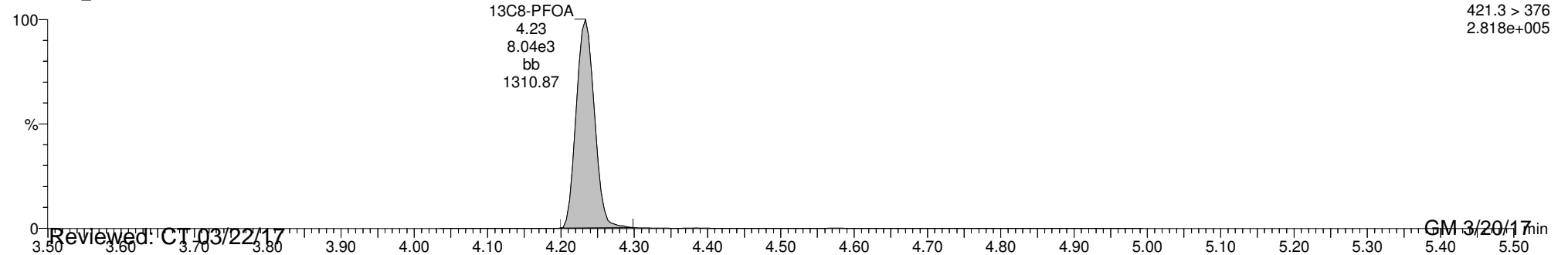
F5:MRM of 12 channels,ES-
414.9 > 369.7
8.921e+005



13C8-PFOA

170317G2_13

F5:MRM of 12 channels,ES-
421.3 > 376
2.818e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-13.qld

Last Altered: Monday, March 20, 2017 10:46:02 AM Pacific Daylight Time

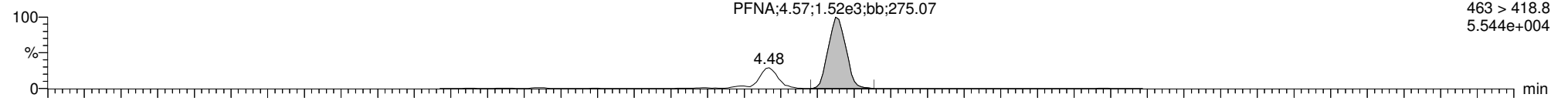
Printed: Monday, March 20, 2017 10:47:50 AM Pacific Daylight Time

ID: 1700311-03 OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170317G2_13, Date: 17-Mar-2017, Time: 18:18:38, Instrument: , Lab: , User:

PFNA

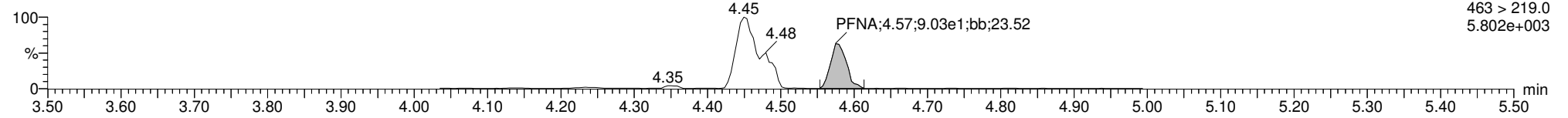
170317G2_13

F5:MRM of 12 channels,ES-
463 > 418.8
5.544e+004



170317G2_13

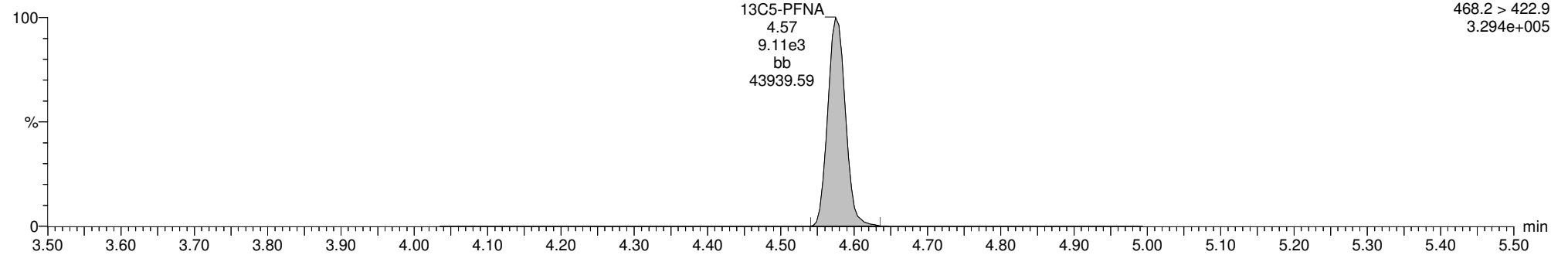
F5:MRM of 12 channels,ES-
463 > 219.0
5.802e+003



13C5-PFNA

170317G2_13

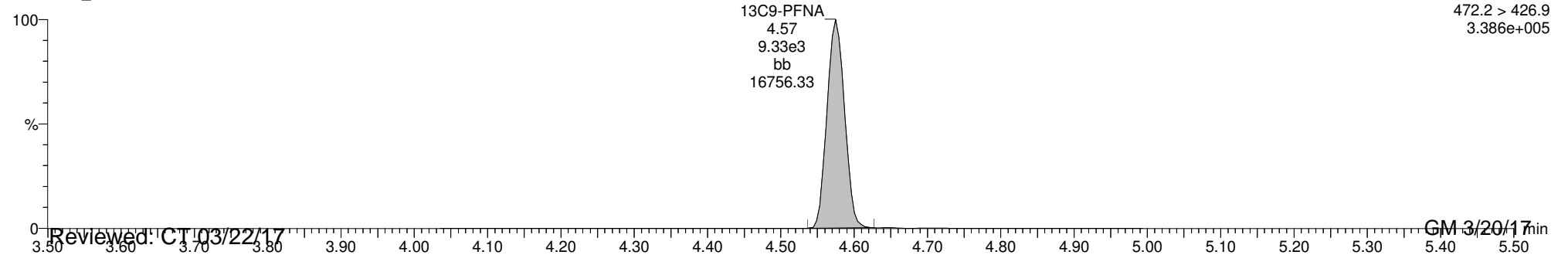
F5:MRM of 12 channels,ES-
468.2 > 422.9
3.294e+005



13C9-PFNA

170317G2_13

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.386e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-13.qld

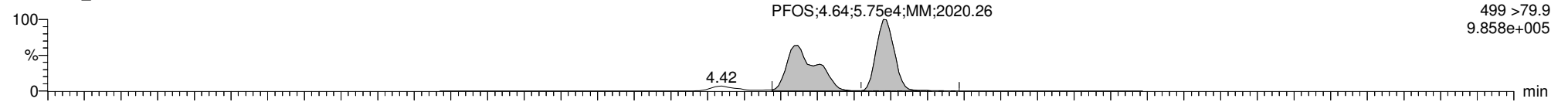
Last Altered: Monday, March 20, 2017 10:46:02 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:47:50 AM Pacific Daylight Time

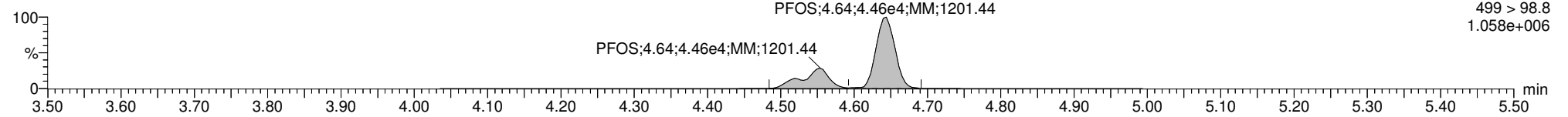
ID: 1700311-03 OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170317G2_13, Date: 17-Mar-2017, Time: 18:18:38, Instrument: , Lab: , User:

Total PFOS

170317G2_13

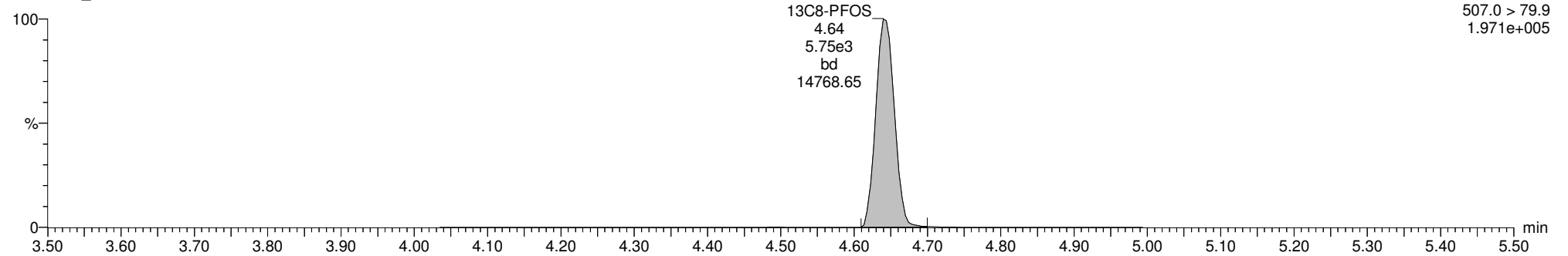


170317G2_13



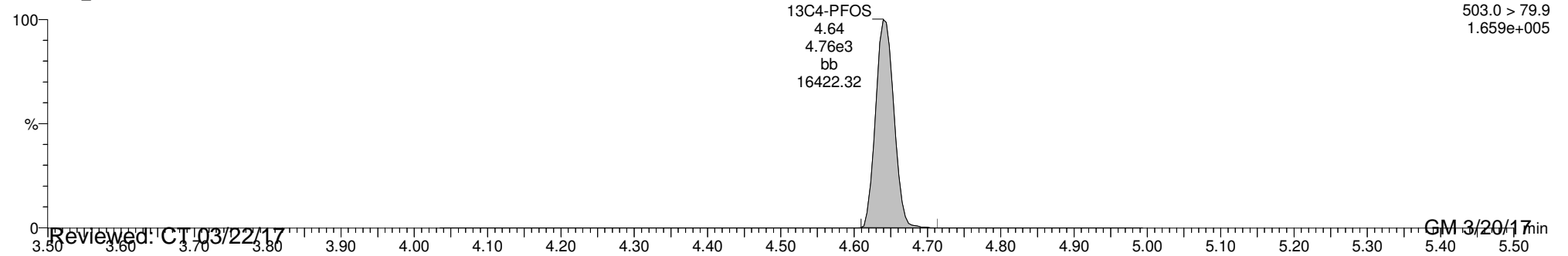
13C8-PFOS

170317G2_13



13C4-PFOS

170317G2_13



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-4.qld

Last Altered: Tuesday, March 21, 2017 12:50:49 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:51:19 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-03@10X OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170320G3_4, Date: 20-Mar-2017, Time: 15:22:38

	# Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	3 PFHxS	398.9 > 79.6	1.995e4	4.905e2		0.124	3.96	2300	
2	6 PFOS	499 >79.9	8.542e2	9.415e1		0.124	4.66	1650	
3	9 18O2-PFHxS	403 > 102.6	4.905e2	8.690e2	0.495	0.124	3.96	115	114
4	12 13C8-PFOS	507.0 > 79.9	9.415e1	2.917e1	1.080	0.124	4.66	301	299
5	14 13C3-PFHxS	401.9 > 79.9	8.690e2	8.690e2	1.000	0.124	3.96	101	100
6	17 13C4-PFOS	503.0 > 79.9	2.917e1	2.917e1	1.000	0.124	4.65	101	100
7	19 Total PFHxS	398.9 > 79.6		4.905e2		0.124		2300	
8	21 Total PFOS	499 > 79.9		9.415e1		0.124		1650	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-4.qld

Last Altered: Tuesday, March 21, 2017 12:50:49 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:51:19 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-03@10X OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170320G3_4, Date: 20-Mar-2017, Time: 15:22:38

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.98	1636.906	830.011	87.2
2	18 Total PFBS	299 > 79.7	2.86	40.058	490.490	3.4

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.96	19950.703	490.490	2297.2

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	20 Total PFOA	413 > 368.7	4.49	6.656	1599.640	
2	4 PFOA	413 > 368.7	4.24	9399.571	1599.640	677.3
3	20 Total PFOA	413 > 368.7	4.15	2067.346	1599.640	147.9

Total PFOS

	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.66	854.246	94.147	1651.9

Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-4.qld

Last Altered: Tuesday, March 21, 2017 12:50:49 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:51:19 Pacific Daylight Time

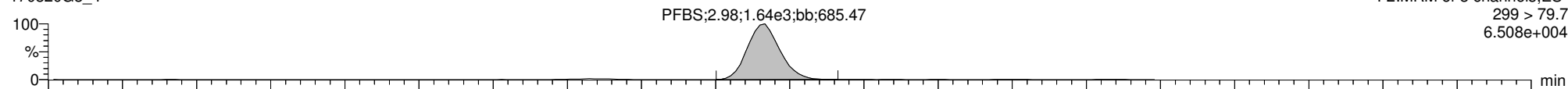
Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

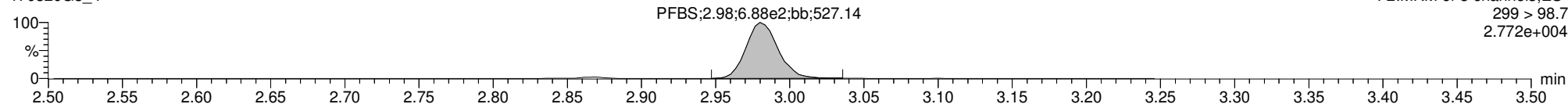
ID: 1700311-03@10X OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170320G3_4, Date: 20-Mar-2017, Time: 15:22:38, Instrument: , Lab: , User:

PFBS

170320G3_4

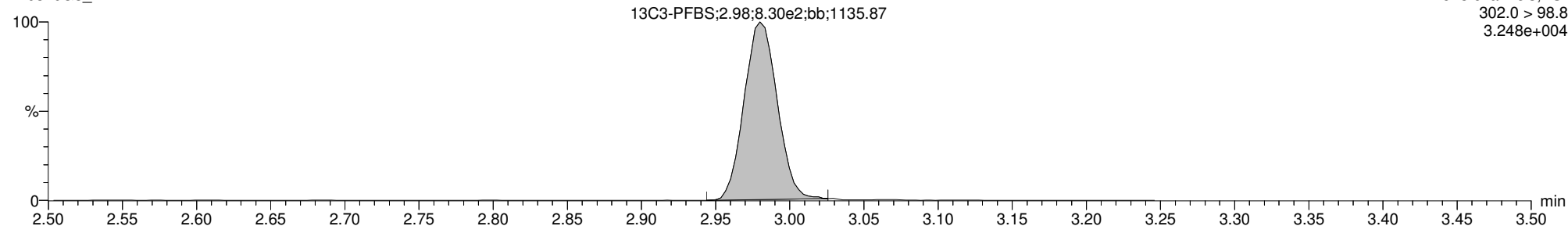


170320G3_4



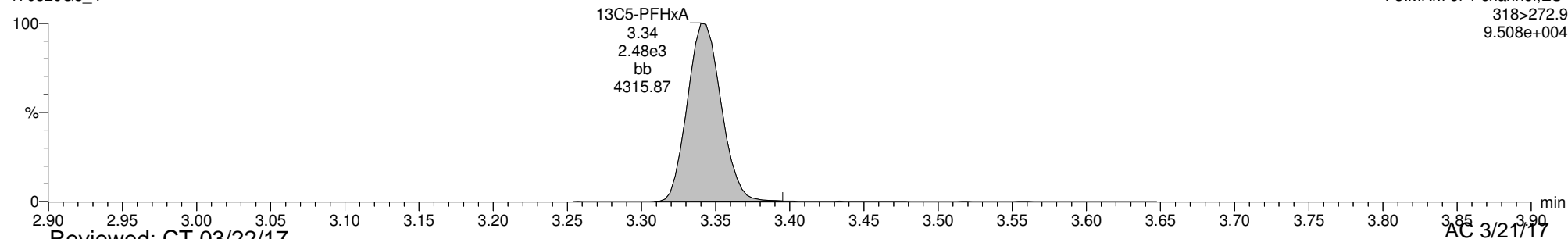
13C3-PFBS

170320G3_4



13C5-PFHxA

170320G3_4



Reviewed: CT 03/22/17

Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-4.qld

Last Altered: Tuesday, March 21, 2017 12:50:49 Pacific Daylight Time

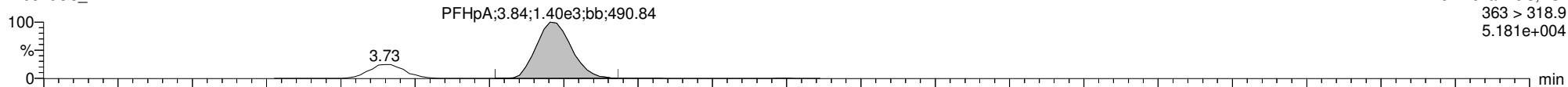
Printed: Tuesday, March 21, 2017 12:51:19 Pacific Daylight Time

ID: 1700311-03@10X OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170320G3_4, Date: 20-Mar-2017, Time: 15:22:38, Instrument: , Lab: , User:

PFHpA

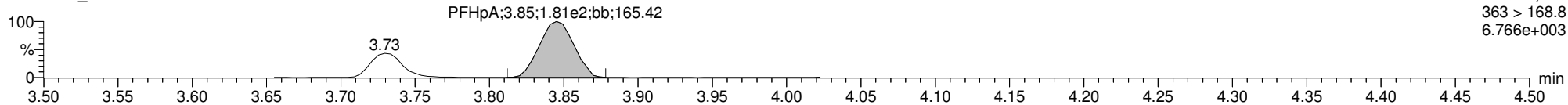
170320G3_4

F4:MRM of 7 channels,ES-
363 > 318.9
5.181e+004



170320G3_4

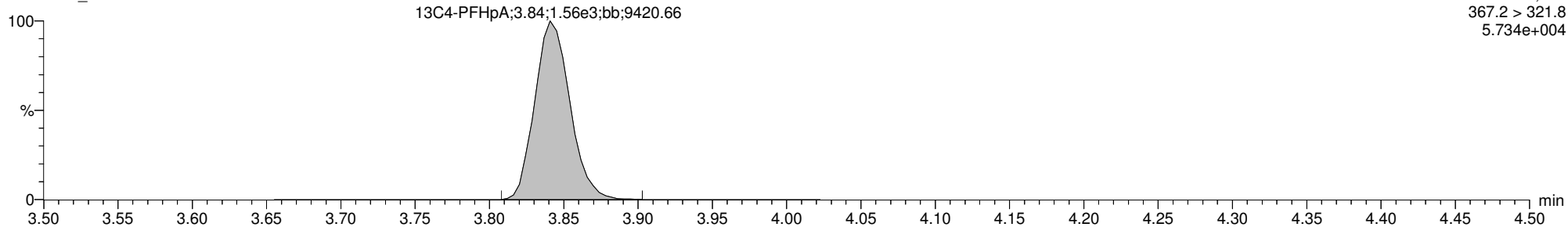
F4:MRM of 7 channels,ES-
363 > 168.8
6.766e+003



13C4-PFHpA

170320G3_4

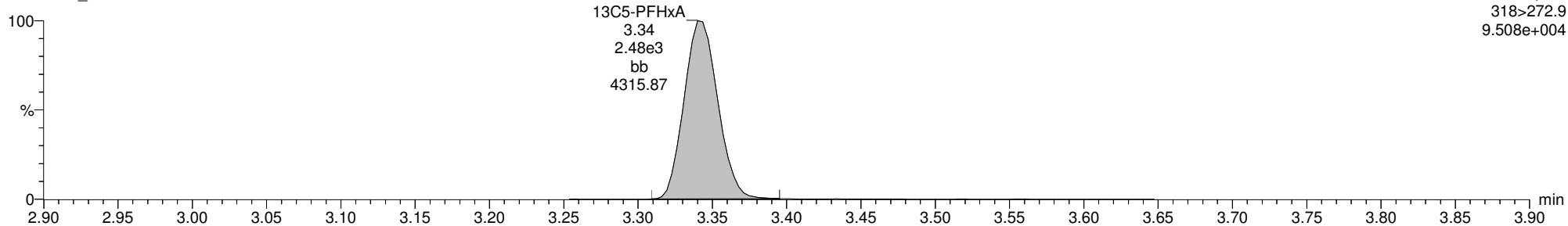
F4:MRM of 7 channels,ES-
367.2 > 321.8
5.734e+004



13C5-PFHxA

170320G3_4

F3:MRM of 1 channel,ES-
318>272.9
9.508e+004



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-4.qld

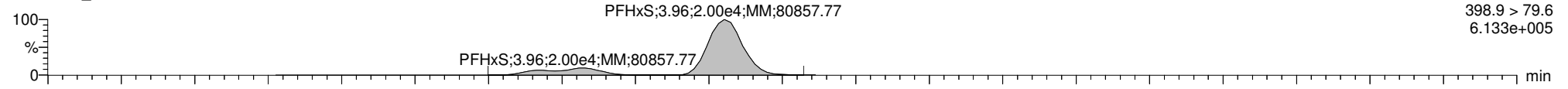
Last Altered: Tuesday, March 21, 2017 12:50:49 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:51:19 Pacific Daylight Time

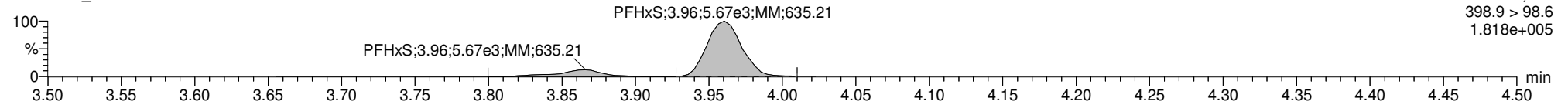
ID: 1700311-03@10X OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170320G3_4, Date: 20-Mar-2017, Time: 15:22:38, Instrument: , Lab: , User:

PFHxS

170320G3_4

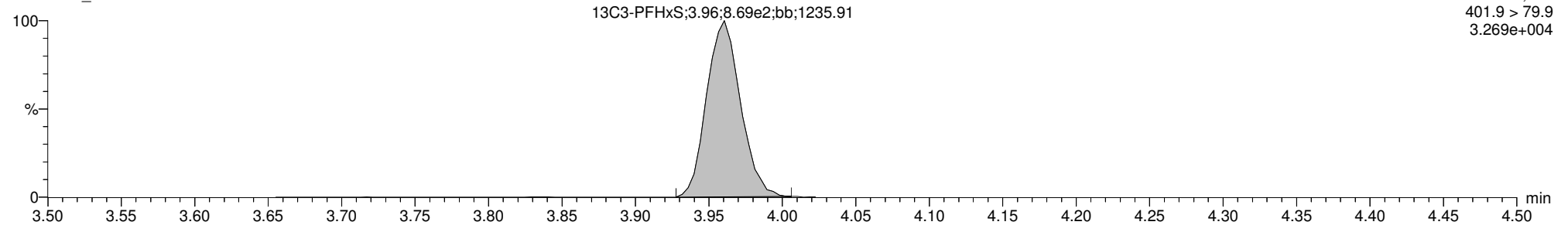


170320G3_4



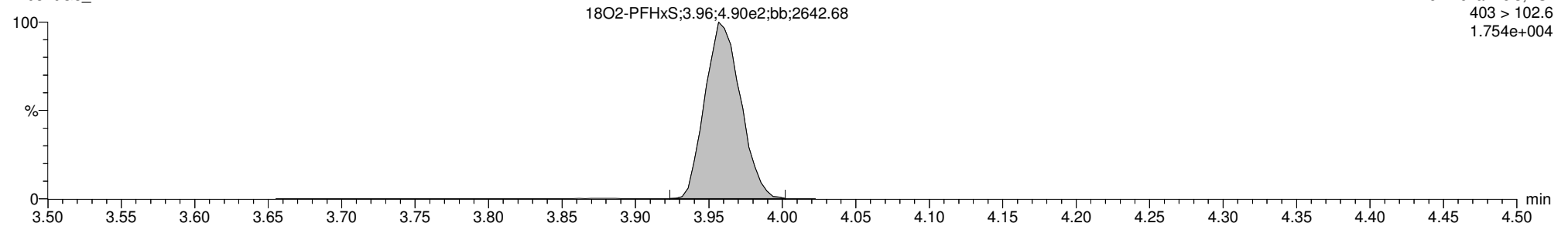
13C3-PFHxS

170320G3_4



18O2-PFHxS

170320G3_4



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-4.qld

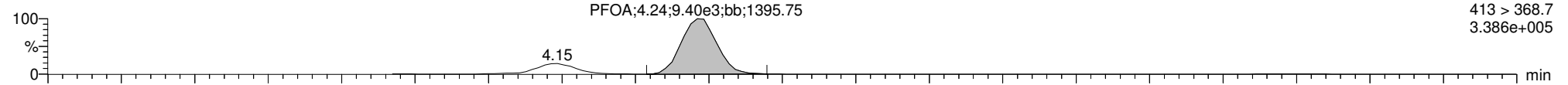
Last Altered: Tuesday, March 21, 2017 12:50:49 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:51:19 Pacific Daylight Time

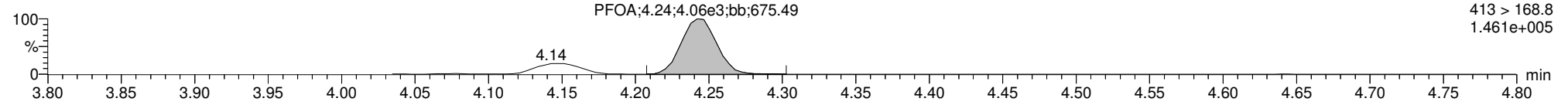
ID: 1700311-03@10X OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170320G3_4, Date: 20-Mar-2017, Time: 15:22:38, Instrument: , Lab: , User:

PFOA

170320G3_4

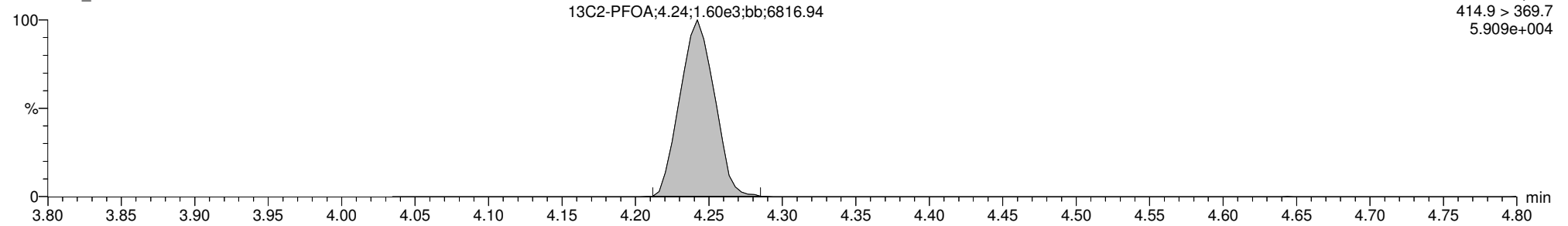


170320G3_4



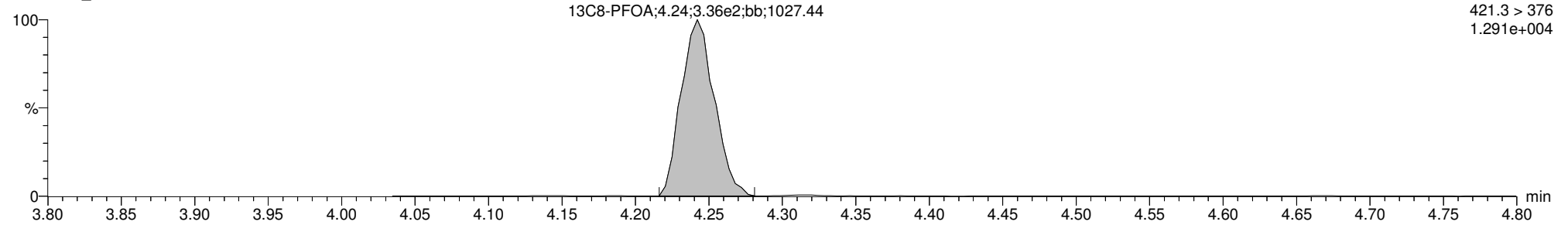
13C2-PFOA

170320G3_4



13C8-PFOA

170320G3_4



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-4.qld

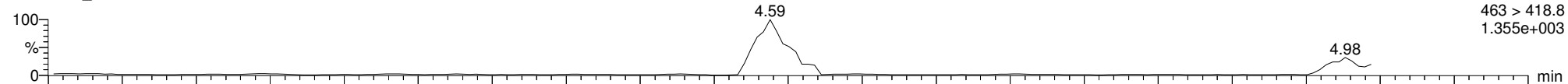
Last Altered: Tuesday, March 21, 2017 12:50:49 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:51:19 Pacific Daylight Time

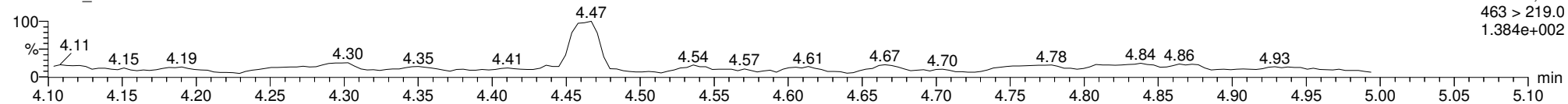
ID: 1700311-03@10X OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170320G3_4, Date: 20-Mar-2017, Time: 15:22:38, Instrument: , Lab: , User:

PFNA

170320G3_4

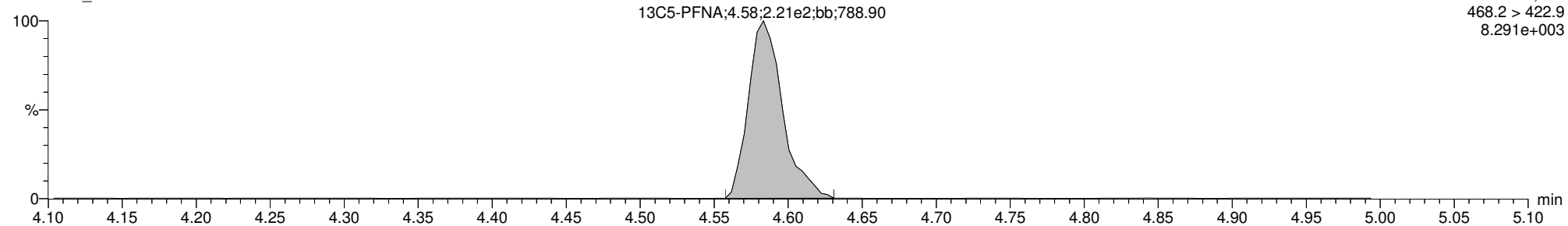


170320G3_4



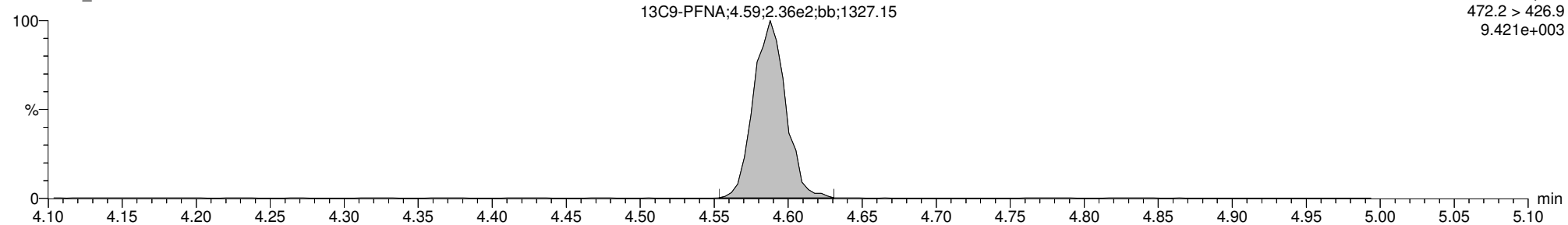
13C5-PFNA

170320G3_4



13C9-PFNA

170320G3_4

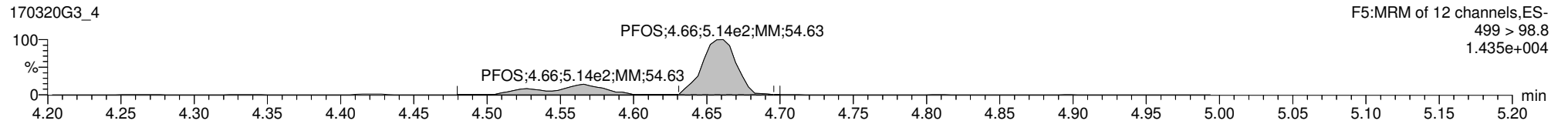
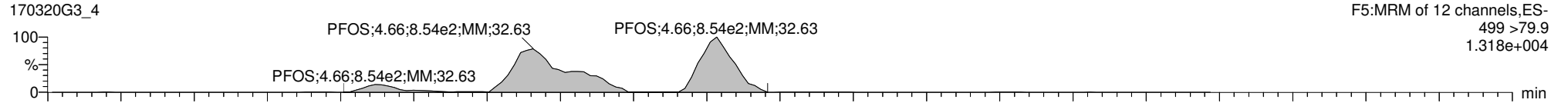


Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-4.qld

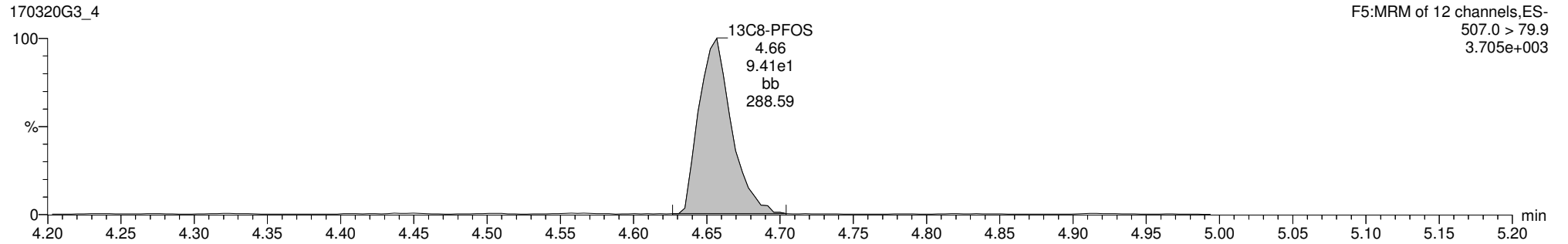
Last Altered: Tuesday, March 21, 2017 12:50:49 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 12:51:19 Pacific Daylight Time

ID: 1700311-03@10X OF-SOW-091DP-0317 0.12421, Description: OF-SOW-091DP-0317, Name: 170320G3_4, Date: 20-Mar-2017, Time: 15:22:38, Instrument: , Lab: , User:

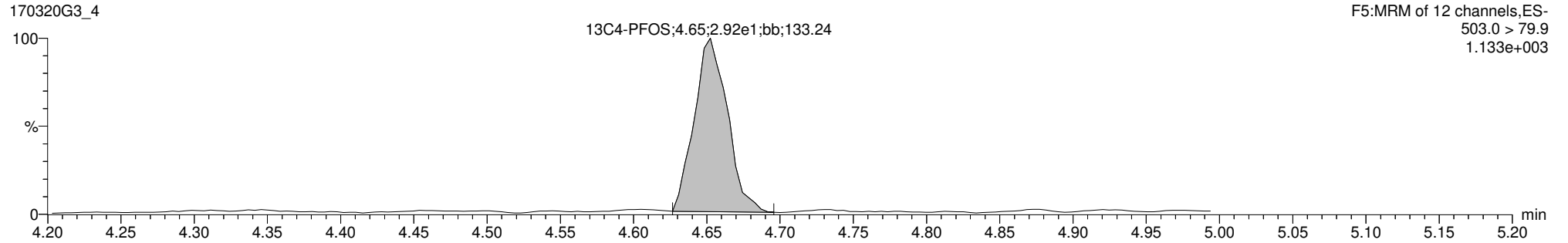
PFOS



13C8-PFOS



13C4-PFOS



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-14.qld

Last Altered: Monday, March 20, 2017 10:53:37 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:53:51 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-04 OF-EB030817 0.12212, Description: OF-EB030817, Name: 170317G2_14, Date: 17-Mar-2017, Time: 18:31:13

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7		9.445e3		0.122			
2	2 PFHpA	363 > 318.9	4.011e1	2.208e4		0.122	3.83		
3	3 PFHxS	398.9 > 79.6	8.664e1	8.518e3		0.122	3.96	0.177	
4	4 PFOA	413 > 368.7	2.459e2	3.786e4		0.122	4.23		
5	5 PFNA	463 > 418.8		1.256e4		0.122			
6	6 PFOS	499 > 79.9	2.418e1	1.085e4		0.122	4.65	1.54	
7	7 13C3-PFBS	302.0 > 98.8	9.445e3	1.592e4	0.501	0.122	2.97	121	118
8	8 13C4-PFHpA	367.2 > 321.8	2.208e4	1.592e4	1.237	0.122	3.83	115	112
9	9 18O2-PFHxS	403 > 102.6	8.518e3	1.592e4	0.495	0.122	3.95	111	108
10	10 13C2-PFOA	414.9 > 369.7	3.786e4	1.109e4	3.221	0.122	4.23	109	106
11	11 13C5-PFNA	468.2 > 422.9	1.256e4	1.170e4	0.979	0.122	4.57	112	110
12	12 13C8-PFOS	507.0 > 79.9	1.085e4	8.884e3	1.080	0.122	4.64	116	113
13	13 13C5-PFHxA	318 > 272.9	2.619e4	2.619e4	1.000	0.122	3.33	102	100
14	14 13C3-PFHxS	401.9 > 79.9	1.592e4	1.592e4	1.000	0.122	3.95	102	100
15	15 13C8-PFOA	421.3 > 376	1.109e4	1.109e4	1.000	0.122	4.23	102	100
16	16 13C9-PFNA	472.2 > 426.9	1.170e4	1.170e4	1.000	0.122	4.57	102	100
17	17 13C4-PFOS	503.0 > 79.9	8.884e3	8.884e3	1.000	0.122	4.64	102	100
18	18 Total PFBS	299 > 79.7		8.518e3		0.122			
19	19 Total PFHxS	398.9 > 79.6		8.518e3		0.122		0.177	
20	20 Total PFOA	413 > 368.7		3.786e4		0.122			
21	21 Total PFOS	499 > 79.9		1.085e4		0.122		1.54	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-14.qld

Last Altered: Monday, March 20, 2017 10:53:37 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:53:51 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-04 OF-EB030817 0.12212, Description: OF-EB030817, Name: 170317G2_14, Date: 17-Mar-2017, Time: 18:31:13

Total PFBS

#	Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7			9445.303	

Total PFHxS

#	Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.96	86.638	8518.298	0.2

Total PFOA

#	Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.23	245.869	37858.453	

Total PFOS

#	Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.65	24.180	10851.648	1.5

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-14.qld

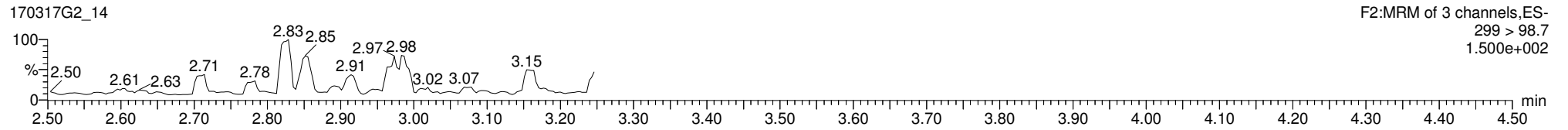
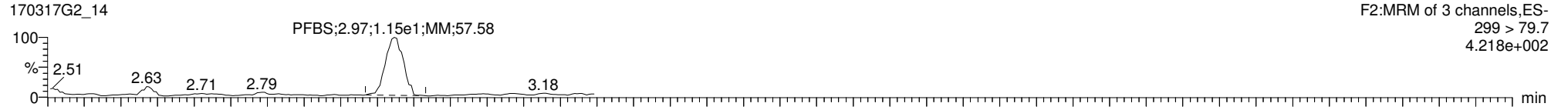
Last Altered: Monday, March 20, 2017 10:53:37 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:53:51 AM Pacific Daylight Time

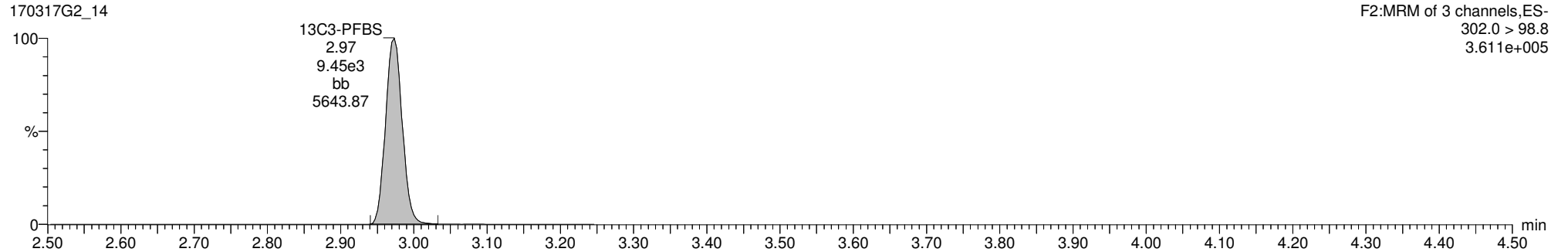
Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-04 OF-EB030817 0.12212, Description: OF-EB030817, Name: 170317G2_14, Date: 17-Mar-2017, Time: 18:31:13, Instrument: , Lab: , User:

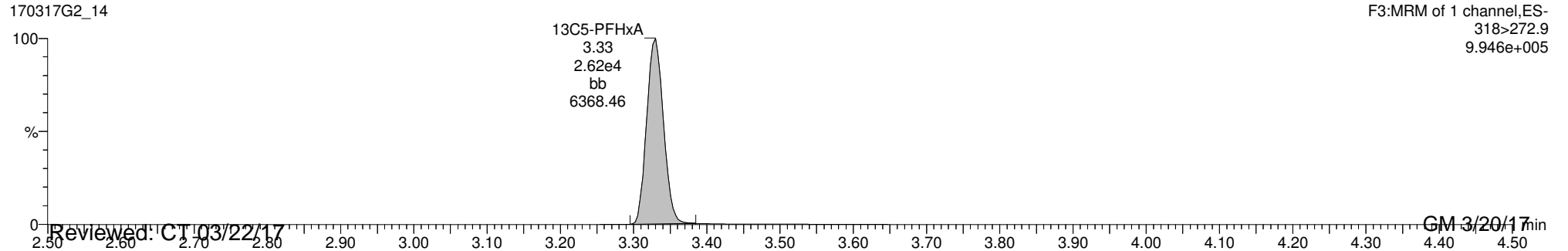
PFBS



13C3-PFBS



13C5-PFHxA



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-14.qld

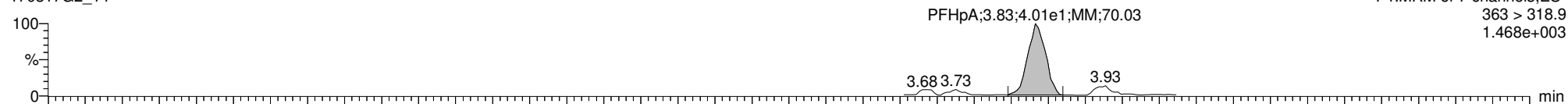
Last Altered: Monday, March 20, 2017 10:53:37 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:53:51 AM Pacific Daylight Time

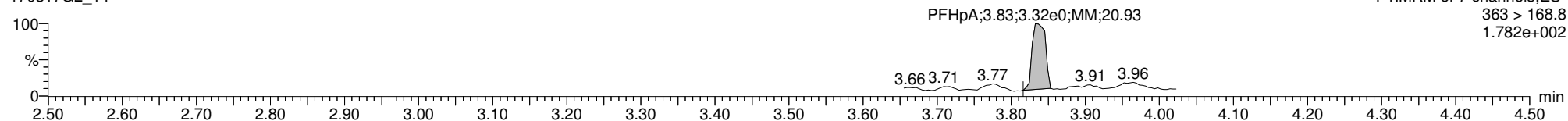
ID: 1700311-04 OF-EB030817 0.12212, Description: OF-EB030817, Name: 170317G2_14, Date: 17-Mar-2017, Time: 18:31:13, Instrument: , Lab: , User:

PFHpA

170317G2_14

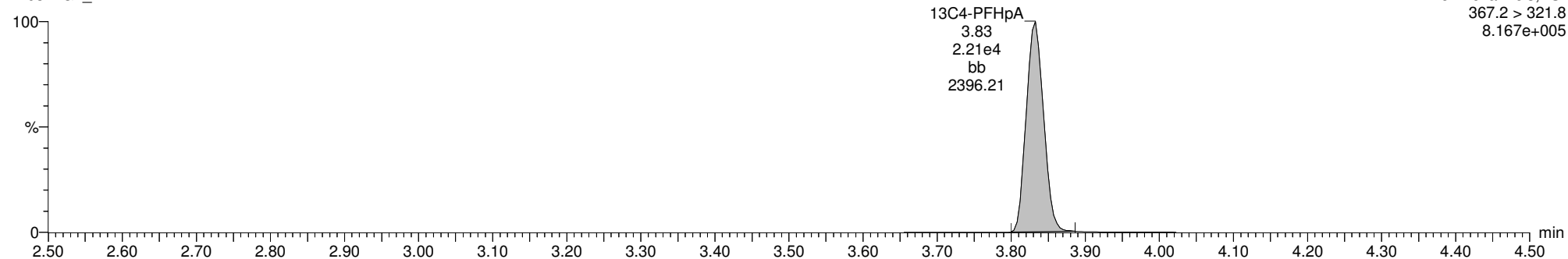


170317G2_14



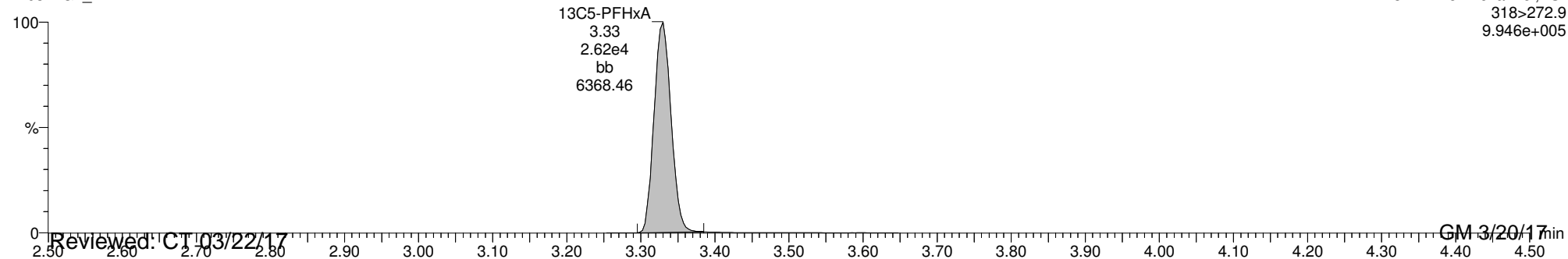
13C4-PFHpA

170317G2_14



13C5-PFHxA

170317G2_14



Reviewed: CT 03/22/17

GM 3/20/17

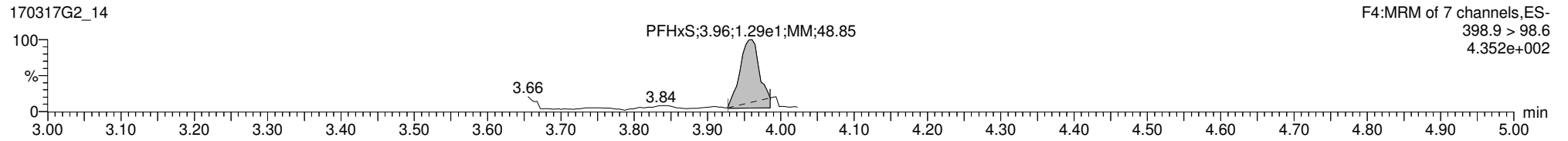
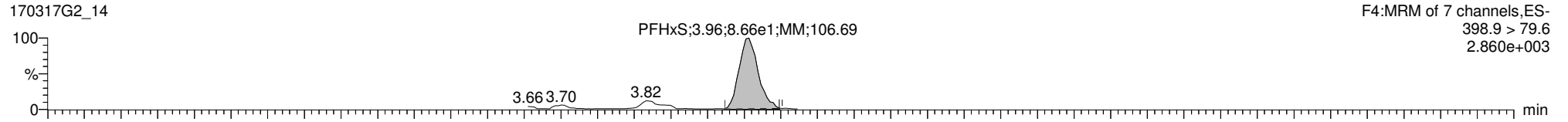
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-14.qld

Last Altered: Monday, March 20, 2017 10:53:37 AM Pacific Daylight Time

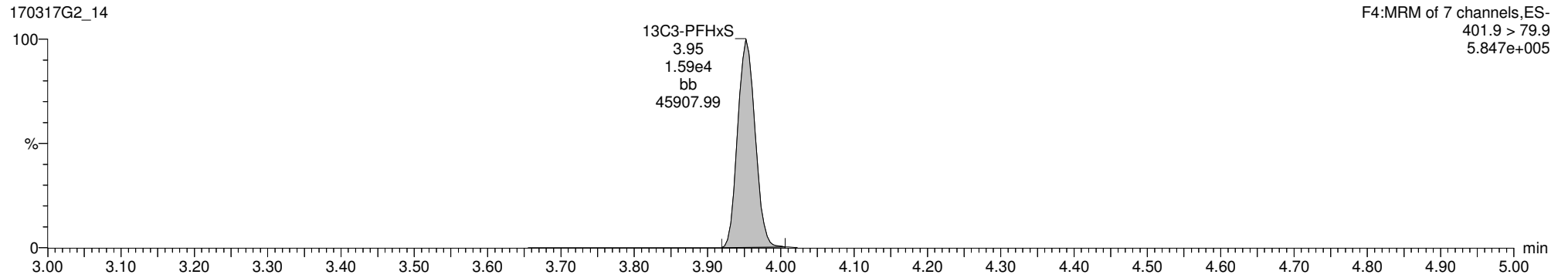
Printed: Monday, March 20, 2017 10:53:51 AM Pacific Daylight Time

ID: 1700311-04 OF-EB030817 0.12212, Description: OF-EB030817, Name: 170317G2_14, Date: 17-Mar-2017, Time: 18:31:13, Instrument: , Lab: , User:

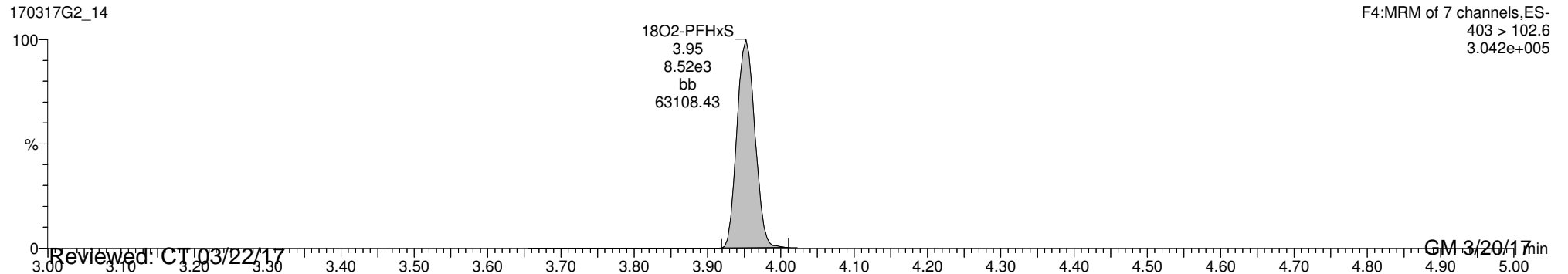
Total PFHxS



13C3-PFHxS



18O2-PFHxS



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-14.qld

Last Altered: Monday, March 20, 2017 10:53:37 AM Pacific Daylight Time

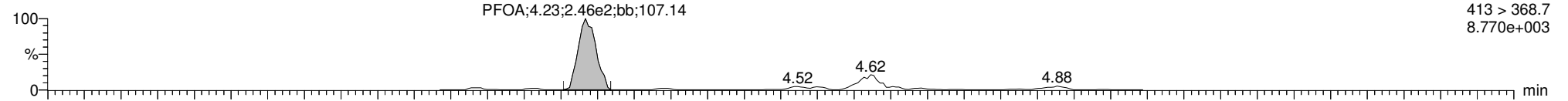
Printed: Monday, March 20, 2017 10:53:51 AM Pacific Daylight Time

ID: 1700311-04 OF-EB030817 0.12212, Description: OF-EB030817, Name: 170317G2_14, Date: 17-Mar-2017, Time: 18:31:13, Instrument: , Lab: , User:

Total PFOA

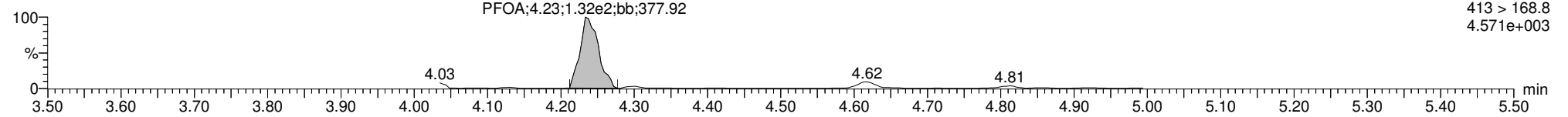
170317G2_14

F5:MRM of 12 channels,ES-
413 > 368.7
8.770e+003



170317G2_14

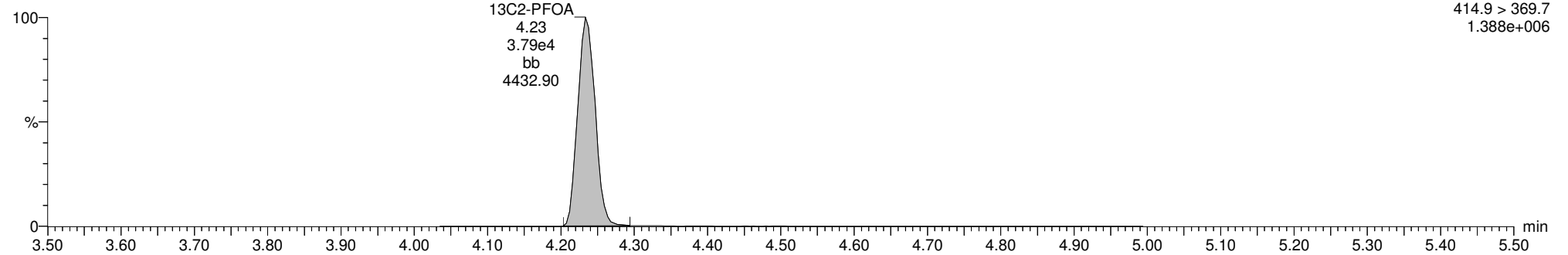
F5:MRM of 12 channels,ES-
413 > 168.8
4.571e+003



13C2-PFOA

170317G2_14

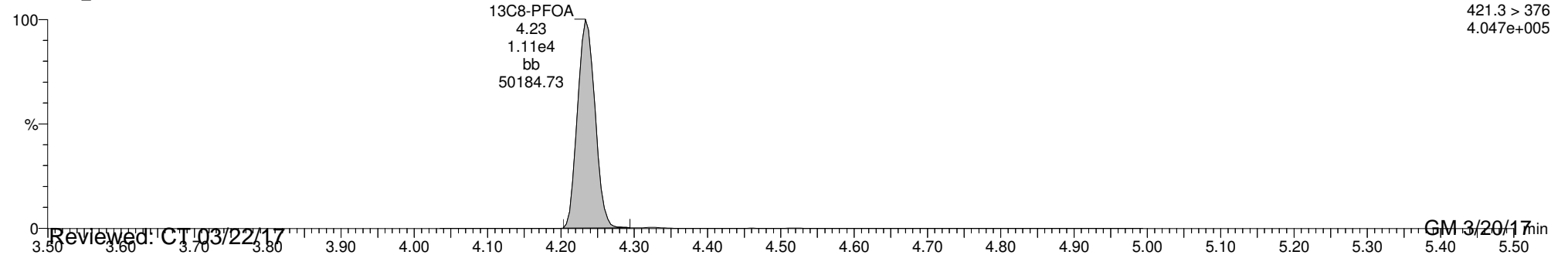
F5:MRM of 12 channels,ES-
414.9 > 369.7
1.388e+006



13C8-PFOA

170317G2_14

F5:MRM of 12 channels,ES-
421.3 > 376
4.047e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-14.qld

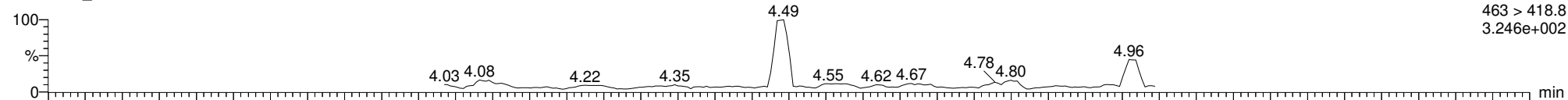
Last Altered: Monday, March 20, 2017 10:53:37 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:53:51 AM Pacific Daylight Time

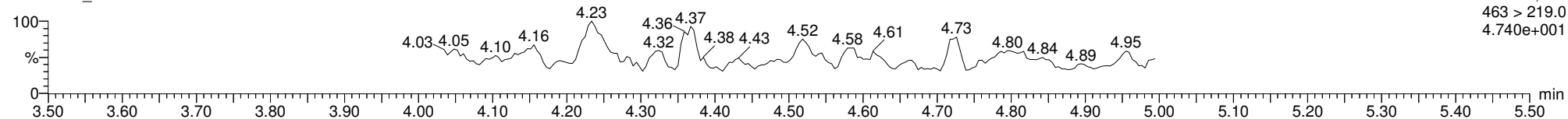
ID: 1700311-04 OF-EB030817 0.12212, Description: OF-EB030817, Name: 170317G2_14, Date: 17-Mar-2017, Time: 18:31:13, Instrument: , Lab: , User:

PFNA

170317G2_14

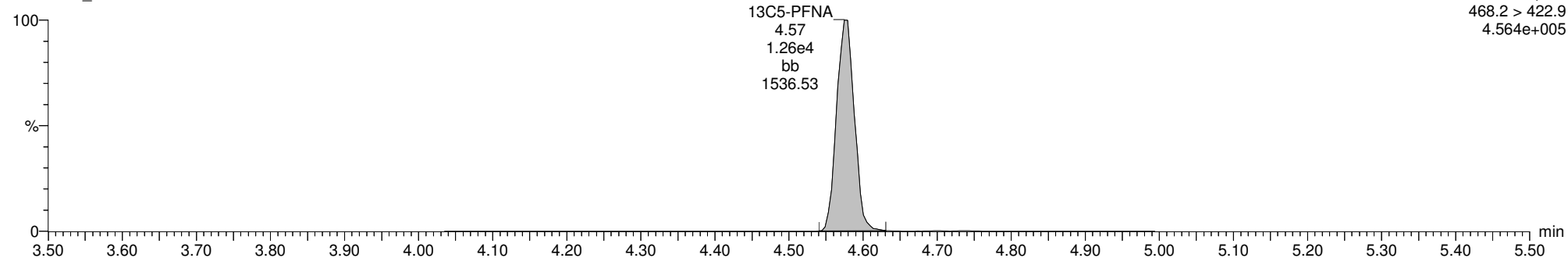


170317G2_14



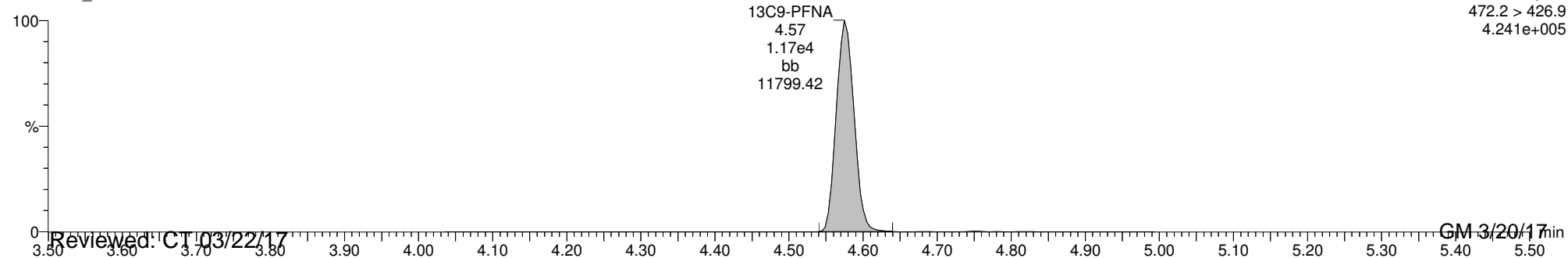
13C5-PFNA

170317G2_14



13C9-PFNA

170317G2_14



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-14.qld

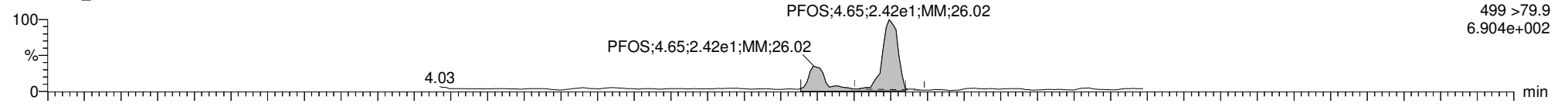
Last Altered: Monday, March 20, 2017 10:53:37 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 10:53:51 AM Pacific Daylight Time

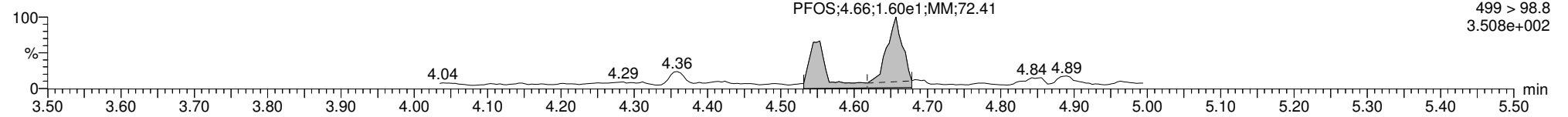
ID: 1700311-04 OF-EB030817 0.12212, Description: OF-EB030817, Name: 170317G2_14, Date: 17-Mar-2017, Time: 18:31:13, Instrument: , Lab: , User:

Total PFOS

170317G2_14

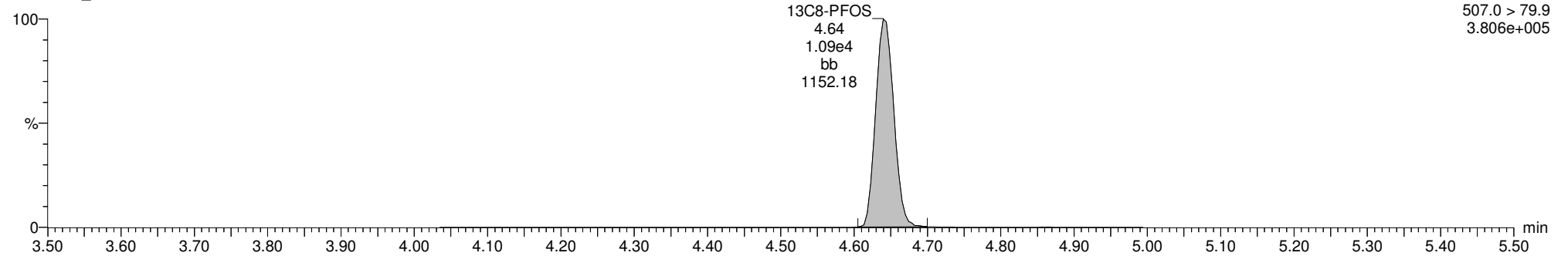


170317G2_14



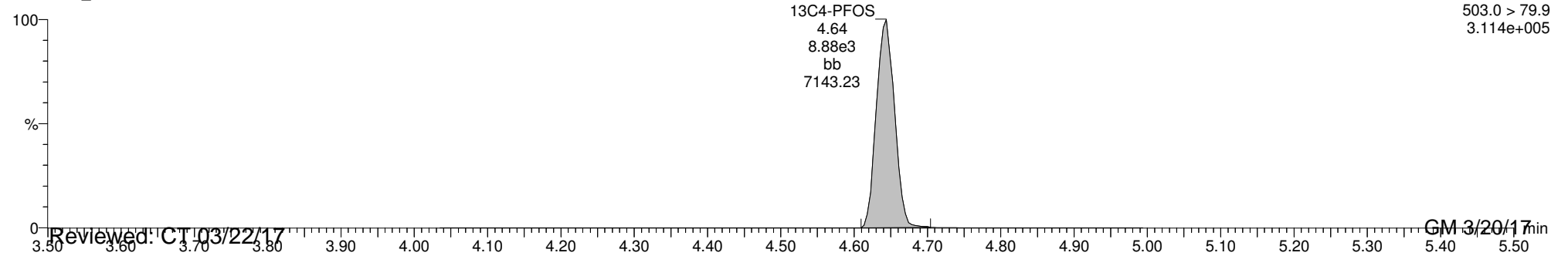
13C8-PFOS

170317G2_14



13C4-PFOS

170317G2_14



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-18.qld

Last Altered: Monday, March 20, 2017 11:33:22 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:34:45 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-05 OF-SOW-091K-0317 0.12112, Description: OF-SOW-091K-0317, Name: 170317G2_18, Date: 17-Mar-2017, Time: 19:21:37

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	6.608e1	8.855e3		0.121	2.97	0.0893	
2	2 PFHpA	363 > 318.9	9.448e1	1.961e4		0.121	3.83		
3	3 PFHxS	398.9 > 79.6	1.203e3	8.835e3		0.121	3.95	7.48	
4	4 PFOA	413 > 368.7	1.040e3	3.177e4		0.121	4.24	2.53	
5	5 PFNA	463 > 418.8		1.123e4		0.121			
6	6 PFOS	499 > 79.9	4.311e2	9.097e3		0.121	4.64	9.98	
7	7 13C3-PFBS	302.0 > 98.8	8.855e3	1.494e4	0.501	0.121	2.97	122	118
8	8 13C4-PFHpA	367.2 > 321.8	1.961e4	1.494e4	1.237	0.121	3.83	109	106
9	9 18O2-PFHxS	403 > 102.6	8.835e3	1.494e4	0.495	0.121	3.95	123	120
10	10 13C2-PFOA	414.9 > 369.7	3.177e4	9.052e3	3.221	0.121	4.23	112	109
11	11 13C5-PFNA	468.2 > 422.9	1.123e4	9.935e3	0.979	0.121	4.57	119	115
12	12 13C8-PFOS	507.0 > 79.9	9.097e3	6.773e3	1.080	0.121	4.64	128	124
13	13 13C5-PFHxA	318 > 272.9	2.202e4	2.202e4	1.000	0.121	3.33	103	100
14	14 13C3-PFHxS	401.9 > 79.9	1.494e4	1.494e4	1.000	0.121	3.95	103	100
15	15 13C8-PFOA	421.3 > 376	9.052e3	9.052e3	1.000	0.121	4.23	103	100
16	16 13C9-PFNA	472.2 > 426.9	9.935e3	9.935e3	1.000	0.121	4.57	103	100
17	17 13C4-PFOS	503.0 > 79.9	6.773e3	6.773e3	1.000	0.121	4.64	103	100
18	18 Total PFBS	299 > 79.7		8.835e3		0.121		0.0893	
19	19 Total PFHxS	398.9 > 79.6		8.835e3		0.121		7.48	
20	20 Total PFOA	413 > 368.7		3.177e4		0.121		2.53	
21	21 Total PFOS	499 > 79.9		9.097e3		0.121		9.98	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-18.qld

Last Altered: Monday, March 20, 2017 11:33:22 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:34:45 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-05 OF-SOW-091K-0317 0.12112, Description: OF-SOW-091K-0317, Name: 170317G2_18, Date: 17-Mar-2017, Time: 19:21:37

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.97	66.082	8855.173	0.1

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.95	1203.173	8834.655	7.5

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.24	1040.492	31766.748	2.5
2	20 Total PFOA	413 > 368.7	4.15	36.984	31766.748	

Total PFOS

	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.64	431.076	9096.677	10.0

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-18.qld

Last Altered: Monday, March 20, 2017 11:33:22 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:34:45 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

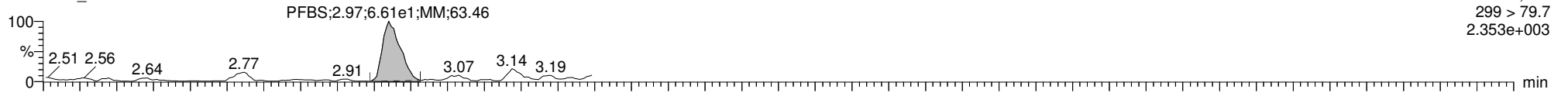
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-05 OF-SOW-091K-0317 0.12112, Description: OF-SOW-091K-0317, Name: 170317G2_18, Date: 17-Mar-2017, Time: 19:21:37, Instrument: , Lab: , User:

PFBS

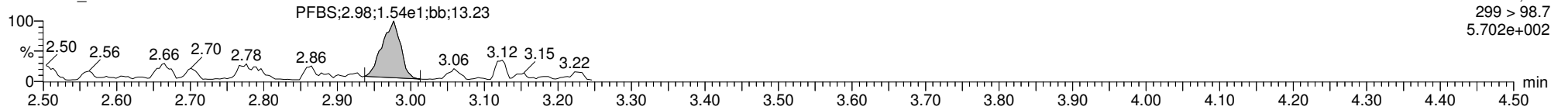
170317G2_18

F2:MRM of 3 channels,ES-
299 > 79.7
2.353e+003



170317G2_18

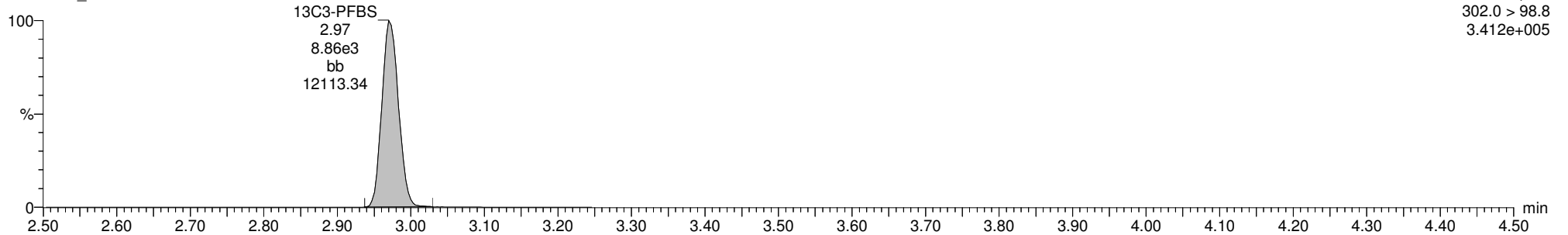
F2:MRM of 3 channels,ES-
299 > 98.7
5.702e+002



13C3-PFBS

170317G2_18

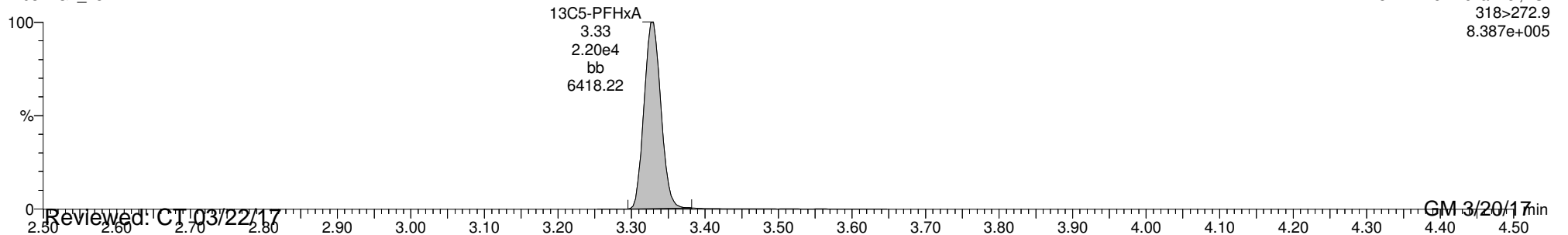
F2:MRM of 3 channels,ES-
302.0 > 98.8
3.412e+005



13C5-PFHxA

170317G2_18

F3:MRM of 1 channel,ES-
318>272.9
8.387e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-18.qld

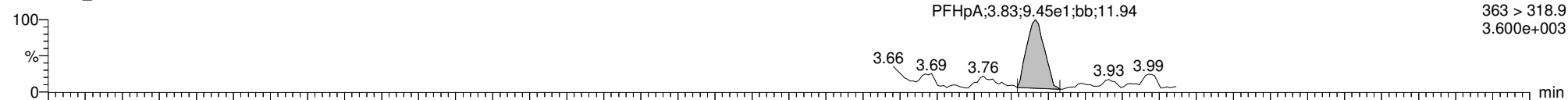
Last Altered: Monday, March 20, 2017 11:33:22 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:34:45 AM Pacific Daylight Time

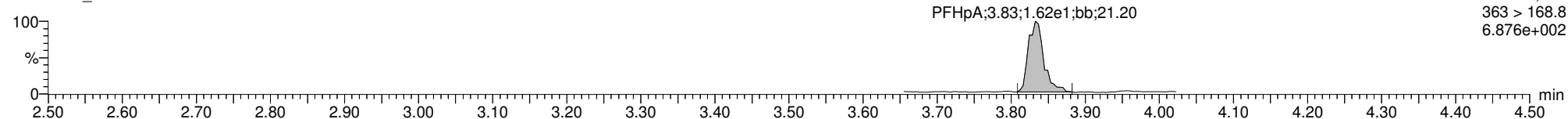
ID: 1700311-05 OF-SOW-091K-0317 0.12112, Description: OF-SOW-091K-0317, Name: 170317G2_18, Date: 17-Mar-2017, Time: 19:21:37, Instrument: , Lab: , User:

PFHpA

170317G2_18

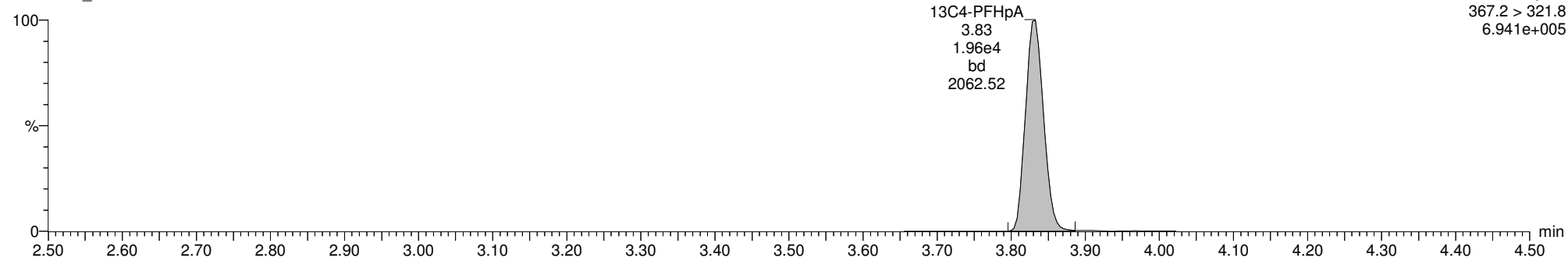


170317G2_18



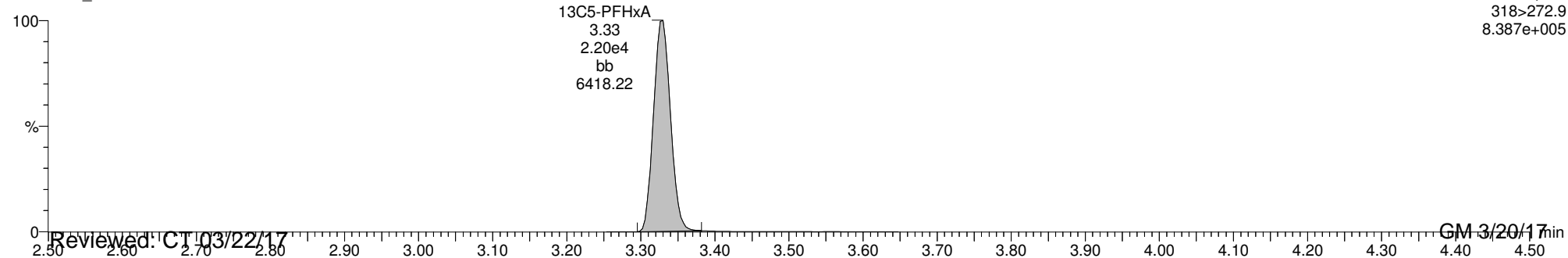
13C4-PFHpA

170317G2_18



13C5-PFHxA

170317G2_18



Reviewed: CT 03/22/17

GM 3/20/17

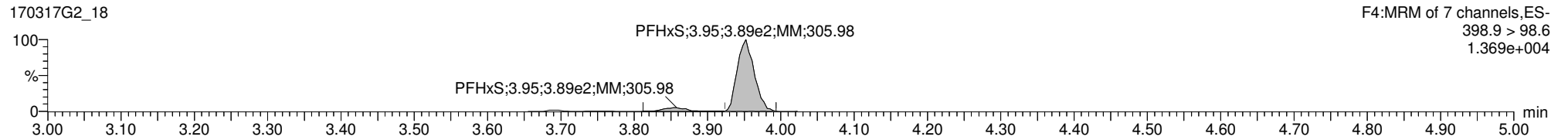
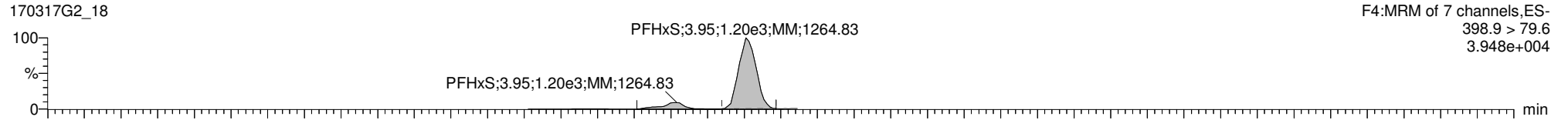
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-18.qld

Last Altered: Monday, March 20, 2017 11:33:22 AM Pacific Daylight Time

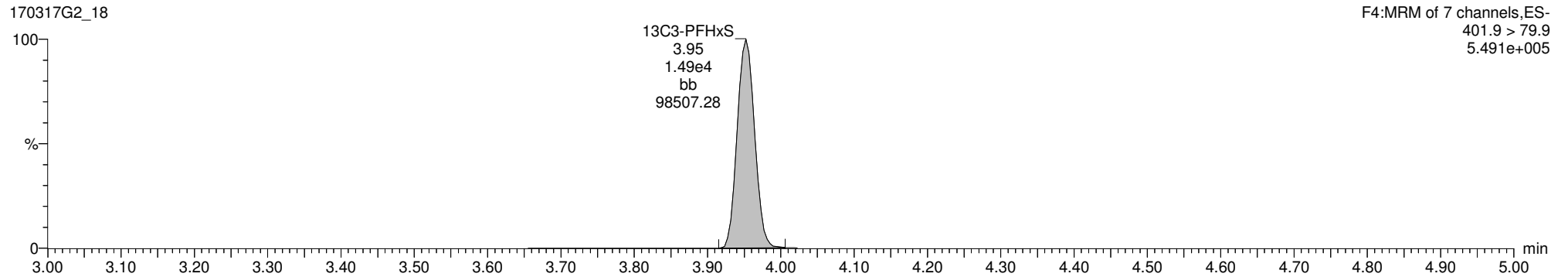
Printed: Monday, March 20, 2017 11:34:45 AM Pacific Daylight Time

ID: 1700311-05 OF-SOW-091K-0317 0.12112, Description: OF-SOW-091K-0317, Name: 170317G2_18, Date: 17-Mar-2017, Time: 19:21:37, Instrument: , Lab: , User:

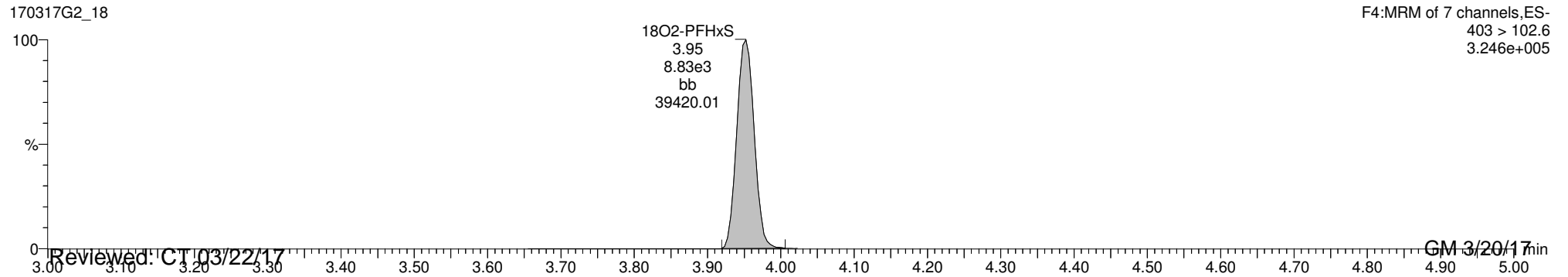
Total PFHxS



13C3-PFHxS



18O2-PFHxS



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-18.qld

Last Altered: Monday, March 20, 2017 11:33:22 AM Pacific Daylight Time

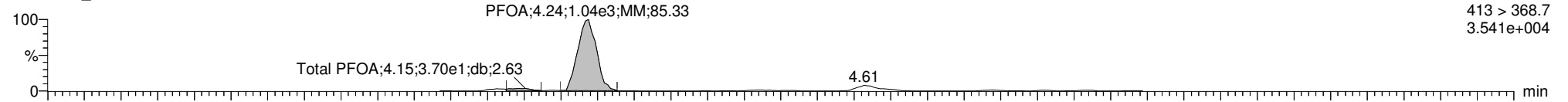
Printed: Monday, March 20, 2017 11:34:45 AM Pacific Daylight Time

ID: 1700311-05 OF-SOW-091K-0317 0.12112, Description: OF-SOW-091K-0317, Name: 170317G2_18, Date: 17-Mar-2017, Time: 19:21:37, Instrument: , Lab: , User:

Total PFOA

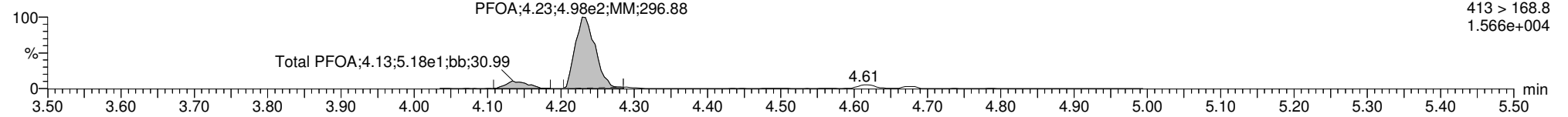
170317G2_18

F5:MRM of 12 channels,ES-
413 > 368.7
3.541e+004



170317G2_18

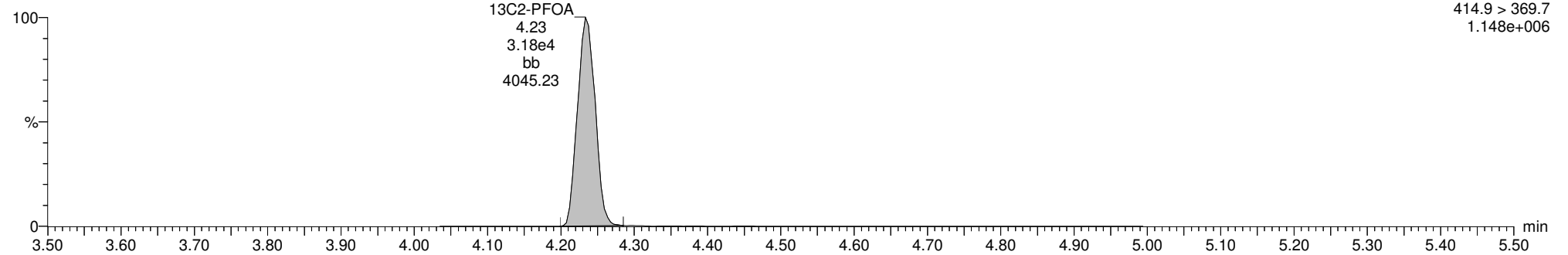
F5:MRM of 12 channels,ES-
413 > 168.8
1.566e+004



13C2-PFOA

170317G2_18

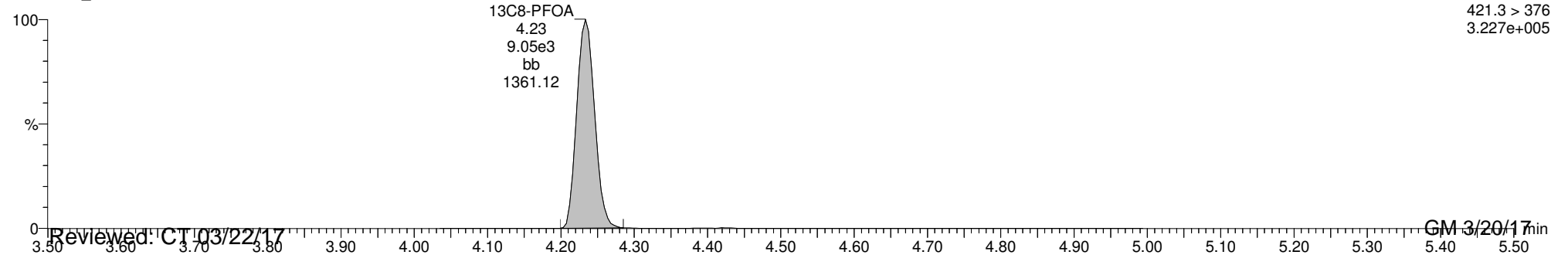
F5:MRM of 12 channels,ES-
414.9 > 369.7
1.148e+006



13C8-PFOA

170317G2_18

F5:MRM of 12 channels,ES-
421.3 > 376
3.227e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-18.qld

Last Altered: Monday, March 20, 2017 11:33:22 AM Pacific Daylight Time

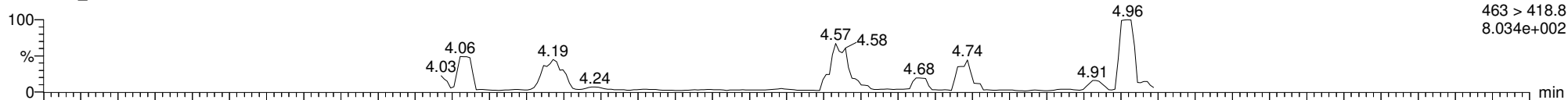
Printed: Monday, March 20, 2017 11:34:45 AM Pacific Daylight Time

ID: 1700311-05 OF-SOW-091K-0317 0.12112, Description: OF-SOW-091K-0317, Name: 170317G2_18, Date: 17-Mar-2017, Time: 19:21:37, Instrument: , Lab: , User:

PFNA

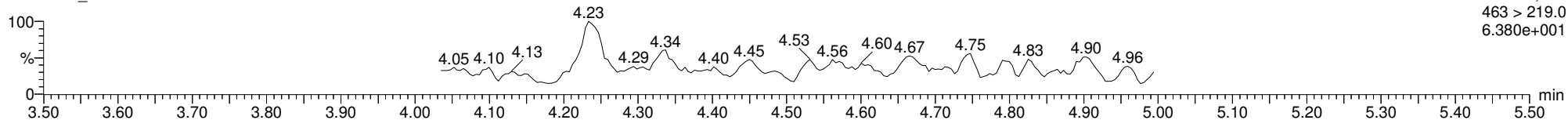
170317G2_18

F5:MRM of 12 channels,ES-
463 > 418.8
8.034e+002



170317G2_18

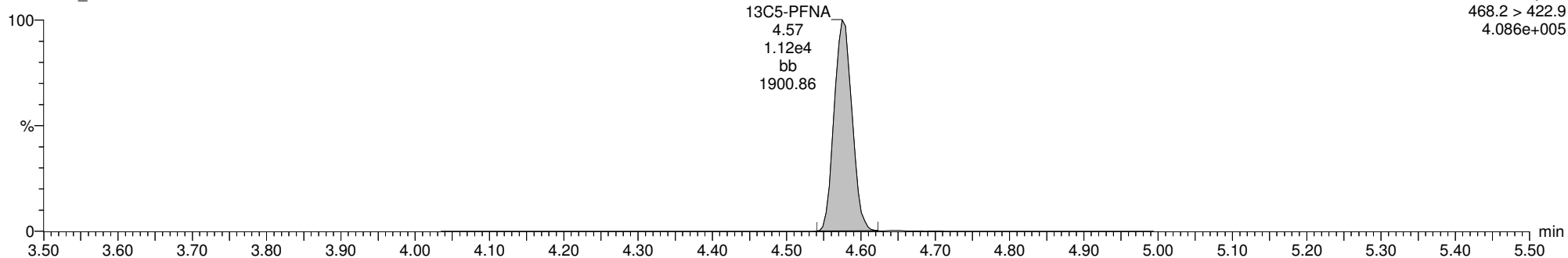
F5:MRM of 12 channels,ES-
463 > 219.0
6.380e+001



13C5-PFNA

170317G2_18

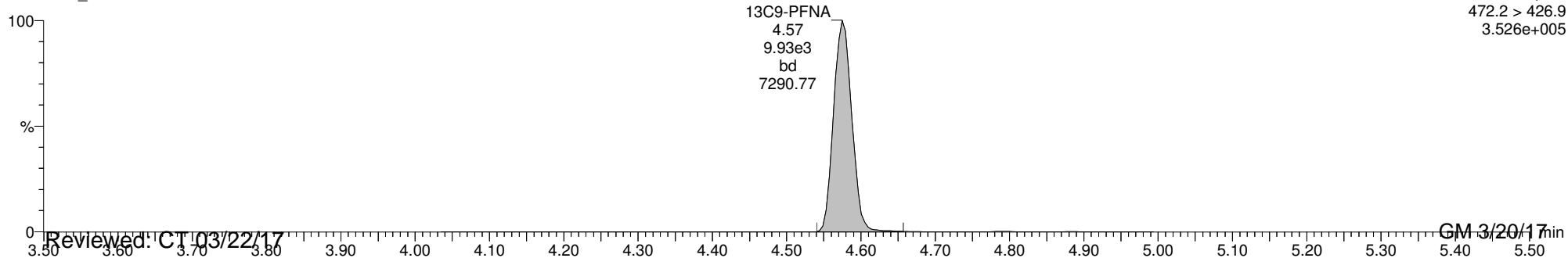
F5:MRM of 12 channels,ES-
468.2 > 422.9
4.086e+005



13C9-PFNA

170317G2_18

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.526e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-18.qld

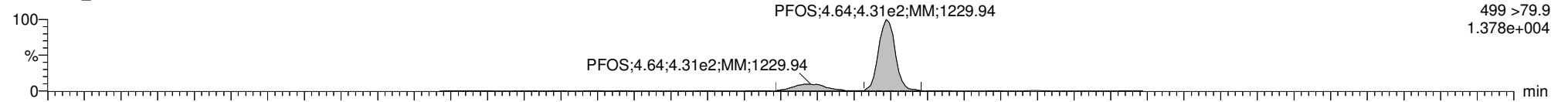
Last Altered: Monday, March 20, 2017 11:33:22 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:34:45 AM Pacific Daylight Time

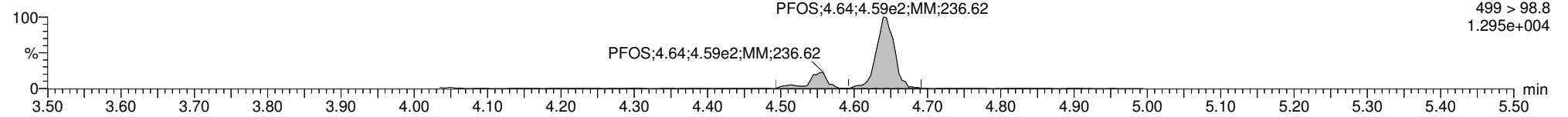
ID: 1700311-05 OF-SOW-091K-0317 0.12112, Description: OF-SOW-091K-0317, Name: 170317G2_18, Date: 17-Mar-2017, Time: 19:21:37, Instrument: , Lab: , User:

Total PFOS

170317G2_18

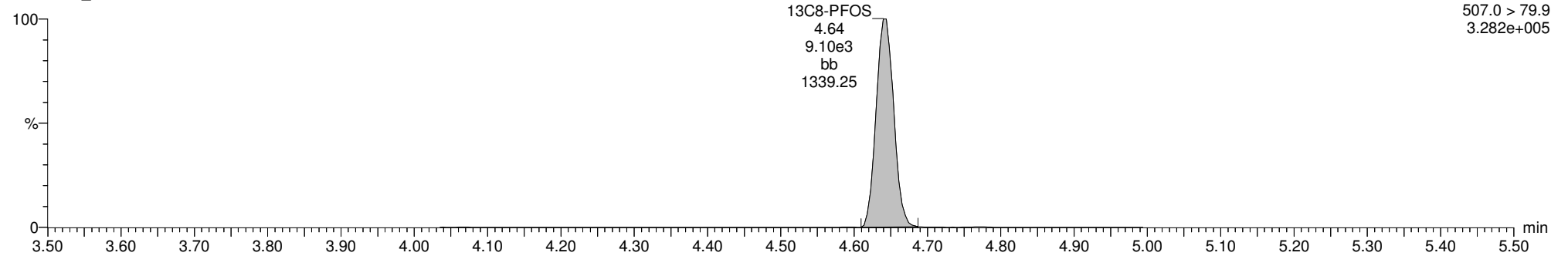


170317G2_18



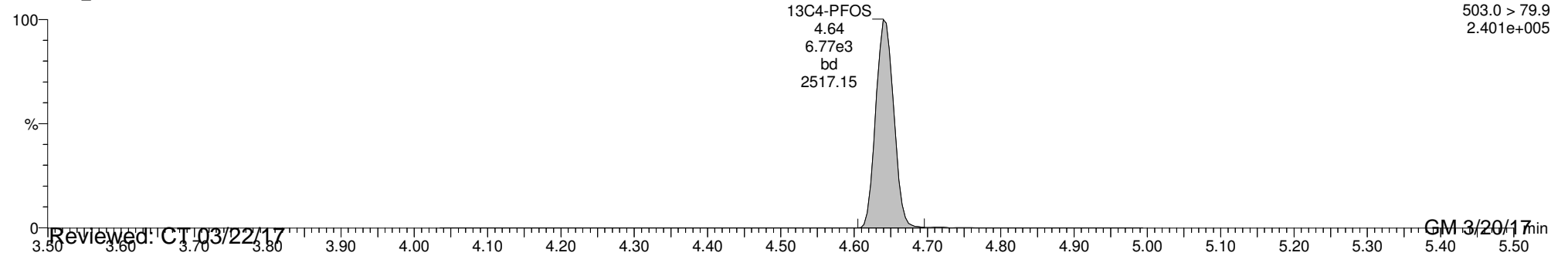
13C8-PFOS

170317G2_18



13C4-PFOS

170317G2_18



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-119.qld
 Last Altered: Monday, March 20, 2017 11:39:23 AM Pacific Daylight Time
 Printed: Monday, March 20, 2017 11:40:08 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57
 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-06 OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170317G2_19, Date: 17-Mar-2017, Time: 19:34:10

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	9.609e3	8.547e3		0.128	2.97	48.2 *	
2	2 PFHpA	363 > 318.9	1.151e4	1.936e4		0.128	3.83	33.1 *	
3	3 PFHxS	398.9 > 79.6	1.686e5	6.034e3		0.128	3.95	1530 ^E	
4	4 PFOA	413 > 368.7	1.825e5	2.449e4		0.128	4.23	835	
5	5 PFNA	463 > 418.8	1.879e3	1.088e4		0.128	4.58	7.13	
6	6 PFOS	499 > 79.9	8.039e4	6.052e3		0.128	4.64	2350 ^E	
7	7 13C3-PFBS	302.0 > 98.8	8.547e3	9.607e3	0.501	0.128	2.97	174	178 *
8	8 13C4-PFHpA	367.2 > 321.8	1.936e4	9.607e3	1.237	0.128	3.83	159	163 *
9	9 18O2-PFHxS	403 > 102.6	6.034e3	9.607e3	0.495	0.128	3.95	124	127
10	10 13C2-PFOA	414.9 > 369.7	2.449e4	7.010e3	3.221	0.128	4.23	106	108
11	11 13C5-PFNA	468.2 > 422.9	1.088e4	9.051e3	0.979	0.128	4.58	120	123
12	12 13C8-PFOS	507.0 > 79.9	6.052e3	4.531e3	1.080	0.128	4.64	121	124
13	13 13C5-PFHxA	318 > 272.9	2.234e4	2.234e4	1.000	0.128	3.33	97.8	100
14	14 13C3-PFHxS	401.9 > 79.9	9.607e3	9.607e3	1.000	0.128	3.95	97.8	100
15	15 13C8-PFOA	421.3 > 376	7.010e3	7.010e3	1.000	0.128	4.23	97.8	100
16	16 13C9-PFNA	472.2 > 426.9	9.051e3	9.051e3	1.000	0.128	4.57	97.8	100
17	17 13C4-PFOS	503.0 > 79.9	4.531e3	4.531e3	1.000	0.128	4.64	97.8	100
18	18 Total PFBS	299 > 79.7		6.034e3		0.128		48.2	
19	19 Total PFHxS	398.9 > 79.6		6.034e3		0.128		1530	
20	20 Total PFOA	413 > 368.7		2.449e4		0.128		956	
21	21 Total PFOS	499 > 79.9		6.052e3		0.128		2350	

*See dilution.

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-119.qld

Last Altered: Monday, March 20, 2017 11:39:23 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:40:08 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-06 OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170317G2_19, Date: 17-Mar-2017, Time: 19:34:10

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.97	9608.742	8547.453	48.2

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.95	168608.531	6033.766	1533.4

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.23	182459.797	24486.660	834.8
2	20 Total PFOA	413 > 368.7	4.14	26624.453	24486.660	120.7

Total PFOS

	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.64	80385.445	6051.782	2349.3

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-119.qld

Last Altered: Monday, March 20, 2017 11:39:23 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:40:08 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

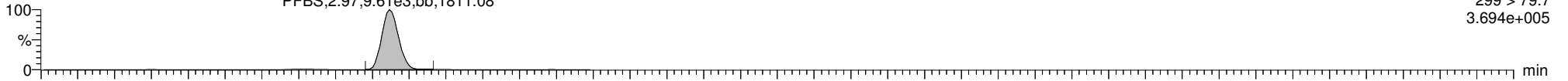
ID: 1700311-06 OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170317G2_19, Date: 17-Mar-2017, Time: 19:34:10, Instrument: , Lab: , User:

PFBS

170317G2_19

PFBS;2.97;9.61e3;bb;1811.08

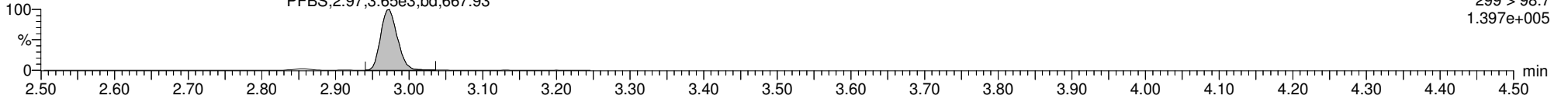
F2:MRM of 3 channels,ES-
299 > 79.7
3.694e+005



170317G2_19

PFBS;2.97;3.65e3;bd;667.93

F2:MRM of 3 channels,ES-
299 > 98.7
1.397e+005

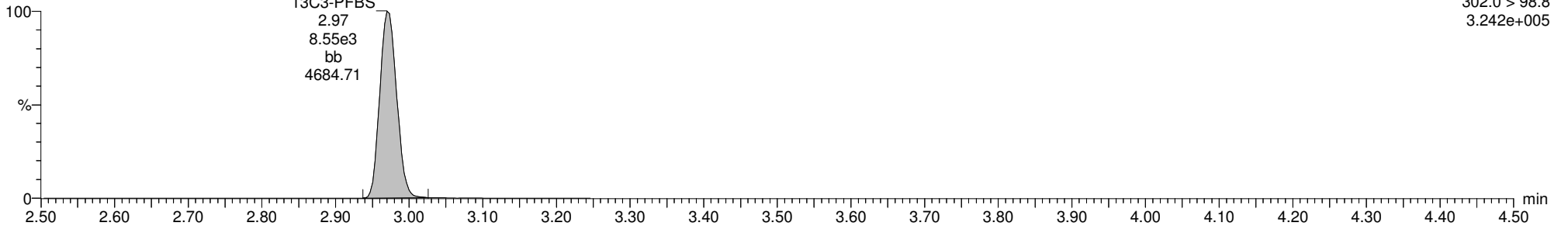


13C3-PFBS

170317G2_19

13C3-PFBS
2.97
8.55e3
bb
4684.71

F2:MRM of 3 channels,ES-
302.0 > 98.8
3.242e+005

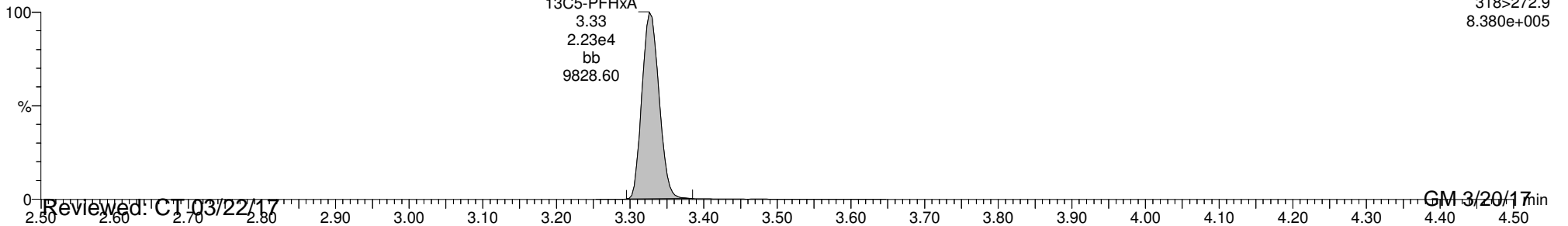


13C5-PFHxA

170317G2_19

13C5-PFHxA
3.33
2.23e4
bb
9828.60

F3:MRM of 1 channel,ES-
318>272.9
8.380e+005



Reviewed: CT 03/22/17

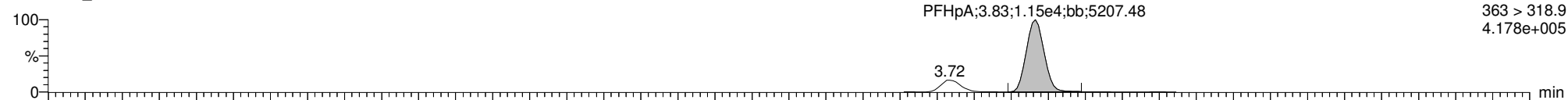
GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-119.qld
Last Altered: Monday, March 20, 2017 11:39:23 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 11:40:08 AM Pacific Daylight Time

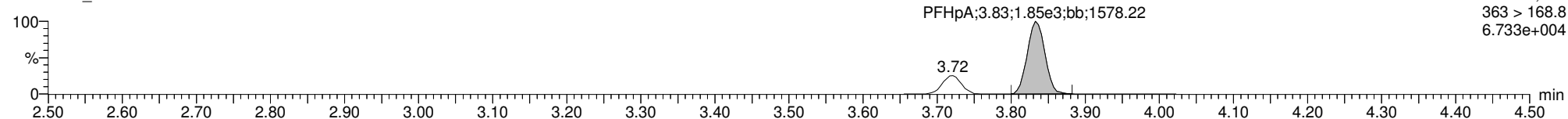
ID: 1700311-06 OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170317G2_19, Date: 17-Mar-2017, Time: 19:34:10, Instrument: , Lab: , User:

PFHpA

170317G2_19

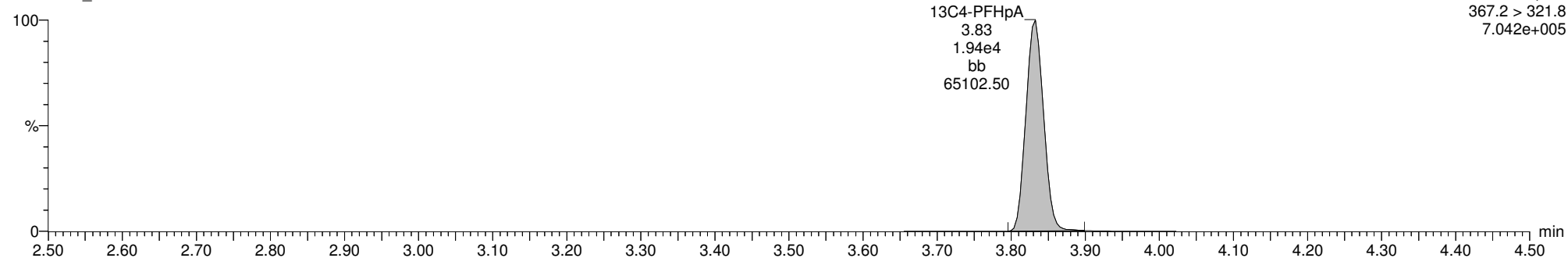


170317G2_19



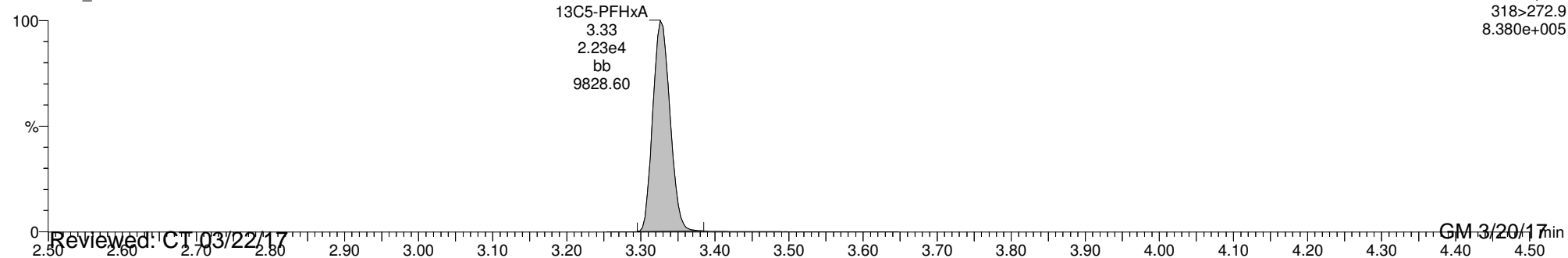
13C4-PFHpA

170317G2_19



13C5-PFHxA

170317G2_19



Reviewed: CT 03/22/17

GM 3/20/17

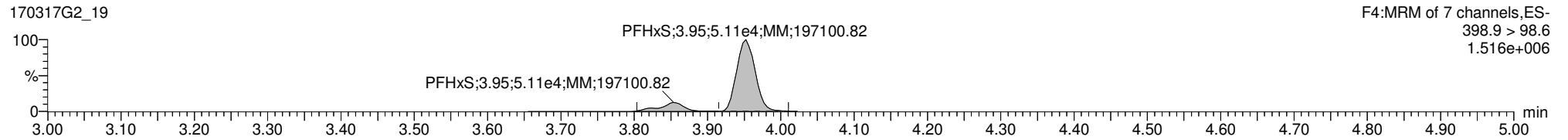
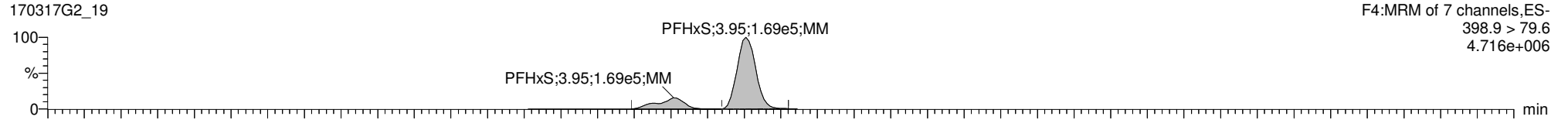
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-119.qld

Last Altered: Monday, March 20, 2017 11:39:23 AM Pacific Daylight Time

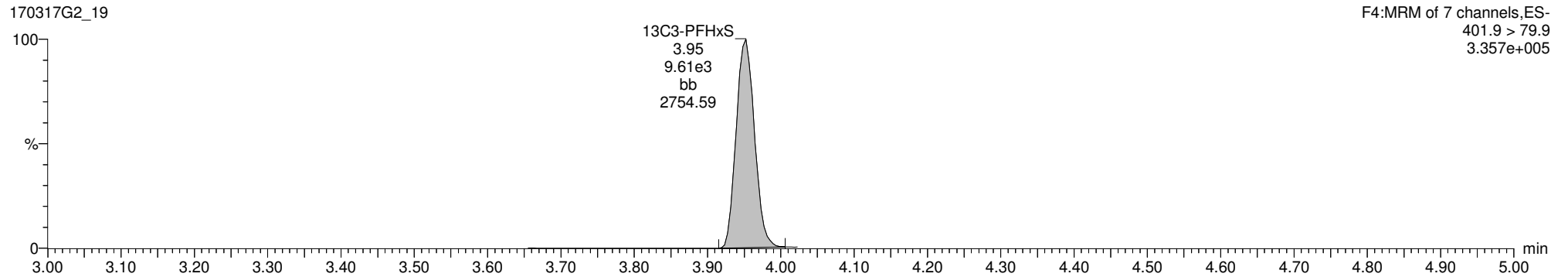
Printed: Monday, March 20, 2017 11:40:08 AM Pacific Daylight Time

ID: 1700311-06 OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170317G2_19, Date: 17-Mar-2017, Time: 19:34:10, Instrument: , Lab: , User:

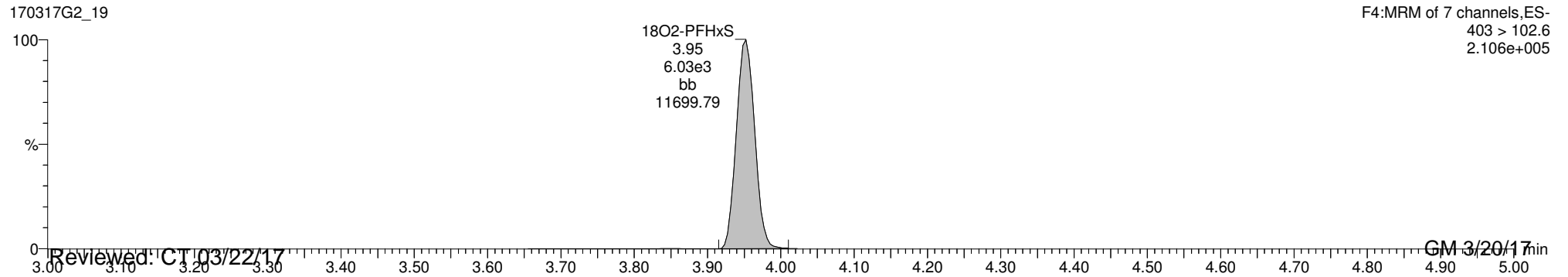
Total PFHxS



13C3-PFHxS



18O2-PFHxS



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-119.qld

Last Altered: Monday, March 20, 2017 11:39:23 AM Pacific Daylight Time

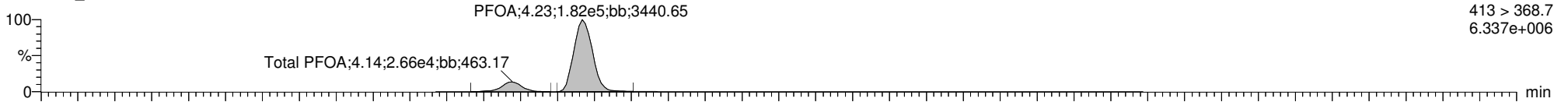
Printed: Monday, March 20, 2017 11:40:08 AM Pacific Daylight Time

ID: 1700311-06 OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170317G2_19, Date: 17-Mar-2017, Time: 19:34:10, Instrument: , Lab: , User:

Total PFOA

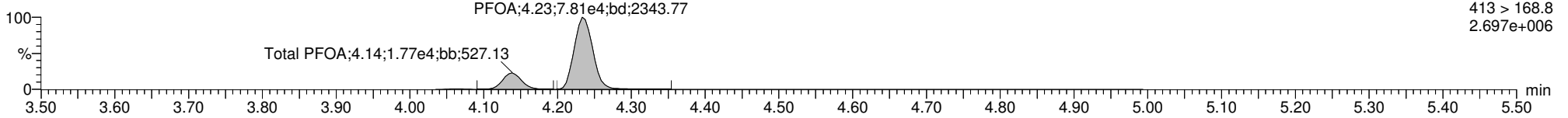
170317G2_19

F5:MRM of 12 channels,ES-
413 > 368.7
6.337e+006



170317G2_19

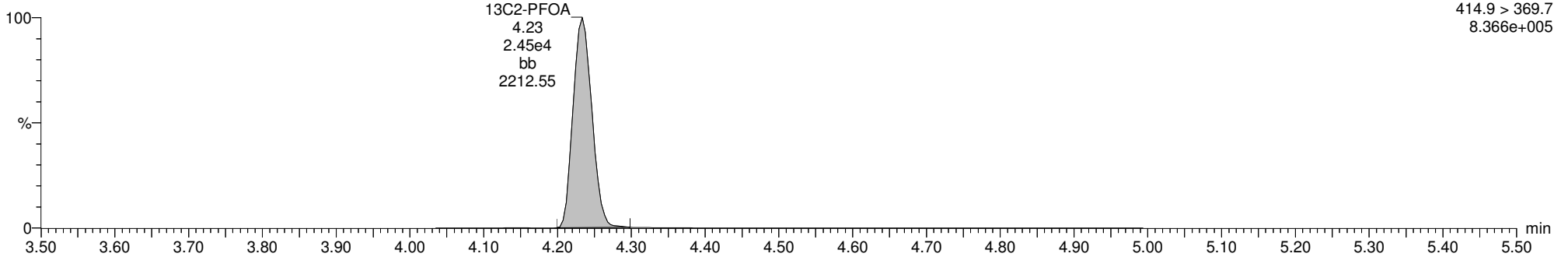
F5:MRM of 12 channels,ES-
413 > 168.8
2.697e+006



13C2-PFOA

170317G2_19

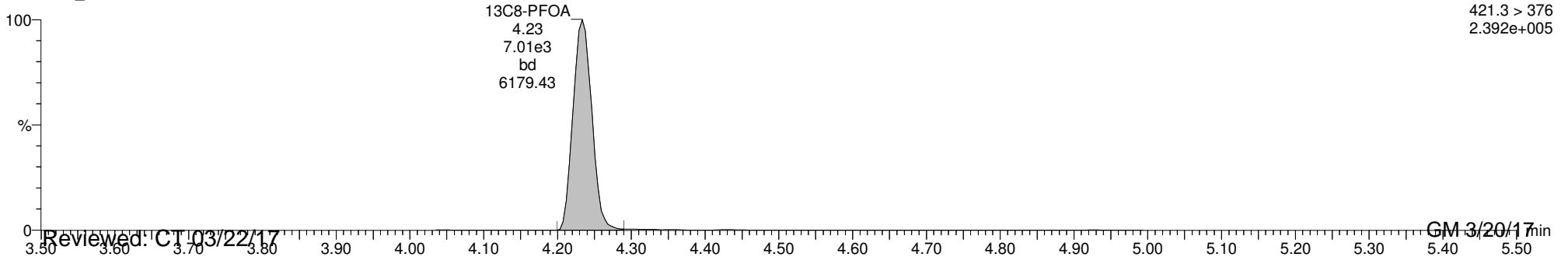
F5:MRM of 12 channels,ES-
414.9 > 369.7
8.366e+005



13C8-PFOA

170317G2_19

F5:MRM of 12 channels,ES-
421.3 > 376
2.392e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-119.qld

Last Altered: Monday, March 20, 2017 11:39:23 AM Pacific Daylight Time

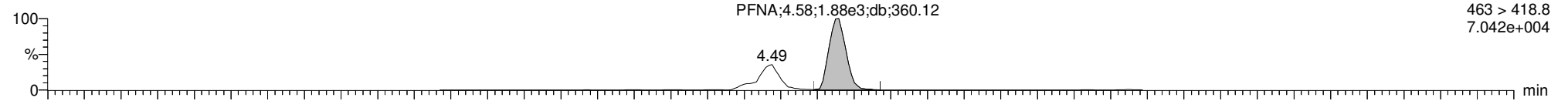
Printed: Monday, March 20, 2017 11:40:08 AM Pacific Daylight Time

ID: 1700311-06 OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170317G2_19, Date: 17-Mar-2017, Time: 19:34:10, Instrument: , Lab: , User:

PFNA

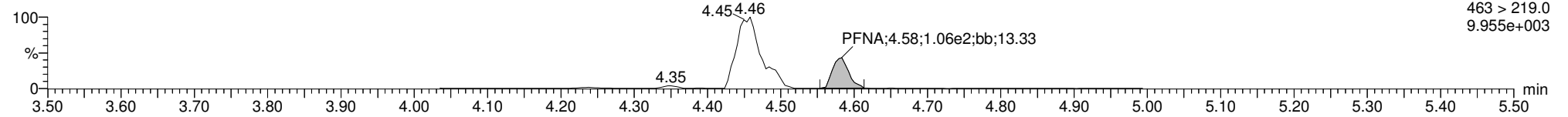
170317G2_19

F5:MRM of 12 channels,ES-
463 > 418.8
7.042e+004



170317G2_19

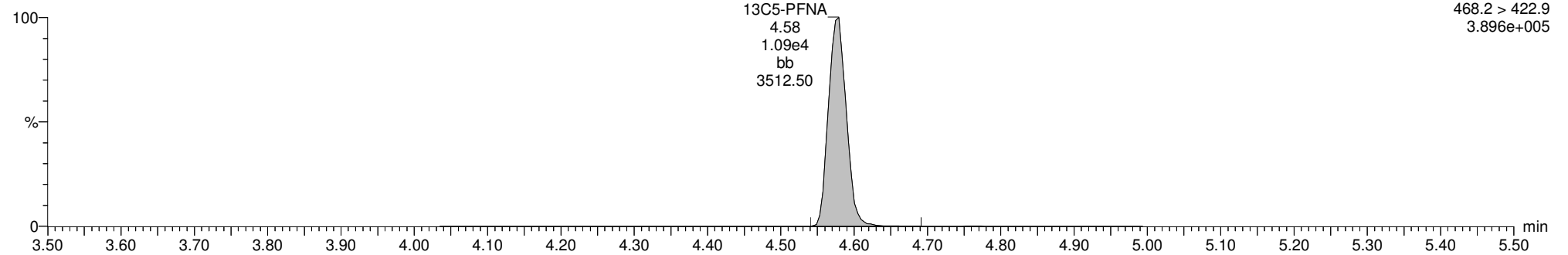
F5:MRM of 12 channels,ES-
463 > 219.0
9.955e+003



13C5-PFNA

170317G2_19

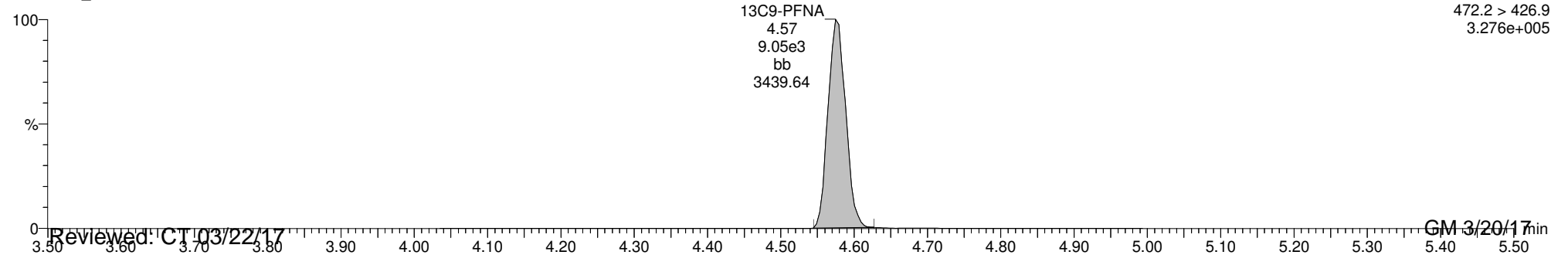
F5:MRM of 12 channels,ES-
468.2 > 422.9
3.896e+005



13C9-PFNA

170317G2_19

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.276e+005

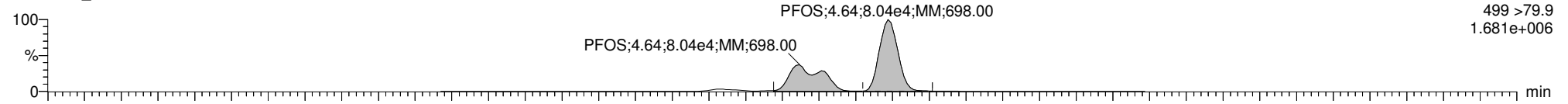


Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-119.qld
Last Altered: Monday, March 20, 2017 11:39:23 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 11:40:08 AM Pacific Daylight Time

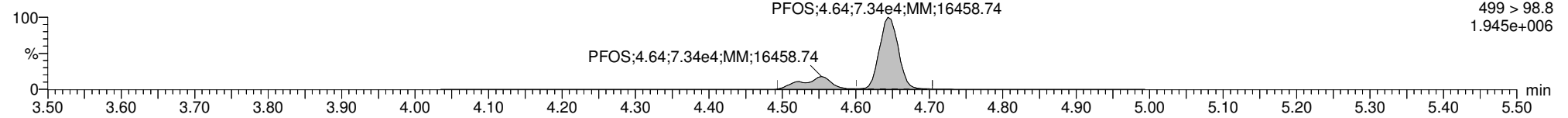
ID: 1700311-06 OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170317G2_19, Date: 17-Mar-2017, Time: 19:34:10, Instrument: , Lab: , User:

Total PFOS

170317G2_19

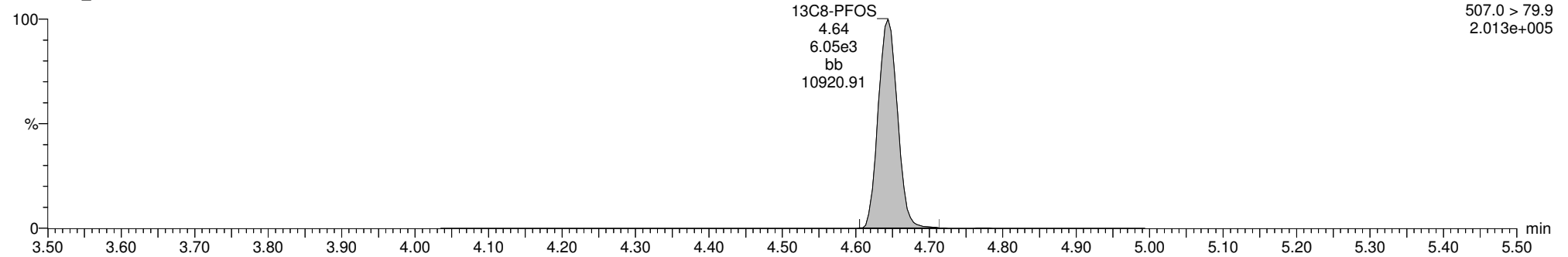


170317G2_19



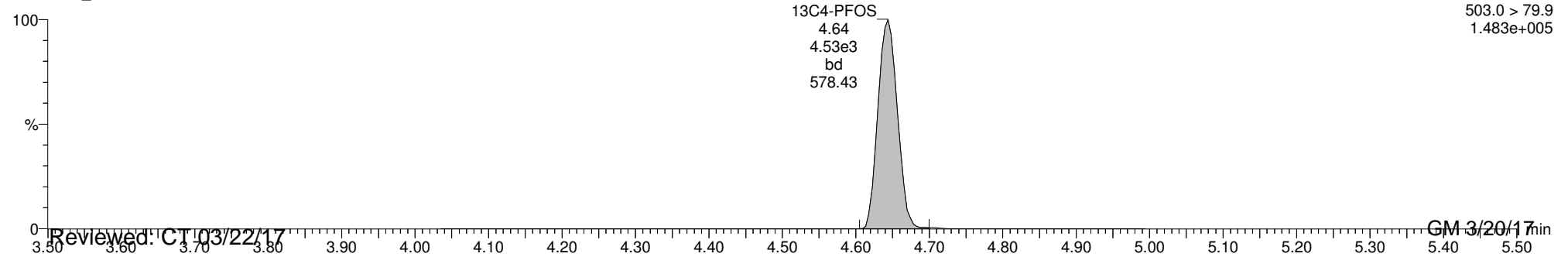
13C8-PFOS

170317G2_19



13C4-PFOS

170317G2_19



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-5.qld

Last Altered: Tuesday, March 21, 2017 12:41:36 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:42:04 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-06@10X OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170320G3_5, Date: 20-Mar-2017, Time: 15:35:09

	# Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	3 PFHxS	398.9 > 79.6	1.537e4	5.751e2		0.128	3.96	1470	
2	6 PFOS	499 >79.9	1.429e3	1.077e2		0.128	4.66	2350	
3	9 18O2-PFHxS	403 > 102.6	5.751e2	1.030e3	0.495	0.128	3.96	110	113
4	12 13C8-PFOS	507.0 > 79.9	1.077e2	6.049e1	1.080	0.128	4.66	161	165
5	14 13C3-PFHxS	401.9 > 79.9	1.030e3	1.030e3	1.000	0.128	3.96	97.8	100
6	17 13C4-PFOS	503.0 > 79.9	6.049e1	6.049e1	1.000	0.128	4.65	97.8	100
7	19 Total PFHxS	398.9 > 79.6		5.751e2		0.128		1470	
8	21 Total PFOS	499 > 79.9		1.077e2		0.128		2350	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-5.qld

Last Altered: Tuesday, March 21, 2017 12:41:36 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:42:04 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-06@10X OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170320G3_5, Date: 20-Mar-2017, Time: 15:35:09

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.98	1032.452	958.073	46.2
2	18 Total PFBS	299 > 79.7	2.86	8.100	575.111	0.4

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.96	15374.032	575.111	1466.9

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.24	14145.068	2009.842	788.4
2	20 Total PFOA	413 > 368.7	4.14	1793.860	2009.842	98.9

Total PFOS

	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.66	1429.422	107.742	2346.5

Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-5.qld

Last Altered: Tuesday, March 21, 2017 12:41:36 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:42:04 Pacific Daylight Time

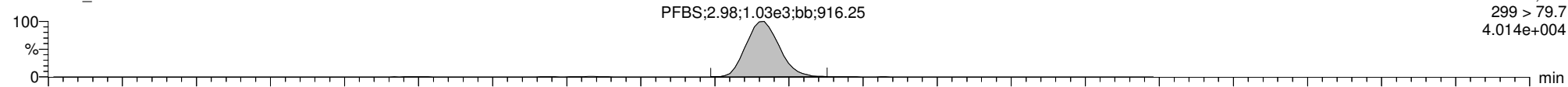
Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

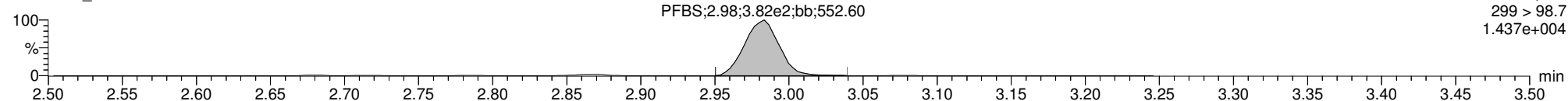
ID: 1700311-06@10X OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170320G3_5, Date: 20-Mar-2017, Time: 15:35:09, Instrument: , Lab: , User:

PFBS

170320G3_5

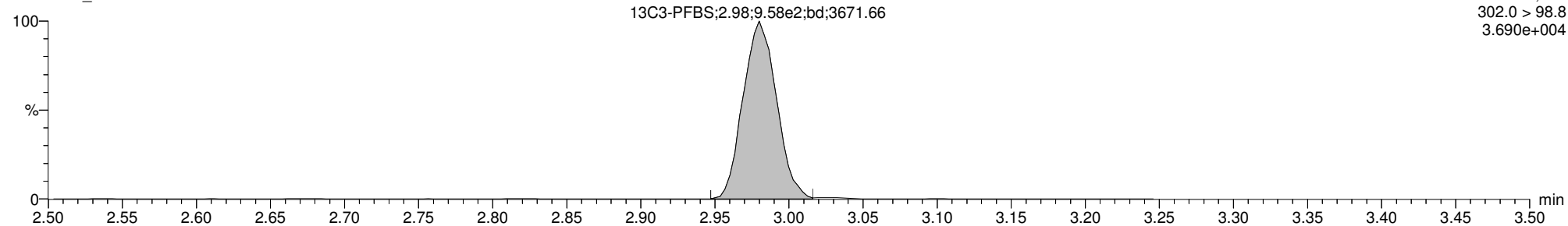


170320G3_5



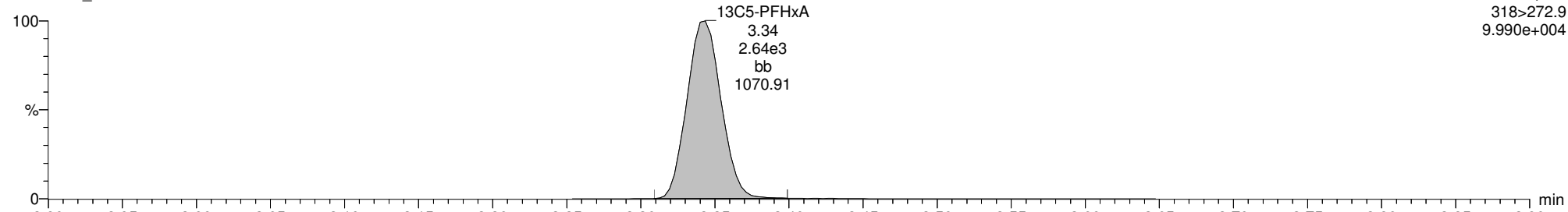
13C3-PFBS

170320G3_5



13C5-PFHxA

170320G3_5



Reviewed: CT 03/22/17

AC 3/21/17

Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-5.qld

Last Altered: Tuesday, March 21, 2017 12:41:36 Pacific Daylight Time

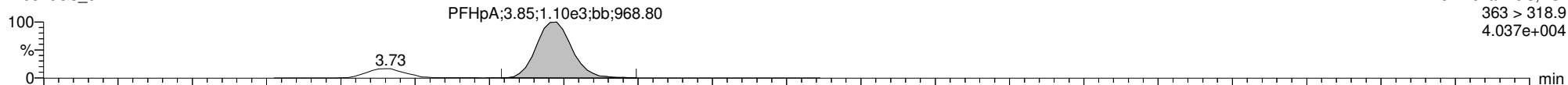
Printed: Tuesday, March 21, 2017 12:42:04 Pacific Daylight Time

ID: 1700311-06@10X OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170320G3_5, Date: 20-Mar-2017, Time: 15:35:09, Instrument: , Lab: , User:

PFHpA

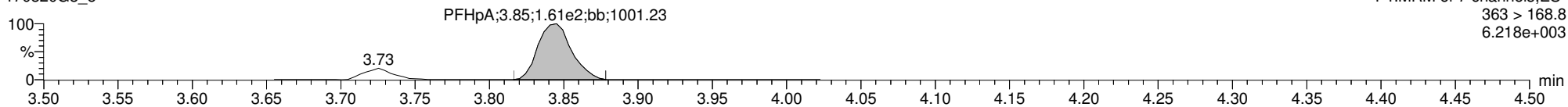
170320G3_5

F4:MRM of 7 channels,ES-
363 > 318.9
4.037e+004



170320G3_5

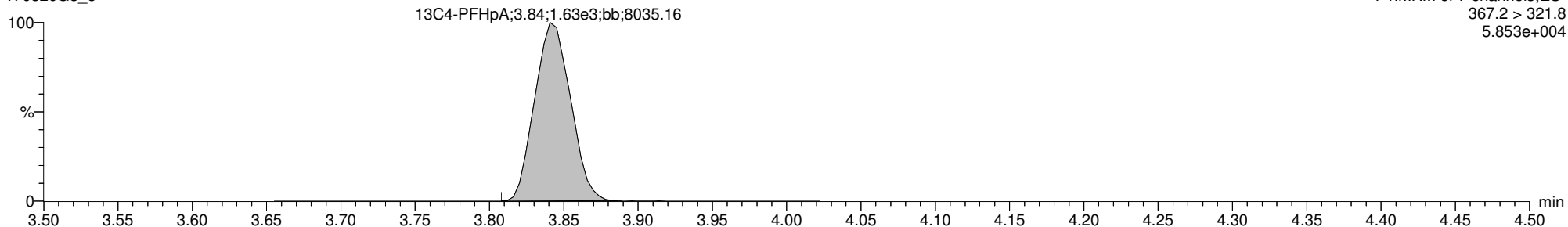
F4:MRM of 7 channels,ES-
363 > 168.8
6.218e+003



13C4-PFHpA

170320G3_5

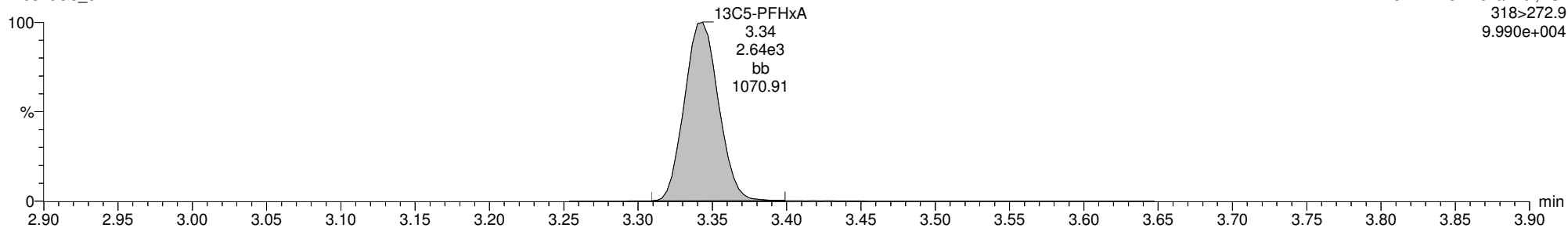
F4:MRM of 7 channels,ES-
367.2 > 321.8
5.853e+004



13C5-PFHxA

170320G3_5

F3:MRM of 1 channel,ES-
318>272.9
9.990e+004



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-5.qld

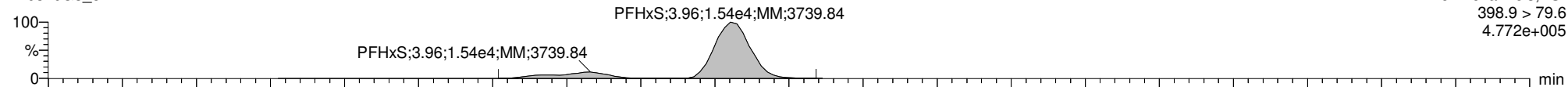
Last Altered: Tuesday, March 21, 2017 12:41:36 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:42:04 Pacific Daylight Time

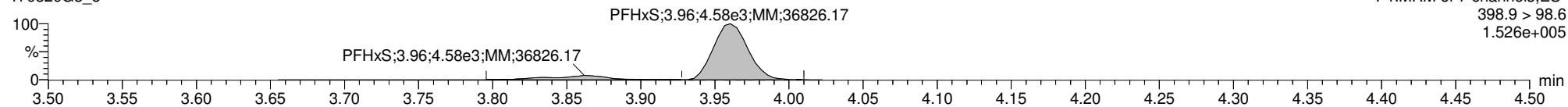
ID: 1700311-06@10X OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170320G3_5, Date: 20-Mar-2017, Time: 15:35:09, Instrument: , Lab: , User:

PFHxS

170320G3_5

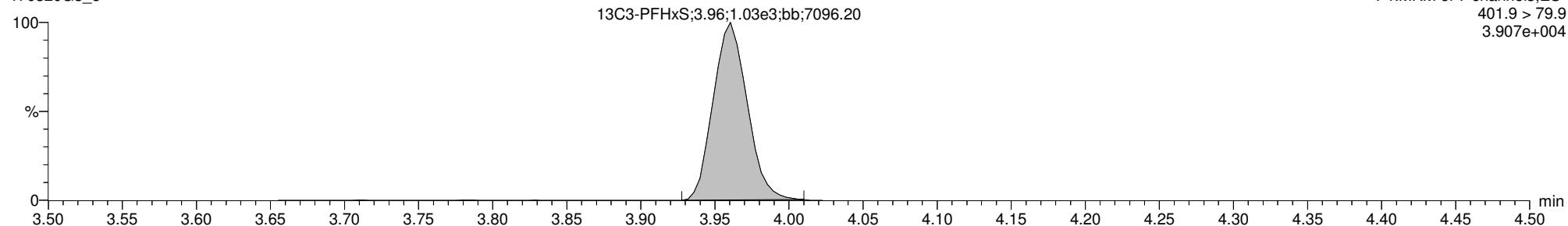


170320G3_5



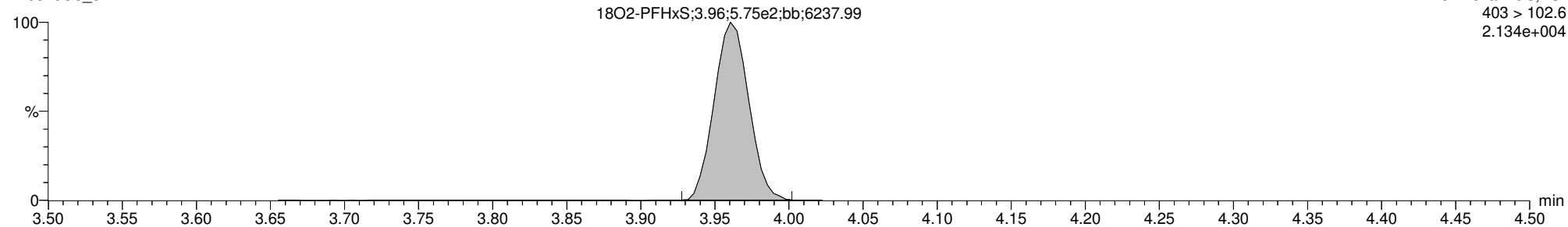
13C3-PFHxS

170320G3_5



18O2-PFHxS

170320G3_5



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-5.qld

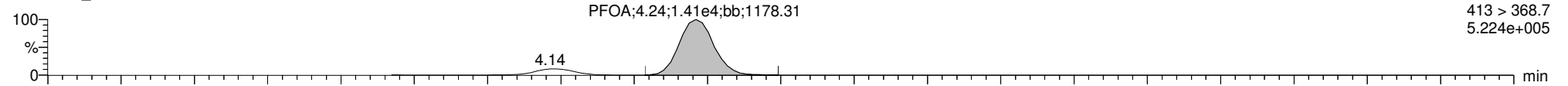
Last Altered: Tuesday, March 21, 2017 12:41:36 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:42:04 Pacific Daylight Time

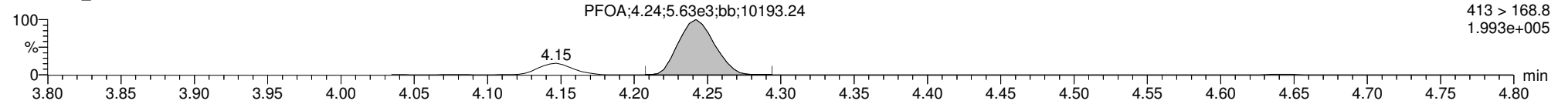
ID: 1700311-06@10X OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170320G3_5, Date: 20-Mar-2017, Time: 15:35:09, Instrument: , Lab: , User:

PFOA

170320G3_5

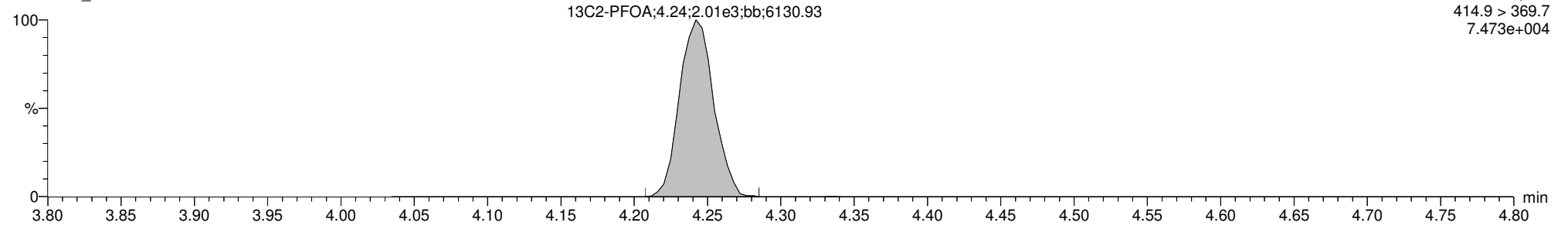


170320G3_5



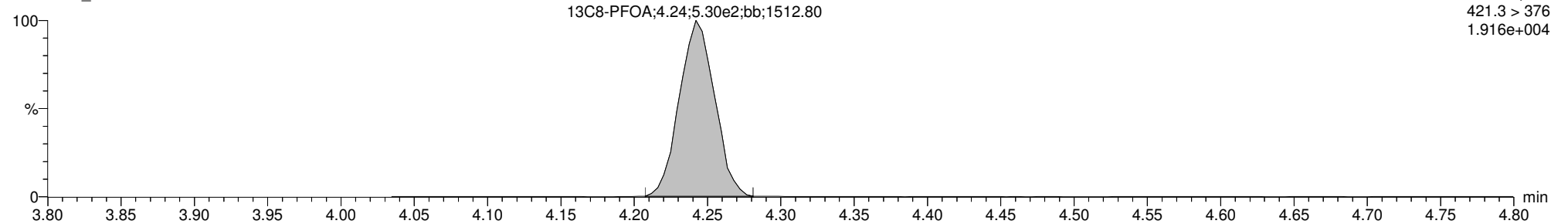
13C2-PFOA

170320G3_5



13C8-PFOA

170320G3_5



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-5.qld

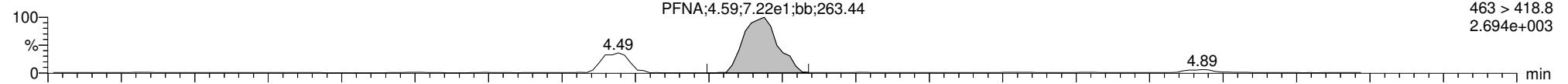
Last Altered: Tuesday, March 21, 2017 12:41:36 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:42:04 Pacific Daylight Time

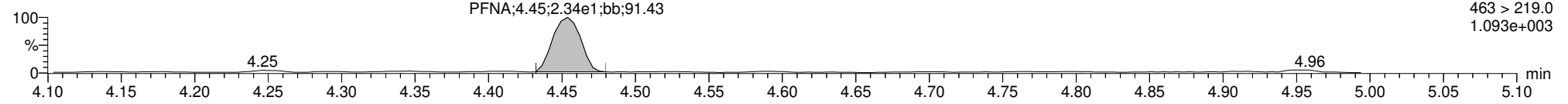
ID: 1700311-06@10X OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170320G3_5, Date: 20-Mar-2017, Time: 15:35:09, Instrument: , Lab: , User:

PFNA

170320G3_5

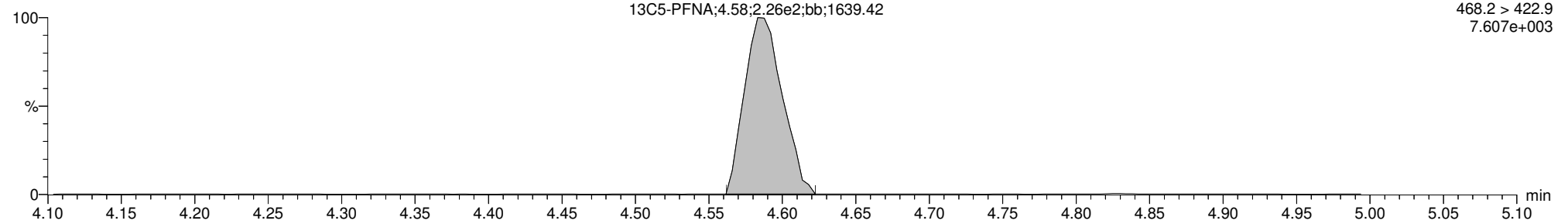


170320G3_5



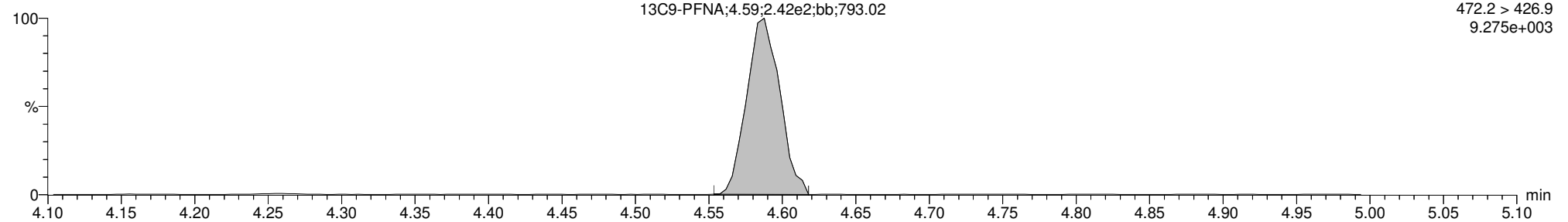
13C5-PFNA

170320G3_5



13C9-PFNA

170320G3_5



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-5.qld

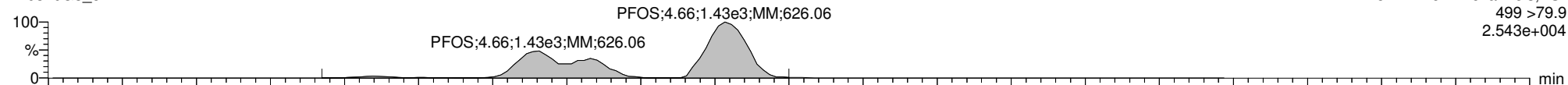
Last Altered: Tuesday, March 21, 2017 12:41:36 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 12:42:04 Pacific Daylight Time

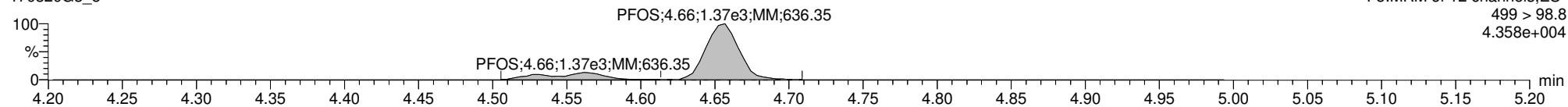
ID: 1700311-06@10X OF-SOW-091M-0317 0.12783, Description: OF-SOW-091M-0317, Name: 170320G3_5, Date: 20-Mar-2017, Time: 15:35:09, Instrument: , Lab: , User:

PFOS

170320G3_5

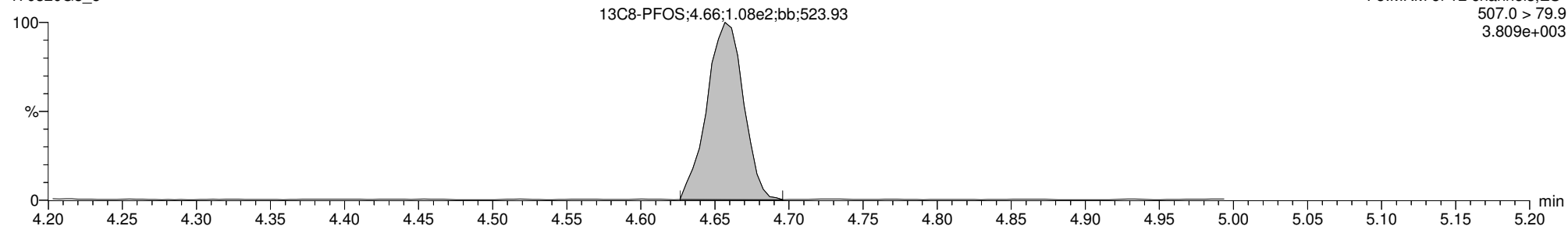


170320G3_5



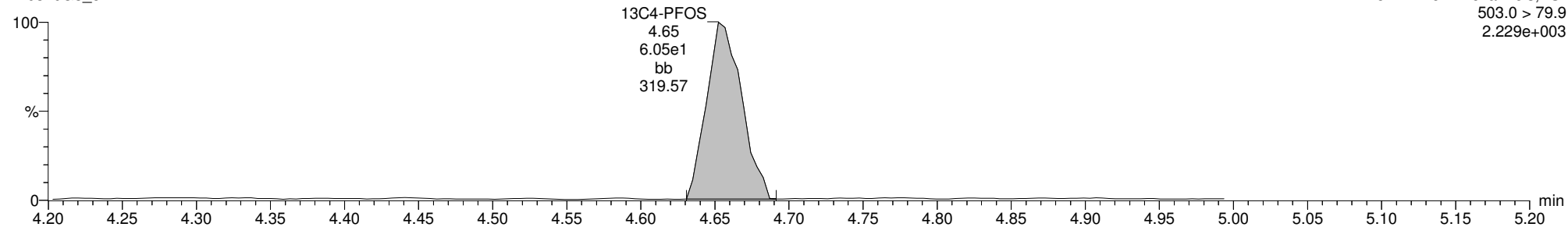
13C8-PFOS

170320G3_5



13C4-PFOS

170320G3_5



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-20.qld

Last Altered: Monday, March 20, 2017 11:43:08 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:43:55 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-07 OF-FB030817 0.12533, Description: OF-FB030817, Name: 170317G2_20, Date: 17-Mar-2017, Time: 19:46:47

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	7.905e1	9.347e3		0.125	2.98	0.130	
2	2 PFHpA	363 > 318.9		2.179e4		0.125			
3	3 PFHxS	398.9 > 79.6	8.089e1	8.351e3		0.125	3.96	0.145	
4	4 PFOA	413 > 368.7	2.591e2	3.217e4		0.125	4.24		
5	5 PFNA	463 > 418.8		1.158e4		0.125			
6	6 PFOS	499 > 79.9	3.140e1	9.899e3		0.125	4.64	1.67	
7	7 13C3-PFBS	302.0 > 98.8	9.347e3	1.407e4	0.501	0.125	2.98	132	133
8	8 13C4-PFHpA	367.2 > 321.8	2.179e4	1.407e4	1.237	0.125	3.84	125	125
9	9 18O2-PFHxS	403 > 102.6	8.351e3	1.407e4	0.495	0.125	3.96	120	120
10	10 13C2-PFOA	414.9 > 369.7	3.217e4	9.147e3	3.221	0.125	4.24	109	109
11	11 13C5-PFNA	468.2 > 422.9	1.158e4	1.070e4	0.979	0.125	4.58	110	110
12	12 13C8-PFOS	507.0 > 79.9	9.899e3	8.309e3	1.080	0.125	4.64	110	110
13	13 13C5-PFHxA	318 > 272.9	2.677e4	2.677e4	1.000	0.125	3.33	99.7	100
14	14 13C3-PFHxS	401.9 > 79.9	1.407e4	1.407e4	1.000	0.125	3.96	99.7	100
15	15 13C8-PFOA	421.3 > 376	9.147e3	9.147e3	1.000	0.125	4.24	99.7	100
16	16 13C9-PFNA	472.2 > 426.9	1.070e4	1.070e4	1.000	0.125	4.58	99.7	100
17	17 13C4-PFOS	503.0 > 79.9	8.309e3	8.309e3	1.000	0.125	4.64	99.7	100
18	18 Total PFBS	299 > 79.7		8.351e3		0.125		0.130	
19	19 Total PFHxS	398.9 > 79.6		8.351e3		0.125		0.145	
20	20 Total PFOA	413 > 368.7		3.217e4		0.125			
21	21 Total PFOS	499 > 79.9		9.899e3		0.125		1.67	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-20.qld

Last Altered: Monday, March 20, 2017 11:43:08 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:43:55 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-07 OF-FB030817 0.12533, Description: OF-FB030817, Name: 170317G2_20, Date: 17-Mar-2017, Time: 19:46:47

Total PFBS

#	Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.98	79.045	9346.911	0.1

Total PFHxS

#	Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.96	80.892	8350.712	0.1

Total PFOA

#	Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.24	259.053	32169.354	

Total PFOS

#	Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.64	31.401	9899.358	1.7

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-20.qld

Last Altered: Monday, March 20, 2017 11:43:08 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:43:55 AM Pacific Daylight Time

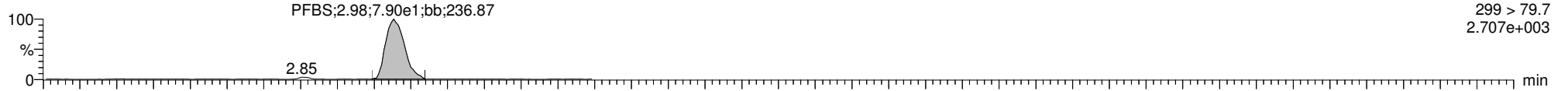
Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

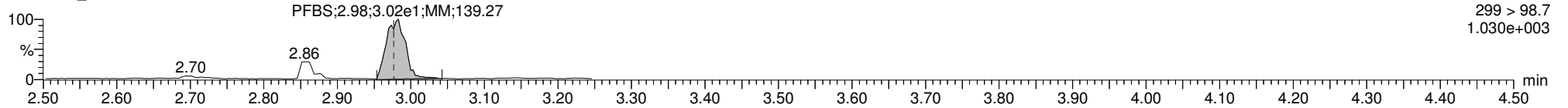
ID: 1700311-07 OF-FB030817 0.12533, Description: OF-FB030817, Name: 170317G2_20, Date: 17-Mar-2017, Time: 19:46:47, Instrument: , Lab: , User:

PFBS

170317G2_20

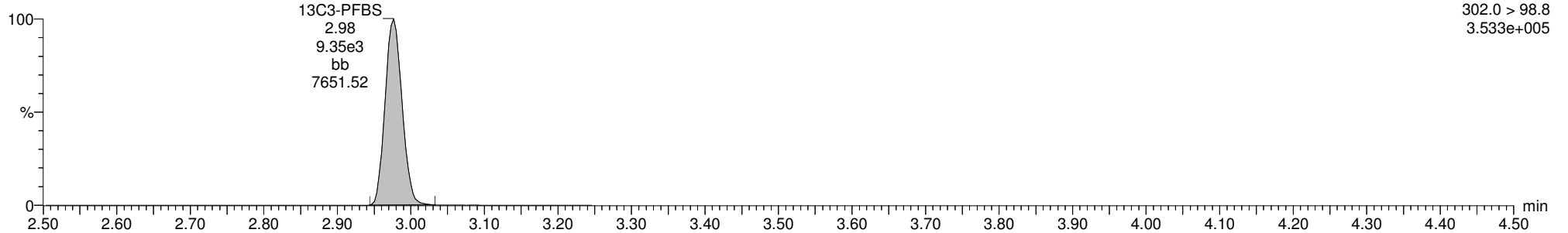


170317G2_20



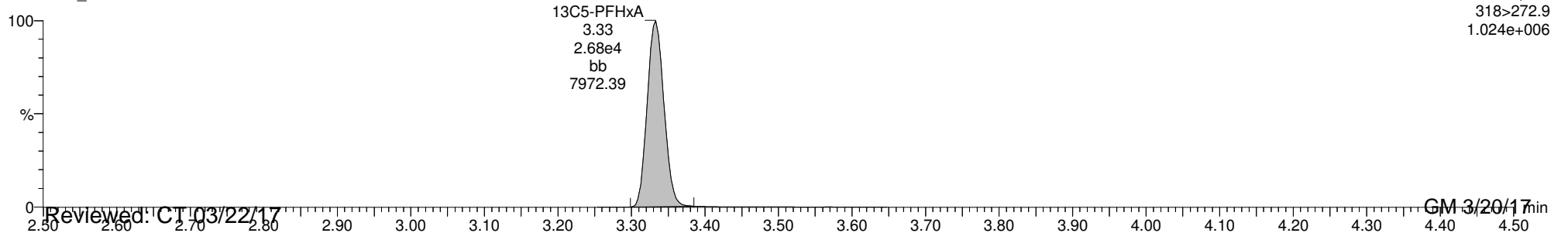
13C3-PFBS

170317G2_20



13C5-PFHxA

170317G2_20



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-20.qld

Last Altered: Monday, March 20, 2017 11:43:08 AM Pacific Daylight Time

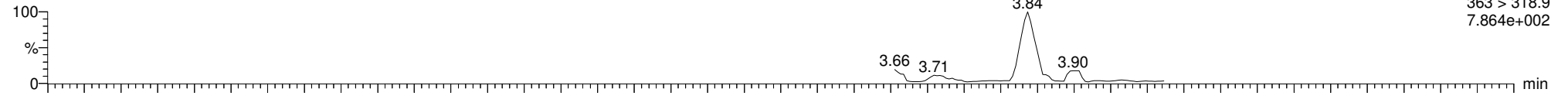
Printed: Monday, March 20, 2017 11:43:55 AM Pacific Daylight Time

ID: 1700311-07 OF-FB030817 0.12533, Description: OF-FB030817, Name: 170317G2_20, Date: 17-Mar-2017, Time: 19:46:47, Instrument: , Lab: , User:

PFHpA

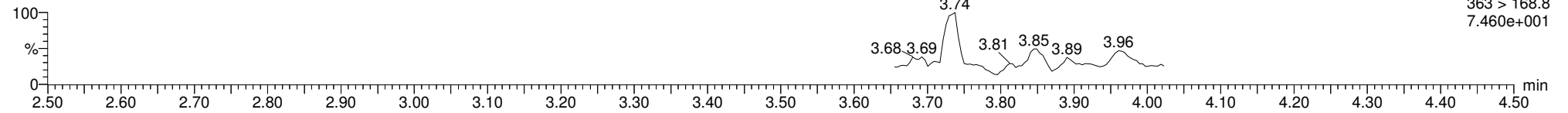
170317G2_20

F4:MRM of 7 channels,ES-
363 > 318.9
7.864e+002



170317G2_20

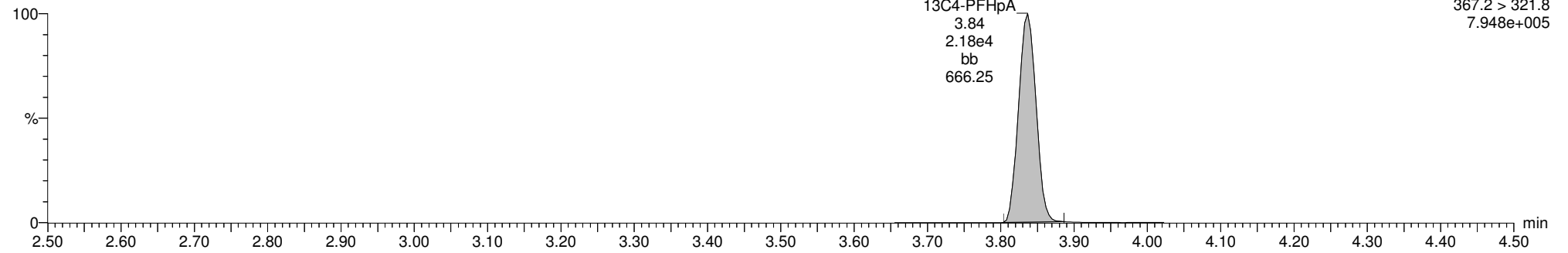
F4:MRM of 7 channels,ES-
363 > 168.8
7.460e+001



13C4-PFHpA

170317G2_20

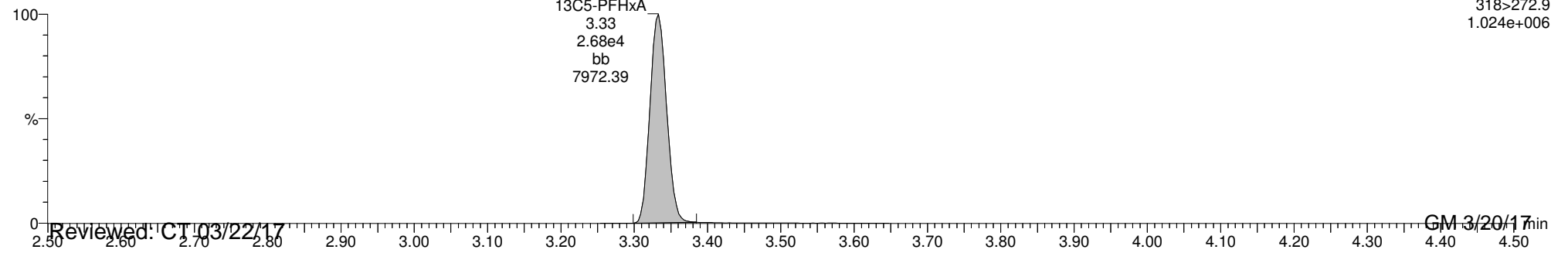
F4:MRM of 7 channels,ES-
367.2 > 321.8
7.948e+005



13C5-PFHxA

170317G2_20

F3:MRM of 1 channel,ES-
318>272.9
1.024e+006



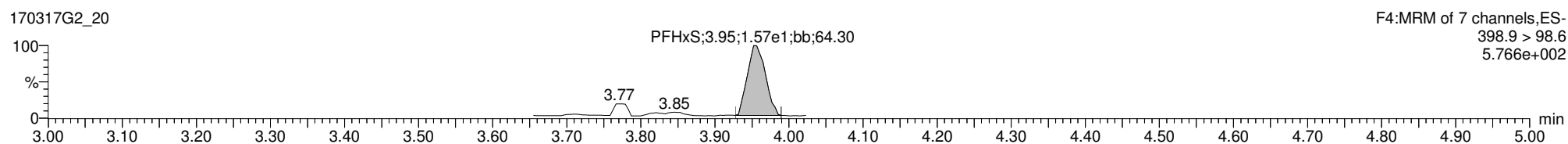
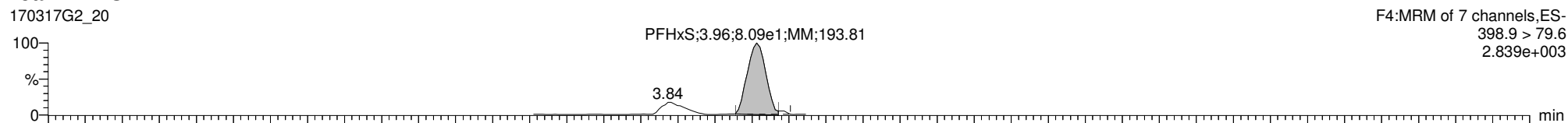
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-20.qld

Last Altered: Monday, March 20, 2017 11:43:08 AM Pacific Daylight Time

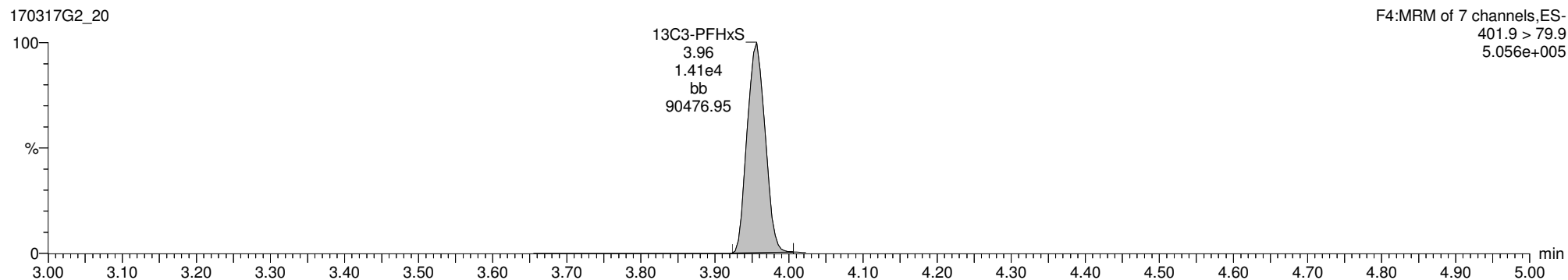
Printed: Monday, March 20, 2017 11:43:55 AM Pacific Daylight Time

ID: 1700311-07 OF-FB030817 0.12533, Description: OF-FB030817, Name: 170317G2_20, Date: 17-Mar-2017, Time: 19:46:47, Instrument: , Lab: , User:

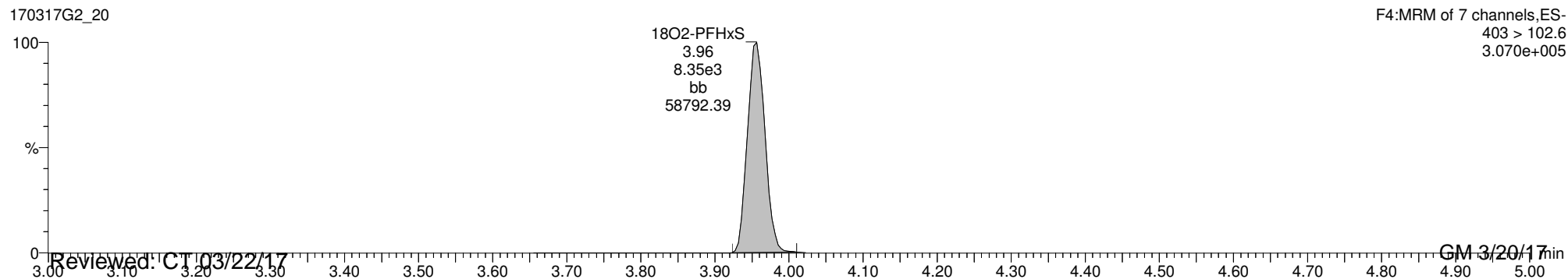
Total PFHxS



13C3-PFHxS



18O2-PFHxS



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-20.qld

Last Altered: Monday, March 20, 2017 11:43:08 AM Pacific Daylight Time

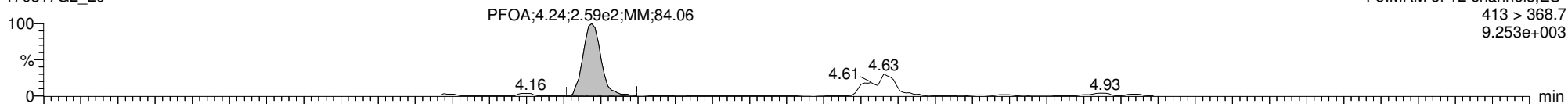
Printed: Monday, March 20, 2017 11:43:55 AM Pacific Daylight Time

ID: 1700311-07 OF-FB030817 0.12533, Description: OF-FB030817, Name: 170317G2_20, Date: 17-Mar-2017, Time: 19:46:47, Instrument: , Lab: , User:

Total PFOA

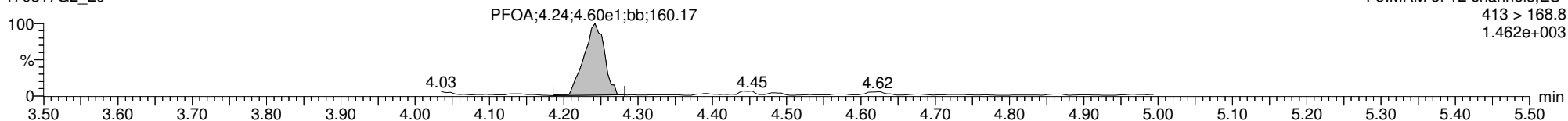
170317G2_20

F5:MRM of 12 channels,ES-
413 > 368.7
9.253e+003



170317G2_20

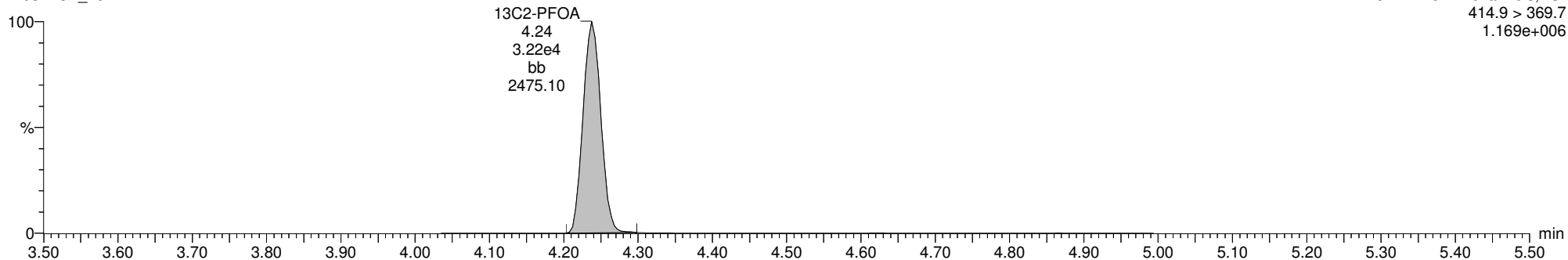
F5:MRM of 12 channels,ES-
413 > 168.8
1.462e+003



13C2-PFOA

170317G2_20

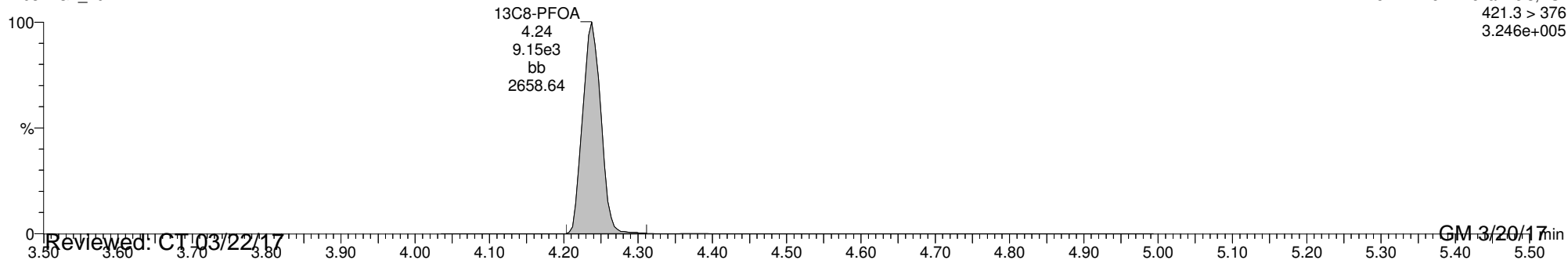
F5:MRM of 12 channels,ES-
414.9 > 369.7
1.169e+006



13C8-PFOA

170317G2_20

F5:MRM of 12 channels,ES-
421.3 > 376
3.246e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-20.qld

Last Altered: Monday, March 20, 2017 11:43:08 AM Pacific Daylight Time

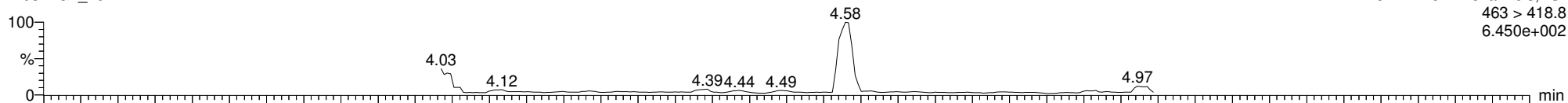
Printed: Monday, March 20, 2017 11:43:55 AM Pacific Daylight Time

ID: 1700311-07 OF-FB030817 0.12533, Description: OF-FB030817, Name: 170317G2_20, Date: 17-Mar-2017, Time: 19:46:47, Instrument: , Lab: , User:

PFNA

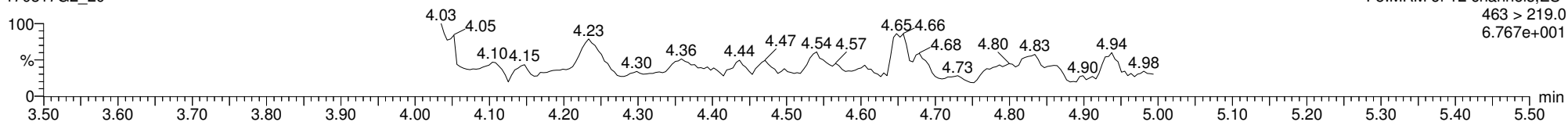
170317G2_20

F5:MRM of 12 channels,ES-
463 > 418.8
6.450e+002



170317G2_20

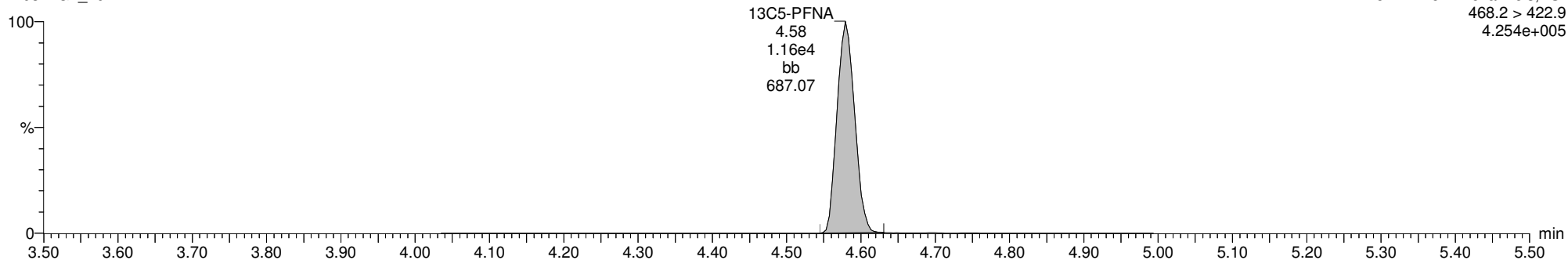
F5:MRM of 12 channels,ES-
463 > 219.0
6.767e+001



13C5-PFNA

170317G2_20

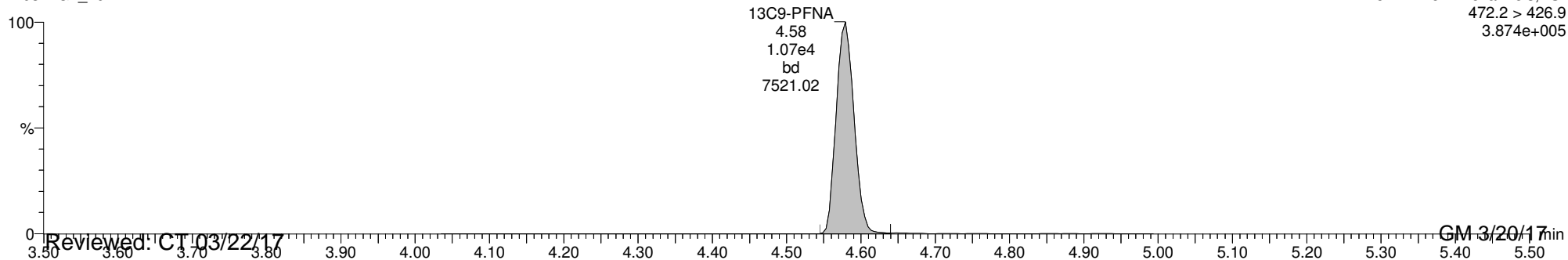
F5:MRM of 12 channels,ES-
468.2 > 422.9
4.254e+005



13C9-PFNA

170317G2_20

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.874e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-20.qld

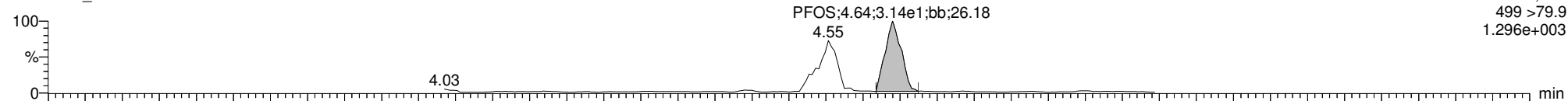
Last Altered: Monday, March 20, 2017 11:43:08 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:43:55 AM Pacific Daylight Time

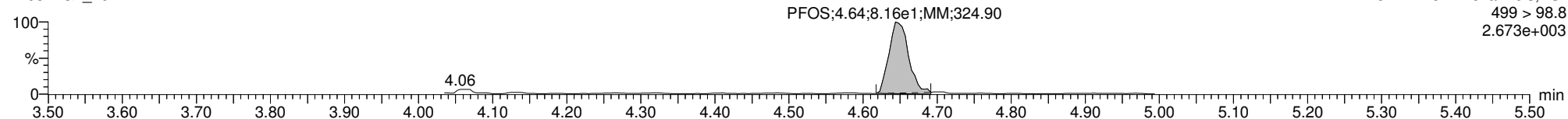
ID: 1700311-07 OF-FB030817 0.12533, Description: OF-FB030817, Name: 170317G2_20, Date: 17-Mar-2017, Time: 19:46:47, Instrument: , Lab: , User:

Total PFOS

170317G2_20

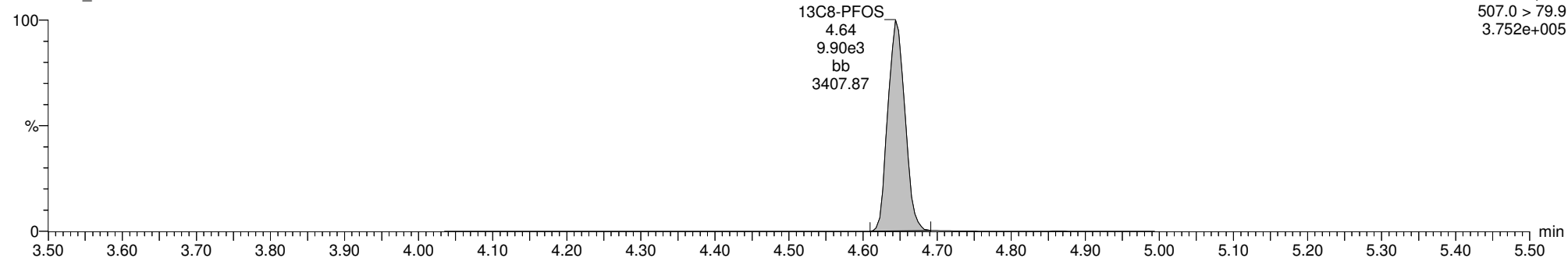


170317G2_20



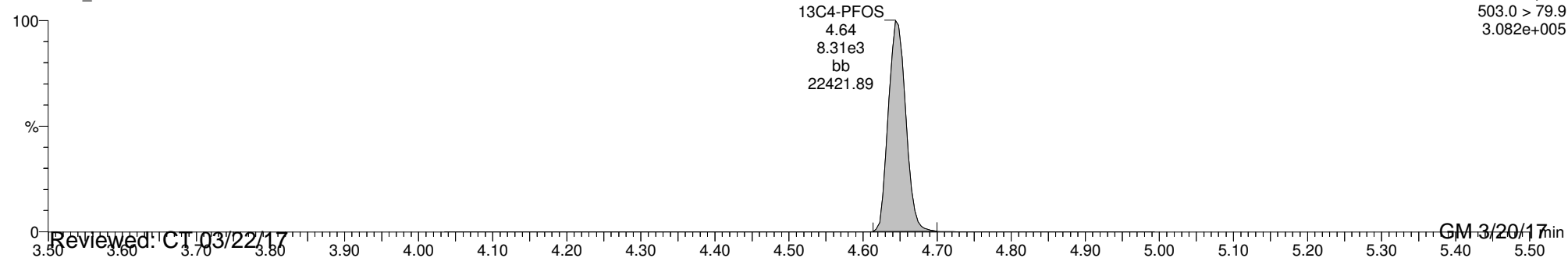
13C8-PFOS

170317G2_20



13C4-PFOS

170317G2_20



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-21.qld

Last Altered: Monday, March 20, 2017 11:51:34 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:51:48 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-08 OF-SOW-091L-0317 0.11948, Description: OF-SOW-091L-0317, Name: 170317G2_21, Date: 17-Mar-2017, Time: 19:59:20

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7		8.901e3		0.119			
2	2 PFHpA	363 > 318.9	3.649e1	2.084e4		0.119	3.83		
3	3 PFHxS	398.9 > 79.6	2.387e2	8.265e3		0.119	3.95	1.28	
4	4 PFOA	413 > 368.7	4.091e2	3.294e4		0.119	4.24	0.125	
5	5 PFNA	463 > 418.8		1.076e4		0.119			
6	6 PFOS	499 > 79.9	6.232e1	9.240e3		0.119	4.64	2.43	
7	7 13C3-PFBS	302.0 > 98.8	8.901e3	1.542e4	0.501	0.119	2.97	120	115
8	8 13C4-PFHpA	367.2 > 321.8	2.084e4	1.542e4	1.237	0.119	3.83	114	109
9	9 18O2-PFHxS	403 > 102.6	8.265e3	1.542e4	0.495	0.119	3.95	113	108
10	10 13C2-PFOA	414.9 > 369.7	3.294e4	9.331e3	3.221	0.119	4.24	115	110
11	11 13C5-PFNA	468.2 > 422.9	1.076e4	1.041e4	0.979	0.119	4.58	110	106
12	12 13C8-PFOS	507.0 > 79.9	9.240e3	8.106e3	1.080	0.119	4.64	110	106
13	13 13C5-PFHxA	318>272.9	2.510e4	2.510e4	1.000	0.119	3.33	105	100
14	14 13C3-PFHxS	401.9 > 79.9	1.542e4	1.542e4	1.000	0.119	3.95	105	100
15	15 13C8-PFOA	421.3 > 376	9.331e3	9.331e3	1.000	0.119	4.23	105	100
16	16 13C9-PFNA	472.2 > 426.9	1.041e4	1.041e4	1.000	0.119	4.58	105	100
17	17 13C4-PFOS	503.0 > 79.9	8.106e3	8.106e3	1.000	0.119	4.64	105	100
18	18 Total PFBS	299 > 79.7		8.265e3		0.119			
19	19 Total PFHxS	398.9 > 79.6		8.265e3		0.119		1.28	
20	20 Total PFOA	413 > 368.7		3.294e4		0.119		0.125	
21	21 Total PFOS	499 > 79.9		9.240e3		0.119		2.43	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-21.qld

Last Altered: Monday, March 20, 2017 11:51:34 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:51:48 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-08 OF-SOW-091L-0317 0.11948, Description: OF-SOW-091L-0317, Name: 170317G2_21, Date: 17-Mar-2017, Time: 19:59:20

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7			8901.193	

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.95	238.683	8265.343	1.3

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.24	409.131	32935.598	0.1
2	20 Total PFOA	413 > 368.7	4.16	5.323	32935.598	

Total PFOS

	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.64	62.316	9240.235	2.4

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-21.qld

Last Altered: Monday, March 20, 2017 11:51:34 AM Pacific Daylight Time

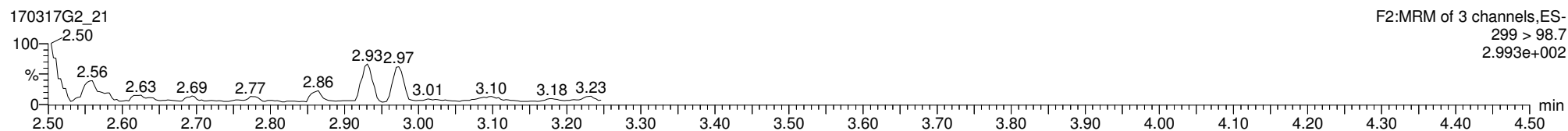
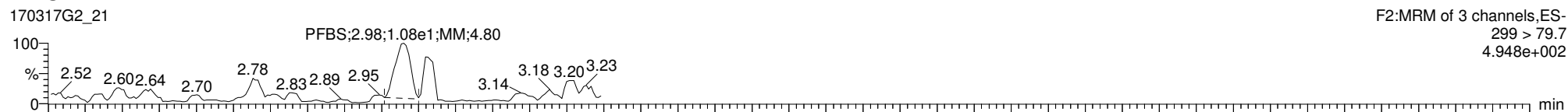
Printed: Monday, March 20, 2017 11:51:48 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

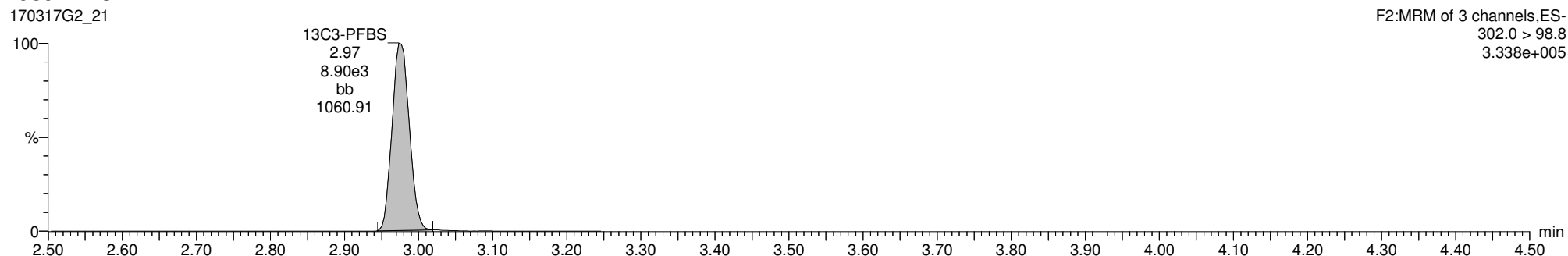
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-08 OF-SOW-091L-0317 0.11948, Description: OF-SOW-091L-0317, Name: 170317G2_21, Date: 17-Mar-2017, Time: 19:59:20, Instrument: , Lab: , User:

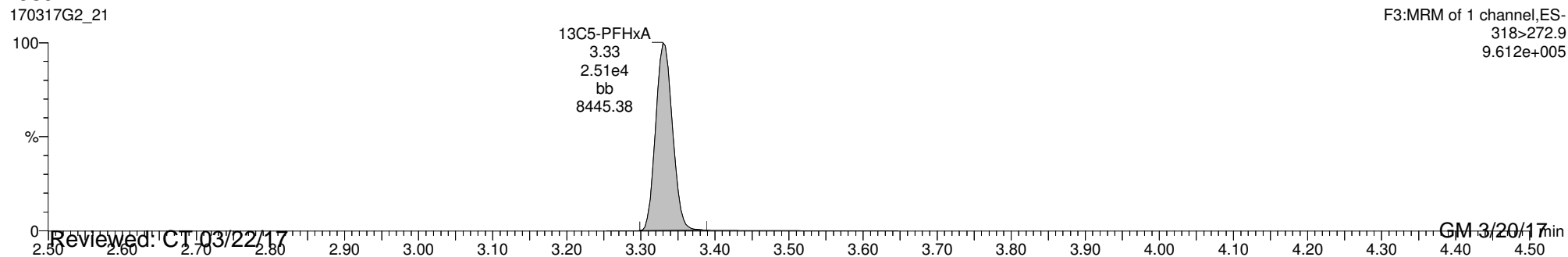
PFBS



13C3-PFBS



13C5-PFHxA



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-21.qld

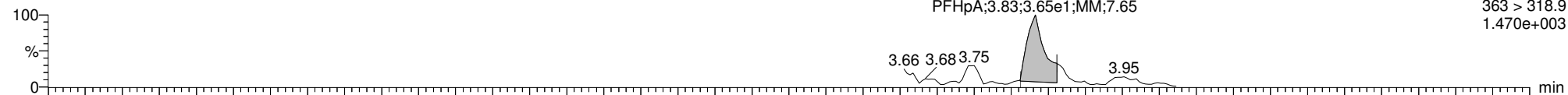
Last Altered: Monday, March 20, 2017 11:51:34 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:51:48 AM Pacific Daylight Time

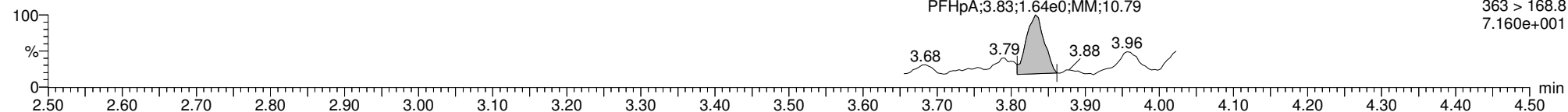
ID: 1700311-08 OF-SOW-091L-0317 0.11948, Description: OF-SOW-091L-0317, Name: 170317G2_21, Date: 17-Mar-2017, Time: 19:59:20, Instrument: , Lab: , User:

PFHpA

170317G2_21

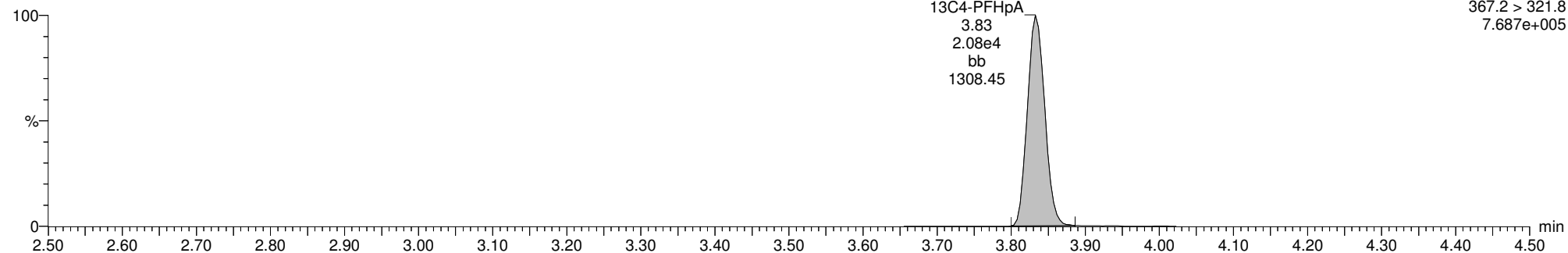


170317G2_21



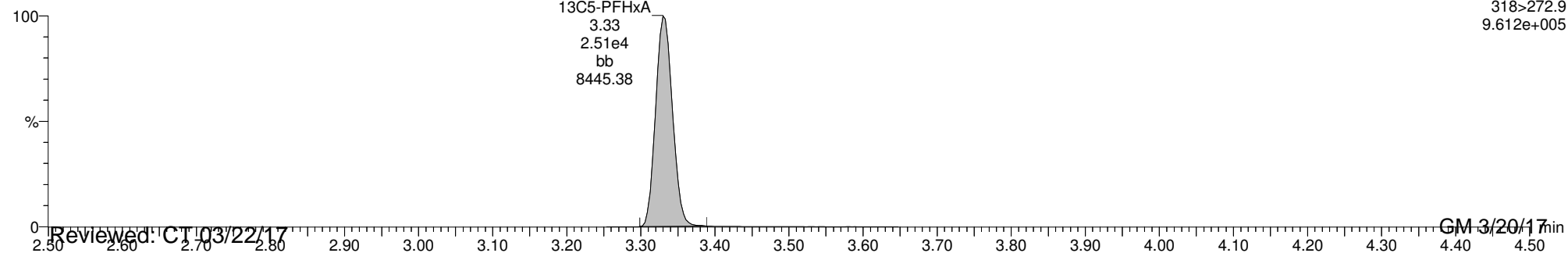
13C4-PFHpA

170317G2_21



13C5-PFHxA

170317G2_21



Reviewed: CT 03/22/17

GM 3/20/17

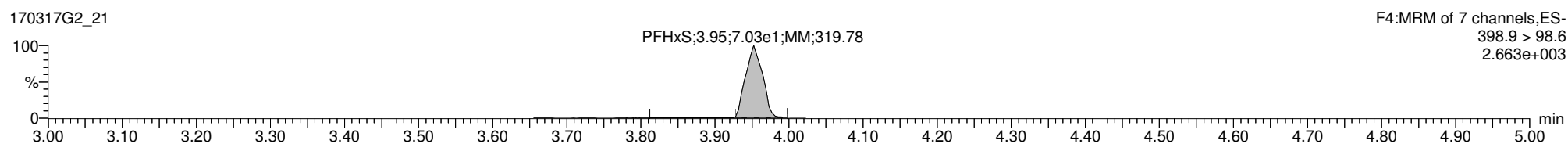
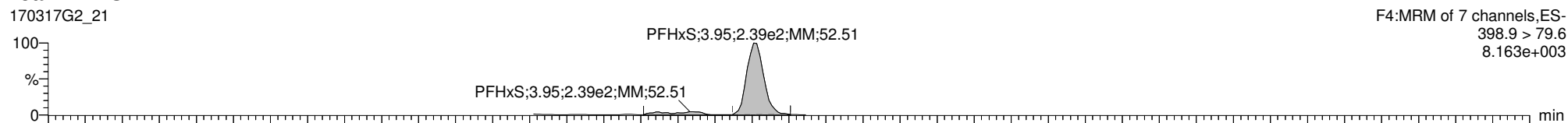
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-21.qld

Last Altered: Monday, March 20, 2017 11:51:34 AM Pacific Daylight Time

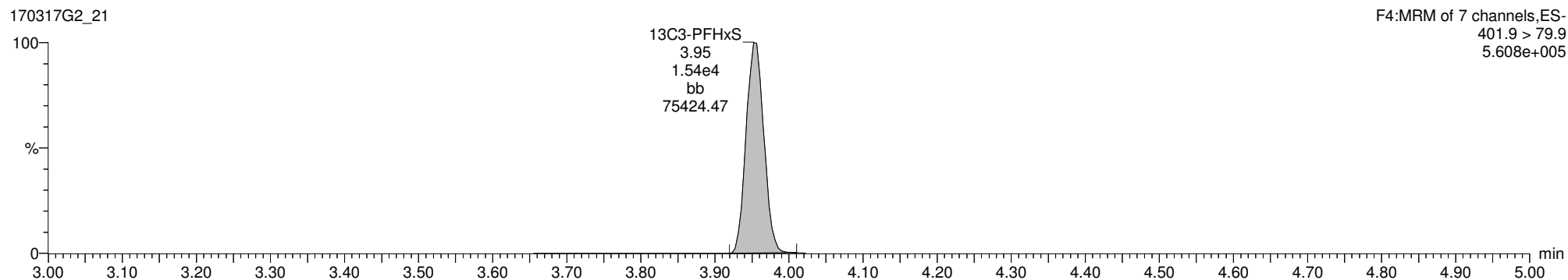
Printed: Monday, March 20, 2017 11:51:48 AM Pacific Daylight Time

ID: 1700311-08 OF-SOW-091L-0317 0.11948, Description: OF-SOW-091L-0317, Name: 170317G2_21, Date: 17-Mar-2017, Time: 19:59:20, Instrument: , Lab: , User:

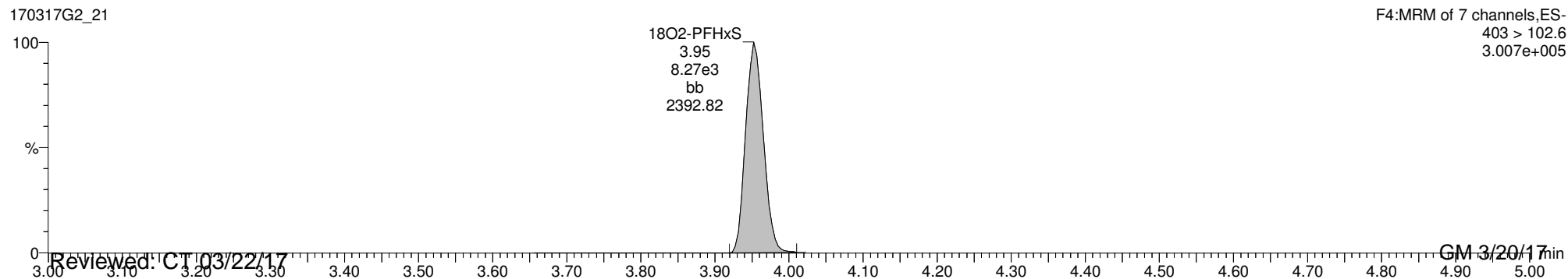
Total PFHxS



13C3-PFHxS



18O2-PFHxS



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-21.qld

Last Altered: Monday, March 20, 2017 11:51:34 AM Pacific Daylight Time

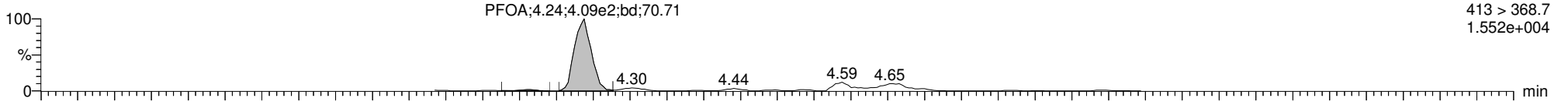
Printed: Monday, March 20, 2017 11:51:48 AM Pacific Daylight Time

ID: 1700311-08 OF-SOW-091L-0317 0.11948, Description: OF-SOW-091L-0317, Name: 170317G2_21, Date: 17-Mar-2017, Time: 19:59:20, Instrument: , Lab: , User:

Total PFOA

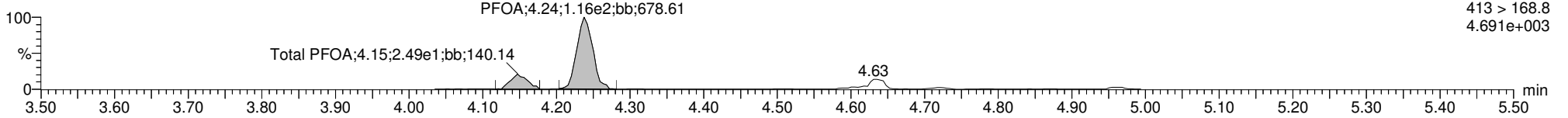
170317G2_21

F5:MRM of 12 channels,ES-
413 > 368.7
1.552e+004



170317G2_21

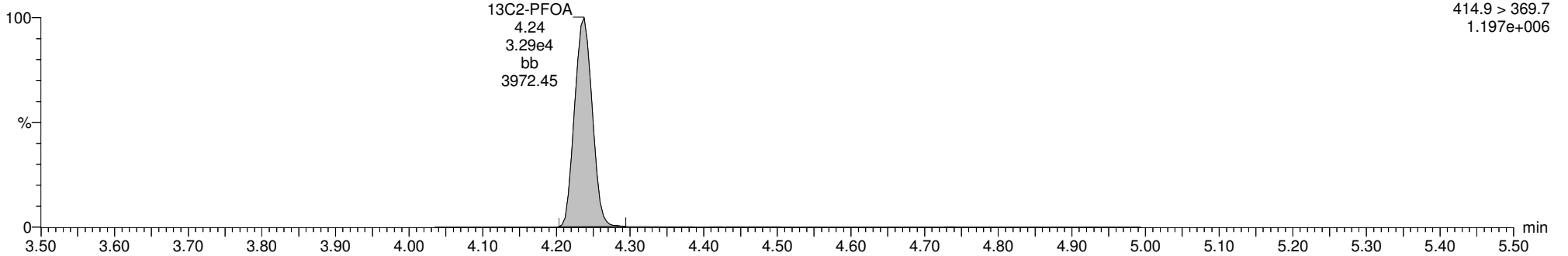
F5:MRM of 12 channels,ES-
413 > 168.8
4.691e+003



13C2-PFOA

170317G2_21

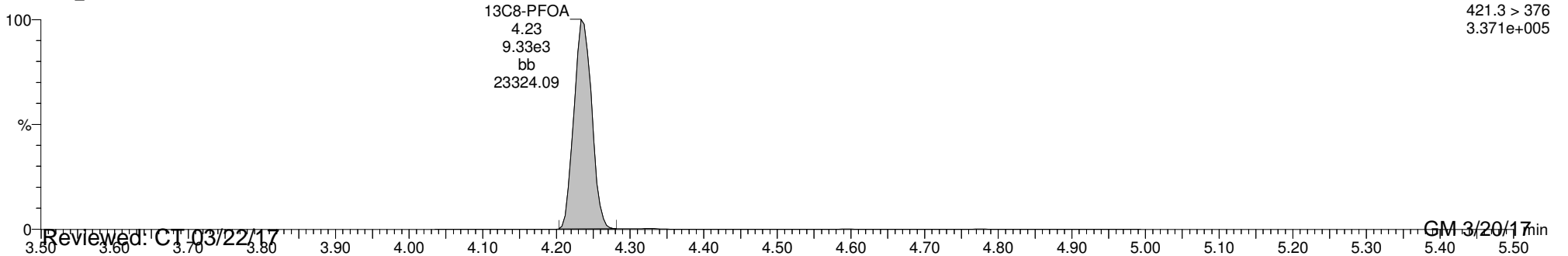
F5:MRM of 12 channels,ES-
414.9 > 369.7
1.197e+006



13C8-PFOA

170317G2_21

F5:MRM of 12 channels,ES-
421.3 > 376
3.371e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-21.qld

Last Altered: Monday, March 20, 2017 11:51:34 AM Pacific Daylight Time

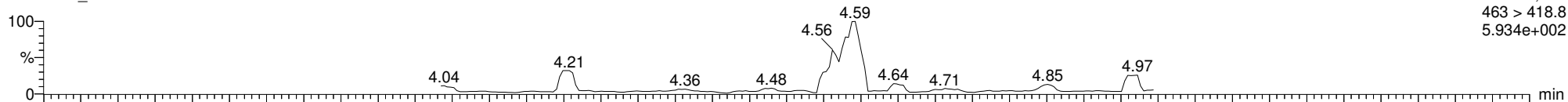
Printed: Monday, March 20, 2017 11:51:48 AM Pacific Daylight Time

ID: 1700311-08 OF-SOW-091L-0317 0.11948, Description: OF-SOW-091L-0317, Name: 170317G2_21, Date: 17-Mar-2017, Time: 19:59:20, Instrument: , Lab: , User:

PFNA

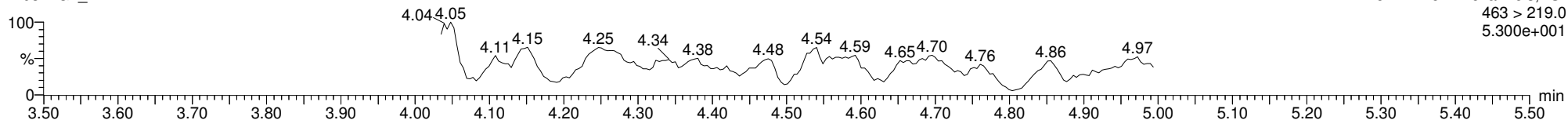
170317G2_21

F5:MRM of 12 channels,ES-
463 > 418.8
5.934e+002



170317G2_21

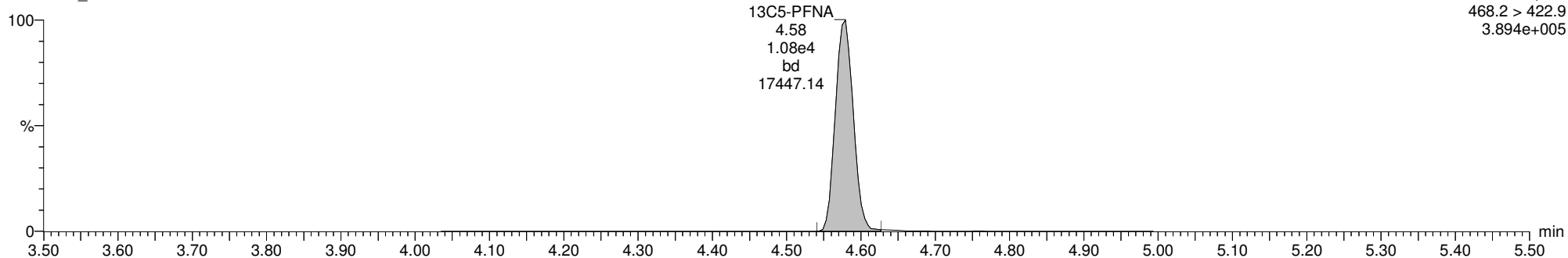
F5:MRM of 12 channels,ES-
463 > 219.0
5.300e+001



13C5-PFNA

170317G2_21

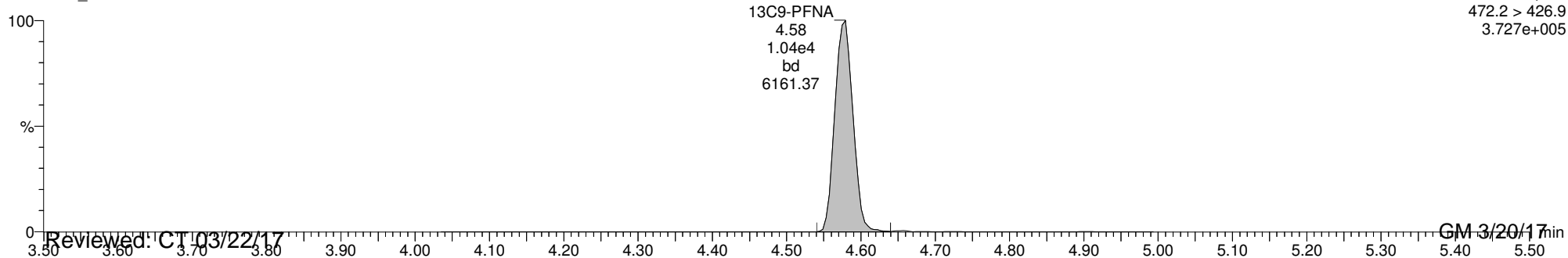
F5:MRM of 12 channels,ES-
468.2 > 422.9
3.894e+005



13C9-PFNA

170317G2_21

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.727e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-21.qld

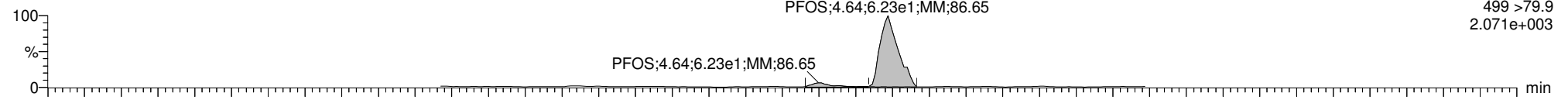
Last Altered: Monday, March 20, 2017 11:51:34 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:51:48 AM Pacific Daylight Time

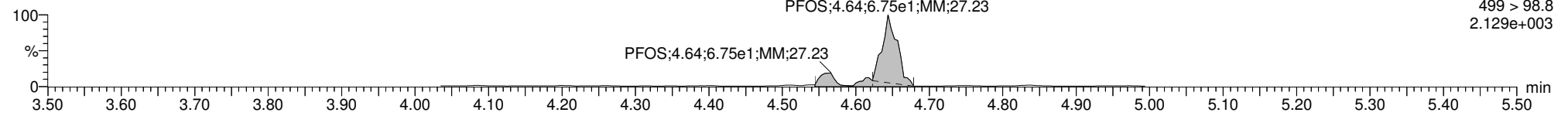
ID: 1700311-08 OF-SOW-091L-0317 0.11948, Description: OF-SOW-091L-0317, Name: 170317G2_21, Date: 17-Mar-2017, Time: 19:59:20, Instrument: , Lab: , User:

Total PFOS

170317G2_21

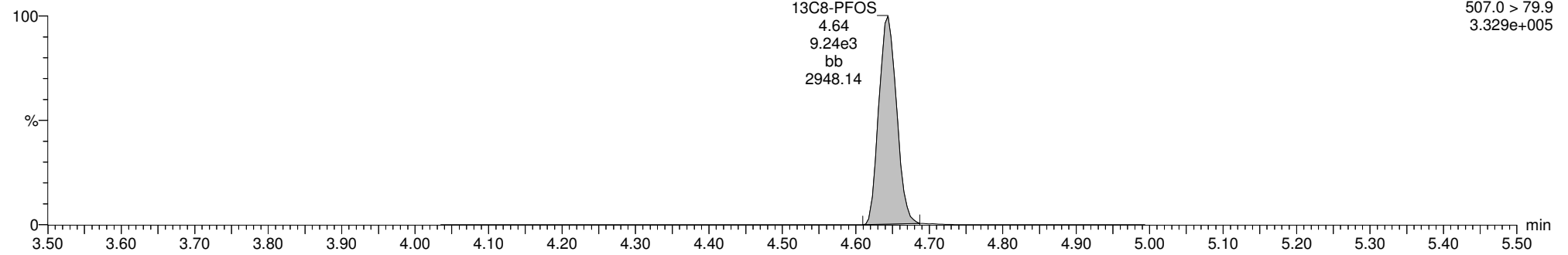


170317G2_21



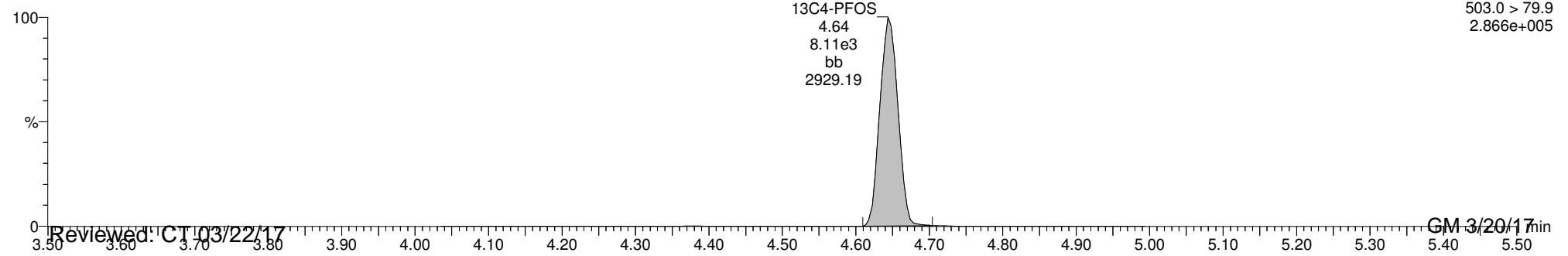
13C8-PFOS

170317G2_21



13C4-PFOS

170317G2_21



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-32.qld

Last Altered: Monday, March 20, 2017 4:00:02 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:00:40 PM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: B7C0050-MS1 Matrix Spike 0.125, Description: Matrix Spike, Name: 170317G2_32, Date: 17-Mar-2017, Time: 22:17:21

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	1.349e4	7.494e3		0.121	2.98	81.9	
2	2 PFHpA	363 > 318.9	2.373e4	1.720e4		0.121	3.84	82.2	
3	3 PFHxS	398.9 > 79.6	9.708e3	7.022e3		0.121	3.96	80.0	
4	4 PFOA	413 > 368.7	1.769e4	2.628e4		0.121	4.24	78.6	
5	5 PFNA	463 > 418.8	1.294e4	6.921e3		0.121	4.58	88.6	
6	6 PFOS	499 > 79.9	2.054e3	5.156e3		0.121	4.64	75.8	
7	7 13C3-PFBS	302.0 > 98.8	7.494e3	1.232e4	0.501	0.121	2.98	126	121
8	8 13C4-PFHpA	367.2 > 321.8	1.720e4	1.232e4	1.237	0.121	3.84	117	113
9	9 18O2-PFHxS	403 > 102.6	7.022e3	1.232e4	0.495	0.121	3.96	119	115
10	10 13C2-PFOA	414.9 > 369.7	2.628e4	7.348e3	3.221	0.121	4.24	115	111
11	11 13C5-PFNA	468.2 > 422.9	6.921e3	6.728e3	0.979	0.121	4.58	109	105
12	12 13C8-PFOS	507.0 > 79.9	5.156e3	4.440e3	1.080	0.121	4.64	111	108
13	13 13C5-PFHxA	318 > 272.9	2.243e4	2.243e4	1.000	0.121	3.33	104	100
14	14 13C3-PFHxS	401.9 > 79.9	1.232e4	1.232e4	1.000	0.121	3.96	104	100
15	15 13C8-PFOA	421.3 > 376	7.348e3	7.348e3	1.000	0.121	4.24	104	100
16	16 13C9-PFNA	472.2 > 426.9	6.728e3	6.728e3	1.000	0.121	4.58	104	100
17	17 13C4-PFOS	503.0 > 79.9	4.440e3	4.440e3	1.000	0.121	4.64	104	100
18	18 Total PFBS	299 > 79.7		7.022e3		0.121		81.9	
19	19 Total PFHxS	398.9 > 79.6		7.022e3		0.121		80.0	
20	20 Total PFOA	413 > 368.7		2.628e4		0.121		78.6	
21	21 Total PFOS	499 > 79.9		5.156e3		0.121		75.8	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-32.qld

Last Altered: Monday, March 20, 2017 4:00:02 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:00:40 PM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: B7C0050-MS1 Matrix Spike 0.125, Description: Matrix Spike, Name: 170317G2_32, Date: 17-Mar-2017, Time: 22:17:21

Total PFBS

	# Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.98	13489.213	7494.369	81.9

Total PFHxS

	# Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.96	9708.116	7022.099	80.0

Total PFOA

	# Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.24	17685.459	26283.174	78.6
2	20 Total PFOA	413 > 368.7	4.15	20.004	26283.174	

Total PFOS

	# Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.64	2054.302	5156.275	75.8

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-32.qld

Last Altered: Monday, March 20, 2017 4:00:02 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:00:40 PM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

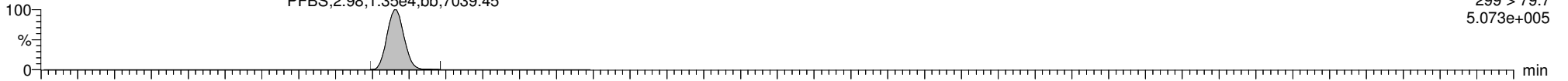
ID: B7C0050-MS1 Matrix Spike 0.125, Description: Matrix Spike, Name: 170317G2_32, Date: 17-Mar-2017, Time: 22:17:21, Instrument: , Lab: , User:

PFBS

170317G2_32

PFBS;2.98;1.35e4;bb;7039.45

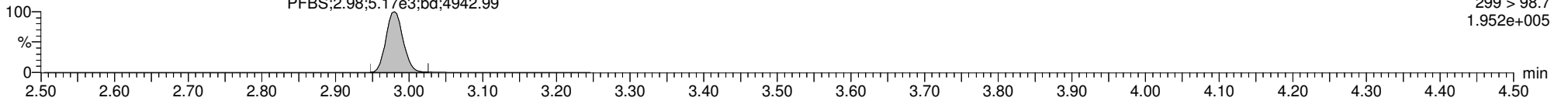
F2:MRM of 3 channels,ES-
299 > 79.7
5.073e+005



170317G2_32

PFBS;2.98;5.17e3;bd;4942.99

F2:MRM of 3 channels,ES-
299 > 98.7
1.952e+005

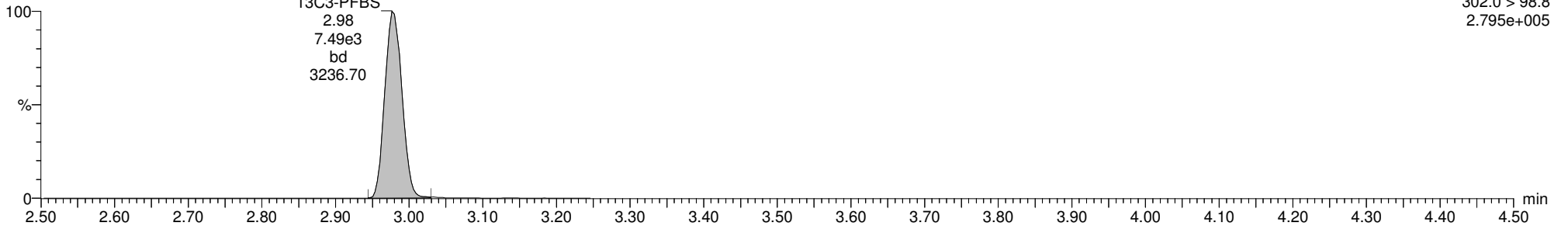


13C3-PFBS

170317G2_32

13C3-PFBS
2.98
7.49e3
bd
3236.70

F2:MRM of 3 channels,ES-
302.0 > 98.8
2.795e+005

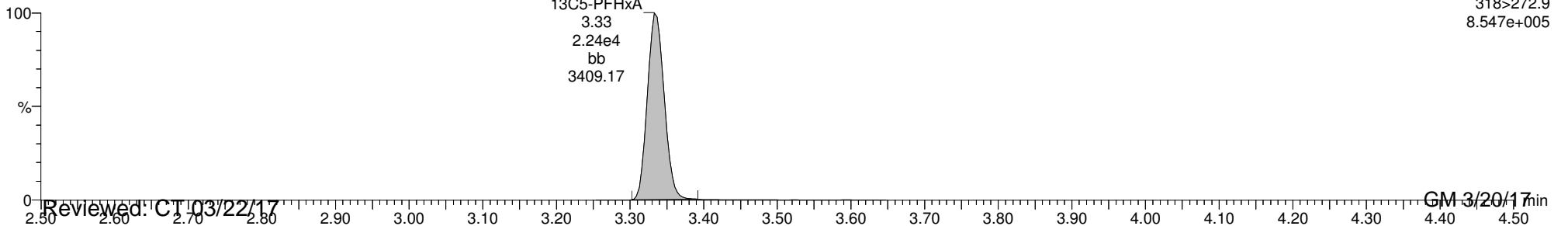


13C5-PFHxA

170317G2_32

13C5-PFHxA
3.33
2.24e4
bb
3409.17

F3:MRM of 1 channel,ES-
318>272.9
8.547e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-32.qld

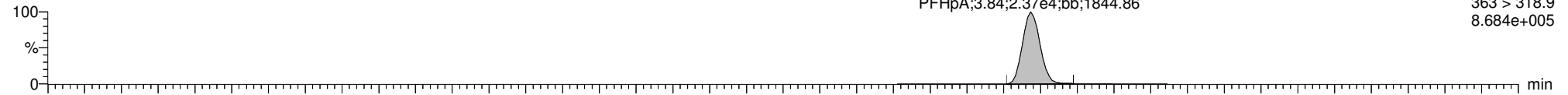
Last Altered: Monday, March 20, 2017 4:00:02 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:00:40 PM Pacific Daylight Time

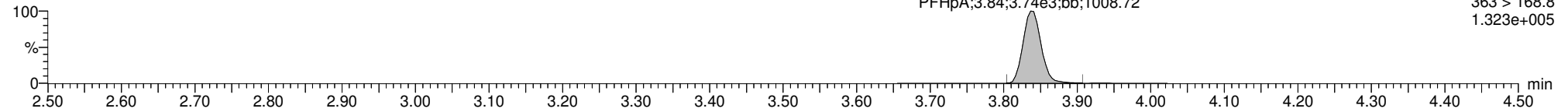
ID: B7C0050-MS1 Matrix Spike 0.125, Description: Matrix Spike, Name: 170317G2_32, Date: 17-Mar-2017, Time: 22:17:21, Instrument: , Lab: , User:

PFHpA

170317G2_32

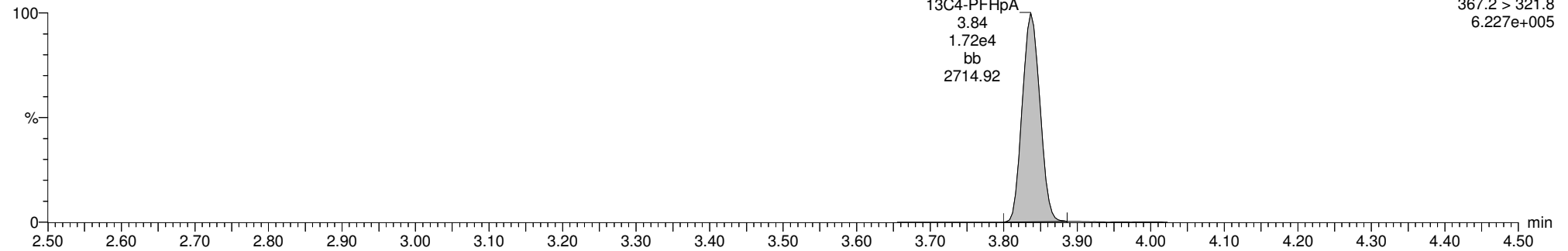


170317G2_32



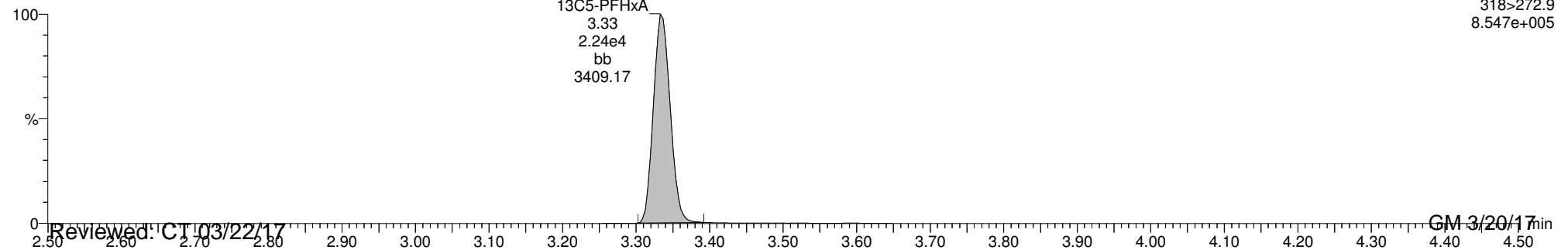
13C4-PFHxA

170317G2_32



13C5-PFHxA

170317G2_32



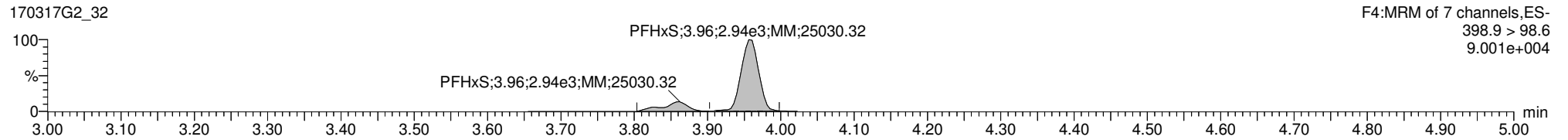
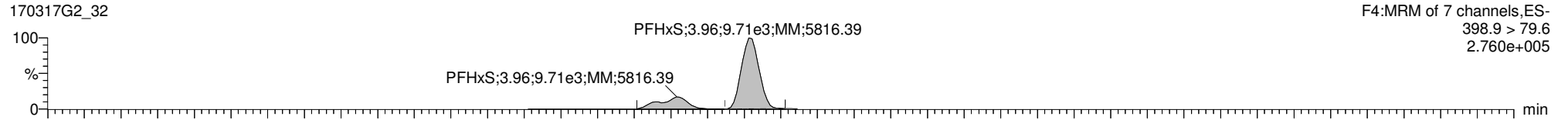
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-32.qld

Last Altered: Monday, March 20, 2017 4:00:02 PM Pacific Daylight Time

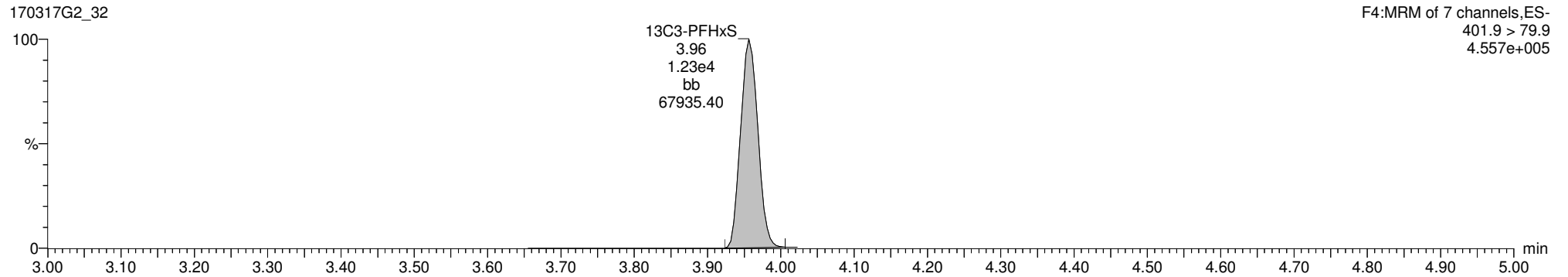
Printed: Monday, March 20, 2017 4:00:40 PM Pacific Daylight Time

ID: B7C0050-MS1 Matrix Spike 0.125, Description: Matrix Spike, Name: 170317G2_32, Date: 17-Mar-2017, Time: 22:17:21, Instrument: , Lab: , User:

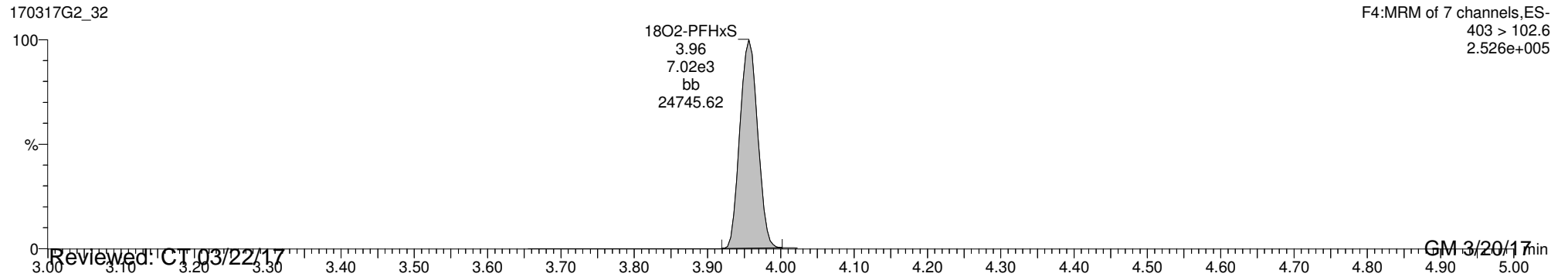
Total PFHxS



13C3-PFHxS



18O2-PFHxS



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-32.qld

Last Altered: Monday, March 20, 2017 4:00:02 PM Pacific Daylight Time

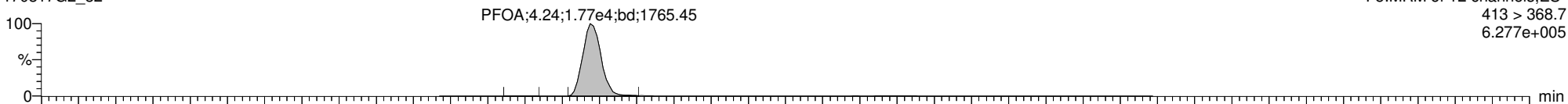
Printed: Monday, March 20, 2017 4:00:40 PM Pacific Daylight Time

ID: B7C0050-MS1 Matrix Spike 0.125, Description: Matrix Spike, Name: 170317G2_32, Date: 17-Mar-2017, Time: 22:17:21, Instrument: , Lab: , User:

Total PFOA

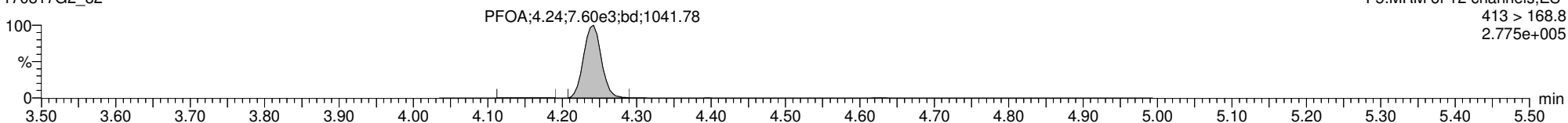
170317G2_32

F5:MRM of 12 channels,ES-
413 > 368.7
6.277e+005



170317G2_32

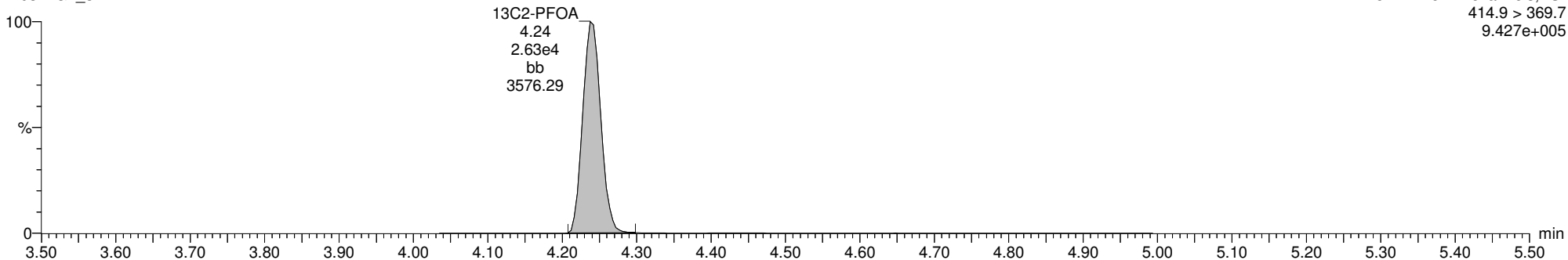
F5:MRM of 12 channels,ES-
413 > 168.8
2.775e+005



13C2-PFOA

170317G2_32

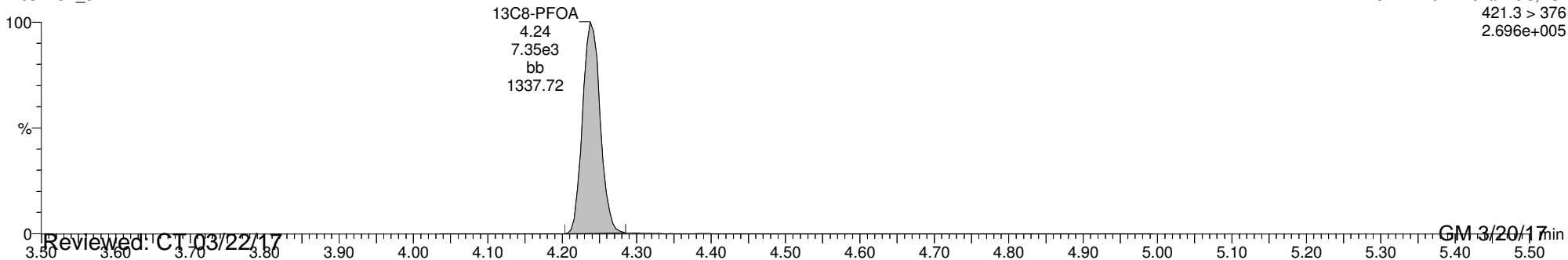
F5:MRM of 12 channels,ES-
414.9 > 369.7
9.427e+005



13C8-PFOA

170317G2_32

F5:MRM of 12 channels,ES-
421.3 > 376
2.696e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-32.qld

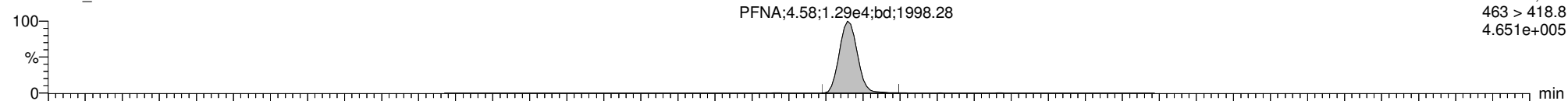
Last Altered: Monday, March 20, 2017 4:00:02 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:00:40 PM Pacific Daylight Time

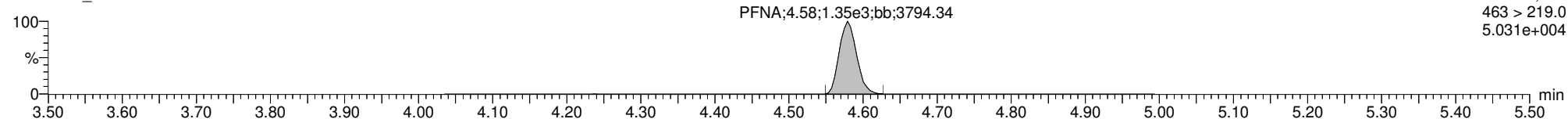
ID: B7C0050-MS1 Matrix Spike 0.125, Description: Matrix Spike, Name: 170317G2_32, Date: 17-Mar-2017, Time: 22:17:21, Instrument: , Lab: , User:

PFNA

170317G2_32

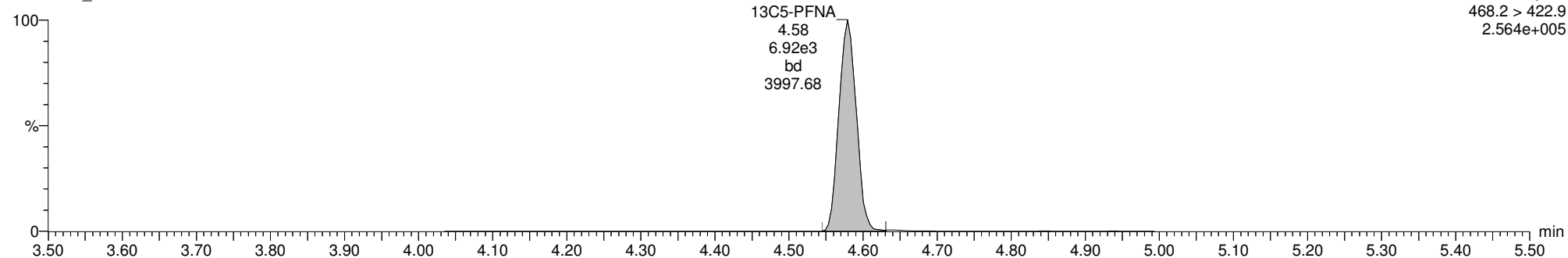


170317G2_32



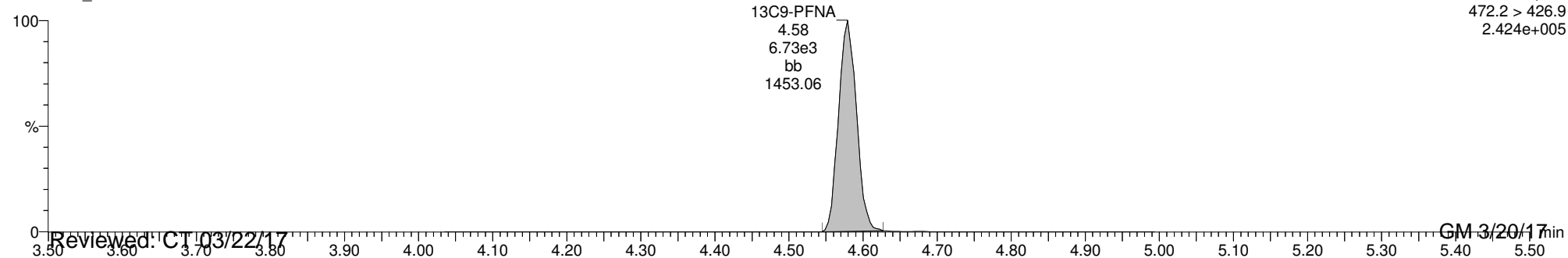
13C5-PFNA

170317G2_32



13C9-PFNA

170317G2_32



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-32.qld

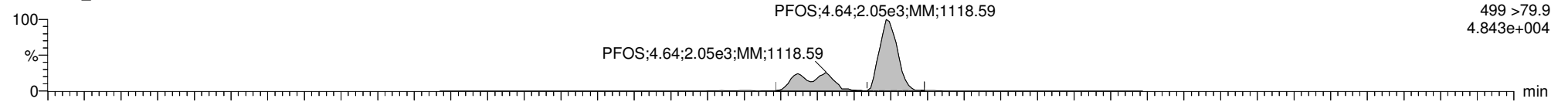
Last Altered: Monday, March 20, 2017 4:00:02 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:00:40 PM Pacific Daylight Time

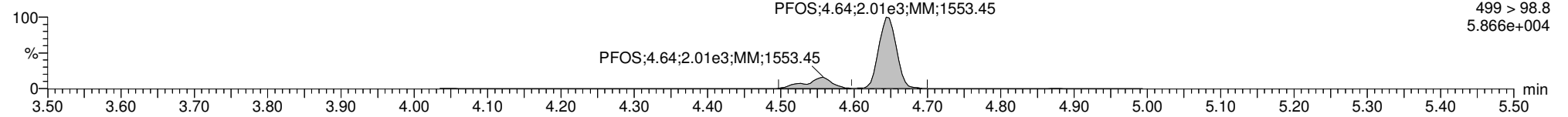
ID: B7C0050-MS1 Matrix Spike 0.125, Description: Matrix Spike, Name: 170317G2_32, Date: 17-Mar-2017, Time: 22:17:21, Instrument: , Lab: , User:

Total PFOS

170317G2_32

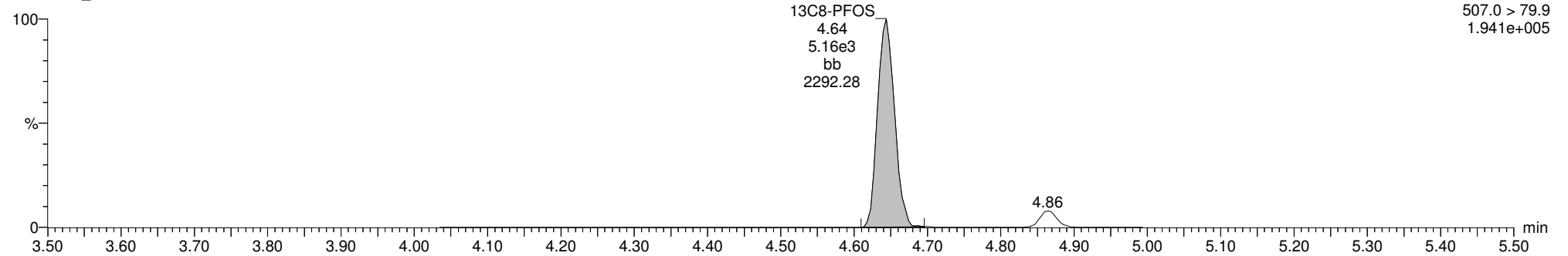


170317G2_32



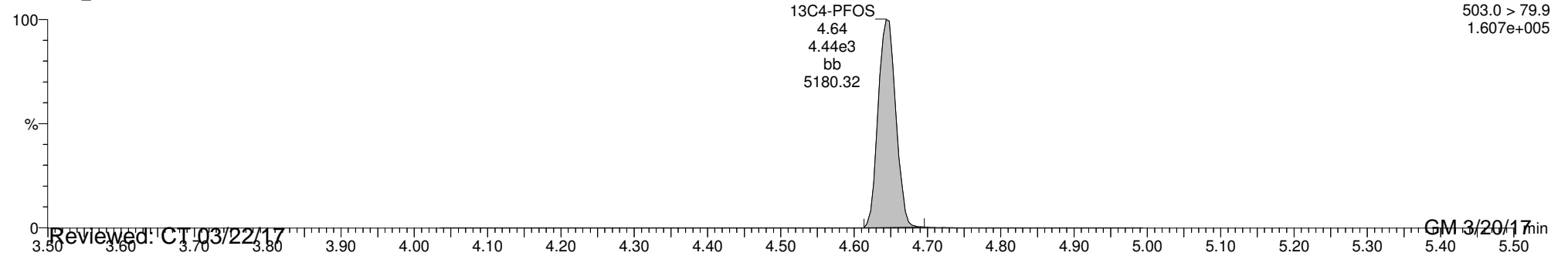
13C8-PFOS

170317G2_32



13C4-PFOS

170317G2_32



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-33.qld

Last Altered: Monday, March 20, 2017 4:04:25 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:05:26 PM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: B7C0050-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup, Name: 170317G2_33, Date: 17-Mar-2017, Time: 22:29:53

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	1.391e4	8.380e3		0.119	2.98	76.3	
2	2 PFHpA	363 > 318.9	2.623e4	1.866e4		0.119	3.84	84.6	
3	3 PFHxS	398.9 > 79.6	1.083e4	8.009e3		0.119	3.96	79.0	
4	4 PFOA	413 > 368.7	2.149e4	3.011e4		0.119	4.24	84.3	
5	5 PFNA	463 > 418.8	1.678e4	9.006e3		0.119	4.58	89.2	
6	6 PFOS	499 > 79.9	3.168e3	8.637e3		0.119	4.65	70.5	
7	7 13C3-PFBS	302.0 > 98.8	8.380e3	1.444e4	0.501	0.119	2.98	121	116
8	8 13C4-PFHpA	367.2 > 321.8	1.866e4	1.444e4	1.237	0.119	3.84	109	104
9	9 18O2-PFHxS	403 > 102.6	8.009e3	1.444e4	0.495	0.119	3.96	117	112
10	10 13C2-PFOA	414.9 > 369.7	3.011e4	7.989e3	3.221	0.119	4.24	122	117
11	11 13C5-PFNA	468.2 > 422.9	9.006e3	8.857e3	0.979	0.119	4.58	109	104
12	12 13C8-PFOS	507.0 > 79.9	8.637e3	7.259e3	1.080	0.119	4.64	115	110
13	13 13C5-PFHxA	318 > 272.9	2.461e4	2.461e4	1.000	0.119	3.34	105	100
14	14 13C3-PFHxS	401.9 > 79.9	1.444e4	1.444e4	1.000	0.119	3.96	105	100
15	15 13C8-PFOA	421.3 > 376	7.989e3	7.989e3	1.000	0.119	4.24	105	100
16	16 13C9-PFNA	472.2 > 426.9	8.857e3	8.857e3	1.000	0.119	4.58	105	100
17	17 13C4-PFOS	503.0 > 79.9	7.259e3	7.259e3	1.000	0.119	4.64	105	100
18	18 Total PFBS	299 > 79.7		8.009e3		0.119		76.3	
19	19 Total PFHxS	398.9 > 79.6		8.009e3		0.119		79.0	
20	20 Total PFOA	413 > 368.7		3.011e4		0.119		84.3	
21	21 Total PFOS	499 > 79.9		8.637e3		0.119		70.5	

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-33.qld

Last Altered: Monday, March 20, 2017 4:04:25 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:05:26 PM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: B7C0050-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup, Name: 170317G2_33, Date: 17-Mar-2017, Time: 22:29:53

Total PFBS

#	Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.98	13911.396	8380.136	76.3

Total PFHxS

#	Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.96	10825.405	8008.712	79.0

Total PFOA

#	Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.24	21490.926	30105.717	84.3

Total PFOS

#	Name	Trace	RT	Area	IS Area	Conc.
1	6 PFOS	499 > 79.9	4.65	3167.514	8637.316	70.5

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-33.qld

Last Altered: Monday, March 20, 2017 4:04:25 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:05:26 PM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

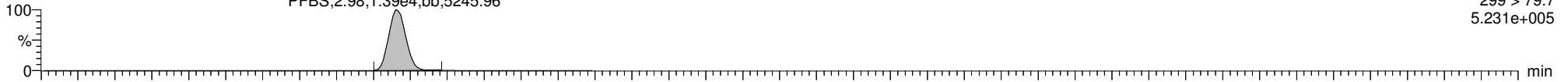
ID: B7C0050-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup, Name: 170317G2_33, Date: 17-Mar-2017, Time: 22:29:53, Instrument: , Lab: , User:

PFBS

170317G2_33

PFBS;2.98;1.39e4;bb;5245.96

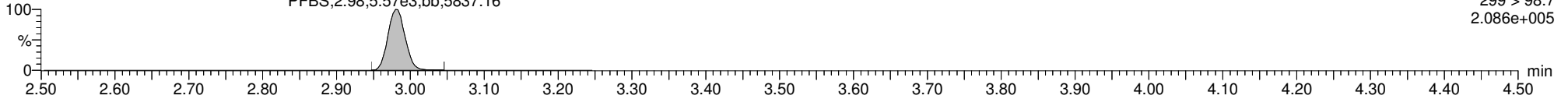
F2:MRM of 3 channels,ES-
299 > 79.7
5.231e+005



170317G2_33

PFBS;2.98;5.57e3;bb;5837.16

F2:MRM of 3 channels,ES-
299 > 98.7
2.086e+005

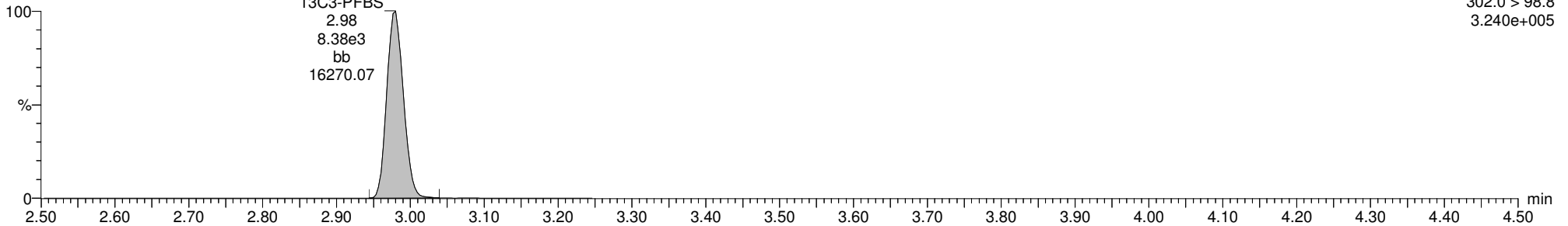


13C3-PFBS

170317G2_33

13C3-PFBS
2.98
8.38e3
bb
16270.07

F2:MRM of 3 channels,ES-
302.0 > 98.8
3.240e+005

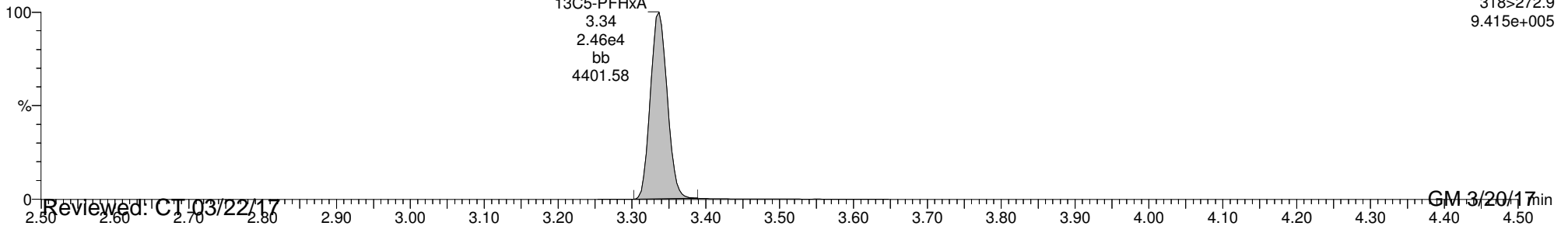


13C5-PFHxA

170317G2_33

13C5-PFHxA
3.34
2.46e4
bb
4401.58

F3:MRM of 1 channel,ES-
318>272.9
9.415e+005



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-33.qld

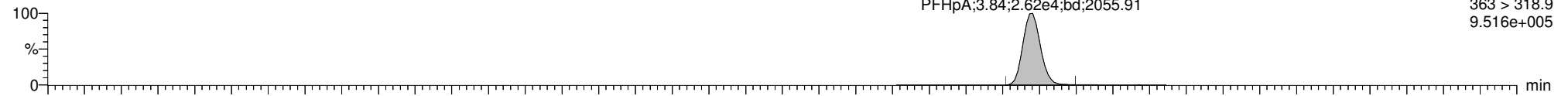
Last Altered: Monday, March 20, 2017 4:04:25 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:05:26 PM Pacific Daylight Time

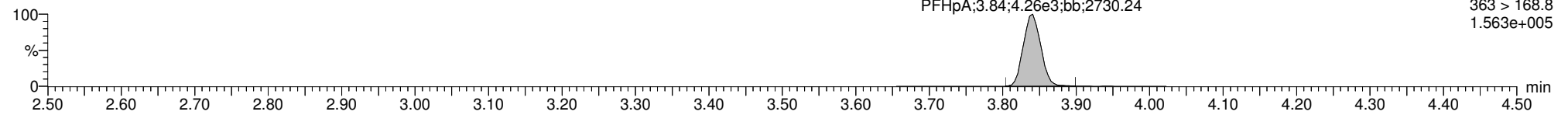
ID: B7C0050-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup, Name: 170317G2_33, Date: 17-Mar-2017, Time: 22:29:53, Instrument: , Lab: , User:

PFHpA

170317G2_33

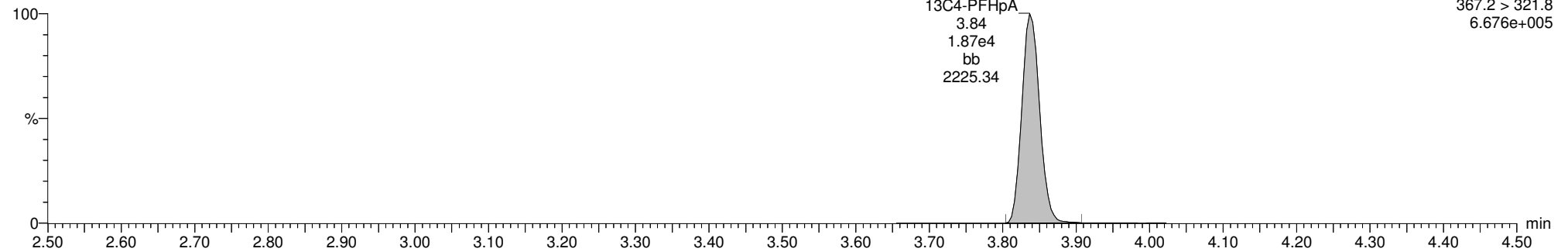


170317G2_33



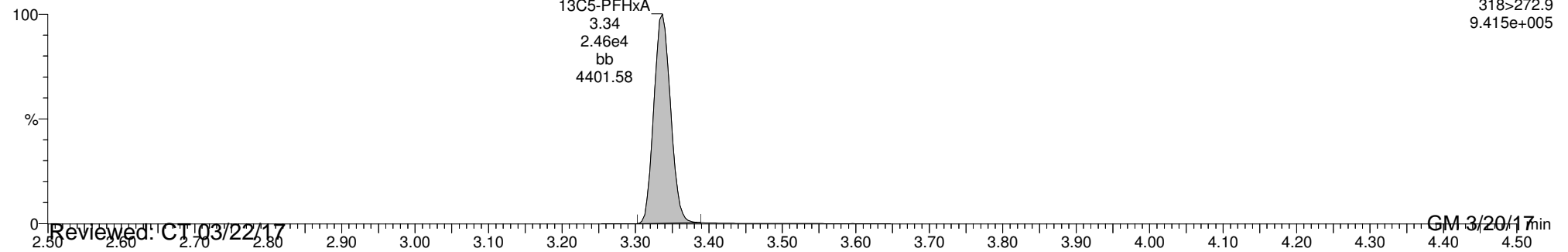
13C4-PFHpA

170317G2_33



13C5-PFHxA

170317G2_33



Reviewed: CT 03/22/17

GM 3/20/17

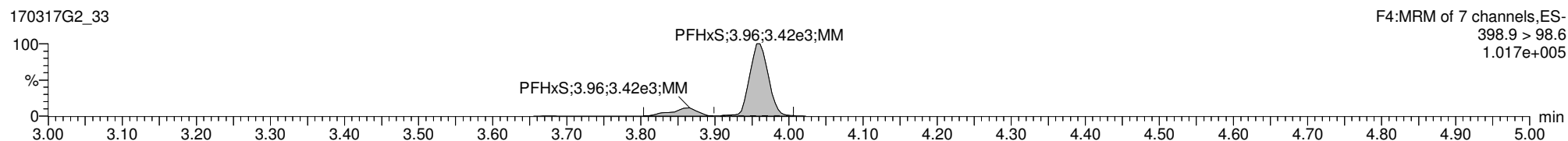
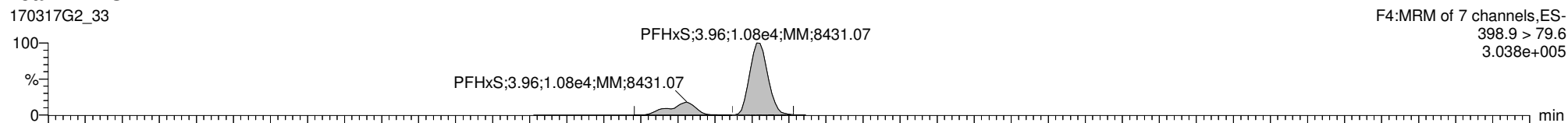
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-33.qld

Last Altered: Monday, March 20, 2017 4:04:25 PM Pacific Daylight Time

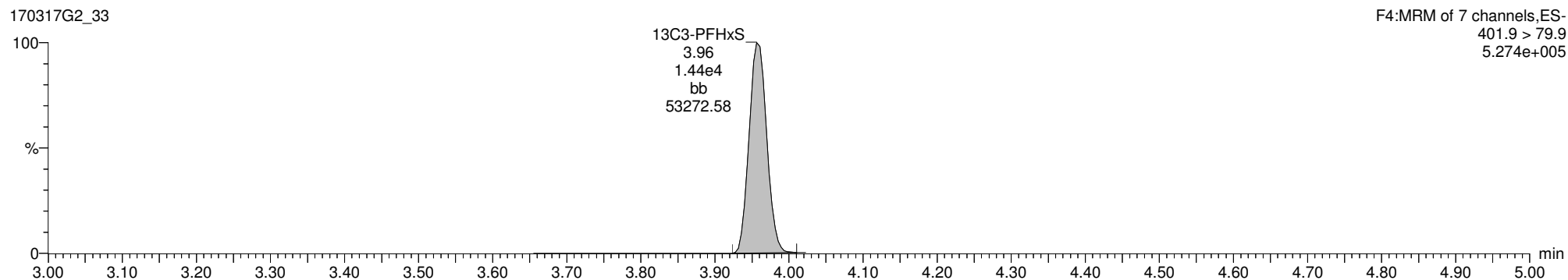
Printed: Monday, March 20, 2017 4:05:26 PM Pacific Daylight Time

ID: B7C0050-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup, Name: 170317G2_33, Date: 17-Mar-2017, Time: 22:29:53, Instrument: , Lab: , User:

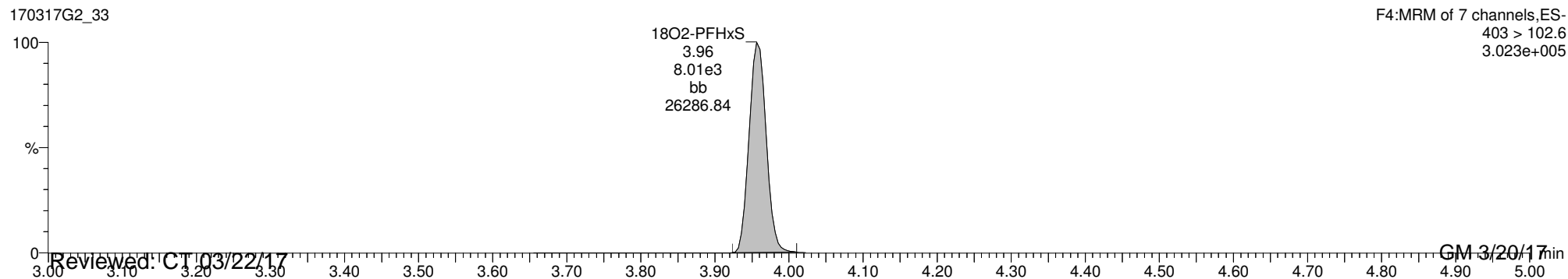
Total PFHxS



13C3-PFHxS



18O2-PFHxS



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-33.qld

Last Altered: Monday, March 20, 2017 4:04:25 PM Pacific Daylight Time

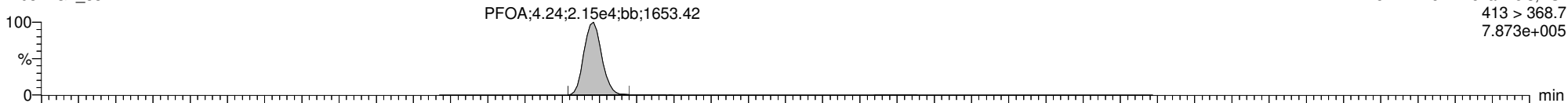
Printed: Monday, March 20, 2017 4:05:26 PM Pacific Daylight Time

ID: B7C0050-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup, Name: 170317G2_33, Date: 17-Mar-2017, Time: 22:29:53, Instrument: , Lab: , User:

Total PFOA

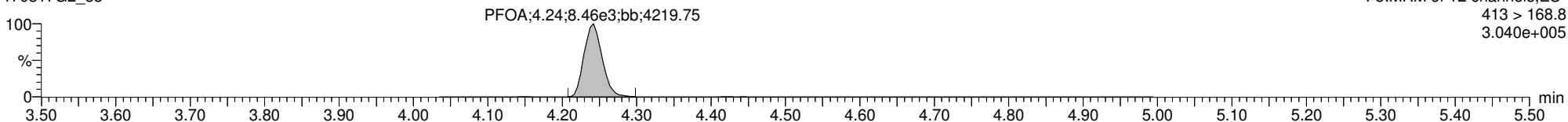
170317G2_33

F5:MRM of 12 channels,ES-
413 > 368.7
7.873e+005



170317G2_33

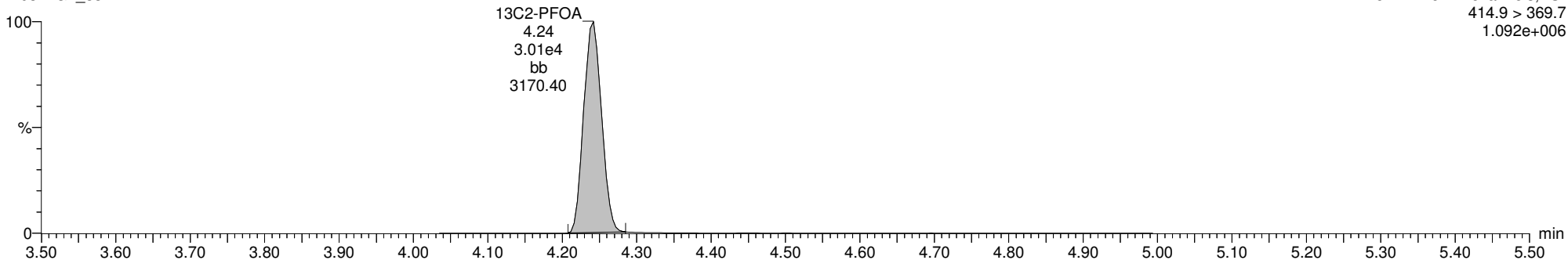
F5:MRM of 12 channels,ES-
413 > 168.8
3.040e+005



13C2-PFOA

170317G2_33

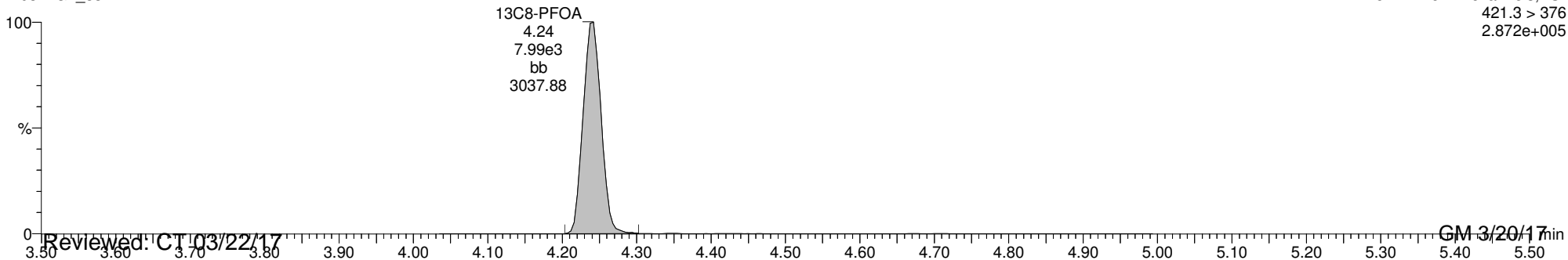
F5:MRM of 12 channels,ES-
414.9 > 369.7
1.092e+006



13C8-PFOA

170317G2_33

F5:MRM of 12 channels,ES-
421.3 > 376
2.872e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-33.qld

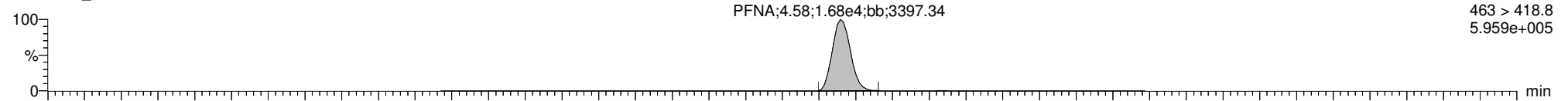
Last Altered: Monday, March 20, 2017 4:04:25 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:05:26 PM Pacific Daylight Time

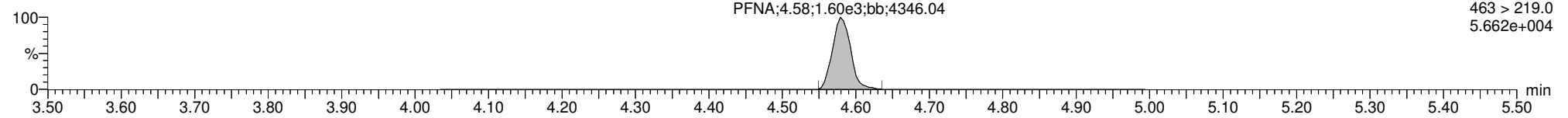
ID: B7C0050-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup, Name: 170317G2_33, Date: 17-Mar-2017, Time: 22:29:53, Instrument: , Lab: , User:

PFNA

170317G2_33

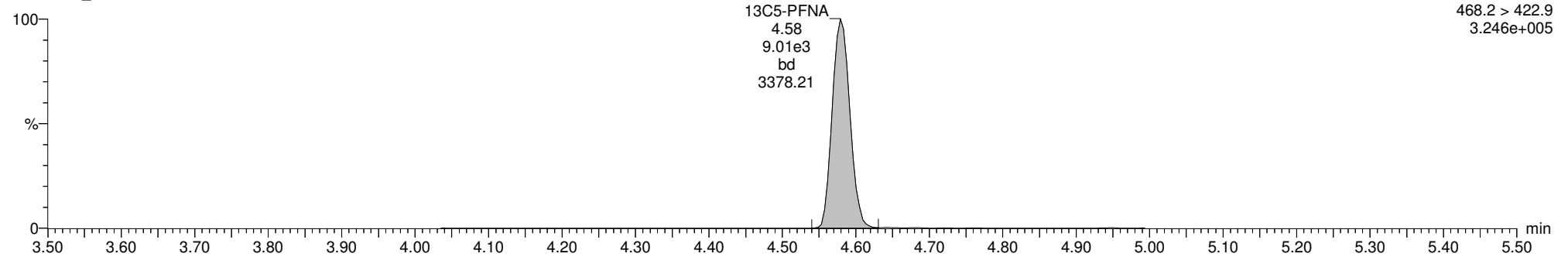


170317G2_33



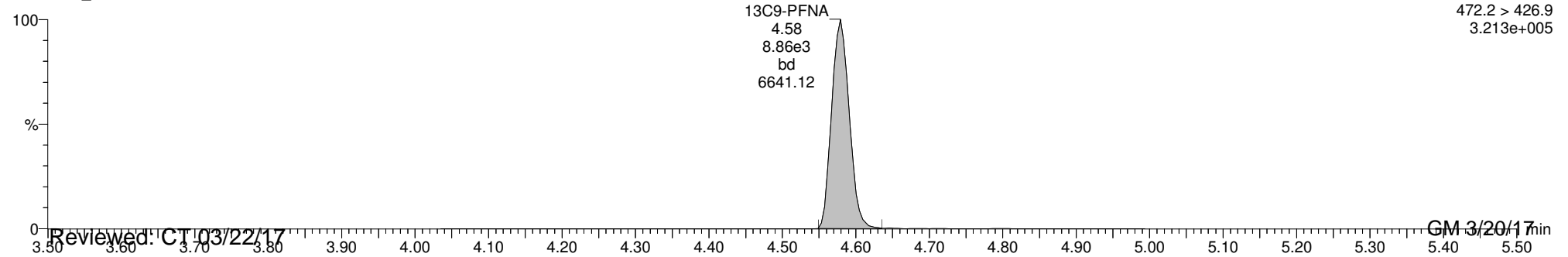
13C5-PFNA

170317G2_33



13C9-PFNA

170317G2_33



Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-33.qld

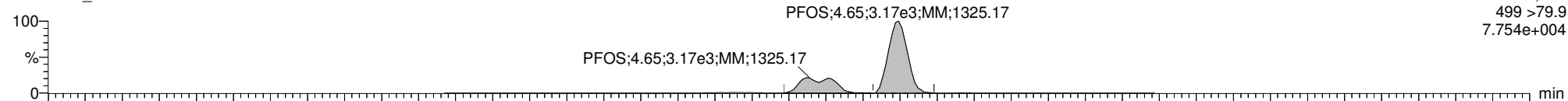
Last Altered: Monday, March 20, 2017 4:04:25 PM Pacific Daylight Time

Printed: Monday, March 20, 2017 4:05:26 PM Pacific Daylight Time

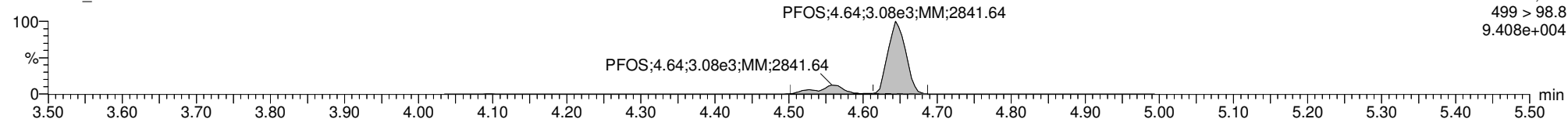
ID: B7C0050-MSD1 Matrix Spike Dup 0.125, Description: Matrix Spike Dup, Name: 170317G2_33, Date: 17-Mar-2017, Time: 22:29:53, Instrument: , Lab: , User:

Total PFOS

170317G2_33

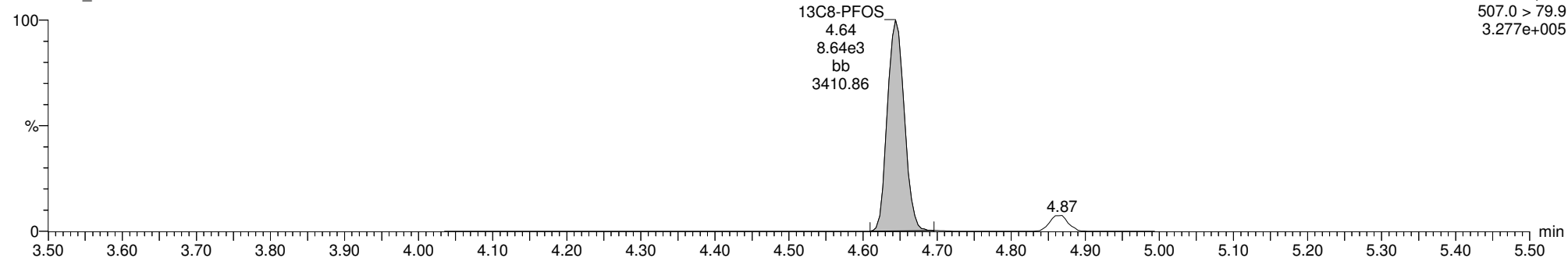


170317G2_33



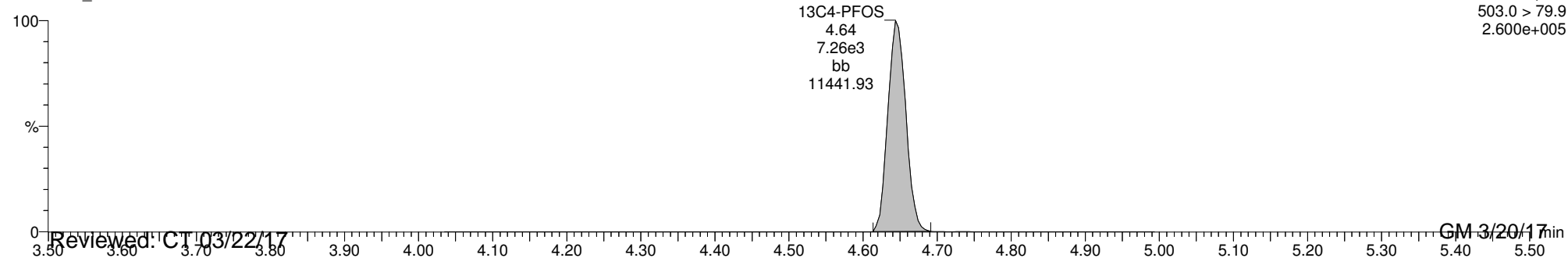
13C8-PFOS

170317G2_33



13C4-PFOS

170317G2_33



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-22.qld

Last Altered: Monday, March 20, 2017 11:56:05 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:56:40 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-09 OF14-GW05-0317 0.12223, Description: OF14-GW05-0317, Name: 170317G2_22, Date: 17-Mar-2017, Time: 20:11:53

#	Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	1.591e2	7.530e3		0.122	2.98	0.704	
2	2 PFHpA	363 > 318.9	5.435e1	1.773e4		0.122	3.83		
3	3 PFHxS	398.9 > 79.6	1.041e3	7.319e3		0.122	3.96	7.76	
4	4 PFOA	413 > 368.7	9.399e2	2.841e4		0.122	4.24	2.55	
5	5 PFNA	463 > 418.8		9.716e3		0.122			
6	6 PFOS	499 > 79.9		8.670e3		0.122			
7	7 13C3-PFBS	302.0 > 98.8	7.530e3	1.257e4	0.501	0.122	2.97	122	119
8	8 13C4-PFHpA	367.2 > 321.8	1.773e4	1.257e4	1.237	0.122	3.83	117	114
9	9 18O2-PFHxS	403 > 102.6	7.319e3	1.257e4	0.495	0.122	3.95	120	118
10	10 13C2-PFOA	414.9 > 369.7	2.841e4	8.750e3	3.221	0.122	4.24	103	101
11	11 13C5-PFNA	468.2 > 422.9	9.716e3	8.991e3	0.979	0.122	4.58	113	110
12	12 13C8-PFOS	507.0 > 79.9	8.670e3	8.004e3	1.080	0.122	4.64	103	100
13	13 13C5-PFHxA	318>272.9	2.143e4	2.143e4	1.000	0.122	3.33	102	100
14	14 13C3-PFHxS	401.9 > 79.9	1.257e4	1.257e4	1.000	0.122	3.95	102	100
15	15 13C8-PFOA	421.3 > 376	8.750e3	8.750e3	1.000	0.122	4.24	102	100
16	16 13C9-PFNA	472.2 > 426.9	8.991e3	8.991e3	1.000	0.122	4.58	102	100
17	17 13C4-PFOS	503.0 > 79.9	8.004e3	8.004e3	1.000	0.122	4.65	102	100
18	18 Total PFBS	299 > 79.7		7.319e3		0.122		0.704	
19	19 Total PFHxS	398.9 > 79.6		7.319e3		0.122		7.76	
20	20 Total PFOA	413 > 368.7		2.841e4		0.122		2.55	
21	21 Total PFOS	499 > 79.9		8.670e3		0.122			

Vista Analytical Laboratory Q1

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-22.qld

Last Altered: Monday, March 20, 2017 11:56:05 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:56:40 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: 1700311-09 OF14-GW05-0317 0.12223, Description: OF14-GW05-0317, Name: 170317G2_22, Date: 17-Mar-2017, Time: 20:11:53

Total PFBS

#	Name	Trace	RT	Area	IS Area	Conc.
1	1 PFBS	299 > 79.7	2.98	159.095	7529.741	0.7

Total PFHxS

#	Name	Trace	RT	Area	IS Area	Conc.
1	3 PFHxS	398.9 > 79.6	3.96	1041.256	7318.912	7.8

Total PFOA

#	Name	Trace	RT	Area	IS Area	Conc.
1	4 PFOA	413 > 368.7	4.24	939.899	28408.076	2.5
2	20 Total PFOA	413 > 368.7	4.14	317.912	28408.076	

Total PFOS

#	Name	Trace	RT	Area	IS Area	Conc.
1						

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-22.qld

Last Altered: Monday, March 20, 2017 11:56:05 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:56:40 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

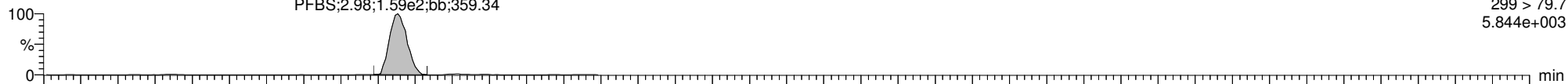
ID: 1700311-09 OF14-GW05-0317 0.12223, Description: OF14-GW05-0317, Name: 170317G2_22, Date: 17-Mar-2017, Time: 20:11:53, Instrument: , Lab: , User:

PFBS

170317G2_22

PFBS;2.98;1.59e2;bb;359.34

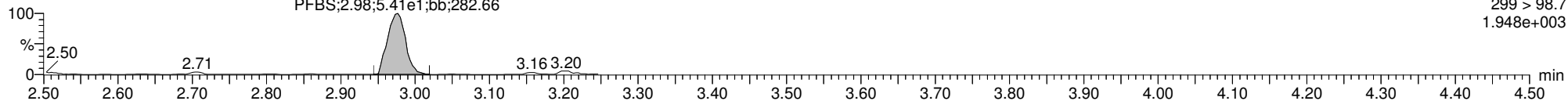
F2:MRM of 3 channels,ES-
299 > 79.7
5.844e+003



170317G2_22

PFBS;2.98;5.41e1;bb;282.66

F2:MRM of 3 channels,ES-
299 > 98.7
1.948e+003

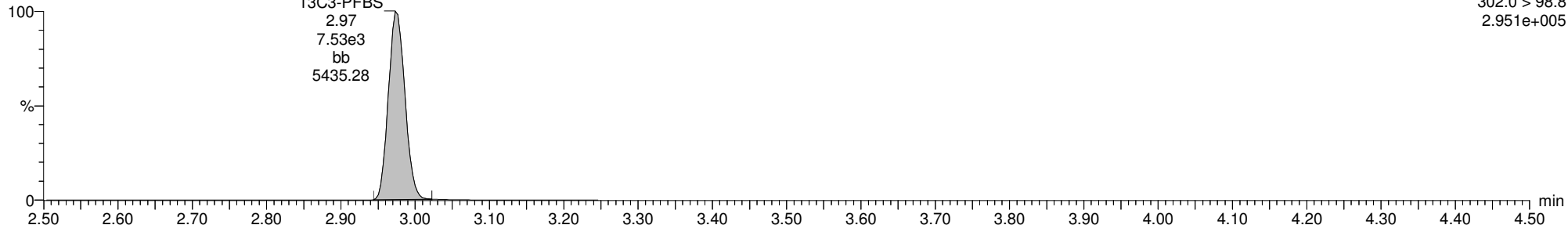


13C3-PFBS

170317G2_22

13C3-PFBS
2.97
7.53e3
bb
5435.28

F2:MRM of 3 channels,ES-
302.0 > 98.8
2.951e+005

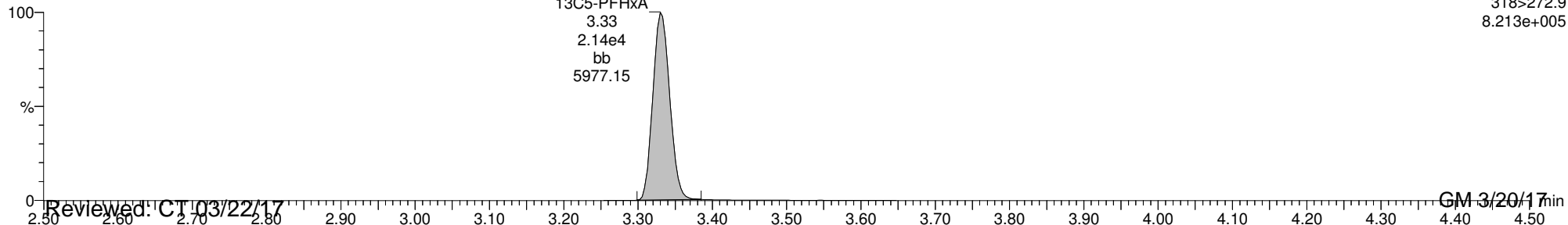


13C5-PFHxA

170317G2_22

13C5-PFHxA
3.33
2.14e4
bb
5977.15

F3:MRM of 1 channel,ES-
318>272.9
8.213e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-22.qld

Last Altered: Monday, March 20, 2017 11:56:05 AM Pacific Daylight Time

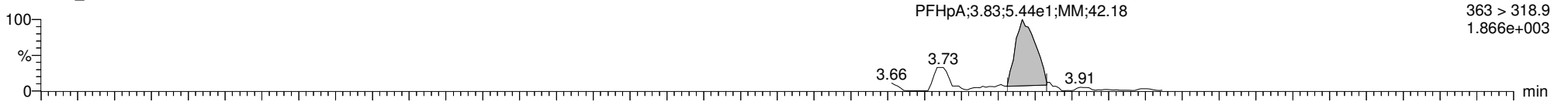
Printed: Monday, March 20, 2017 11:56:40 AM Pacific Daylight Time

ID: 1700311-09 OF14-GW05-0317 0.12223, Description: OF14-GW05-0317, Name: 170317G2_22, Date: 17-Mar-2017, Time: 20:11:53, Instrument: , Lab: , User:

PFHpA

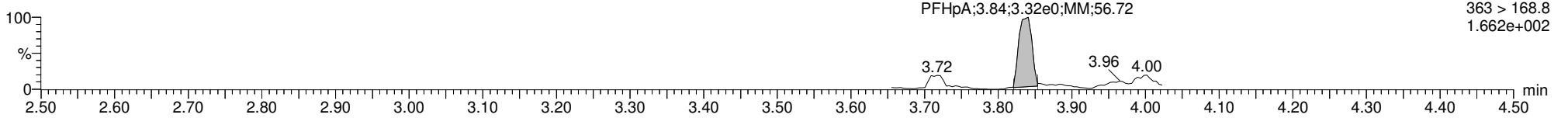
170317G2_22

F4:MRM of 7 channels,ES-
363 > 318.9
1.866e+003



170317G2_22

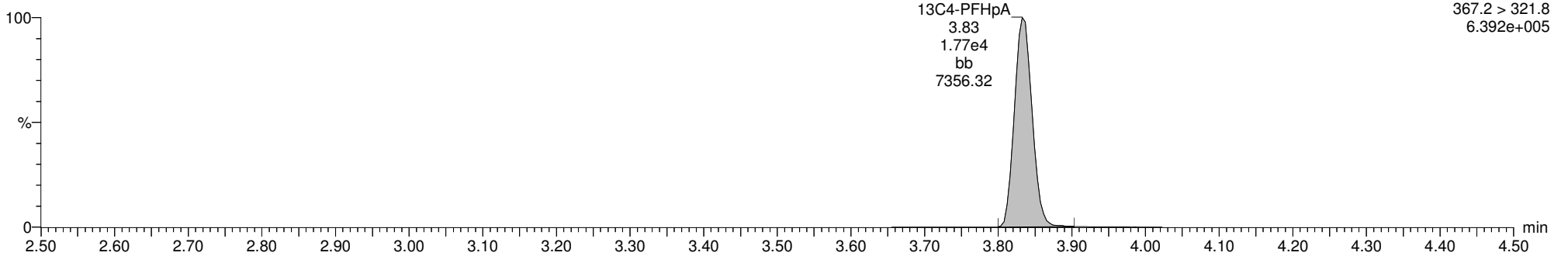
F4:MRM of 7 channels,ES-
363 > 168.8
1.662e+002



13C4-PFHpA

170317G2_22

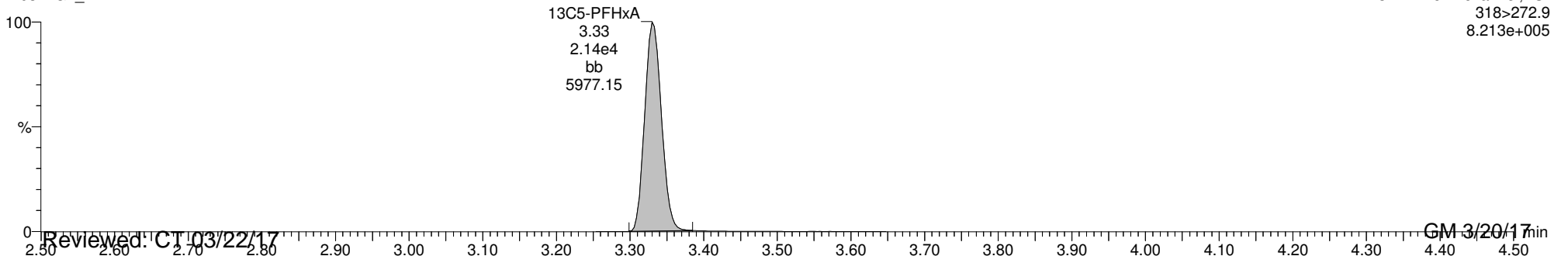
F4:MRM of 7 channels,ES-
367.2 > 321.8
6.392e+005



13C5-PFHxA

170317G2_22

F3:MRM of 1 channel,ES-
318>272.9
8.213e+005



Reviewed: CT 03/22/17

GM 3/20/17

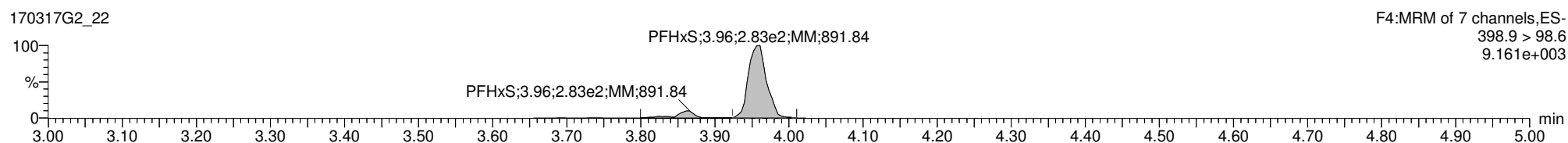
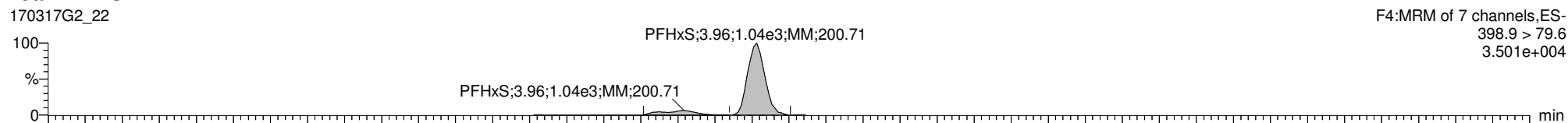
Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-22.qld

Last Altered: Monday, March 20, 2017 11:56:05 AM Pacific Daylight Time

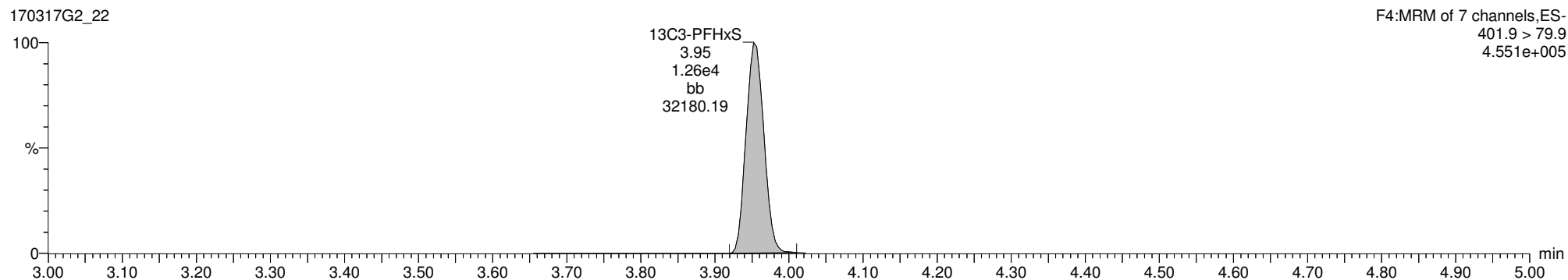
Printed: Monday, March 20, 2017 11:56:40 AM Pacific Daylight Time

ID: 1700311-09 OF14-GW05-0317 0.12223, Description: OF14-GW05-0317, Name: 170317G2_22, Date: 17-Mar-2017, Time: 20:11:53, Instrument: , Lab: , User:

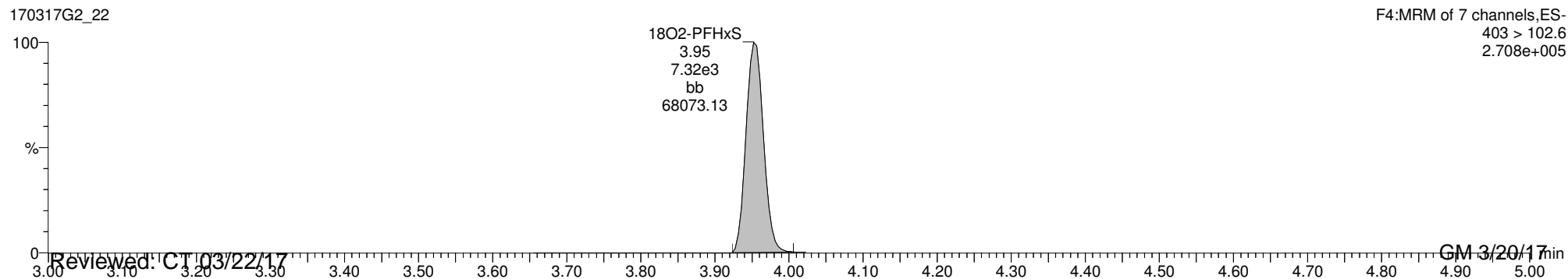
Total PFHxS



13C3-PFHxS



18O2-PFHxS



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-22.qld

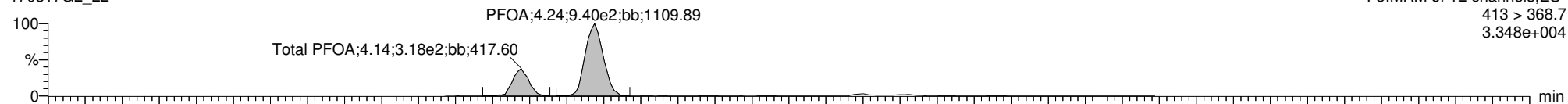
Last Altered: Monday, March 20, 2017 11:56:05 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 11:56:40 AM Pacific Daylight Time

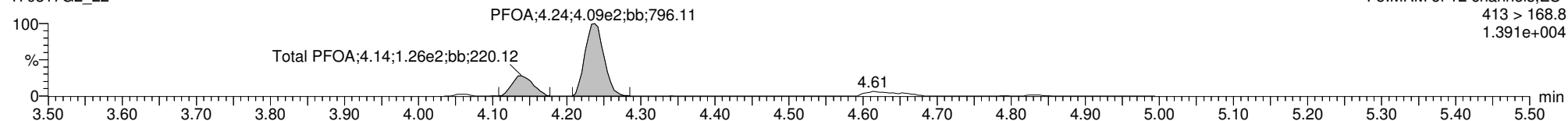
ID: 1700311-09 OF14-GW05-0317 0.12223, Description: OF14-GW05-0317, Name: 170317G2_22, Date: 17-Mar-2017, Time: 20:11:53, Instrument: , Lab: , User:

Total PFOA

170317G2_22

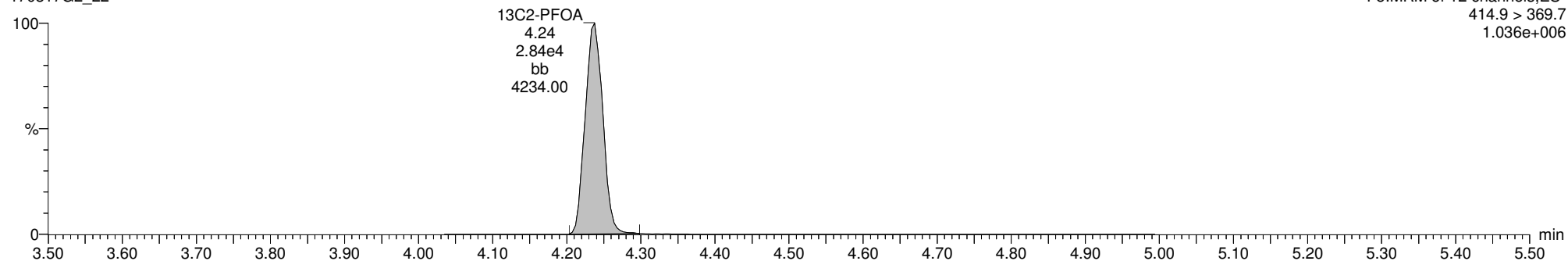


170317G2_22



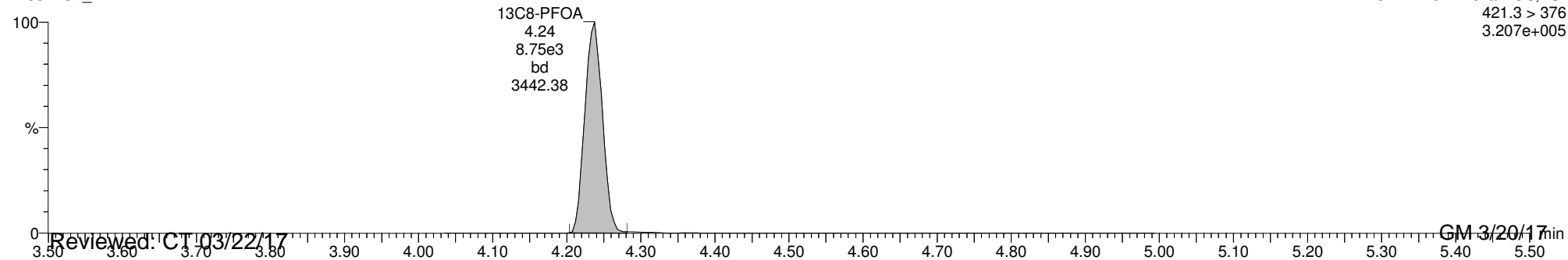
13C2-PFOA

170317G2_22



13C8-PFOA

170317G2_22



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-22.qld

Last Altered: Monday, March 20, 2017 11:56:05 AM Pacific Daylight Time

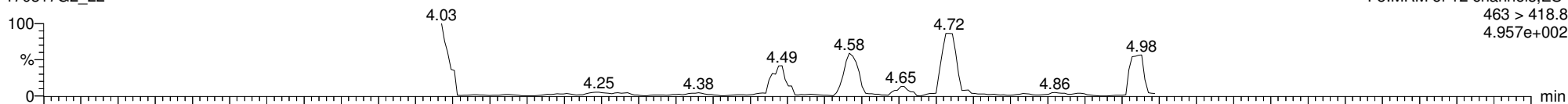
Printed: Monday, March 20, 2017 11:56:40 AM Pacific Daylight Time

ID: 1700311-09 OF14-GW05-0317 0.12223, Description: OF14-GW05-0317, Name: 170317G2_22, Date: 17-Mar-2017, Time: 20:11:53, Instrument: , Lab: , User:

PFNA

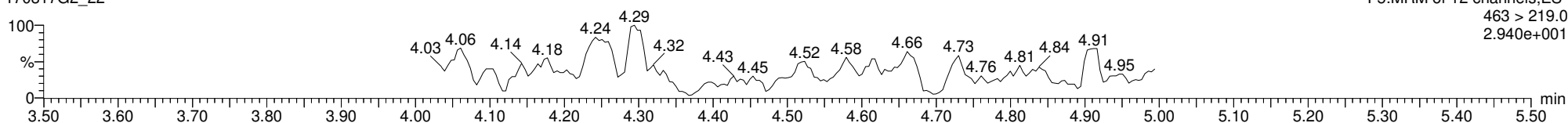
170317G2_22

F5:MRM of 12 channels,ES-
463 > 418.8
4.957e+002



170317G2_22

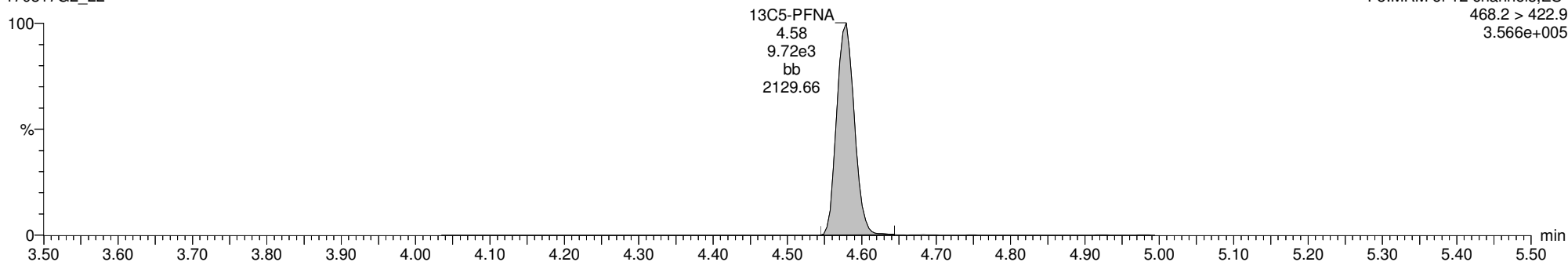
F5:MRM of 12 channels,ES-
463 > 219.0
2.940e+001



13C5-PFNA

170317G2_22

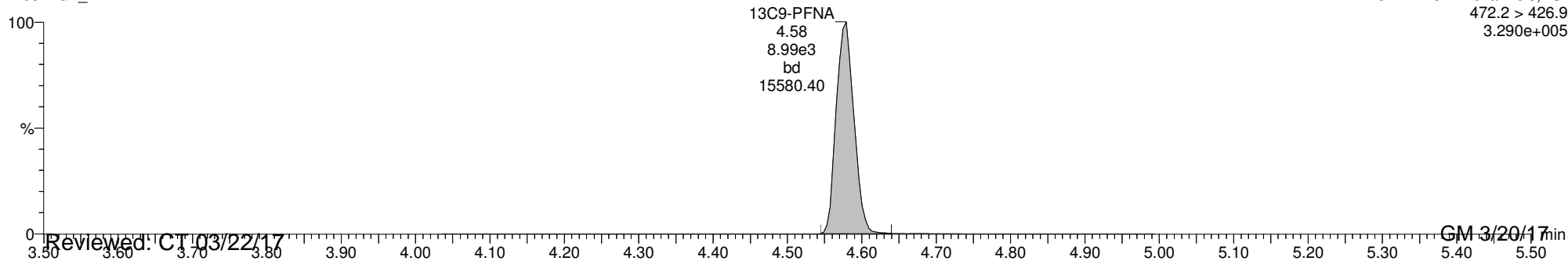
F5:MRM of 12 channels,ES-
468.2 > 422.9
3.566e+005



13C9-PFNA

170317G2_22

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.290e+005



Reviewed: CT 03/22/17

GM 3/20/17

Dataset: U:\G1.PRO\Results\2017\170317G2\170317G2-22.qld

Last Altered: Monday, March 20, 2017 11:56:05 AM Pacific Daylight Time

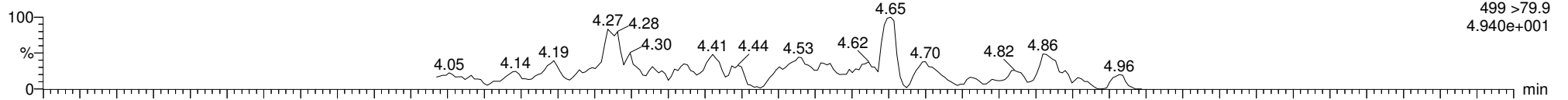
Printed: Monday, March 20, 2017 11:56:40 AM Pacific Daylight Time

ID: 1700311-09 OF14-GW05-0317 0.12223, Description: OF14-GW05-0317, Name: 170317G2_22, Date: 17-Mar-2017, Time: 20:11:53, Instrument: , Lab: , User:

Total PFOS

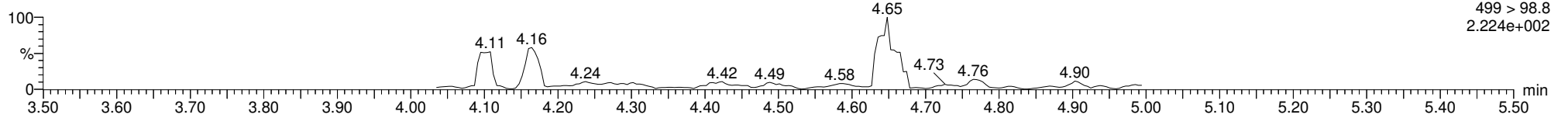
170317G2_22

F5:MRM of 12 channels,ES-
499 >79.9
4.940e+001



170317G2_22

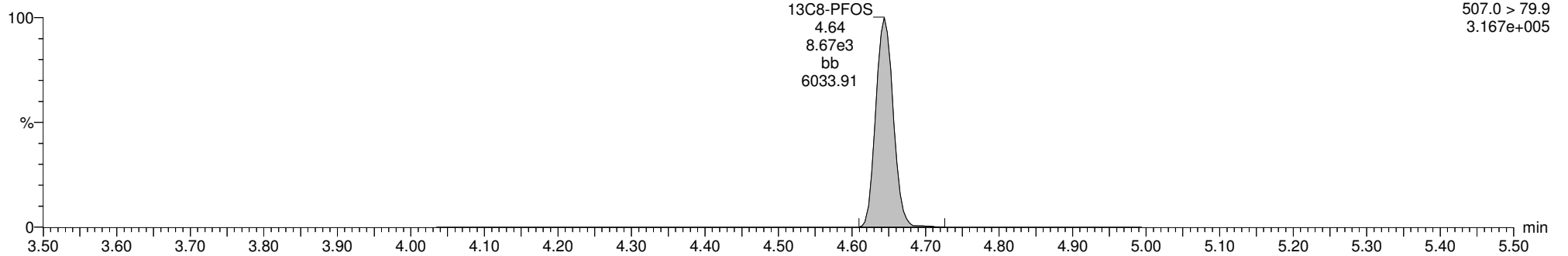
F5:MRM of 12 channels,ES-
499 > 98.8
2.224e+002



13C8-PFOS

170317G2_22

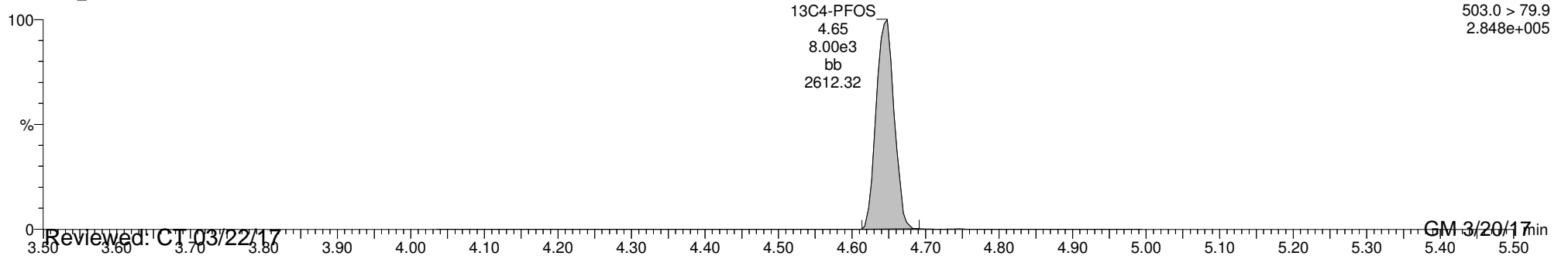
F5:MRM of 12 channels,ES-
507.0 > 79.9
3.167e+005



13C4-PFOS

170317G2_22

F5:MRM of 12 channels,ES-
503.0 > 79.9
2.848e+005



CONTINUING CALIBRATION

Dataset: U:\G1.PRO\Results\2017\New folder\170317G2-2.qld

Last Altered: Monday, March 20, 2017 9:17:58 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 9:19:11 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170317G2_2, Date: 17-Mar-2017, Time: 16:00:26, ID: ST170317G2-1 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

#	Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	6.74e3	7.63e3		1.000	2.97	4.83	96.7
2	2 PFHpA	363 > 318.9	1.25e4	1.60e4		1.000	3.83	5.59	111.8
3	3 PFHxS	398.9 > 79.6	4.99e3	6.52e3		1.000	3.95	5.33	106.6
4	4 PFOA	413 > 368.7	9.39e3	2.50e4		1.000	4.23	5.22	104.5
5	5 PFNA	463 > 418.8	8.57e3	9.19e3		1.000	4.57	5.29	105.9
6	6 PFOS	499 > 79.9	1.31e3	7.37e3		1.000	4.64	4.15	83.0
7	7 13C3-PFBS	302.0 > 98.8	7.63e3	1.68e4	0.501	1.000	2.96	11.3	90.8
8	8 13C4-PFHpA	367.2 > 321.8	1.60e4	1.68e4	1.237	1.000	3.82	9.65	77.2
9	9 18O2-PFHxS	403 > 102.6	6.52e3	1.68e4	0.495	1.000	3.94	9.82	78.6
10	10 13C2-PFOA	414.9 > 369.7	2.50e4	1.13e4	3.221	1.000	4.23	8.58	68.7
11	11 13C5-PFNA	468.2 > 422.9	9.19e3	1.05e4	0.979	1.000	4.57	11.2	89.8
12	12 13C8-PFOS	507.0 > 79.9	7.37e3	7.41e3	1.080	1.000	4.64	11.5	92.2
13	13 13C5-PFHxA	318 > 272.9	2.53e4	2.53e4	1.000	1.000	3.32	12.5	100.0
14	14 13C3-PFHxS	401.9 > 79.9	1.68e4	1.68e4	1.000	1.000	3.94	12.5	100.0
15	15 13C8-PFOA	421.3 > 376	1.13e4	1.13e4	1.000	1.000	4.23	12.5	100.0
16	16 13C9-PFNA	472.2 > 426.9	1.05e4	1.05e4	1.000	1.000	4.57	12.5	100.0
17	17 13C4-PFOS	503.0 > 79.9	7.41e3	7.41e3	1.000	1.000	4.64	12.5	100.0

75-125
↓
60-150
↓

AC
3/20/17

Dataset: Untitled

Last Altered: Monday, March 20, 2017 09:39:14 Pacific Daylight Time

Printed: Monday, March 20, 2017 09:40:12 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Compound name: PFBS

	Name	ID	Acq.Date	Acq.Time
1	170317G2_1	IPA	17-Mar-17	15:48:14
2	170317G2_2	ST170317G2-1 PFC CS2 17C1703	17-Mar-17	16:00:26
3	170317G2_3	IPA	17-Mar-17	16:13:08
4	170317G2_4	1700304-01 Field Blank (420-117740-1) 0.12255	17-Mar-17	16:25:43
5	170317G2_5	1700299-01 MATPEW100 0.12287	17-Mar-17	16:38:13
6	170317G2_6	1700299-02 MATPEW101 0.11464	17-Mar-17	16:50:46
7	170317G2_7	1700299-03 MATPEW102 0.12518	17-Mar-17	17:03:22
8	170317G2_8	1700311-02@5X OF-SOW-091D-0317 0.12329	17-Mar-17	17:15:57
9	170317G2_9	1700311-03@5X OF-SOW-091DP-0317 0.124...	17-Mar-17	17:28:29
10	170317G2_10	1700311-06@5X OF-SOW-091M-0317 0.12783	17-Mar-17	17:41:02
11	170317G2_11	1700311-01 OF-SOW-091A-0317 0.11879	17-Mar-17	17:53:36
12	170317G2_12	1700311-02 OF-SOW-091D-0317 0.12329	17-Mar-17	18:06:04
13	170317G2_13	1700311-03 OF-SOW-091DP-0317 0.12421	17-Mar-17	18:18:38
14	170317G2_14	1700311-04 OF-EB030817 0.12212	17-Mar-17	18:31:13
15	170317G2_15	IPA	17-Mar-17	18:43:44
16	170317G2_16	ST170317G2-2 PFC CS2 17C1703	17-Mar-17	18:56:18
17	170317G2_17	IPA	17-Mar-17	19:09:09
18	170317G2_18	1700311-05 OF-SOW-091K-0317 0.12112	17-Mar-17	19:21:37
19	170317G2_19	1700311-06 OF-SOW-091M-0317 0.12783	17-Mar-17	19:34:10
20	170317G2_20	1700311-07 OF-FB030817 0.12533	17-Mar-17	19:46:47
21	170317G2_21	1700311-08 OF-SOW-091L-0317 0.11948	17-Mar-17	19:59:20
22	170317G2_22	1700311-09 OF14-GW05-0317 0.12223	17-Mar-17	20:11:53
23	170317G2_23	1700314-01 OUTFALL #1 0.125	17-Mar-17	20:24:22
24	170317G2_24	1700314-02 OUTFALL #2 0.125	17-Mar-17	20:36:55
25	170317G2_25	1700314-03 OUTFALL #2A 0.125	17-Mar-17	20:49:28
26	170317G2_26	1700314-04 OUTFALL #3 0.125	17-Mar-17	21:02:01
27	170317G2_27	1700314-05 OUTFALL #4 0.125	17-Mar-17	21:14:35
28	170317G2_28	1700314-06 PFC FIELD BLANK@ OUTFALL#...	17-Mar-17	21:27:08
29	170317G2_29	IPA	17-Mar-17	21:39:42
30	170317G2_30	ST170317G2-3 PFC CS2 17C1703	17-Mar-17	21:52:14
31	170317G2_31	IPA	17-Mar-17	22:04:48

Work Order 170311

Dataset: Untitled

Last Altered: Monday, March 20, 2017 09:39:14 Pacific Daylight Time

Printed: Monday, March 20, 2017 09:40:12 Pacific Daylight Time

Compound name: PFBS

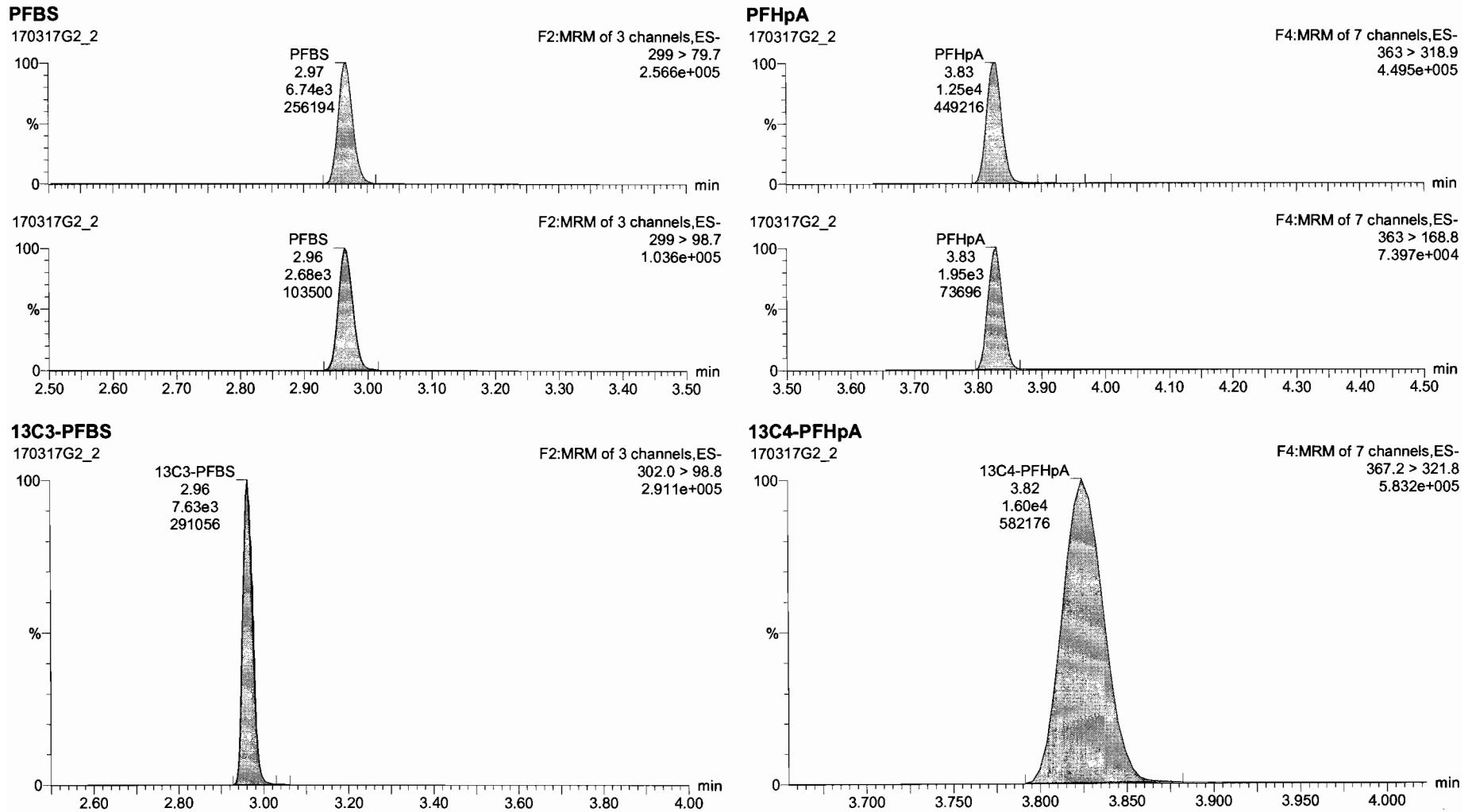
	Name	ID	Acq.Date	Acq.Time
32	170317G2_32	B7C0050-MS1 Matrix Spike 0.125	17-Mar-17	22:17:21
33	170317G2_33	B7C0050-MSD1 Matrix Spike Dup 0.125	17-Mar-17	22:29:53
34	170317G2_34	1700304-02RE1@10XB-104-Trailer(420-1177...	17-Mar-17	22:42:22
35	170317G2_35	1700304-02RE1 B-104 -Trailer (420-117740-2)...	17-Mar-17	22:54:56
36	170317G2_36	CS3 A Tester 17C1715	17-Mar-17	23:07:28
37	170317G2_37	IPA	17-Mar-17	23:20:02
38	170317G2_38	ST170317G2-4 PFC CS2 17C1703	17-Mar-17	23:32:36
39	170317G2_39	IPA	17-Mar-17	23:45:10

Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:11:39 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:14:39 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170317G2_2, Date: 17-Mar-2017, Time: 16:00:26, ID: ST170317G2-1 PFC CS2 17C1703, Description: PFC CS2 17C1703 A



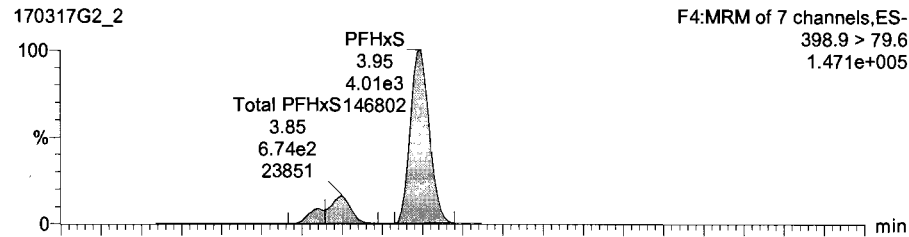
Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:11:39 AM Pacific Daylight Time

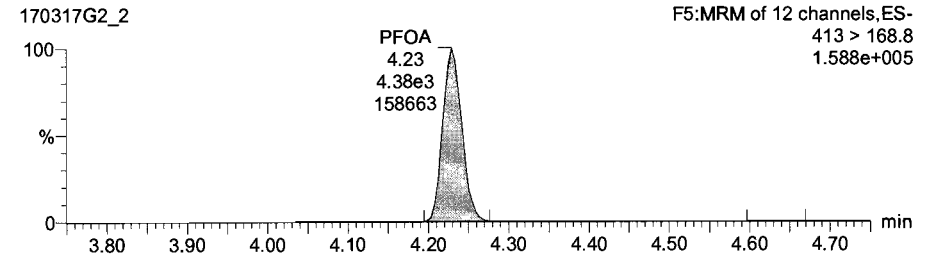
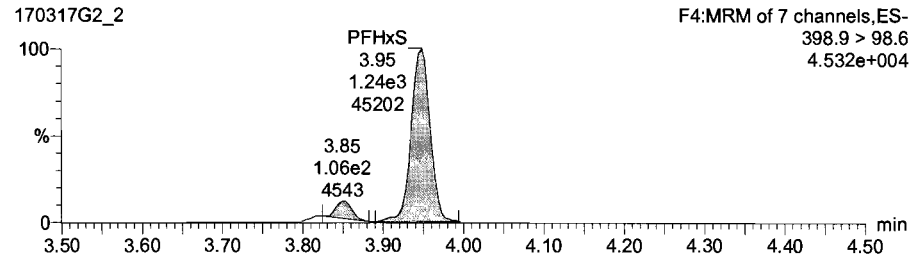
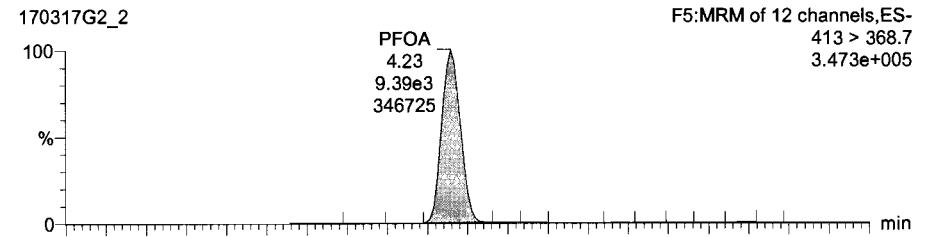
Printed: Monday, March 20, 2017 8:14:39 AM Pacific Daylight Time

Name: 170317G2_2, Date: 17-Mar-2017, Time: 16:00:26, ID: ST170317G2-1 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

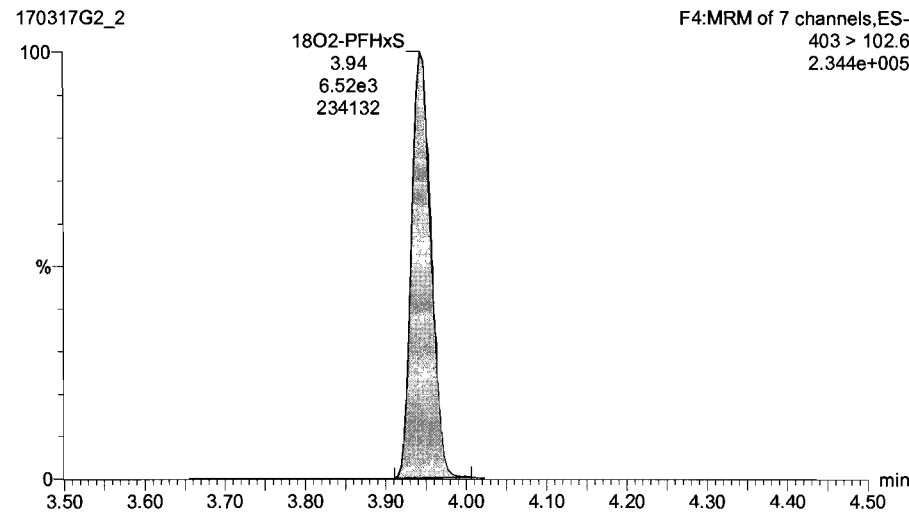
PFHxS



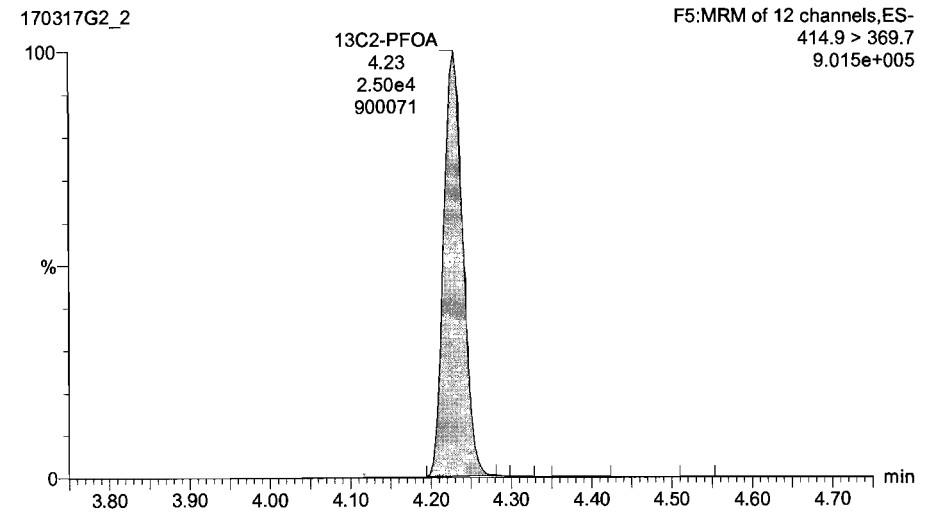
PFOA



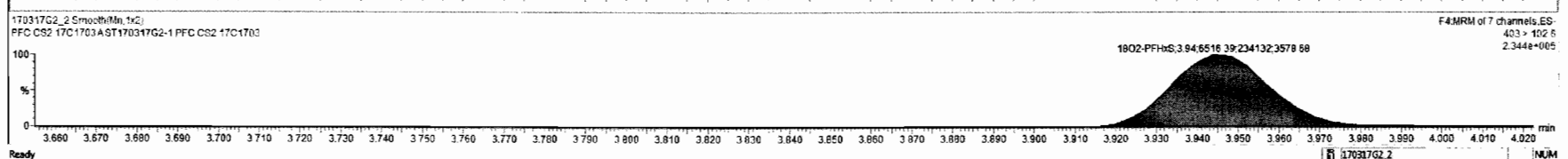
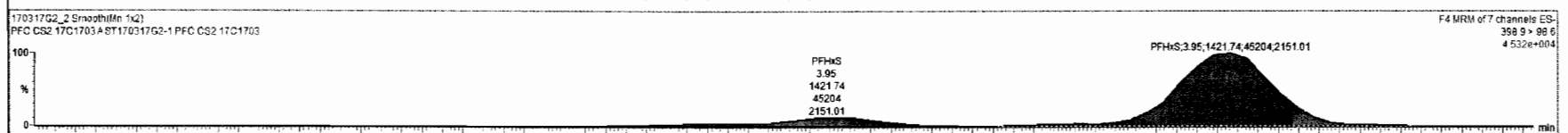
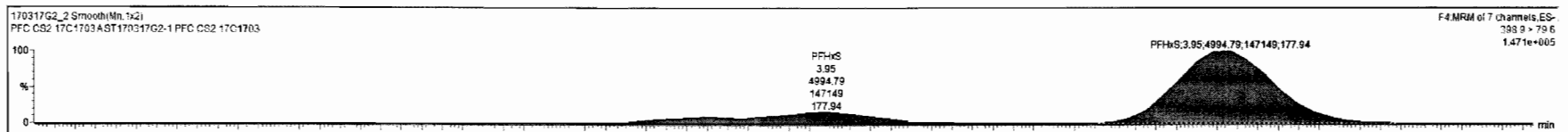
18O2-PFHxS



13C2-PFOA



#	Name	Trace	Area	RRF	WWVol	Pred.RT	RT	Conc	MDL	%Rec	DL
1	PFBS	299 > 79.7	6.74e3		1.000	2.96	2.97	4.83	NO	96.7	0.0000000
2	PFHpA	363 > 318.9	1.25e4		1.000	3.62	3.63	5.59	YES	111.8	0.0000000
3	PFHxS	386.9 > 79.9	4.99e3		1.000	3.84	3.95	5.33	YES	106.8	0.0121796
4	PFOA	413 > 368.7	9.55e3		1.000	4.23	4.23	5.22	YES	104.5	0.0000000
5	PFNA	463 > 418.8	8.57e3		1.000	4.57	4.57	5.29	YES	105.9	0.0000000
6	PFOS	499 > 79.9	1.31e5		1.000	4.64	4.64	4.15	YES	83.0	0.1769381
7	13CLPFBS	302.0 > 98.8	7.83e3	0.501	1.000	2.95	2.96	11.3	NO	90.8	0.0006258
8	13CLPFHpA	367.2 > 321.8	1.50e4	1.24	1.000	3.62	3.62	9.65	NO	77.2	0.0290016
9	1802PFHxS	403 > 102.6	6.52e3	0.495	1.000	3.94	3.94	9.82	NO	78.6	0.006326
10	13CLPFOA	414.9 > 369.7	2.50e4	3.22	1.000	4.23	4.23	8.58	NO	68.7	0.0017033
11	13CLPFNA	468.2 > 422.9	9.19e3	0.979	1.000	4.57	4.57	11.2	NO	89.8	0.0024999
12	13CLPFOS	507.0 > 79.9	7.07e3	1.08	1.000	4.64	4.64	11.5	NO	92.2	0.0021954
13	13CLPFHxA	318.0 > 272.9	2.53e4	1.00	1.000	3.29	3.32	12.5	NO	100.0	0.0061080
14	13CLPFHxS	401.9 > 79.9	1.68e4	1.00	1.000	3.94	3.94	12.5	NO	100.0	0.0072690
15	13CLPFOA	421.3 > 376	1.13e4	1.00	1.000	4.22	4.23	12.5	NO	100.0	0.1114159
16	13CLPFNA	472.2 > 426.9	1.05e4	1.00	1.000	4.56	4.57	12.5	NO	100.0	0.0012859
17	13CLPFOS	503.0 > 79.9	7.41e3	1.00	1.000	4.67	4.64	12.5	NO	100.0	0.0012859
18	Total PFBS	299 > 79.7	6.74e3		1.000	3.11		4.83	NO		
19	Total PFHxS	386.9 > 79.6	5.95e3		1.000	4.09		6.26	NO		
20	Total PFOA	413 > 368.7	9.55e3		1.000	4.39		5.22	NO		
21	Total PFOS	499 > 79.9	1.96e3		1.000	4.67		5.49	NO		0.1769381

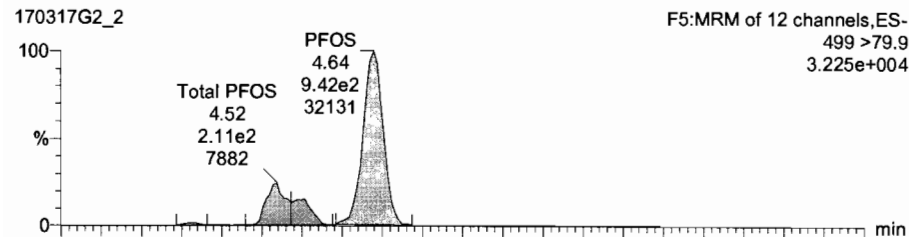


Dataset: Untitled

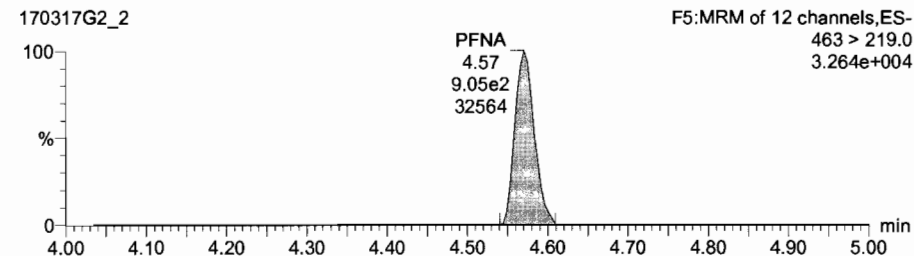
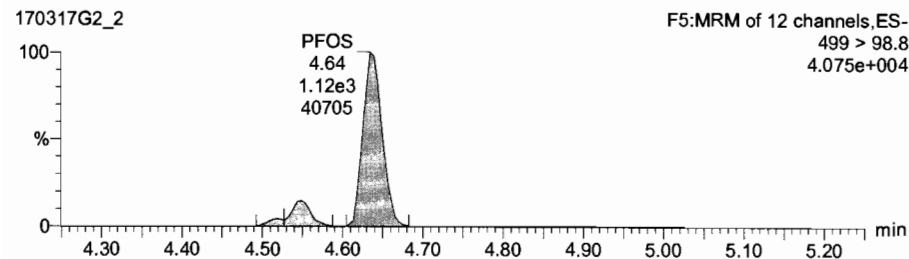
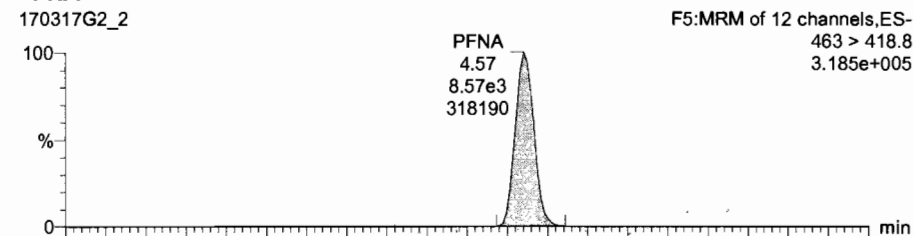
Last Altered: Monday, March 20, 2017 8:11:39 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:14:39 AM Pacific Daylight Time

Name: 170317G2_2, Date: 17-Mar-2017, Time: 16:00:26, ID: ST170317G2-1 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

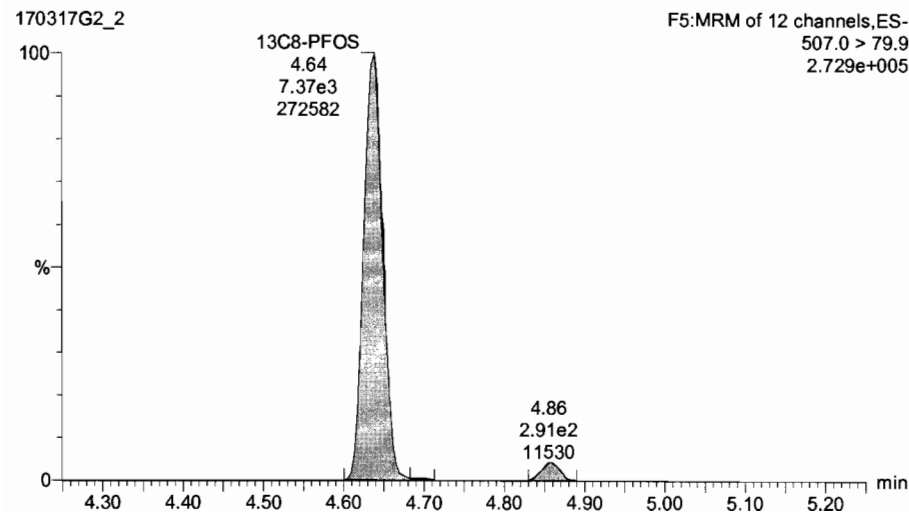
PFOS



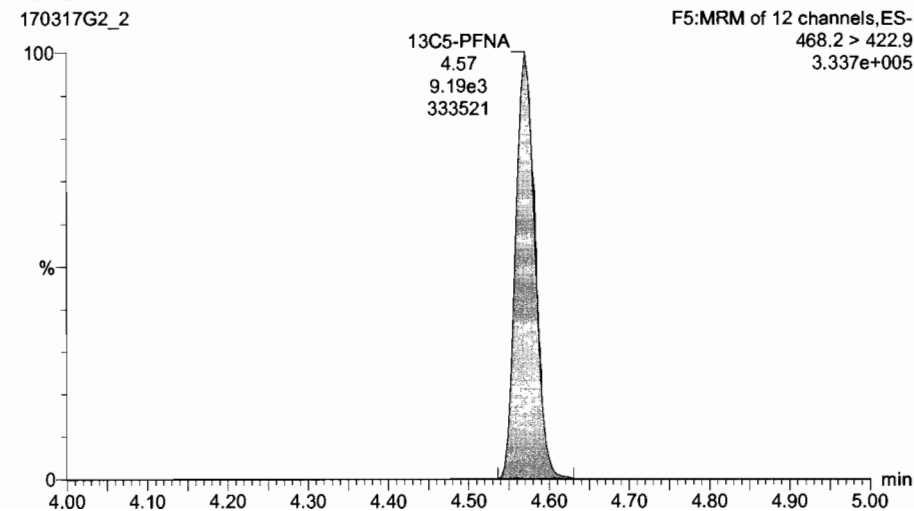
PFNA



13C8-PFOS

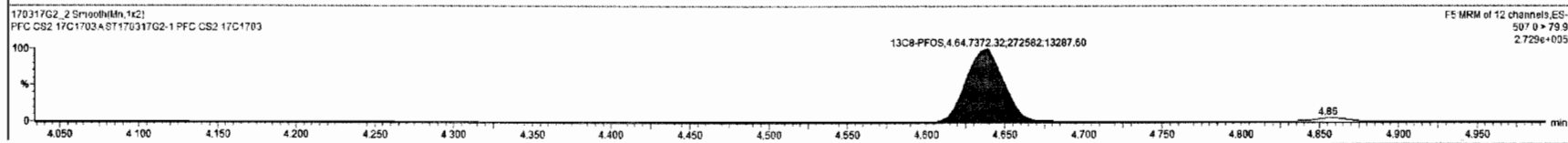
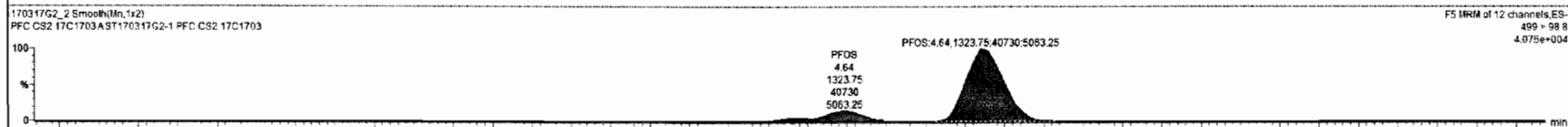
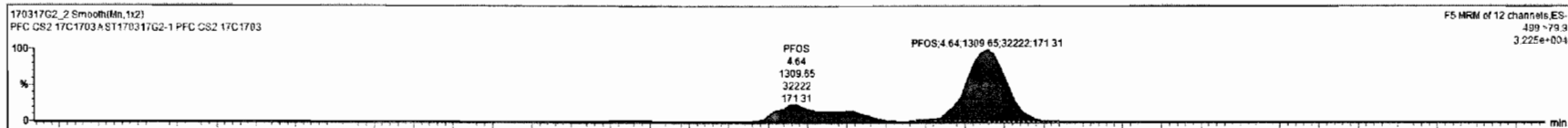


13C5-PFNA



170317G2_2 - S1170317G2-1 PFC CS2 17C1703 - PFC CS2 17C1703A

Item	Name	Trace	Area	RRF	WVCL	Pred RT	RT	Conc	>MDE	%Rec	DL
1	PFBS	299 > 79.7	6.74e3		1.000	2.96	2.97	4.83	NO	96.7	0.0000200
2	PFHpA	363 > 318.9	1.25e4		1.000	3.82	3.83	5.59	YES	111.8	0.0000000
3	PFHxS	368.9 > 79.6	4.99e3		1.000	3.94	3.95	5.33	YES	106.6	0.0121796
4	PFOA	413 > 368.7	9.59e3		1.000	4.23	4.23	5.22	YES	104.5	0.0000000
5	PFNA	463 > 418.8	8.57e3		1.000	4.57	4.57	5.29	YES	105.9	0.0000000
6	PFOS	499 > 79.9	1.31e3		1.000	4.64	4.64	4.44	YES	93.0	0.1769281
7	13C3-PFBS	302.0 > 98.8	7.63e3	0.501	1.000	2.95	2.96	11.5	NO	90.8	0.0006258
8	13C4-PFHpA	367.2 > 321.8	1.60e4	1.24	1.000	3.82	3.82	9.65	NO	77.2	0.0290018
9	1002-PFHxS	403 > 102.6	6.52e3	0.495	1.000	3.94	3.94	9.82	NO	78.6	0.0056326
10	13C2-PFOA	414.9 > 369.7	2.50e4	3.22	1.000	4.23	4.23	8.58	NO	68.7	0.0170333
11	13C5-PFNA	468.2 > 422.9	9.19e3	0.579	1.000	4.57	4.57	11.2	NO	90.8	0.0024999
12	13C8-PFOS	507.0 > 79.9	7.37e3	1.06	1.000	4.64	4.64	11.5	NO	92.2	0.0021954
13	13C5-PFHxS	318 > 272.9	2.53e4	1.00	1.000	3.29	3.32	12.5	NO	100.0	0.0051060
14	13C3-PFHxS	401.9 > 79.9	1.68e4	1.00	1.000	3.94	3.94	12.5	NO	100.0	0.0087459
15	13C8-PFOA	421.3 > 378	1.13e4	1.00	1.000	4.22	4.22	12.5	NO	100.0	0.0072880
16	13C9-PFNA	472.2 > 426.9	1.05e4	1.00	1.000	4.56	4.57	12.5	NO	100.0	0.0114159
17	13C4-PFOS	503.0 > 79.9	7.41e3	1.00	1.000	4.67	4.64	12.5	NO	100.0	0.0012659
18	Total PFBS	299 > 79.7	6.74e3		1.000	3.11		4.83	NO		
19	Total PFHxS	368.9 > 79.6	5.95e3		1.000	4.09		6.28	NO		
20	Total PFOA	413 > 368.7	9.55e3		1.000	4.39		5.22	NO		
21	Total PFOS	499 > 79.9	1.66e3		1.000	4.87		4.49	NO		0.1769381



Custom Reporting: Select reports to generate

170317G2_2 NUM

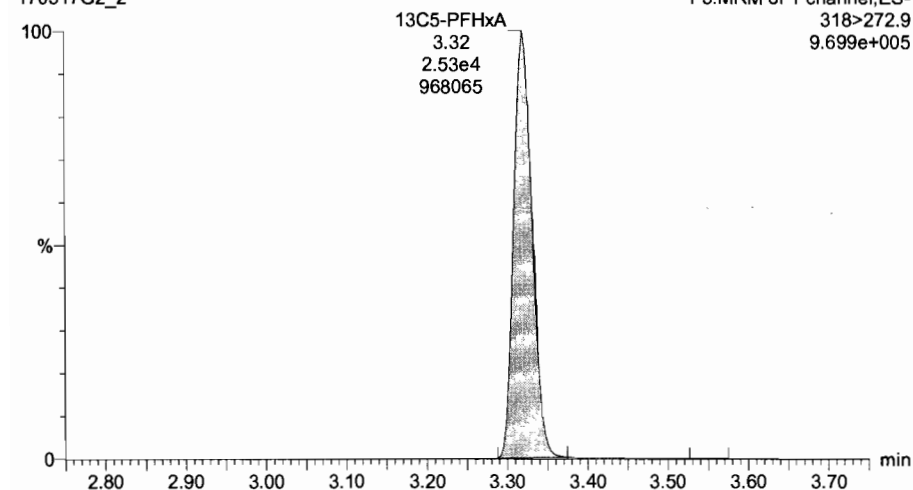
Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:11:39 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:14:39 AM Pacific Daylight Time

Name: 170317G2_2, Date: 17-Mar-2017, Time: 16:00:26, ID: ST170317G2-1 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

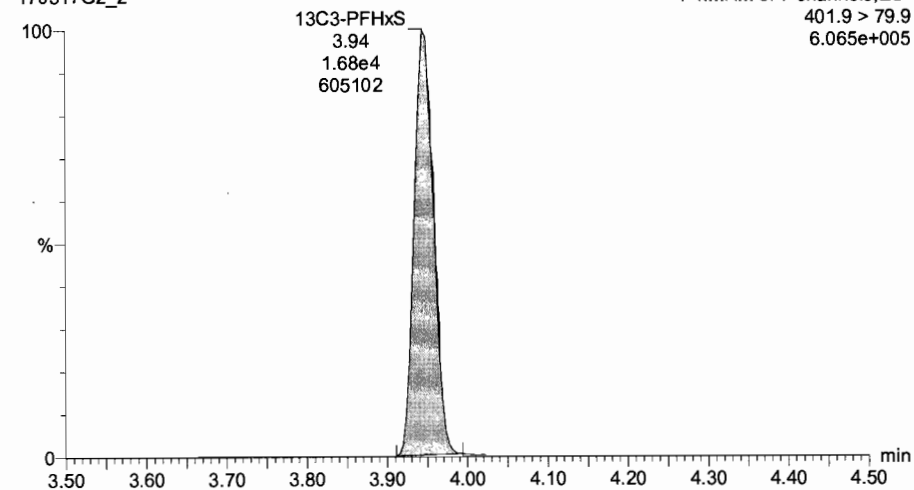
13C5-PFHxA

170317G2_2



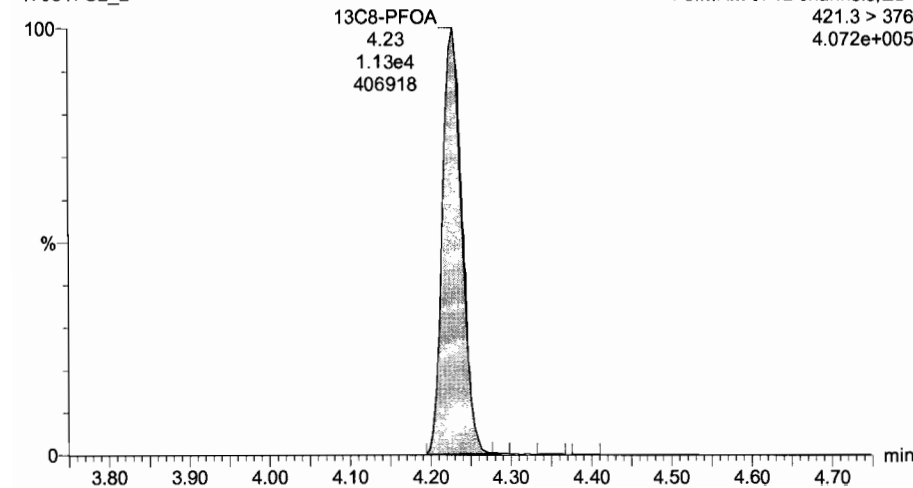
13C3-PFHxS

170317G2_2



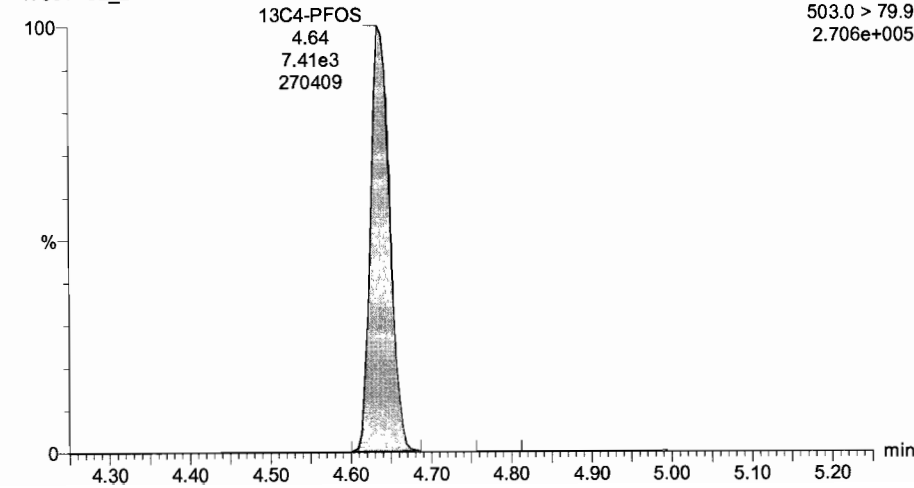
13C8-PFOA

170317G2_2



13C4-PFOS

170317G2_2



Dataset: Untitled

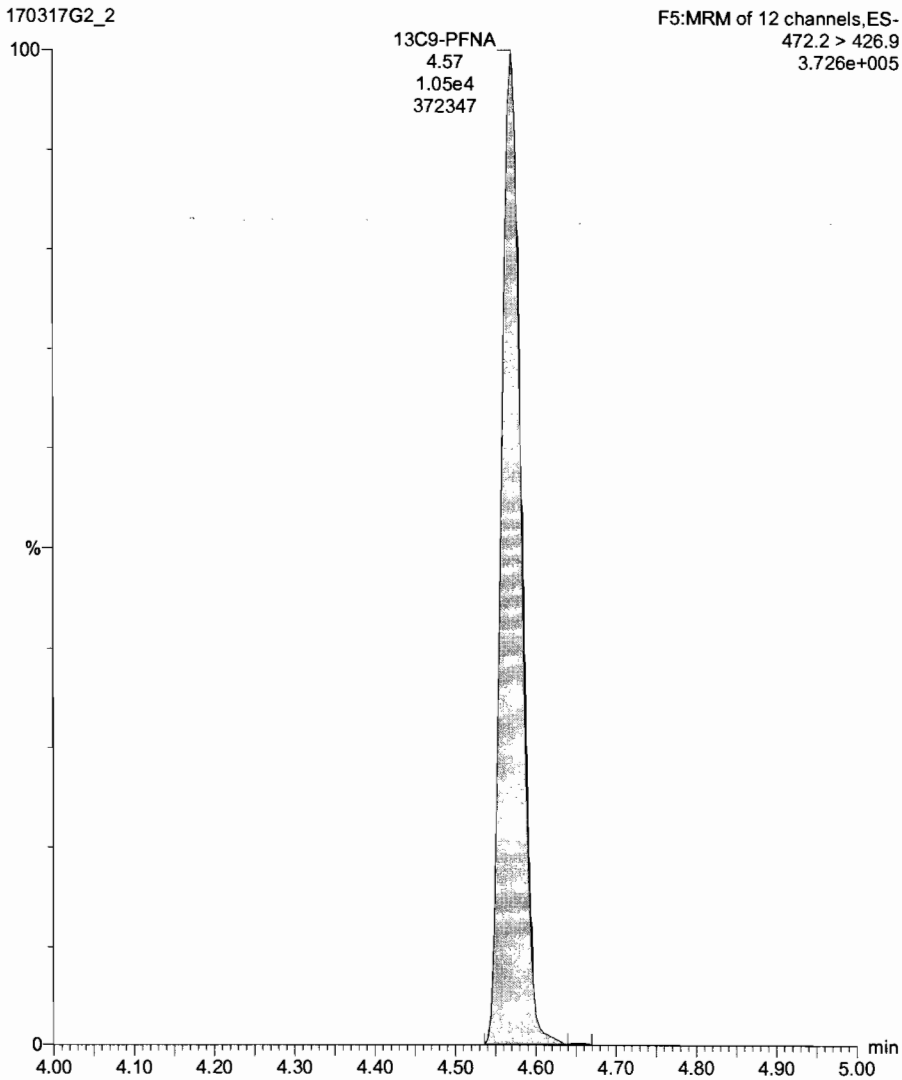
Last Altered: Monday, March 20, 2017 8:11:39 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 8:14:39 AM Pacific Daylight Time

Name: 170317G2_2, Date: 17-Mar-2017, Time: 16:00:26, ID: ST170317G2-1 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

13C9-PFNA

170317G2_2



Dataset: U:\G1.PRO\Results\2017\New folder\170317G2-16.qld

Last Altered: Monday, March 20, 2017 9:21:55 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 9:22:40 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170317G2_16, Date: 17-Mar-2017, Time: 18:56:18, ID: ST170317G2-2 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

#	Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	7.35e3	7.85e3		1.000	2.97	5.13	102.5
2	2 PFHpA	363 > 318.9	1.42e4	1.90e4		1.000	3.83	5.34	106.8
3	3 PFHxS	398.9 > 79.6	5.69e3	8.02e3		1.000	3.95	4.93	98.7
4	4 PFOA	413 > 368.7	1.11e4	3.21e4		1.000	4.23	4.81	96.3
5	5 PFNA	463 > 418.8	9.54e3	1.05e4		1.000	4.57	5.14	102.8
6	6 PFOS	499 > 79.9	1.66e3	8.99e3		1.000	4.64	4.32	86.5
7	7 13C3-PFBS	302.0 > 98.8	7.85e3	1.90e4	0.501	1.000	2.97	10.3	82.4
8	8 13C4-PFHpA	367.2 > 321.8	1.90e4	1.90e4	1.237	1.000	3.83	10.1	80.7
9	9 18O2-PFHxS	403 > 102.6	8.02e3	1.90e4	0.495	1.000	3.95	10.7	85.3
10	10 13C2-PFOA	414.9 > 369.7	3.21e4	1.26e4	3.221	1.000	4.23	9.85	78.8
11	11 13C5-PFNA	468.2 > 422.9	1.05e4	1.35e4	0.979	1.000	4.57	9.94	79.5
12	12 13C8-PFOS	507.0 > 79.9	8.99e3	9.73e3	1.080	1.000	4.64	10.7	85.5
13	13 13C5-PFHxA	318 > 272.9	2.92e4	2.92e4	1.000	1.000	3.33	12.5	100.0
14	14 13C3-PFHxS	401.9 > 79.9	1.90e4	1.90e4	1.000	1.000	3.95	12.5	100.0
15	15 13C8-PFOA	421.3 > 376	1.26e4	1.26e4	1.000	1.000	4.23	12.5	100.0
16	16 13C9-PFNA	472.2 > 426.9	1.35e4	1.35e4	1.000	1.000	4.57	12.5	100.0
17	17 13C4-PFOS	503.0 > 79.9	9.73e3	9.73e3	1.000	1.000	4.64	12.5	100.0

75-125
↓
60-150
↓
50-150
60-150

AC
3/20/17

Dataset: Untitled

Last Altered: Monday, March 20, 2017 09:39:14 Pacific Daylight Time

Printed: Monday, March 20, 2017 09:40:12 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Compound name: PFBS

	Name	ID	Acq.Date	Acq.Time
1	170317G2_1	IPA	17-Mar-17	15:48:14
2	170317G2_2	ST170317G2-1 PFC CS2 17C1703	17-Mar-17	16:00:26
3	170317G2_3	IPA	17-Mar-17	16:13:08
4	170317G2_4	1700304-01 Field Blank (420-117740-1) 0.12255	17-Mar-17	16:25:43
5	170317G2_5	1700299-01 MATPEW100 0.12287	17-Mar-17	16:38:13
6	170317G2_6	1700299-02 MATPEW101 0.11464	17-Mar-17	16:50:46
7	170317G2_7	1700299-03 MATPEW102 0.12518	17-Mar-17	17:03:22
8	170317G2_8	1700311-02@5X OF-SOW-091D-0317 0.12329	17-Mar-17	17:15:57
9	170317G2_9	1700311-03@5X OF-SOW-091DP-0317 0.124...	17-Mar-17	17:28:29
10	170317G2_10	1700311-06@5X OF-SOW-091M-0317 0.12783	17-Mar-17	17:41:02
11	170317G2_11	1700311-01 OF-SOW-091A-0317 0.11879	17-Mar-17	17:53:36
12	170317G2_12	1700311-02 OF-SOW-091D-0317 0.12329	17-Mar-17	18:06:04
13	170317G2_13	1700311-03 OF-SOW-091DP-0317 0.12421	17-Mar-17	18:18:38
14	170317G2_14	1700311-04 OF-EB030817 0.12212	17-Mar-17	18:31:13
15	170317G2_15	IPA	17-Mar-17	18:43:44
16	170317G2_16	ST170317G2-2 PFC CS2 17C1703	17-Mar-17	18:56:18
17	170317G2_17	IPA	17-Mar-17	19:09:09
18	170317G2_18	1700311-05 OF-SOW-091K-0317 0.12112	17-Mar-17	19:21:37
19	170317G2_19	1700311-06 OF-SOW-091M-0317 0.12783	17-Mar-17	19:34:10
20	170317G2_20	1700311-07 OF-FB030817 0.12533	17-Mar-17	19:46:47
21	170317G2_21	1700311-08 OF-SOW-091L-0317 0.11948	17-Mar-17	19:59:20
22	170317G2_22	1700311-09 OF14-GW05-0317 0.12223	17-Mar-17	20:11:53
23	170317G2_23	1700314-01 OUTFALL #1 0.125	17-Mar-17	20:24:22
24	170317G2_24	1700314-02 OUTFALL #2 0.125	17-Mar-17	20:36:55
25	170317G2_25	1700314-03 OUTFALL #2A 0.125	17-Mar-17	20:49:28
26	170317G2_26	1700314-04 OUTFALL #3 0.125	17-Mar-17	21:02:01
27	170317G2_27	1700314-05 OUTFALL #4 0.125	17-Mar-17	21:14:35
28	170317G2_28	1700314-06 PFC FIELD BLANK@ OUTFALL#...	17-Mar-17	21:27:08
29	170317G2_29	IPA	17-Mar-17	21:39:42
30	170317G2_30	ST170317G2-3 PFC CS2 17C1703	17-Mar-17	21:52:14
31	170317G2_31	IPA	17-Mar-17	22:04:48

Dataset: Untitled

Last Altered: Monday, March 20, 2017 09:39:14 Pacific Daylight Time

Printed: Monday, March 20, 2017 09:40:12 Pacific Daylight Time

Compound name: PFBS

	Name	ID	Acq. Date	Acq. Time
32	170317G2_32	B7C0050-MS1 Matrix Spike 0.125	17-Mar-17	22:17:21
33	170317G2_33	B7C0050-MSD1 Matrix Spike Dup 0.125	17-Mar-17	22:29:53
34	170317G2_34	1700304-02RE1@10XB-104-Trailer(420-1177...	17-Mar-17	22:42:22
35	170317G2_35	1700304-02RE1 B-104 -Trailer (420-117740-2)...	17-Mar-17	22:54:56
36	170317G2_36	CS3 A Tester 17C1715	17-Mar-17	23:07:28
37	170317G2_37	IPA	17-Mar-17	23:20:02
38	170317G2_38	ST170317G2-4 PFC CS2 17C1703	17-Mar-17	23:32:36
39	170317G2_39	IPA	17-Mar-17	23:45:10

Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:14:49 AM Pacific Daylight Time

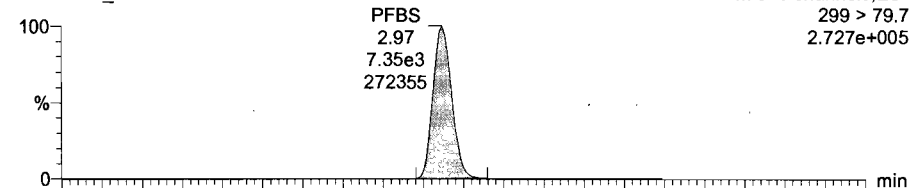
Printed: Monday, March 20, 2017 8:14:53 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170317G2_16, Date: 17-Mar-2017, Time: 18:56:18, ID: ST170317G2-2 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

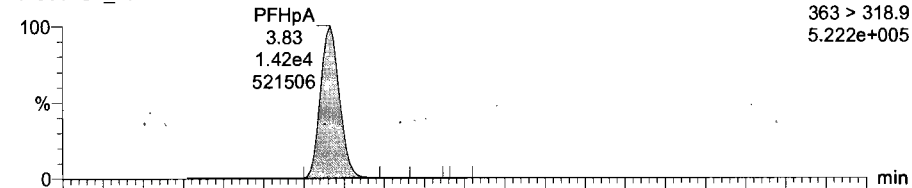
PFBS

170317G2_16

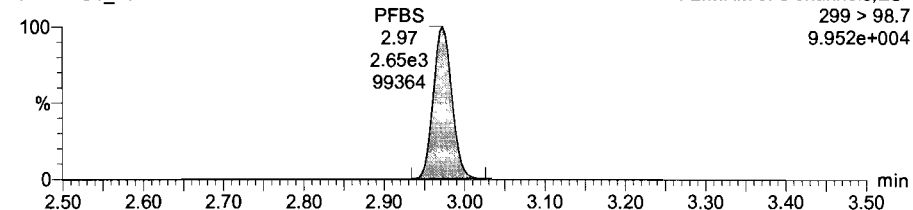


PFHpA

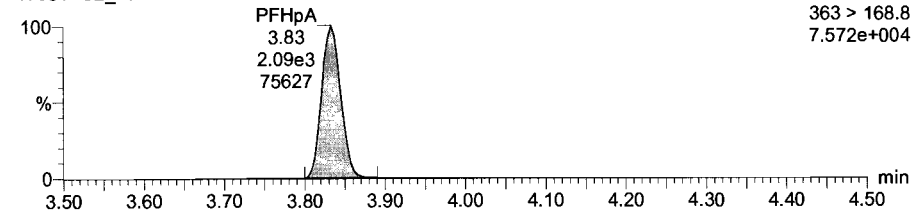
170317G2_16



170317G2_16

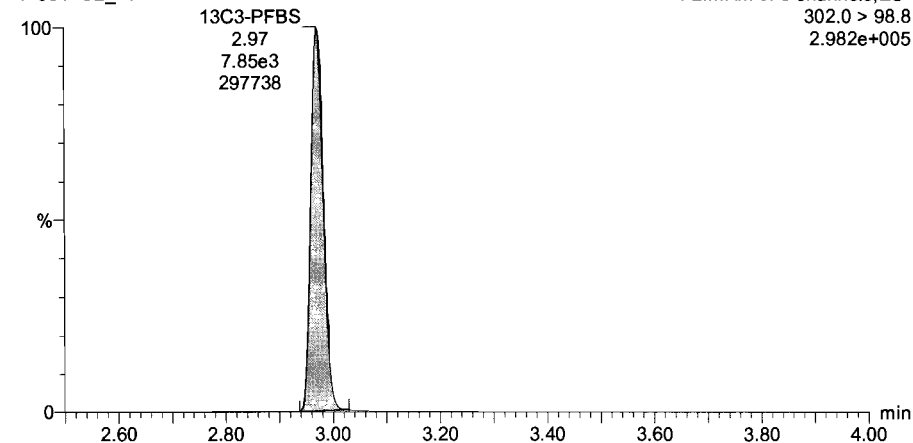


170317G2_16



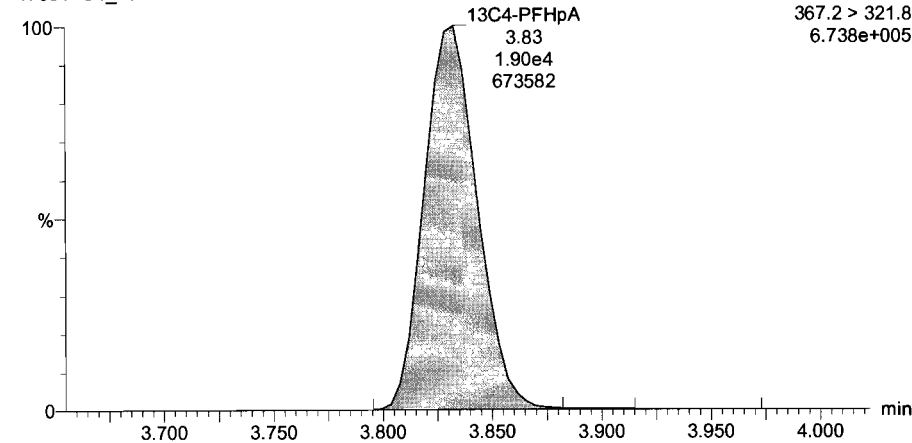
13C3-PFBS

170317G2_16



13C4-PFHpA

170317G2_16



Dataset: Untitled

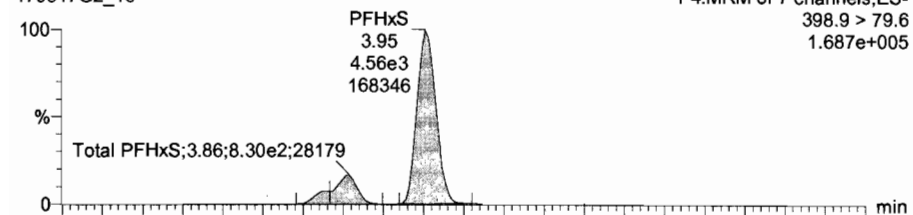
Last Altered: Monday, March 20, 2017 8:14:49 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 8:14:53 AM Pacific Daylight Time

Name: 170317G2_16, Date: 17-Mar-2017, Time: 18:56:18, ID: ST170317G2-2 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

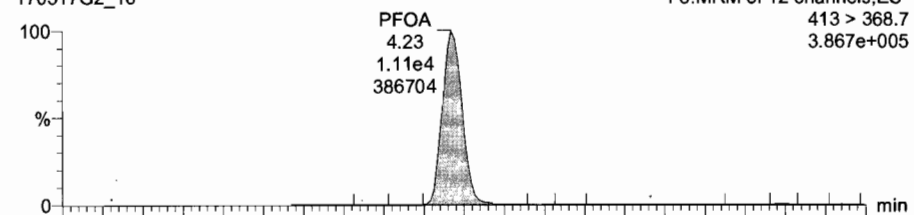
PFHxS

170317G2_16

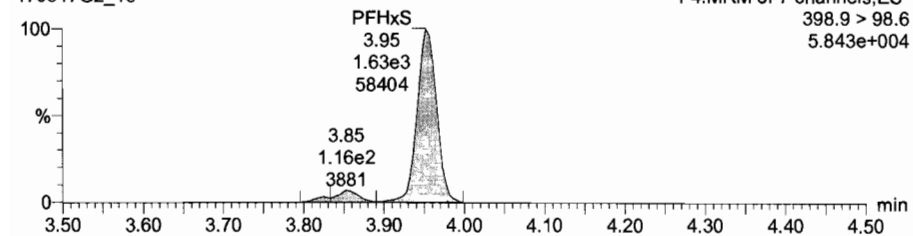


PFOA

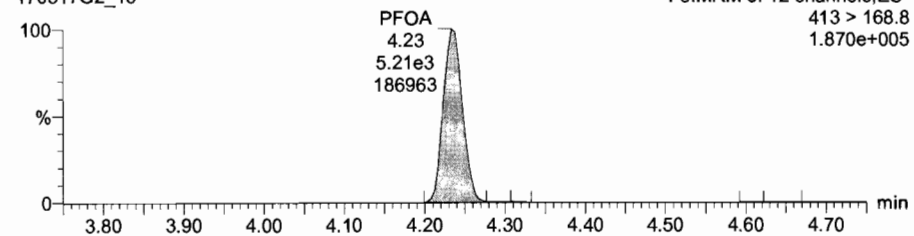
170317G2_16



170317G2_16

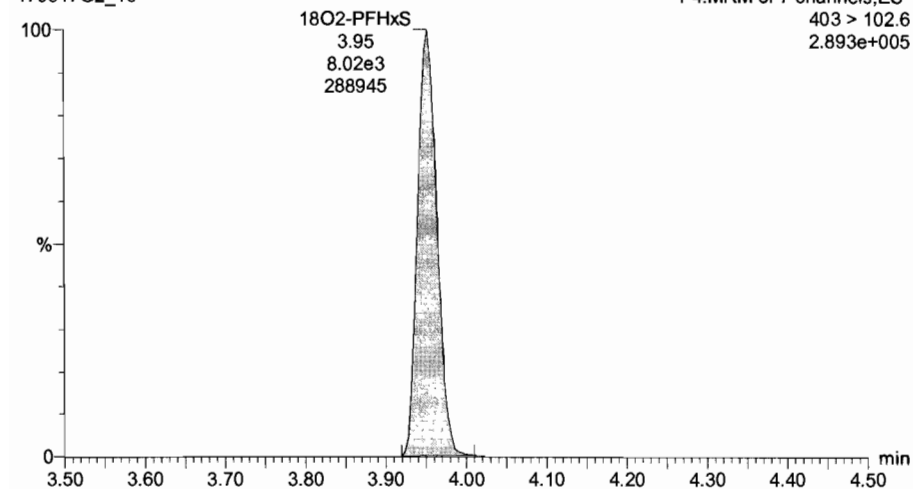


170317G2_16



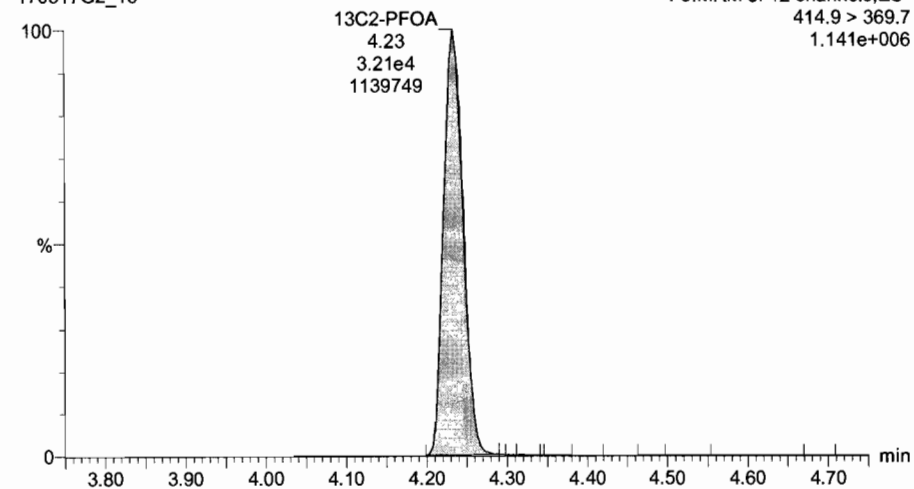
18O2-PFHxS

170317G2_16



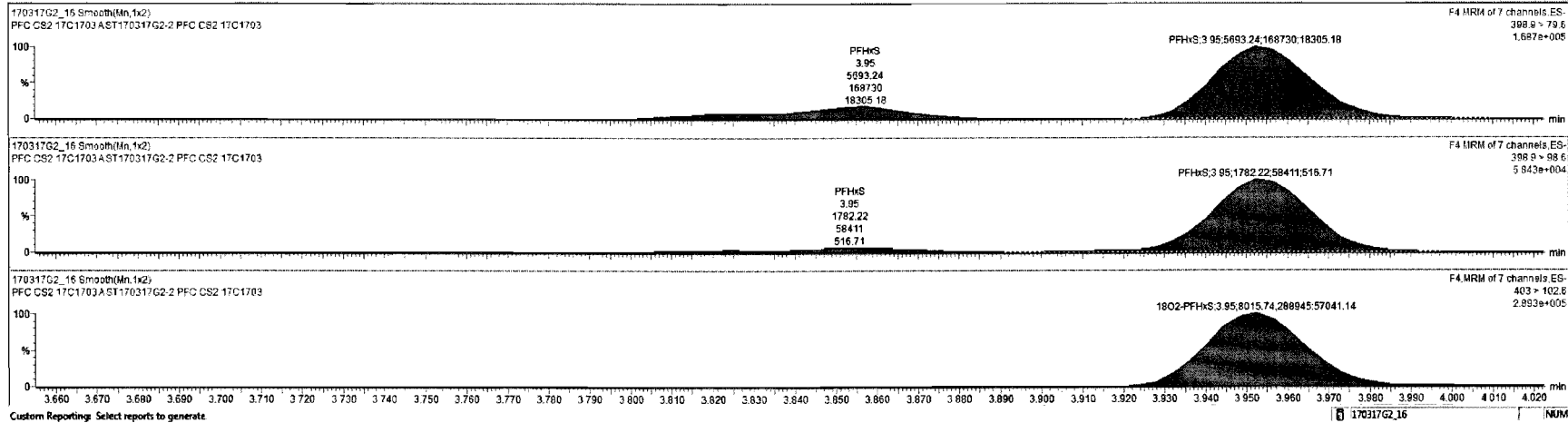
13C2-PFOA

170317G2_16



170317G2_16 ST170317G2 2 PFC CS2 17C1703 PFC CS2 17C1703A

1	Name	Trace	Area	RRF	Wt%	Prod RT	RT	Conc.	>MDL	%Rec	DL
1	PFBS	299 > 79.7	7.35e3		1.000	2.97	2.97	5.13	NO	102.5	0.0000000
2	PFHpA	363 > 318.9	1.42e4		1.000	3.83	3.83	5.34	NO	106.9	0.0000000
3	PFHxS	388.9 > 79.6	6.79e3		1.000	3.95	3.95	4.93	YES	95.7	0.0000000
4	PFOA	413 > 368.7	1.13e4		1.000	4.23	4.23	4.81	YES	96.3	0.0000000
5	PFNA	463 > 418.8	9.54e3		1.000	4.57	4.57	5.14	YES	102.8	0.0000000
6	PFOS	499 > 79.9	1.65e3		1.000	4.64	4.64	3.03	YES	60.5	0.1775576
7	13C3-PFBS	302.0 > 98.6	7.85e3	0.591	1.000	2.98	2.97	10.3	NO	82.4	0.0228487
8	13C4-PFHpA	367.2 > 321.8	1.90e4	1.24	1.000	3.83	3.83	10.1	NO	80.7	0.0002367
9	18O2-PFHxS	403 > 102.6	8.02e3	0.495	1.000	3.95	3.95	10.7	NO	85.3	0.0004529
10	13C2-PFOA	414.9 > 369.7	3.21e4	3.22	1.000	4.23	4.23	9.85	NO	76.6	0.0657763
11	13C5-PFNA	468.2 > 422.9	1.05e4	0.979	1.000	4.57	4.57	9.94	NO	79.5	0.0130402
12	13C8-PFOS	507.0 > 79.9	8.89e3	1.08	1.000	4.64	4.64	10.7	NO	85.5	0.0098174
13	13C3-PFHxS	318 > 272.9	2.92e4	1.00	1.000	3.29	3.33	12.5	NO	100.0	0.0047579
14	13C3-PFHxS	401.9 > 79.9	1.90e4	1.00	1.000	3.94	3.95	12.5	NO	100.0	0.0092013
15	13C8-PFOA	421.3 > 376	1.28e4	1.00	1.000	4.22	4.23	12.5	NO	100.0	0.0030947
16	13C9-PFNA	472.2 > 426.9	1.35e4	1.00	1.000	4.56	4.57	12.5	NO	100.0	0.0070260
17	13C4-PFOS	503.0 > 79.9	9.73e3	1.00	1.000	4.67	4.64	12.5	NO	100.0	0.0099678
18	Total PFBS	299 > 79.7	7.35e3		1.000	3.11		5.13	NO		
19	Total PFHxS	388.9 > 79.6	6.79e3		1.000	4.09		5.79	NO		
20	Total PFOA	413 > 368.7	1.13e4		1.000	4.39		4.81	NO		
21	Total PFOS	499 > 79.9	1.65e3		1.000	4.67		4.70	NO		0.1775576

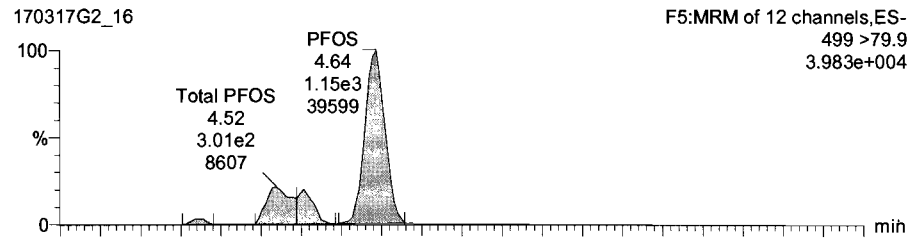


Dataset: Untitled

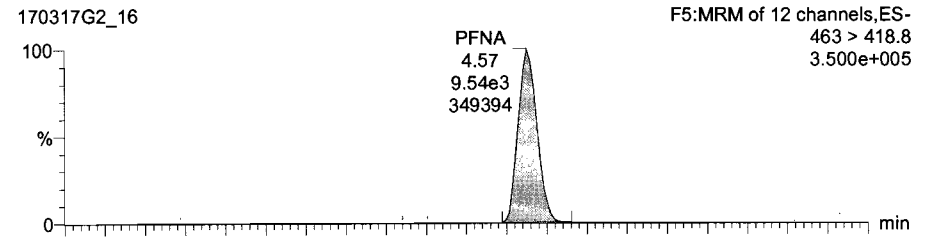
Last Altered: Monday, March 20, 2017 8:14:49 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:14:53 AM Pacific Daylight Time

Name: 170317G2_16, Date: 17-Mar-2017, Time: 18:56:18, ID: ST170317G2-2 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

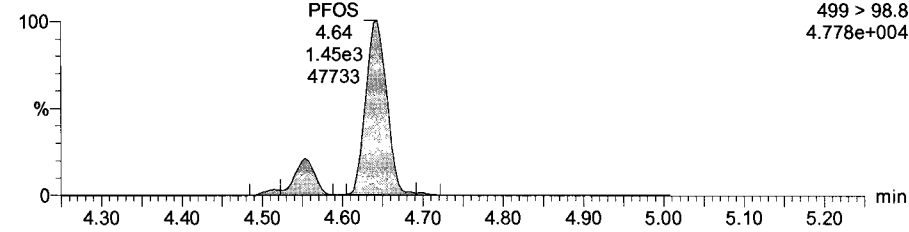
PFOS



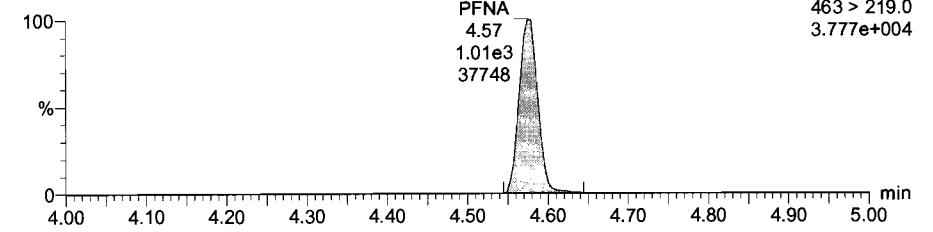
PFNA



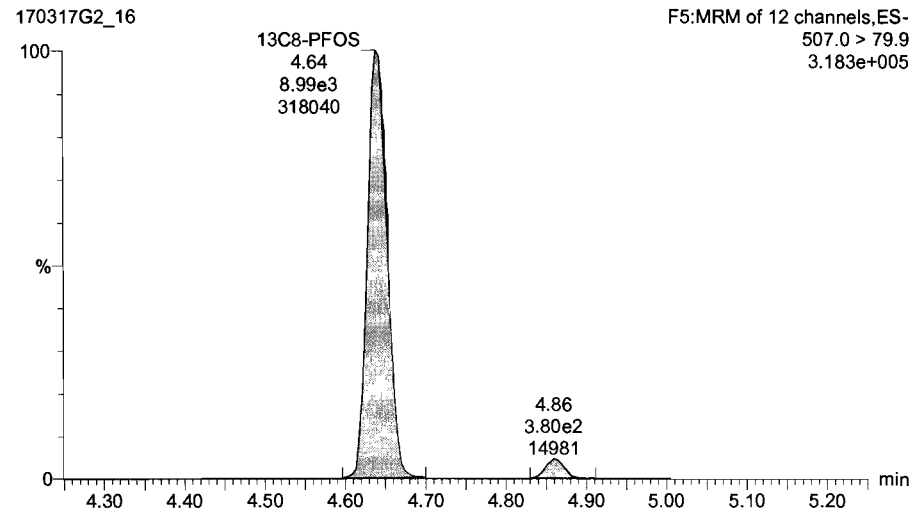
170317G2_16



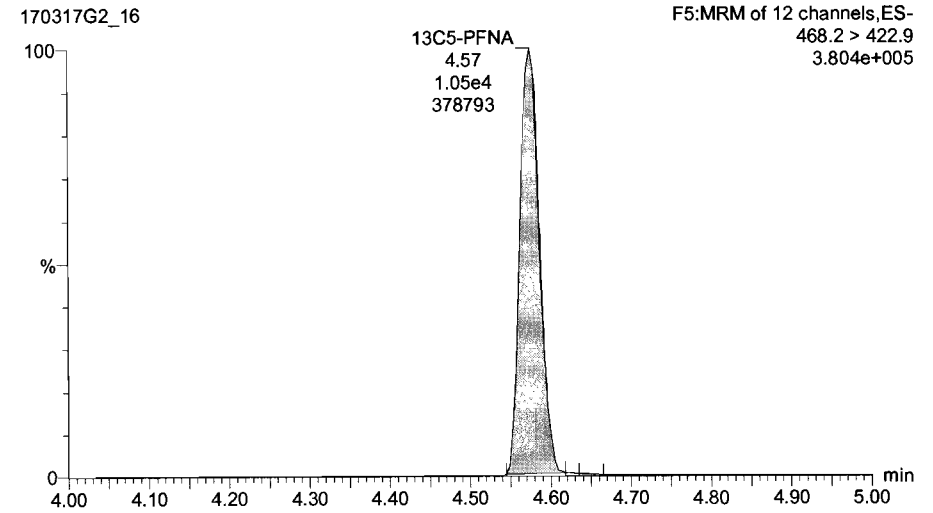
170317G2_16



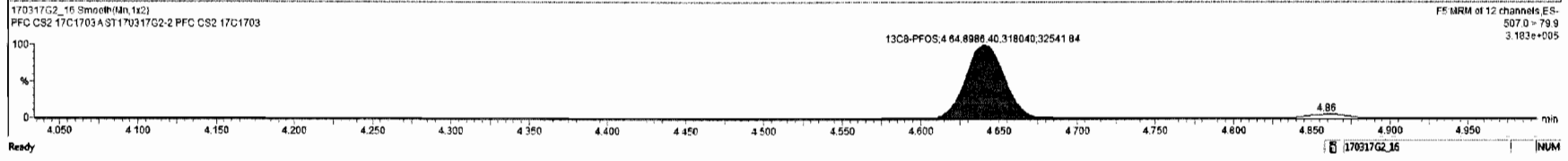
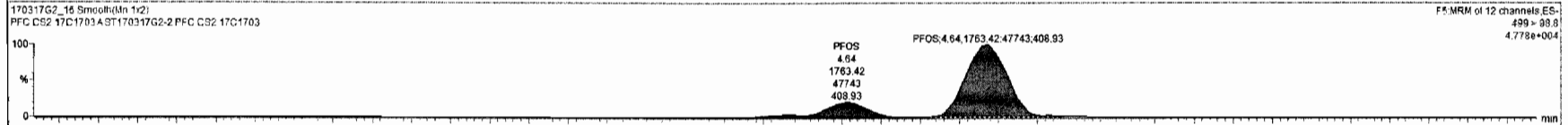
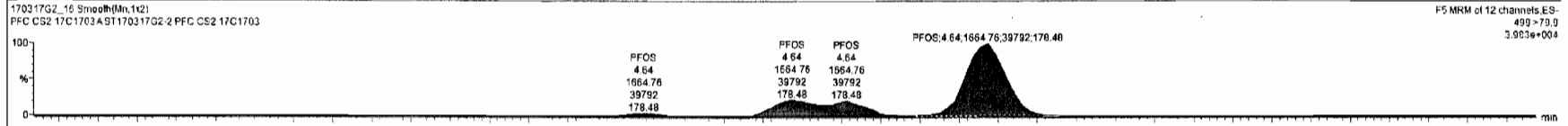
13C8-PFOS



13C5-PFNA



Name	Trace	Area	RRF	WtVol	Pred RT	RT	Conc	MDL	%Rec	DL	
1	PFBS	299 > 79.7	7.35e3	1.000	2.97	2.97	5.13	NO	102.5	0.0000000	
2	PFHxA	389 > 79.6	1.42e4	1.000	3.83	3.83	5.34	NO	100.0	0.0000000	
3	PFHxS	388.9 > 79.6	5.09e3	1.000	3.95	3.95	4.93	YES	93.7	0.0000000	
4	PFDA	413 > 368.7	1.11e4	1.000	4.23	4.23	4.81	YES	98.3	0.0000000	
5	PFNA	483 > 418.8	9.54e3	1.000	4.87	4.87	5.14	YES	102.8	0.0000000	
6	PFOS	499 > 79.9	1.68e3	1.000	4.84	4.84	4.22	YES	86.5	0.1775576	
7	13C3-PFBS	302.0 > 86.6	7.85e3	0.991	1.000	2.96	2.97	10.3	NO	82.4	0.0226497
8	13C4-PFHpA	387.2 > 821.8	1.90e4	1.24	1.000	3.83	3.83	10.1	NO	80.7	0.0602987
9	14C2-PFHxS	403 > 102.6	6.62e3	0.486	1.000	3.96	3.95	10.7	NO	85.3	0.0004628
10	13C3-PFDA	414.9 > 389.7	3.21e4	3.22	1.000	4.23	4.23	9.85	NO	79.0	0.0657783
11	13C5-PFNA	488.2 > 422.0	1.05e4	0.970	1.000	4.87	4.57	9.94	NO	79.5	0.0130402
12	13C8-PFOS	507.0 > 79.9	6.09e3	1.00	1.000	4.84	4.84	10.7	NO	85.5	0.0008174
13	13C5-PFHxA	519 > 272.9	2.80e4	1.80	1.000	3.29	3.33	12.5	NO	100.0	0.0047879
14	13C3-PFHxS	401.9 > 79.8	1.80e4	1.00	1.000	3.94	3.86	12.5	NO	100.0	0.0020113
15	13C8-PFDA	421.3 > 276	1.26e4	1.00	1.000	4.22	4.23	12.5	NO	100.0	0.0030947
16	13C8-PFNA	472.2 > 426.9	1.35e4	1.00	1.000	4.58	4.57	12.5	NO	100.0	0.0070260
17	13C4-PFOS	503.0 > 79.9	9.73e3	1.00	1.000	4.87	4.84	12.5	NO	100.0	0.0009876
18	Total PFBS	299 > 79.7	7.35e3	1.000	3.11		5.13	NO			
19	Total PFHxS	388.9 > 79.6	6.79e3	1.000	4.09		5.79	NO			
20	Total PFDA	413 > 368.7	1.12e4	1.000	4.39		4.81	NO			
21	Total PFOS	499 > 79.9	2.11e3	1.000	4.87		6.00	NO		0.1775576	



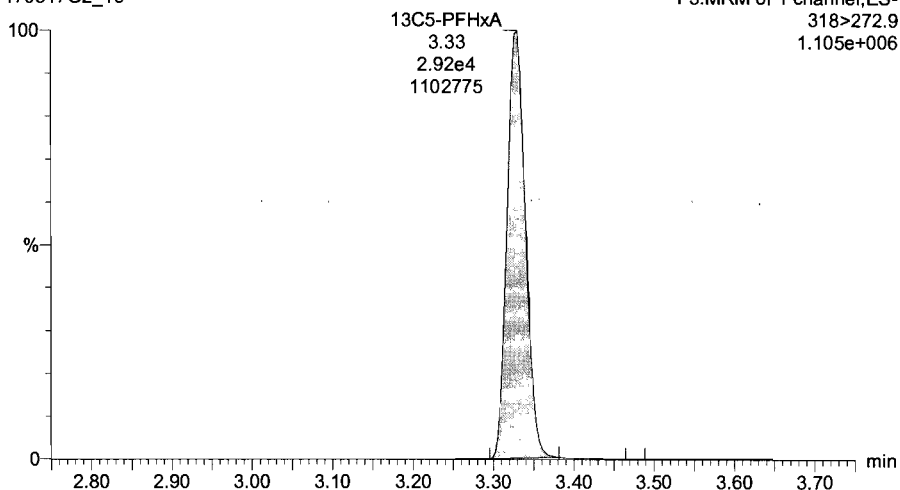
Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:14:49 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:14:53 AM Pacific Daylight Time

Name: 170317G2_16, Date: 17-Mar-2017, Time: 18:56:18, ID: ST170317G2-2 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

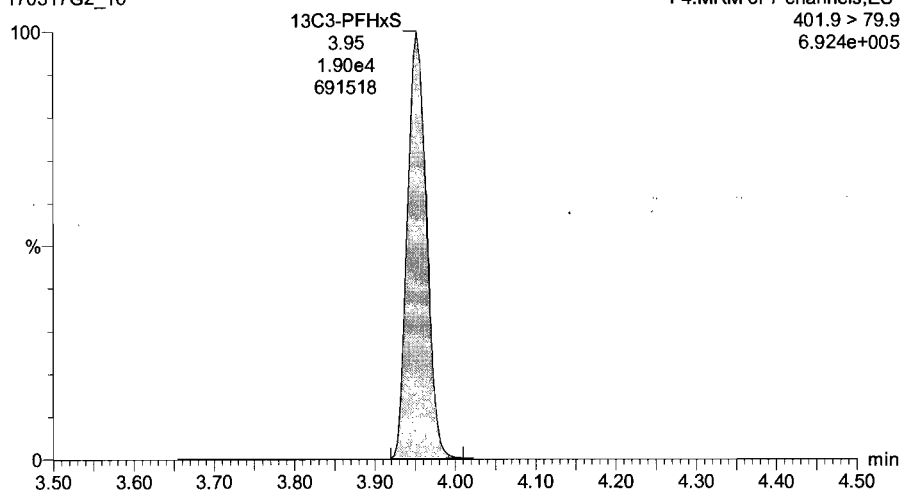
13C5-PFHxA

170317G2_16



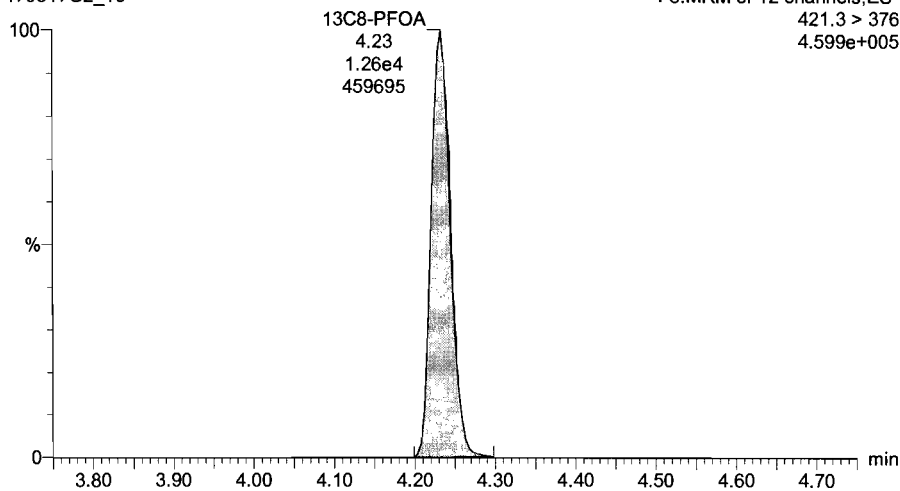
13C3-PFHxS

170317G2_16



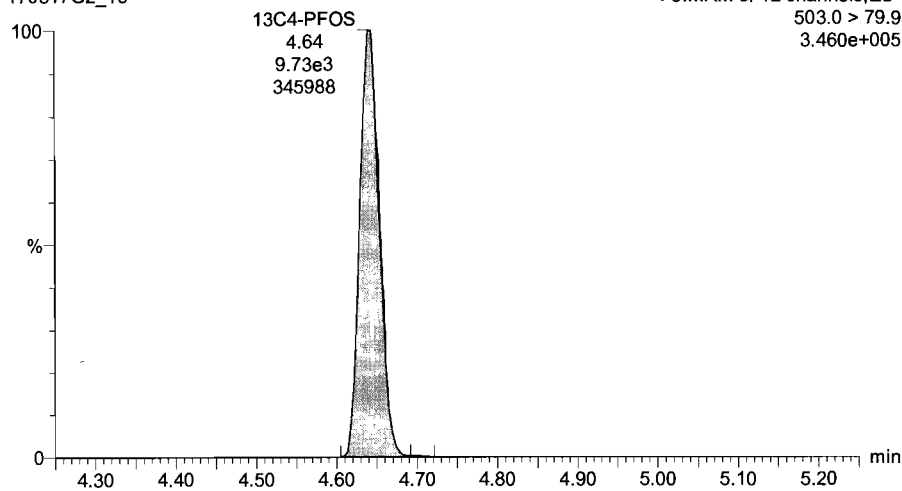
13C8-PFOA

170317G2_16



13C4-PFOS

170317G2_16



Dataset: Untitled

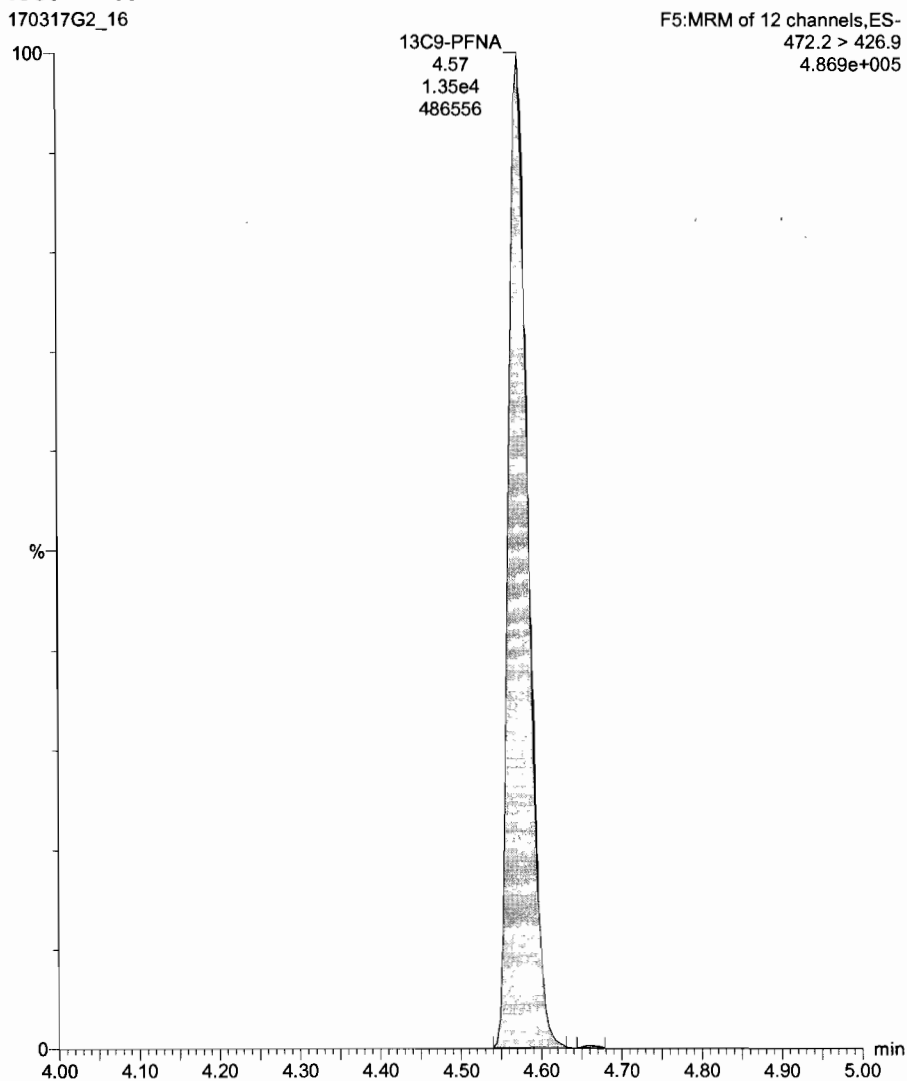
Last Altered: Monday, March 20, 2017 8:14:49 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 8:14:53 AM Pacific Daylight Time

Name: 170317G2_16, Date: 17-Mar-2017, Time: 18:56:18, ID: ST170317G2-2 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

13C9-PFNA

170317G2_16



Dataset: U:\G1.PRO\Results\2017\New folder\170317G2-30.qld

Last Altered: Monday, March 20, 2017 9:27:16 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 9:28:15 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170317G2_30, Date: 17-Mar-2017, Time: 21:52:14, ID: ST170317G2-3 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

#	Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	7.54e3	7.69e3		1.000	2.98	5.37	107.4
2	2 PFHpA	363 > 318.9	1.36e4	1.95e4		1.000	3.84	4.97	99.5
3	3 PFHxS	398.9 > 79.6	5.45e3	7.51e3		1.000	3.96	5.04	100.8
4	4 PFOA	413 > 368.7	1.27e4	3.21e4		1.000	4.24	5.51	110.1
5	5 PFNA	463 > 418.8	9.47e3	1.00e4		1.000	4.58	5.37	107.4
6	6 PFOS	499 > 79.9	1.47e3	7.47e3		1.000	4.65	4.58	91.7
7	7 13C3-PFBS	302.0 > 98.8	7.69e3	1.93e4	0.501	1.000	2.98	9.95	79.6
8	8 13C4-PFHpA	367.2 > 321.8	1.95e4	1.93e4	1.237	1.000	3.84	10.2	81.9
9	9 18O2-PFHxS	403 > 102.6	7.51e3	1.93e4	0.495	1.000	3.96	9.84	78.7
10	10 13C2-PFOA	414.9 > 369.7	3.21e4	1.04e4	3.221	1.000	4.24	12.0	95.7
11	11 13C5-PFNA	468.2 > 422.9	1.00e4	1.18e4	0.979	1.000	4.58	10.9	86.8
12	12 13C8-PFOS	507.0 > 79.9	7.47e3	7.93e3	1.080	1.000	4.64	10.9	87.2
13	13 13C5-PFHxA	318 > 272.9	3.02e4	3.02e4	1.000	1.000	3.33	12.5	100.0
14	14 13C3-PFHxS	401.9 > 79.9	1.93e4	1.93e4	1.000	1.000	3.96	12.5	100.0
15	15 13C8-PFOA	421.3 > 376	1.04e4	1.04e4	1.000	1.000	4.24	12.5	100.0
16	16 13C9-PFNA	472.2 > 426.9	1.18e4	1.18e4	1.000	1.000	4.58	12.5	100.0
17	17 13C4-PFOS	503.0 > 79.9	7.93e3	7.93e3	1.000	1.000	4.64	12.5	100.0

75-125
↓
60-150
↓
50-150
60-150

AC
3/20/17

Dataset: Untitled

Last Altered: Monday, March 20, 2017 09:39:14 Pacific Daylight Time

Printed: Monday, March 20, 2017 09:40:12 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Compound name: PFBS

	Name	ID	Acq.Date	Acq.Time
1	170317G2_1	IPA	17-Mar-17	15:48:14
2	170317G2_2	ST170317G2-1 PFC CS2 17C1703	17-Mar-17	16:00:26
3	170317G2_3	IPA	17-Mar-17	16:13:08
4	170317G2_4	1700304-01 Field Blank (420-117740-1) 0.12255	17-Mar-17	16:25:43
5	170317G2_5	1700299-01 MATPEW100 0.12287	17-Mar-17	16:38:13
6	170317G2_6	1700299-02 MATPEW101 0.11464	17-Mar-17	16:50:46
7	170317G2_7	1700299-03 MATPEW102 0.12518	17-Mar-17	17:03:22
8	170317G2_8	1700311-02@5X OF-SOW-091D-0317 0.12329	17-Mar-17	17:15:57
9	170317G2_9	1700311-03@5X OF-SOW-091DP-0317 0.124...	17-Mar-17	17:28:29
10	170317G2_10	1700311-06@5X OF-SOW-091M-0317 0.12783	17-Mar-17	17:41:02
11	170317G2_11	1700311-01 OF-SOW-091A-0317 0.11879	17-Mar-17	17:53:36
12	170317G2_12	1700311-02 OF-SOW-091D-0317 0.12329	17-Mar-17	18:06:04
13	170317G2_13	1700311-03 OF-SOW-091DP-0317 0.12421	17-Mar-17	18:18:38
14	170317G2_14	1700311-04 OF-EB030817 0.12212	17-Mar-17	18:31:13
15	170317G2_15	IPA	17-Mar-17	18:43:44
16	170317G2_16	ST170317G2-2 PFC CS2 17C1703	17-Mar-17	18:56:18
17	170317G2_17	IPA	17-Mar-17	19:09:09
18	170317G2_18	1700311-05 OF-SOW-091K-0317 0.12112	17-Mar-17	19:21:37
19	170317G2_19	1700311-06 OF-SOW-091M-0317 0.12783	17-Mar-17	19:34:10
20	170317G2_20	1700311-07 OF-FB030817 0.12533	17-Mar-17	19:46:47
21	170317G2_21	1700311-08 OF-SOW-091L-0317 0.11948	17-Mar-17	19:59:20
22	170317G2_22	1700311-09 OF-14-GW05-0317 0.12223	17-Mar-17	20:11:53
23	170317G2_23	1700314-01 OUTFALL #1 0.125	17-Mar-17	20:24:22
24	170317G2_24	1700314-02 OUTFALL #2 0.125	17-Mar-17	20:36:55
25	170317G2_25	1700314-03 OUTFALL #2A 0.125	17-Mar-17	20:49:28
26	170317G2_26	1700314-04 OUTFALL #3 0.125	17-Mar-17	21:02:01
27	170317G2_27	1700314-05 OUTFALL #4 0.125	17-Mar-17	21:14:35
28	170317G2_28	1700314-06 PFC FIELD BLANK@ OUTFALL#...	17-Mar-17	21:27:08
29	170317G2_29	IPA	17-Mar-17	21:39:42
30	170317G2_30	ST170317G2-3 PFC CS2 17C1703	17-Mar-17	21:52:14
31	170317G2_31	IPA	17-Mar-17	22:04:48

Dataset: Untitled

Last Altered: Monday, March 20, 2017 09:39:14 Pacific Daylight Time

Printed: Monday, March 20, 2017 09:40:12 Pacific Daylight Time

Compound name: PFBS

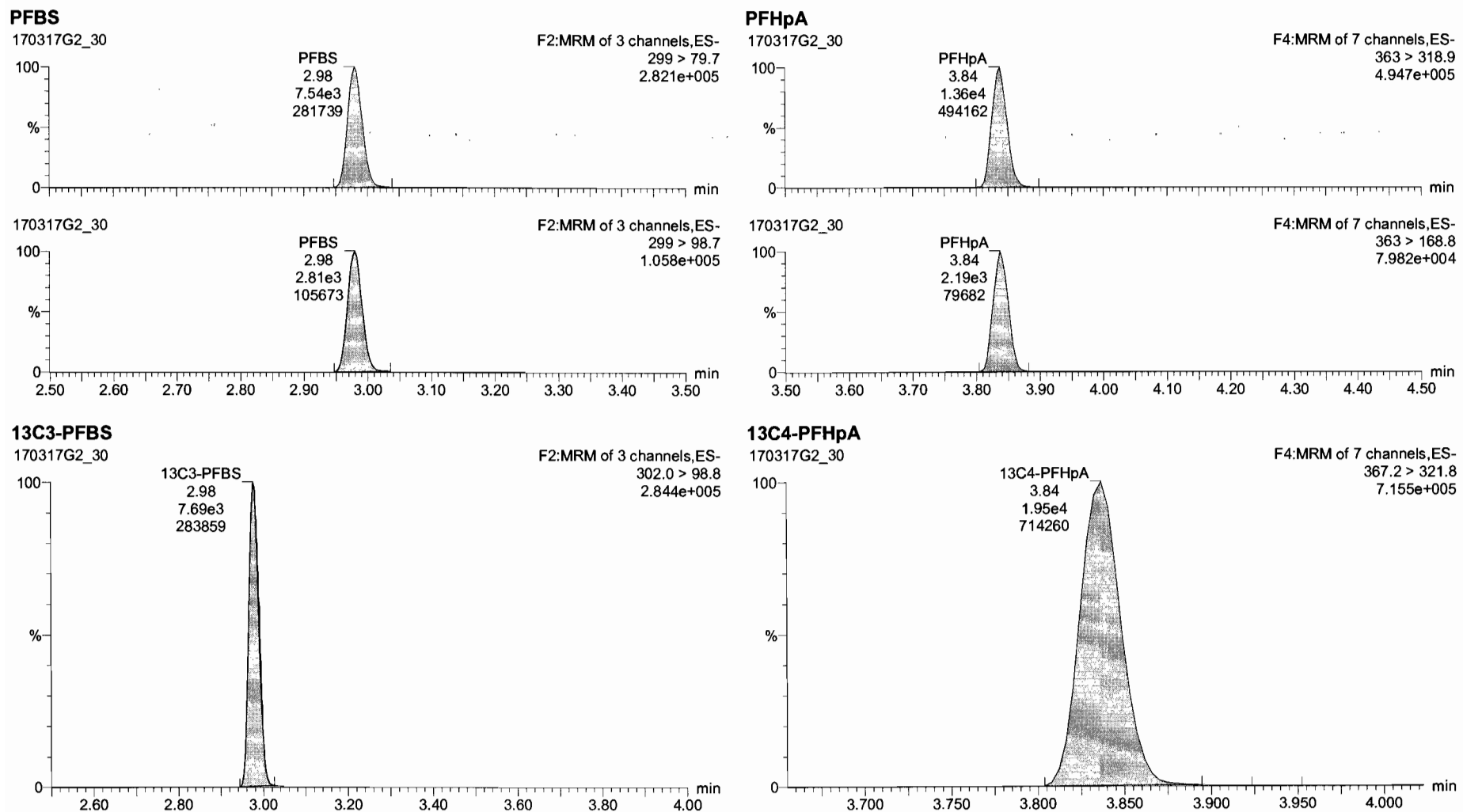
	Name	ID	Acq.Date	Acq.Time
32	170317G2_32	B7C0050-MS1 Matrix Spike 0.125	17-Mar-17	22:17:21
33	170317G2_33	B7C0050-MSD1 Matrix Spike Dup 0.125	17-Mar-17	22:29:53
34	170317G2_34	1700304-02RE1@10XB-104-Trailer(420-1177...	17-Mar-17	22:42:22
35	170317G2_35	1700304-02RE1 B-104 -Trailer (420-117740-2)...	17-Mar-17	22:54:56
36	170317G2_36	CS3 A Tester 17C1715	17-Mar-17	23:07:28
37	170317G2_37	IPA	17-Mar-17	23:20:02
38	170317G2_38	ST170317G2-4 PFC CS2 17C1703	17-Mar-17	23:32:36
39	170317G2_39	IPA	17-Mar-17	23:45:10

Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:15:04 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:15:07 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170317G2_30, Date: 17-Mar-2017, Time: 21:52:14, ID: ST170317G2-3 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

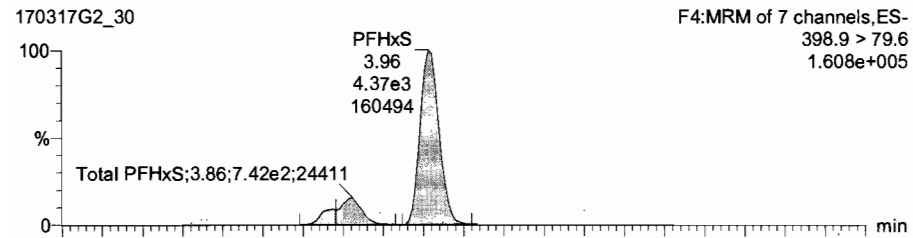


Dataset: Untitled

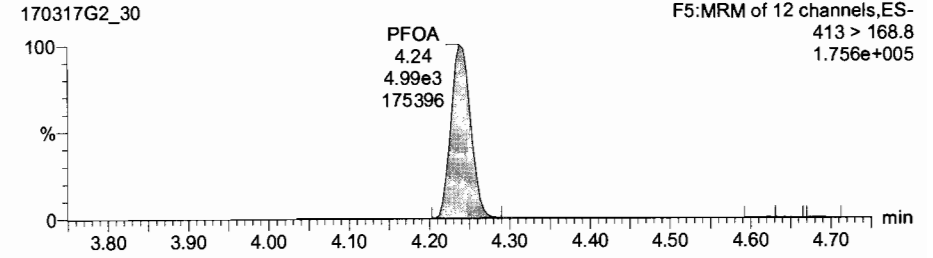
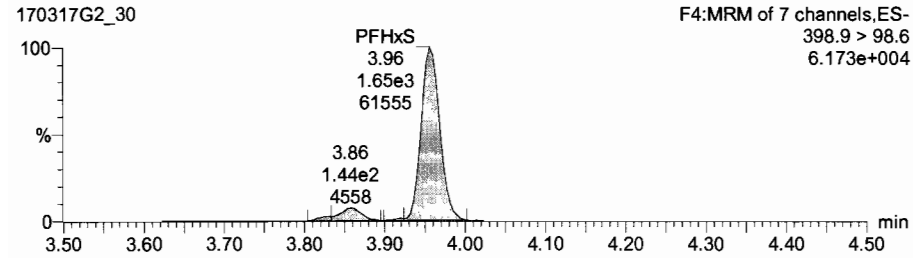
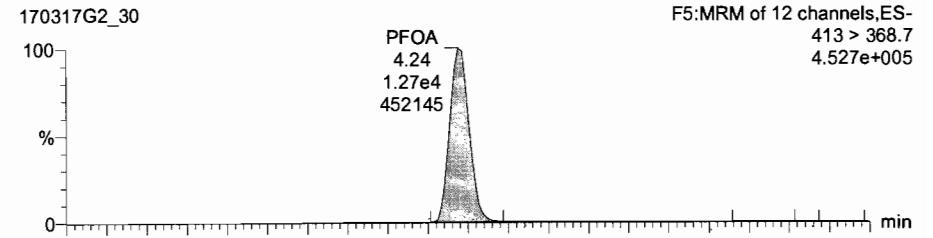
Last Altered: Monday, March 20, 2017 8:15:04 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:15:07 AM Pacific Daylight Time

Name: 170317G2_30, Date: 17-Mar-2017, Time: 21:52:14, ID: ST170317G2-3 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

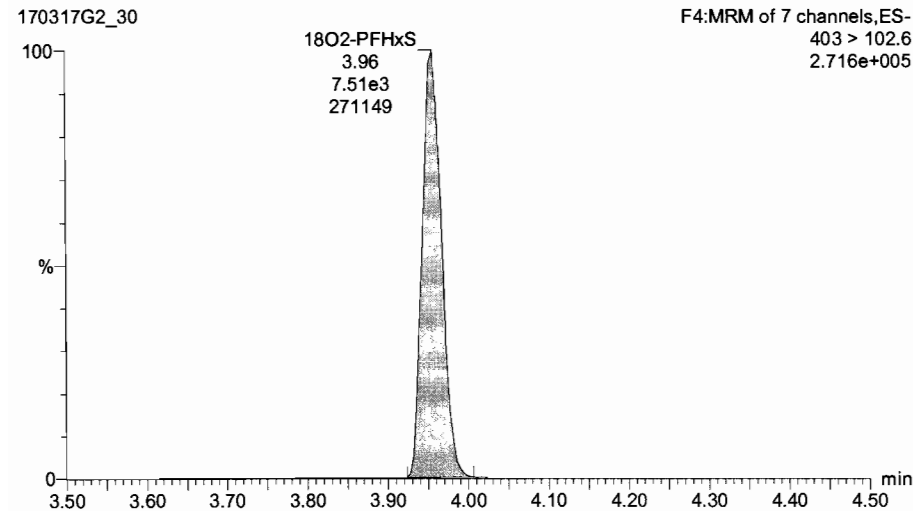
PFHxS



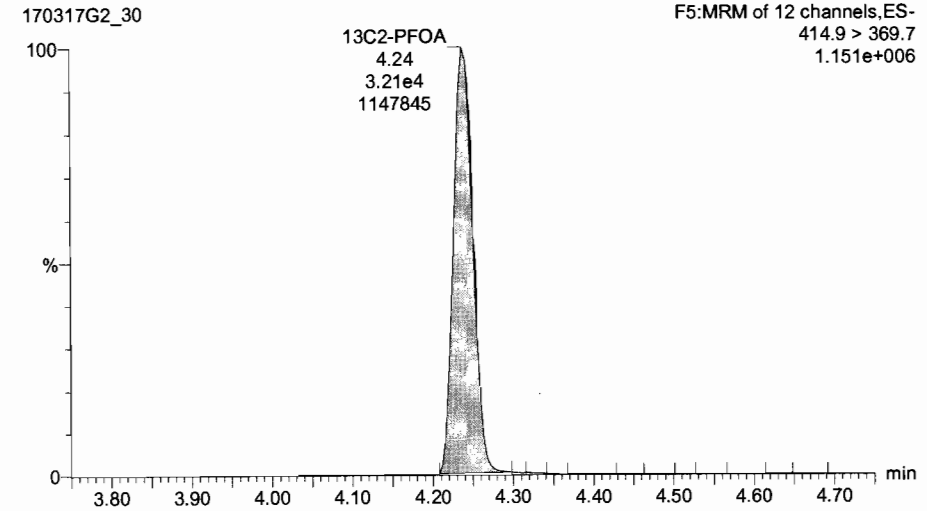
PFOA



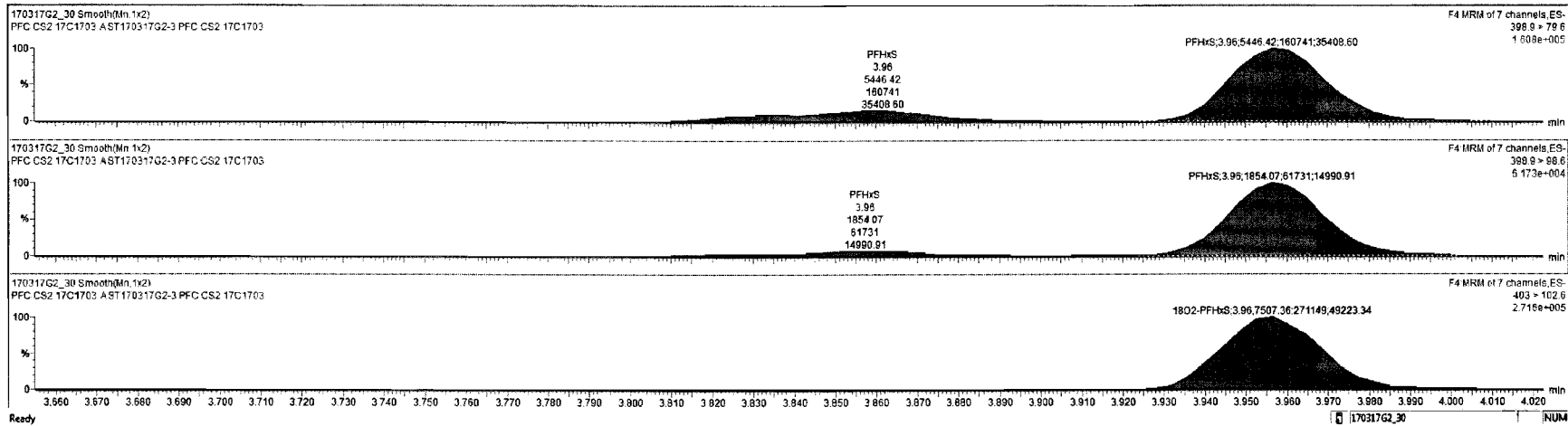
18O2-PFHxS



13C2-PFOA



#	Name	Trace	Area	RRF	WtAve	Pred RT	RT	Conc	MDL	MRac	DL
1	PFBS	299 > 79.7	7.54e3		1.000	2.96	2.96	5.37	NO	107.4	0.0000000
2	PFHpA	363 > 318.9	1.36e4		1.000	3.84	3.84	4.97	NO	99.5	0.0000000
3	PFHxS	398.9 > 79.6	6.49e3		1.000	3.96	3.96	5.04	YES	109.8	0.0000000
4	PFOA	413 > 368.7	1.27e4		1.000	4.24	4.24	5.51	YES	110.1	0.0000000
5	PFNA	463 > 418.8	9.47e3		1.000	4.58	4.58	5.37	YES	107.4	0.0000000
6	PFOS	499 > 79.9	1.47e3		1.000	4.65	4.65	4.58	YES	91.7	0.2316208
7	13C3-PFBS	302.0 > 98.8	7.69e3	0.501	1.000	2.96	2.96	9.96	NO	79.6	0.0003442
8	13C4-PFHpA	367.2 > 321.8	1.95e4	1.24	1.000	3.84	3.84	10.2	NO	81.9	0.0021439
9	18O2-PFHxS	403 > 102.6	7.51e3	0.495	1.000	3.96	3.96	9.84	NO	78.7	0.0004892
10	13C2-PFOA	414.9 > 369.7	3.21e4	3.22	1.000	4.24	4.24	12.0	NO	95.7	0.0205649
11	13C5-PFNA	468.2 > 422.9	1.00e4	0.979	1.000	4.58	4.58	10.9	NO	86.8	0.0007699
12	13C8-PFOS	507.0 > 79.9	7.47e3	1.08	1.000	4.64	4.64	10.9	NO	87.2	0.0022290
13	13C3-PFHpA	318 > 272.9	3.02e4	1.00	1.000	3.29	3.33	12.5	NO	100.0	0.0064559
14	13C3-PFHxS	401.9 > 79.9	1.93e4	1.00	1.000	3.94	3.96	12.5	NO	100.0	0.0008267
15	13C8-PFOA	421.3 > 376	1.04e4	1.00	1.000	4.22	4.24	12.5	NO	100.0	0.0008464
16	13C9-PFNA	472.2 > 426.9	1.16e4	1.00	1.000	4.56	4.58	12.5	NO	100.0	0.0003960
17	13C4-PFOS	503.0 > 79.9	7.93e3	1.00	1.000	4.67	4.64	12.5	NO	100.0	0.0090078
18	Total PFBS	299 > 79.7	7.54e3		1.000	3.11		5.37	NO		
19	Total PFHxS	398.9 > 79.6	6.49e3		1.000	4.09		5.92	NO		
20	Total PFOA	413 > 368.7	1.27e4		1.000	4.39		5.51	NO		
21	Total PFOS	499 > 79.9	1.59e3		1.000	4.67		5.22	NO		0.2316208

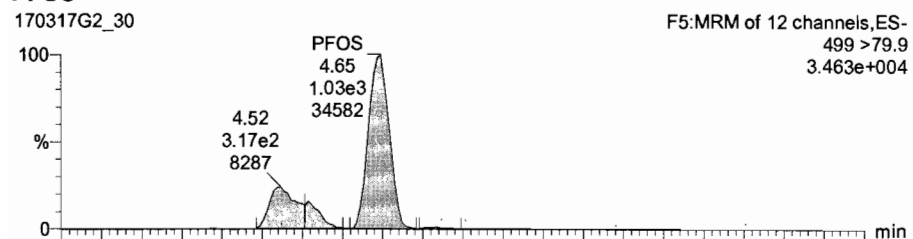


Dataset: Untitled

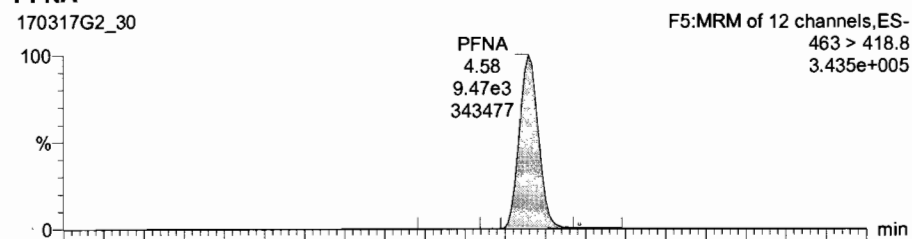
Last Altered: Monday, March 20, 2017 8:15:04 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:15:07 AM Pacific Daylight Time

Name: 170317G2_30, Date: 17-Mar-2017, Time: 21:52:14, ID: ST170317G2-3 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

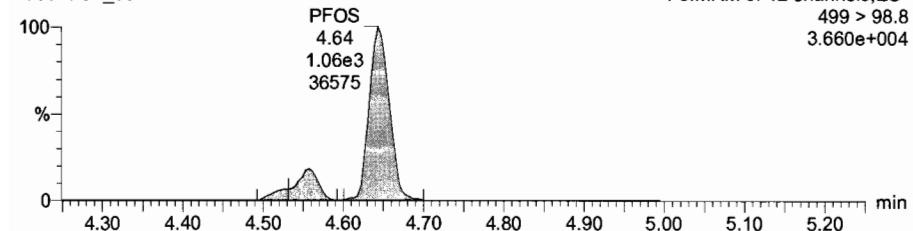
PFOS



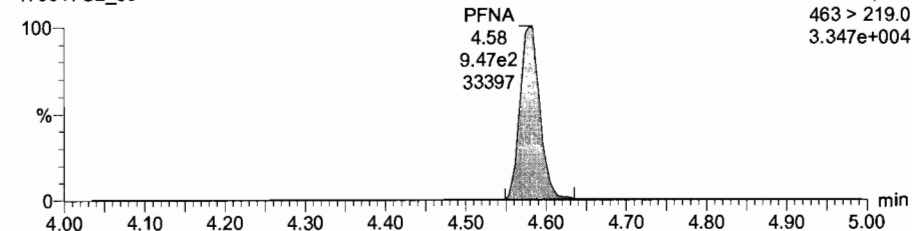
PFNA



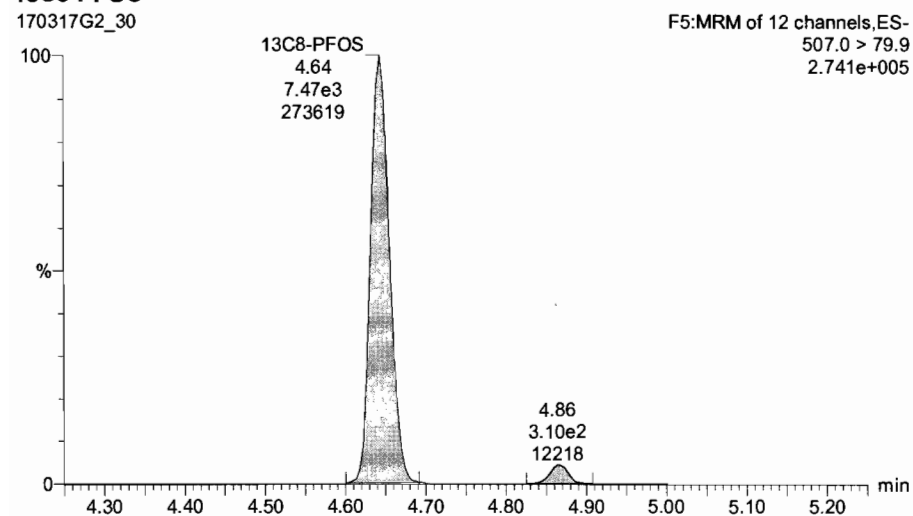
170317G2_30



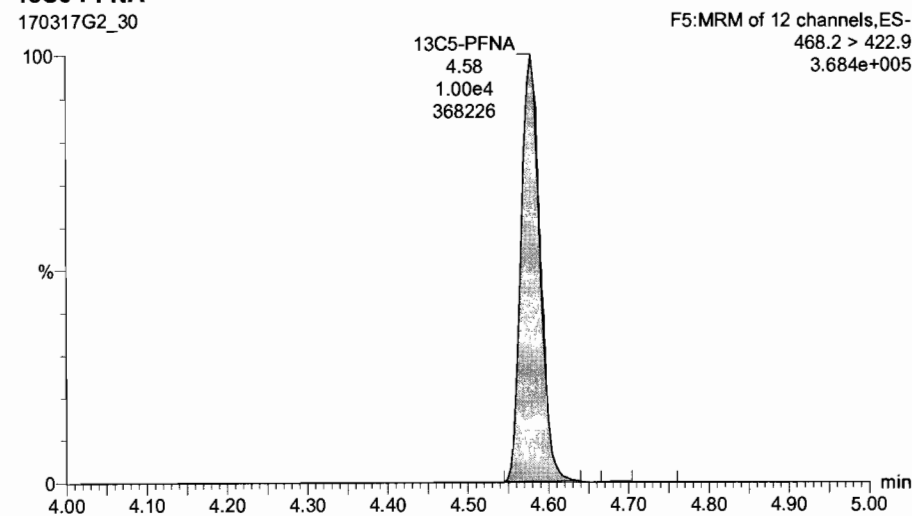
170317G2_30



13C8-PFOS

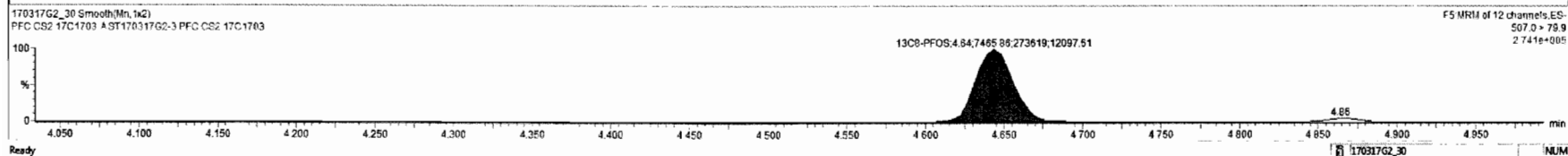
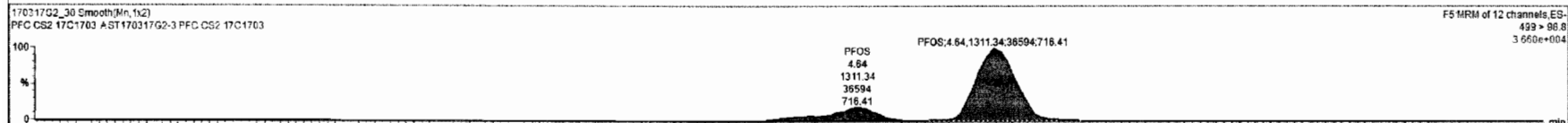
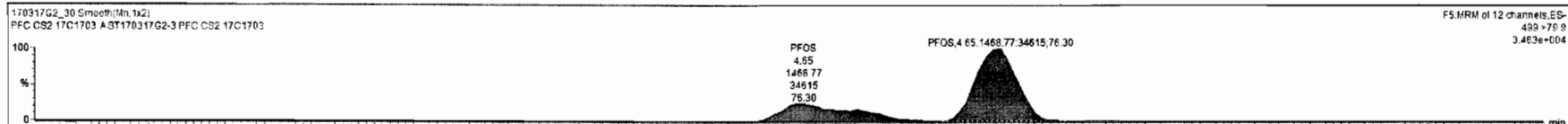


13C5-PFNA



170317G2_30 - ST170317G2-3 PFC CS2 17C1703 - PFC CS2 17C1703 A

#	Name	Trace	Area	RRF	WAVEL	Pred.RT	RT	Conc.	>MDL	%Rec	DL
1	PFBS	299 > 79.7	7.54e3		1.000	2.98	2.98	5.37	NO	107.4	0.0000000
2	PFHxA	383 > 316.9	1.35e4		1.000	3.84	3.84	4.97	NO	99.5	0.0000000
3	PFHxS	398.9 > 79.6	5.45e3		1.000	3.96	3.96	5.04	YES	100.3	0.0000000
4	PFOA	413 > 368.7	1.27e4		1.000	4.24	4.24	5.51	YES	110.1	0.0000000
5	PFNA	483 > 418.8	9.47e3		1.000	4.58	4.58	5.37	YES	107.4	0.0000000
6	PFOS	499 > 79.9	1.47e4		1.000	4.65	4.65	5.22	YES	91.7	0.2316208
7	13C1-PFBS	312.0 > 98.8	7.89e3	0.501	1.000	2.98	2.98	9.95	NO	79.6	0.0003442
8	13C4-PFHxA	387.2 > 321.8	1.95e4	1.24	1.000	3.84	3.84	10.2	NO	81.9	0.0021439
9	18O2-PFHxS	403 > 102.6	7.51e3	0.495	1.000	3.96	3.96	9.84	NO	78.7	0.0004992
10	13C2-PFOA	414.9 > 369.7	3.21e4	3.22	1.000	4.24	4.24	12.0	NO	95.7	0.0205949
11	13C5-PFNA	488.2 > 422.9	1.00e4	0.979	1.000	4.58	4.58	10.9	NO	86.8	0.0007699
12	13C6-PFOS	507.0 > 79.9	7.47e3	1.08	1.000	4.64	4.64	10.9	NO	87.2	0.0022296
13	13C5-PFHxA	318 > 272.9	3.02e4	1.00	1.000	3.29	3.29	12.5	NO	100.0	0.0064859
14	13C1-PFHxS	401.9 > 79.9	1.93e4	1.00	1.000	3.94	3.96	12.5	NO	100.0	0.0005207
15	13C8-PFOA	421.3 > 376	1.04e4	1.00	1.000	4.22	4.24	12.5	NO	100.0	0.0008464
16	13C8-PFNA	472.0 > 426.9	1.18e4	1.00	1.000	4.56	4.58	12.5	NO	100.0	0.0039680
17	13C4-PFOS	503.0 > 79.9	7.93e3	1.00	1.000	4.67	4.64	12.5	NO	100.0	0.0000078
18	Total PFBS	299 > 79.7	7.54e3		1.000	3.11		5.37	NO		
19	Total PFHxS	398.9 > 79.6	6.49e3		1.000	4.09		5.92	NO		
20	Total PFOA	413 > 368.7	1.27e4		1.000	4.39		5.51	NO		
21	Total PFOS	499 > 79.9	1.59e3		1.000	4.67		5.22	NO		0.2316208



Dataset: Untitled

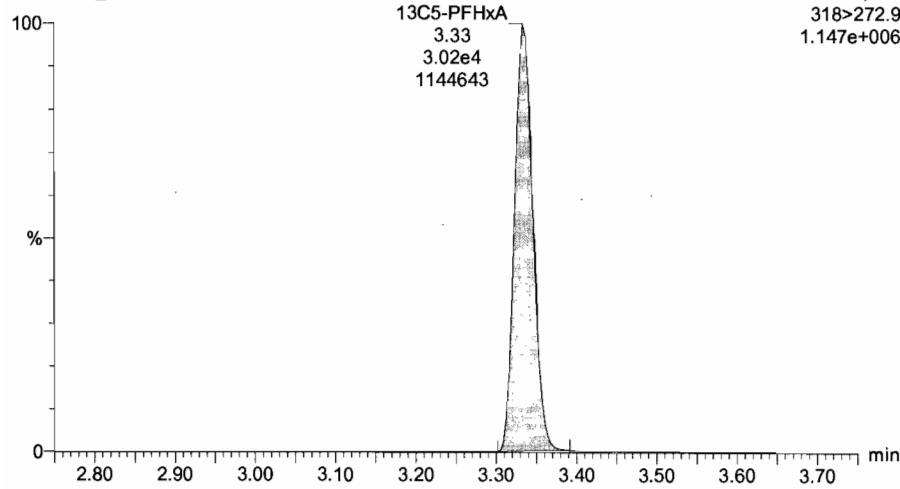
Last Altered: Monday, March 20, 2017 8:15:04 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 8:15:07 AM Pacific Daylight Time

Name: 170317G2_30, Date: 17-Mar-2017, Time: 21:52:14, ID: ST170317G2-3 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

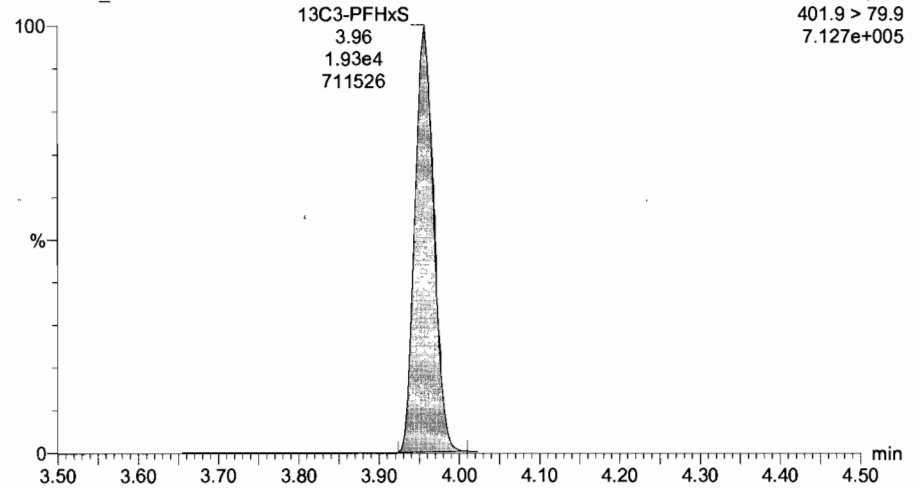
13C5-PFHxA

170317G2_30



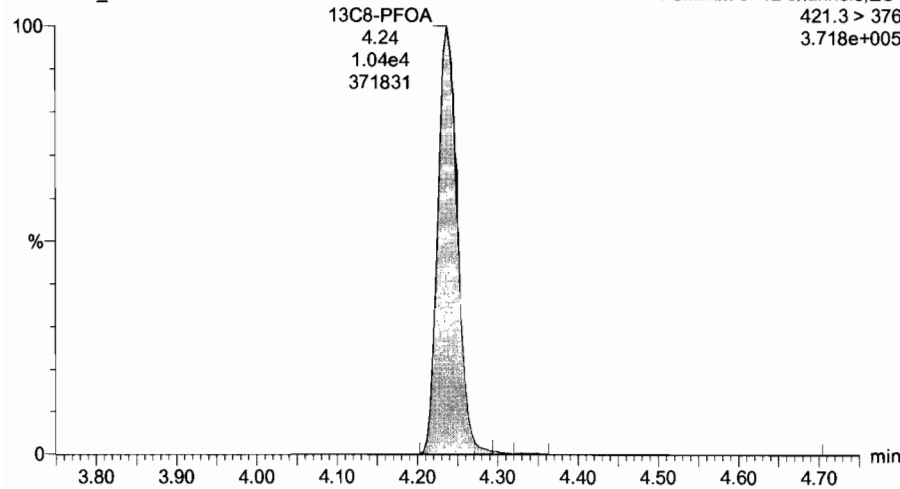
13C3-PFHxS

170317G2_30



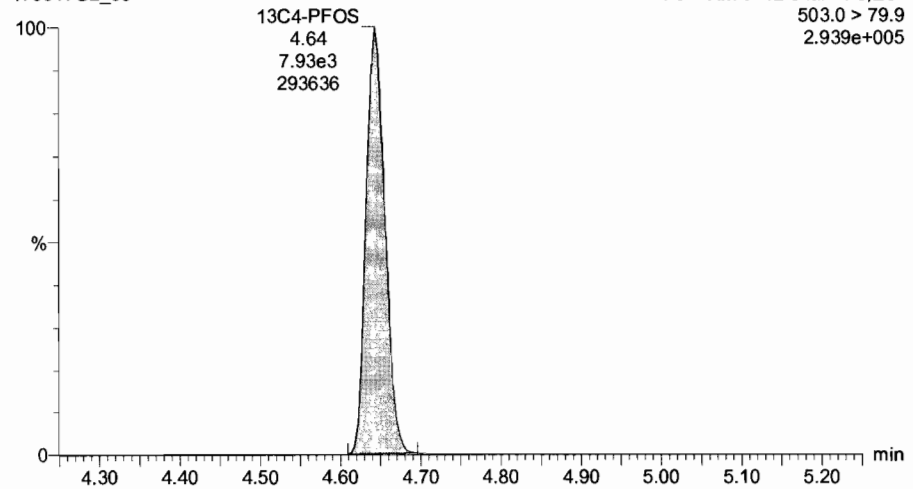
13C8-PFOA

170317G2_30



13C4-PFOS

170317G2_30



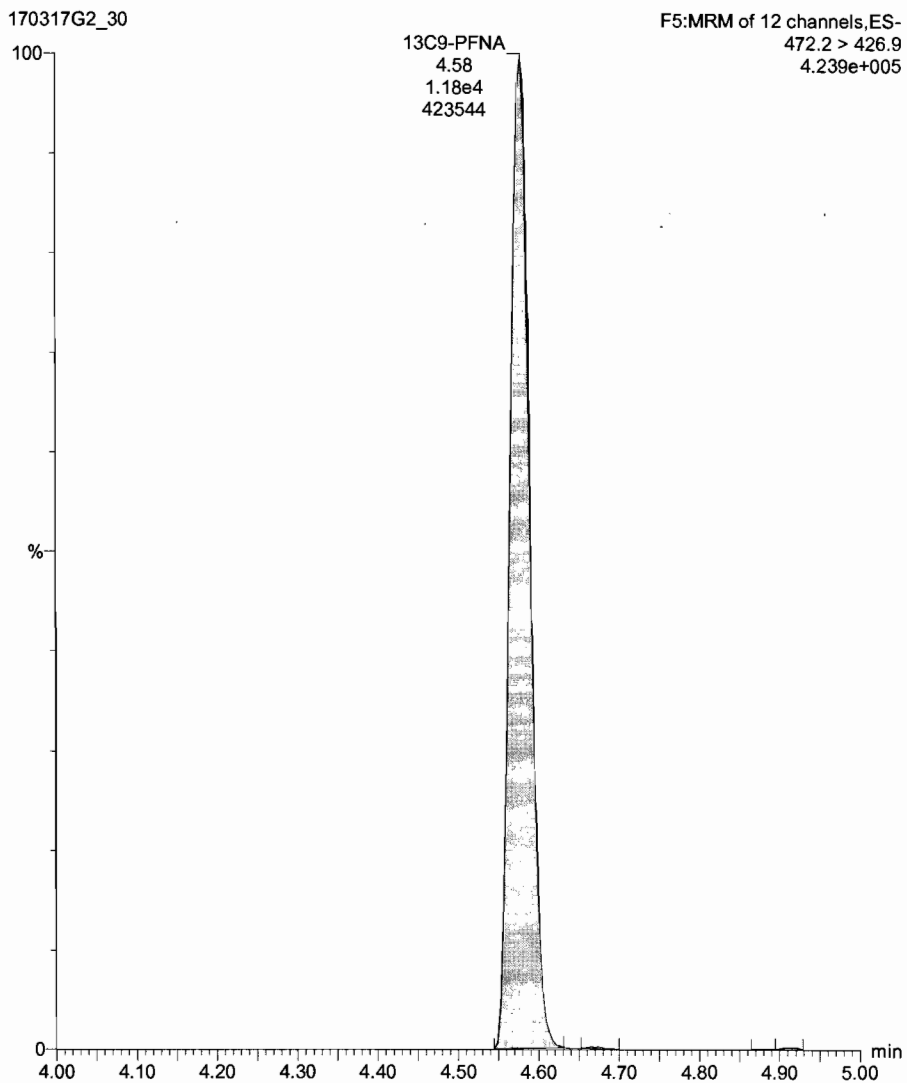
Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:15:04 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:15:07 AM Pacific Daylight Time

Name: 170317G2_30, Date: 17-Mar-2017, Time: 21:52:14, ID: ST170317G2-3 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

13C9-PFNA

170317G2_30



Dataset: U:\G1.PRO\Results\2017\New folder\170317G2-38.qld

Last Altered: Monday, March 20, 2017 9:32:45 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 9:33:06 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170317G2_38, Date: 17-Mar-2017, Time: 23:32:36, ID: ST170317G2-4 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

#	Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	7.53e3	8.10e3		1.000	2.98	5.09	101.8
2	2 PFHpA	363 > 318.9	1.46e4	1.97e4		1.000	3.84	5.29	105.8
3	3 PFHxS	398.9 > 79.6	6.03e3	7.92e3		1.000	3.96	5.29	105.9
4	4 PFOA	413 > 368.7	1.19e4	3.24e4		1.000	4.25	5.10	102.0
5	5 PFNA	463 > 418.8	8.89e3	8.94e3		1.000	4.58	5.65	112.9
6	6 PFOS	499 > 79.9	1.49e3	6.89e3		1.000	4.64	5.03	100.7
7	7 13C3-PFBS	302.0 > 98.8	8.10e3	1.82e4	0.501	1.000	2.98	11.1	88.6
8	8 13C4-PFHpA	367.2 > 321.8	1.97e4	1.82e4	1.237	1.000	3.84	10.9	87.2
9	9 18O2-PFHxS	403 > 102.6	7.92e3	1.82e4	0.495	1.000	3.96	11.0	87.8
10	10 13C2-PFOA	414.9 > 369.7	3.24e4	1.12e4	3.221	1.000	4.25	11.2	89.4
11	11 13C5-PFNA	468.2 > 422.9	8.94e3	1.07e4	0.979	1.000	4.58	10.6	85.0
12	12 13C8-PFOS	507.0 > 79.9	6.89e3	7.27e3	1.080	1.000	4.64	11.0	87.7
13	13 13C5-PFHxA	318 > 272.9	3.12e4	3.12e4	1.000	1.000	3.34	12.5	100.0
14	14 13C3-PFHxS	401.9 > 79.9	1.82e4	1.82e4	1.000	1.000	3.96	12.5	100.0
15	15 13C8-PFOA	421.3 > 376	1.12e4	1.12e4	1.000	1.000	4.25	12.5	100.0
16	16 13C9-PFNA	472.2 > 426.9	1.07e4	1.07e4	1.000	1.000	4.58	12.5	100.0
17	17 13C4-PFOS	503.0 > 79.9	7.27e3	7.27e3	1.000	1.000	4.64	12.5	100.0

75-125
↓
60-150
↓
50-150
60-150

AC
3/20/17

Dataset: Untitled

Last Altered: Monday, March 20, 2017 09:39:14 Pacific Daylight Time

Printed: Monday, March 20, 2017 09:40:12 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Compound name: PFBS

	Name	ID	Acq.Date	Acq.Time
1	170317G2_1	IPA	17-Mar-17	15:48:14
2	170317G2_2	ST170317G2-1 PFC CS2 17C1703	17-Mar-17	16:00:26
3	170317G2_3	IPA	17-Mar-17	16:13:08
4	170317G2_4	1700304-01 Field Blank (420-117740-1) 0.12255	17-Mar-17	16:25:43
5	170317G2_5	1700299-01 MATPEW100 0.12287	17-Mar-17	16:38:13
6	170317G2_6	1700299-02 MATPEW101 0.11464	17-Mar-17	16:50:46
7	170317G2_7	1700299-03 MATPEW102 0.12518	17-Mar-17	17:03:22
8	170317G2_8	1700311-02@5X OF-SOW-091D-0317 0.12329	17-Mar-17	17:15:57
9	170317G2_9	1700311-03@5X OF-SOW-091DP-0317 0.124...	17-Mar-17	17:28:29
10	170317G2_10	1700311-06@5X OF-SOW-091M-0317 0.12783	17-Mar-17	17:41:02
11	170317G2_11	1700311-01 OF-SOW-091A-0317 0.11879	17-Mar-17	17:53:36
12	170317G2_12	1700311-02 OF-SOW-091D-0317 0.12329	17-Mar-17	18:06:04
13	170317G2_13	1700311-03 OF-SOW-091DP-0317 0.12421	17-Mar-17	18:18:38
14	170317G2_14	1700311-04 OF-EB030817 0.12212	17-Mar-17	18:31:13
15	170317G2_15	IPA	17-Mar-17	18:43:44
16	170317G2_16	ST170317G2-2 PFC CS2 17C1703	17-Mar-17	18:56:18
17	170317G2_17	IPA	17-Mar-17	19:09:09
18	170317G2_18	1700311-05 OF-SOW-091K-0317 0.12112	17-Mar-17	19:21:37
19	170317G2_19	1700311-06 OF-SOW-091M-0317 0.12783	17-Mar-17	19:34:10
20	170317G2_20	1700311-07 OF-FB030817 0.12533	17-Mar-17	19:46:47
21	170317G2_21	1700311-08 OF-SOW-091L-0317 0.11948	17-Mar-17	19:59:20
22	170317G2_22	1700311-09 OF14-GW05-0317 0.12223	17-Mar-17	20:11:53
23	170317G2_23	1700314-01 OUTFALL #1 0.125	17-Mar-17	20:24:22
24	170317G2_24	1700314-02 OUTFALL #2 0.125	17-Mar-17	20:36:55
25	170317G2_25	1700314-03 OUTFALL #2A 0.125	17-Mar-17	20:49:28
26	170317G2_26	1700314-04 OUTFALL #3 0.125	17-Mar-17	21:02:01
27	170317G2_27	1700314-05 OUTFALL #4 0.125	17-Mar-17	21:14:35
28	170317G2_28	1700314-06 PFC FIELD BLANK@ OUTFALL#...	17-Mar-17	21:27:08
29	170317G2_29	IPA	17-Mar-17	21:39:42
30	170317G2_30	ST170317G2-3 PFC CS2 17C1703	17-Mar-17	21:52:14
31	Work Order 1703170311	IPA	17-Mar-17	22:04:48

Dataset: Untitled

Last Altered: Monday, March 20, 2017 09:39:14 Pacific Daylight Time

Printed: Monday, March 20, 2017 09:40:12 Pacific Daylight Time

Compound name: PFBS

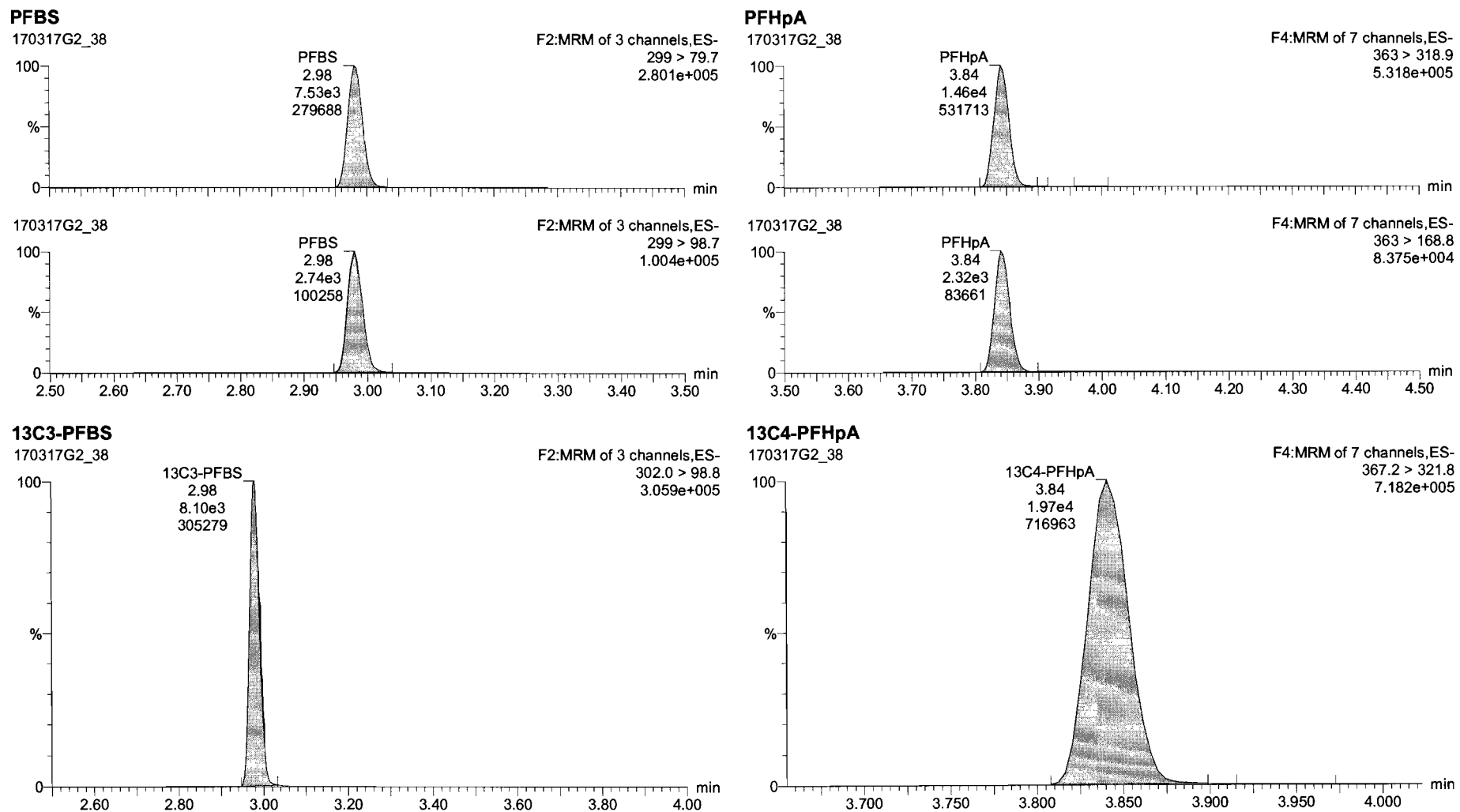
	Name	ID	Acq.Date	Acq.Time
32	170317G2_32	B7C0050-MS1 Matrix Spike 0.125	17-Mar-17	22:17:21
33	170317G2_33	B7C0050-MSD1 Matrix Spike Dup 0.125	17-Mar-17	22:29:53
34	170317G2_34	1700304-02RE1@10XB-104-Trailer(420-1177...	17-Mar-17	22:42:22
35	170317G2_35	1700304-02RE1 B-104 -Trailer (420-117740-2)...	17-Mar-17	22:54:56
36	170317G2_36	CS3 A Tester 17C1715	17-Mar-17	23:07:28
37	170317G2_37	IPA	17-Mar-17	23:20:02
38	170317G2_38	ST170317G2-4 PFC CS2 17C1703	17-Mar-17	23:32:36
39	170317G2_39	IPA	17-Mar-17	23:45:10

Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:15:17 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:15:21 AM Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170317G2_38, Date: 17-Mar-2017, Time: 23:32:36, ID: ST170317G2-4 PFC CS2 17C1703, Description: PFC CS2 17C1703 A



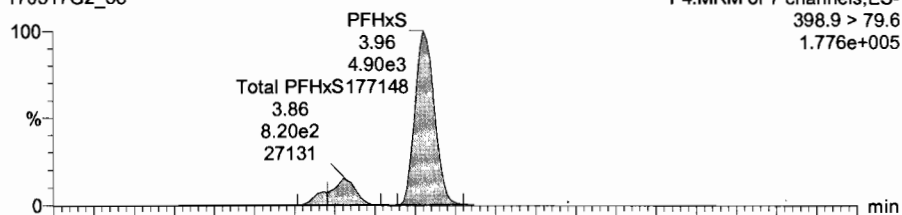
Dataset: Untitled

Last Altered: Monday, March 20, 2017 8:15:17 AM Pacific Daylight Time
Printed: Monday, March 20, 2017 8:15:21 AM Pacific Daylight Time

Name: 170317G2_38, Date: 17-Mar-2017, Time: 23:32:36, ID: ST170317G2-4 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

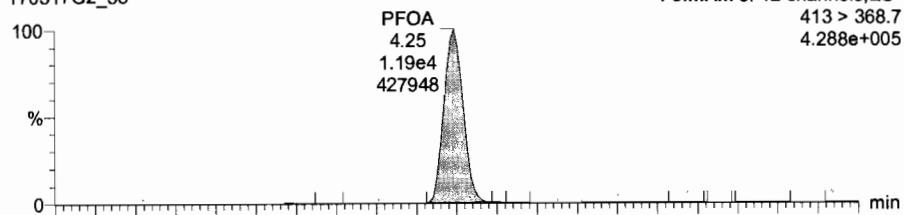
PFHxS

170317G2_38

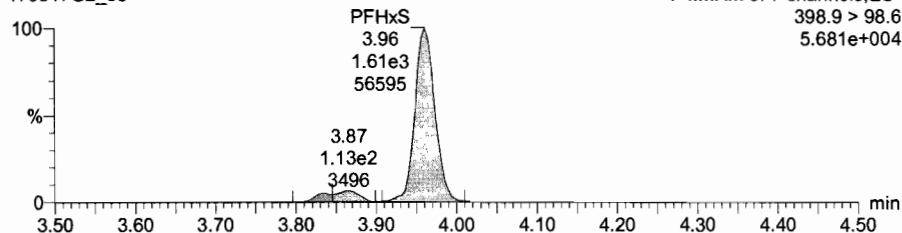


PFOA

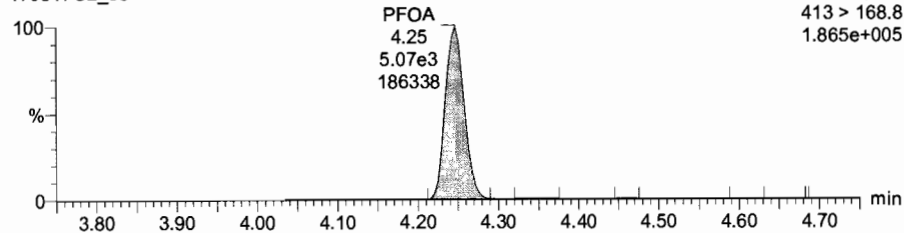
170317G2_38



170317G2_38

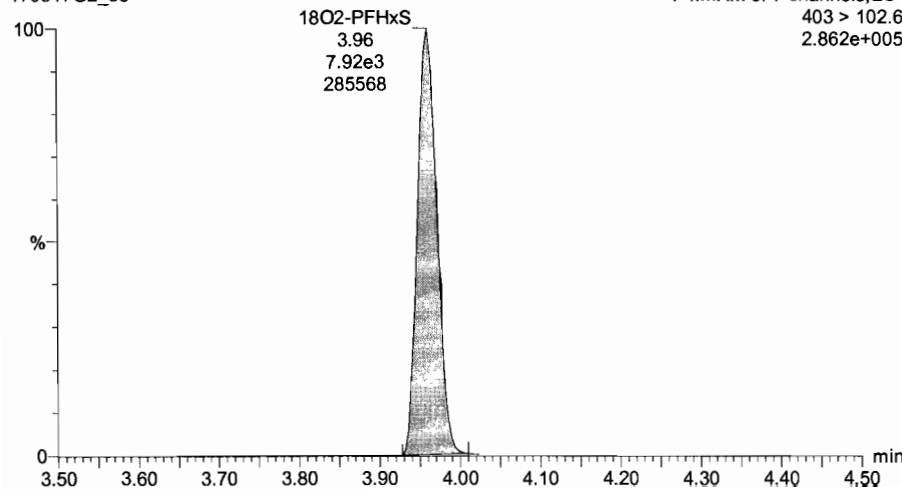


170317G2_38



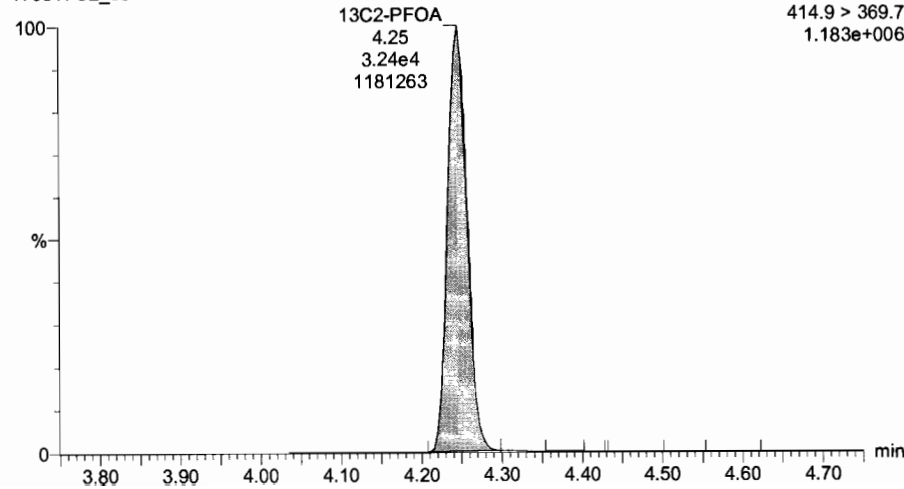
18O2-PFHxS

170317G2_38

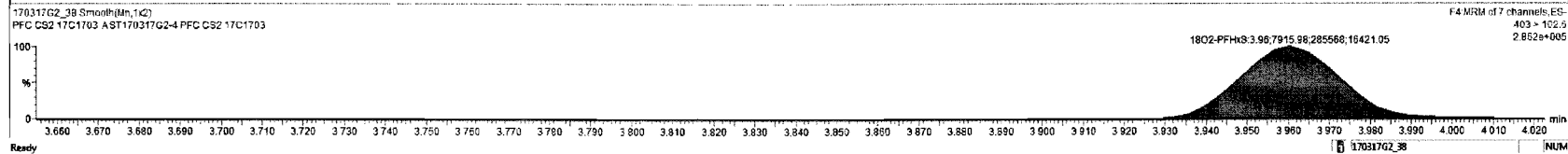
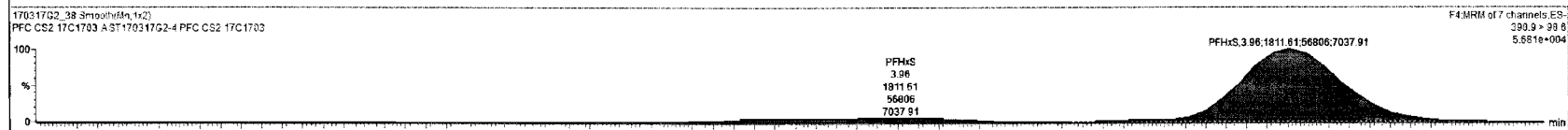


13C2-PFOA

170317G2_38



Name	Trace	Area	RRF	Wt/Wt	Prod RT	RT	Conc	MDL	%Rec	DL	
1	PFBS	299 > 79.7	7.53e3	1.000	2.98	2.98	5.09	NO	191.8	0.0000000	
2	PFHxA	363 > 315.9	1.46e4	1.000	3.84	3.84	5.29	NO	165.8	0.0000000	
3	PFHxS	398.9 > 79.6	6.03e3	1.000	3.96	3.96	5.29	YES	165.9	0.0000000	
4	PFOA	413 > 368.7	1.19e4	1.000	4.25	4.25	5.10	YES	162.0	0.0000000	
5	PFNA	463 > 418.8	8.89e3	1.000	4.58	4.58	5.65	YES	112.9	0.0000000	
6	PFOS	499 > 79.9	1.49e3	1.000	4.65	4.64	5.03	YES	100.7	0.1419964	
7	13C3-PFBS	302.0 > 98.8	8.10e3	0.501	1.000	2.96	2.96	11.1	NO	86.6	0.0023387
8	13C4-PFHxA	367.2 > 321.8	1.97e4	1.24	1.000	3.84	3.84	10.9	NO	87.2	0.0071228
9	18O2-PFHxS	403 > 102.6	7.92e3	0.495	1.000	3.96	3.96	11.0	NO	87.8	0.0019417
10	13C2-PFOA	414.9 > 369.7	3.24e4	3.22	1.000	4.25	4.25	11.2	NO	89.4	0.0047871
11	13C5-PFNA	468.2 > 422.9	8.94e3	0.979	1.000	4.58	4.58	10.6	NO	85.0	0.0026267
12	13C6-PFOS	503.0 > 79.9	6.89e3	1.08	1.000	4.64	4.64	11.0	NO	87.7	0.0016915
13	13C5-PFHxA	318-272.9	3.12e4	1.00	1.000	3.29	3.34	12.5	NO	100.0	0.0029241
14	13C3-PFHxS	401.9 > 79.9	1.82e4	1.00	1.000	3.94	3.96	12.5	NO	100.0	0.0025026
15	13C4-PFOA	421.3 > 378	1.12e4	1.00	1.000	4.22	4.25	12.5	NO	100.0	0.0082219
16	13C5-PFNA	472.2 > 426.9	1.07e4	1.00	1.000	4.56	4.58	12.5	NO	100.0	0.0014388
17	13C6-PFOS	503.0 > 79.9	7.27e3	1.08	1.000	4.67	4.64	12.5	NO	100.0	0.0026138
18	Total PFBS	299 > 79.7	7.53e3	1.000	3.11		5.09	NO			
19	Total PFHxS	398.9 > 79.6	7.10e3	1.000	4.63		6.14	NO			
20	Total PFOA	413 > 368.7	1.20e4	1.000	4.33		5.10	NO			
21	Total PFOS	499 > 79.9	1.92e3	1.000	4.67		6.73	NO		0.1419964	

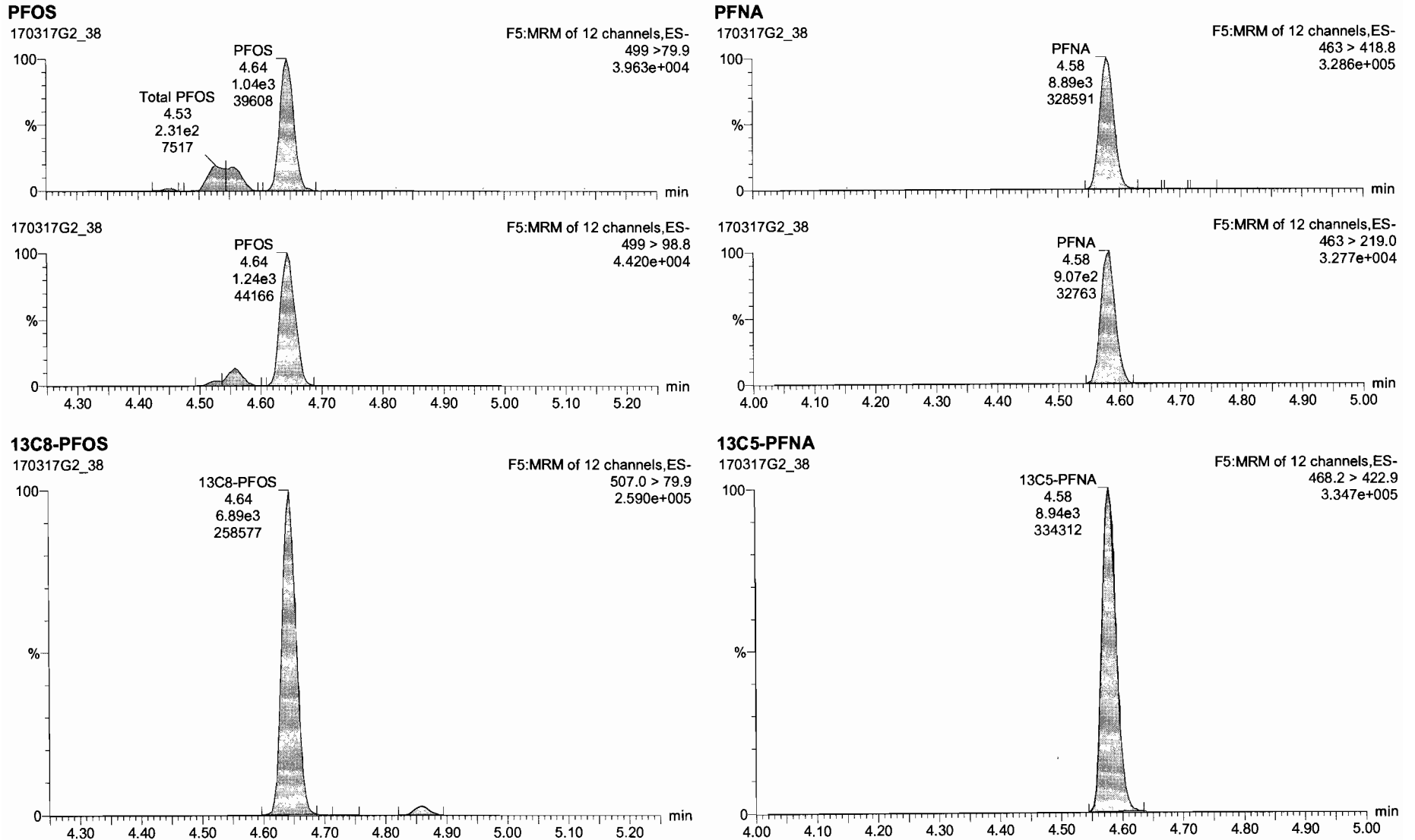


Dataset: Untitled

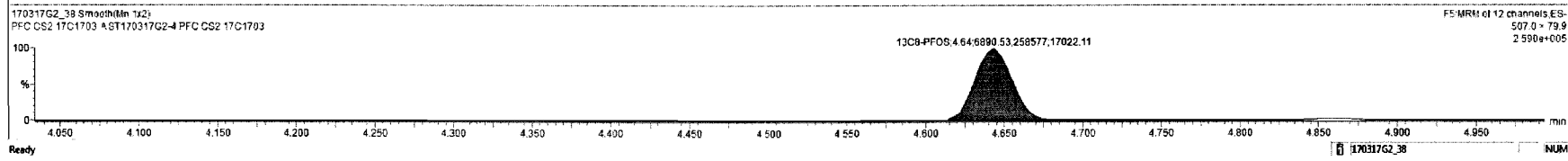
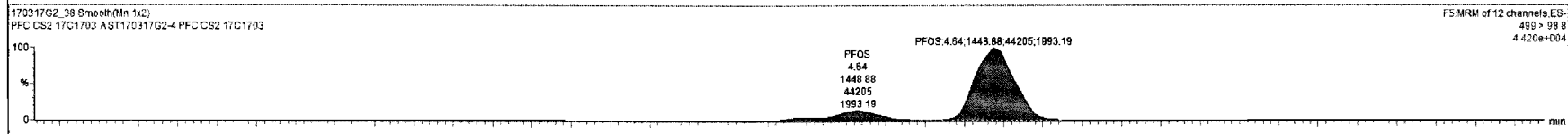
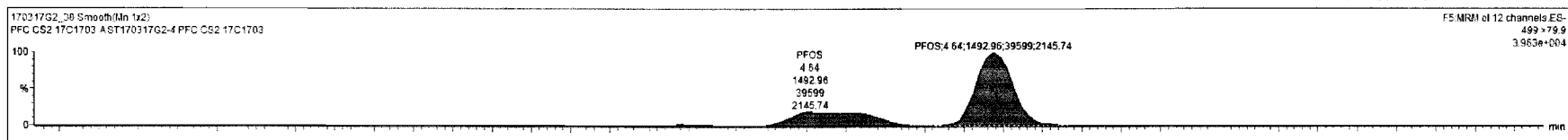
Last Altered: Monday, March 20, 2017 8:15:17 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 8:15:21 AM Pacific Daylight Time

Name: 170317G2_38, Date: 17-Mar-2017, Time: 23:32:36, ID: ST170317G2-4 PFC CS2 17C1703, Description: PFC CS2 17C1703 A



Name	Trace	Area	RRF	Wt%	Pred RT	RT	Conc	>MOL	%Rec	DL	
1	PFBS	299 > 79.7	7.53e3	1.000	2.93	2.93	5.09	NO	101.8	0.0000000	
2	PFHpA	363 > 318.9	1.46e4	1.000	3.24	3.24	5.29	NO	105.8	0.0000000	
3	PFHxS	368.9 > 79.6	6.03e3	1.000	3.96	3.96	5.29	YES	105.9	0.0000000	
4	PFOA	413 > 368.7	1.19e4	1.000	4.25	4.25	5.10	YES	102.0	0.0000000	
5	PFNA	463 > 418.8	8.89e3	1.000	4.58	4.58	5.65	YES	112.9	0.0000000	
6	PFOS	464 > 79.9	1.92e3	1.000	4.67	4.64	5.03	YES	100.7	0.1419864	
7	13C3-PFBS	302.0 > 98.8	6.10e3	0.501	1.000	2.96	2.95	11.1	NO	68.6	0.0023387
8	13C4-PFHpA	367.2 > 321.6	1.97e4	1.24	1.000	3.84	3.84	10.9	NO	67.2	0.0071228
9	18O2-PFHxS	403 > 102.8	7.92e3	0.495	1.000	3.96	3.95	11.0	NO	67.8	0.0016417
10	13C2-PFOA	414.9 > 368.7	3.24e4	3.22	1.000	4.25	4.25	11.2	NO	89.4	0.0047971
11	13C5-PFNA	468.2 > 422.9	8.94e3	0.979	1.000	4.58	4.58	10.6	NO	85.0	0.0026267
12	13C8-PFOS	507.0 > 79.9	6.89e3	1.06	1.000	4.64	4.64	11.0	NO	67.7	0.0016015
13	13C5-PFHxS	318 > 272.9	3.12e4	1.00	1.000	3.29	3.34	12.5	NO	100.0	0.0029241
14	13C3-PFHxS	401.9 > 79.9	1.82e4	1.00	1.000	3.94	3.96	12.5	NO	100.0	0.0009026
15	13C8-PFOA	421.3 > 378	1.12e4	1.00	1.000	4.22	4.25	12.5	NO	100.0	0.0082219
16	13C9-PFNA	472.2 > 428.9	1.07e4	1.00	1.000	4.55	4.58	12.5	NO	100.0	0.0014388
17	13C4-PFOS	503.0 > 79.9	7.27e3	1.00	1.000	4.67	4.64	12.5	NO	100.0	0.0026138
18	Total PFBS	299 > 79.7	7.53e3		1.000	3.11		5.09	NO		
19	Total PFHxS	368.9 > 79.6	7.10e3		1.000	4.09		8.14	NO		
20	Total PFOA	413 > 368.7	1.20e4		1.000	4.38		5.10	NO		
21	Total PFOS	469 > 79.9	1.92e3		1.000	4.67		6.73	NO		0.1419864



Dataset: Untitled

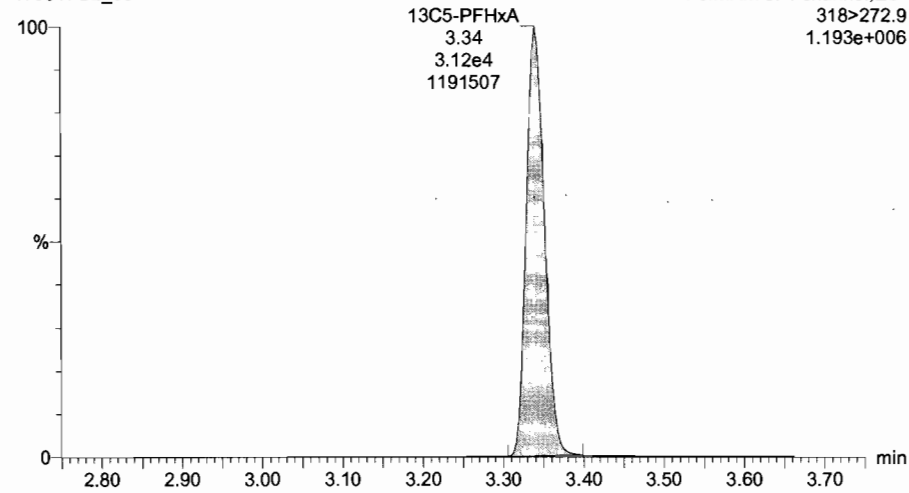
Last Altered: Monday, March 20, 2017 8:15:17 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 8:15:21 AM Pacific Daylight Time

Name: 170317G2_38, Date: 17-Mar-2017, Time: 23:32:36, ID: ST170317G2-4 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

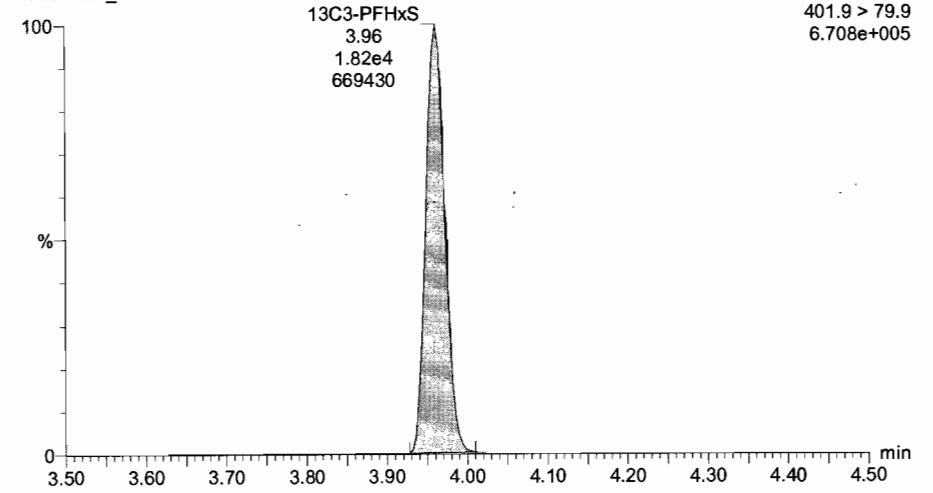
13C5-PFHxA

170317G2_38



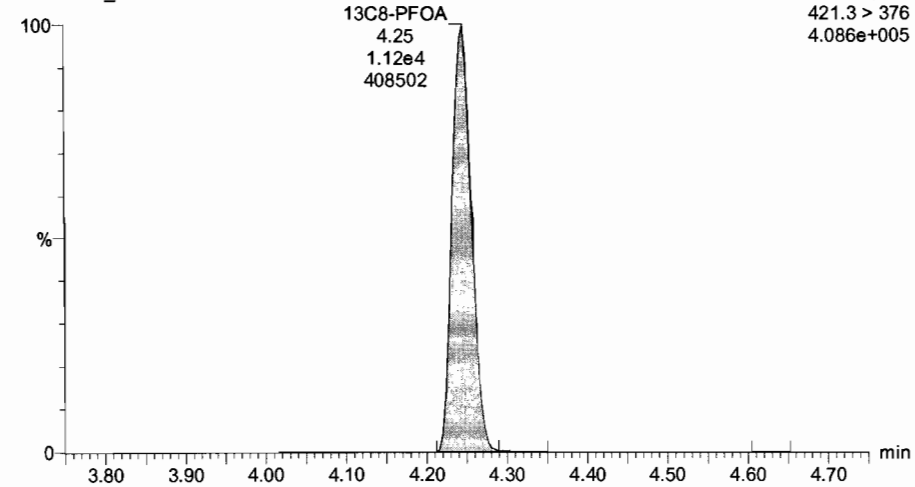
13C3-PFHxS

170317G2_38



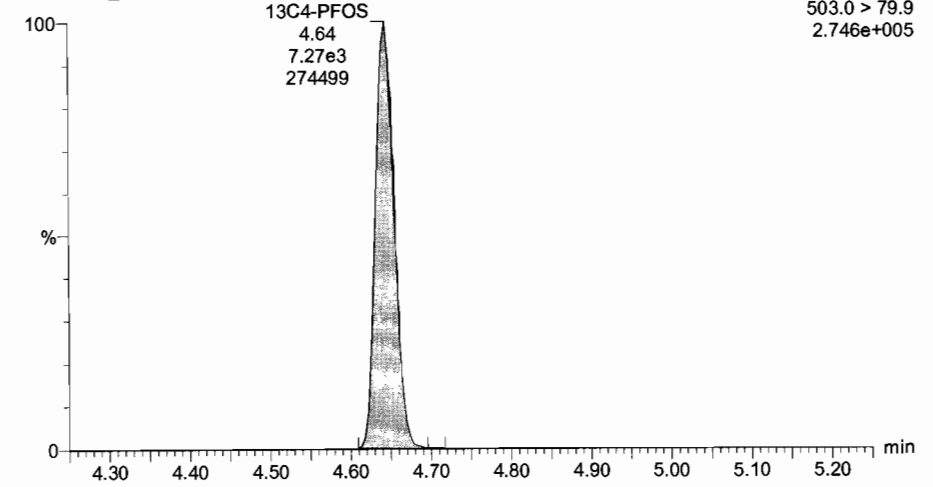
13C8-PFOA

170317G2_38



13C4-PFOS

170317G2_38



Dataset: Untitled

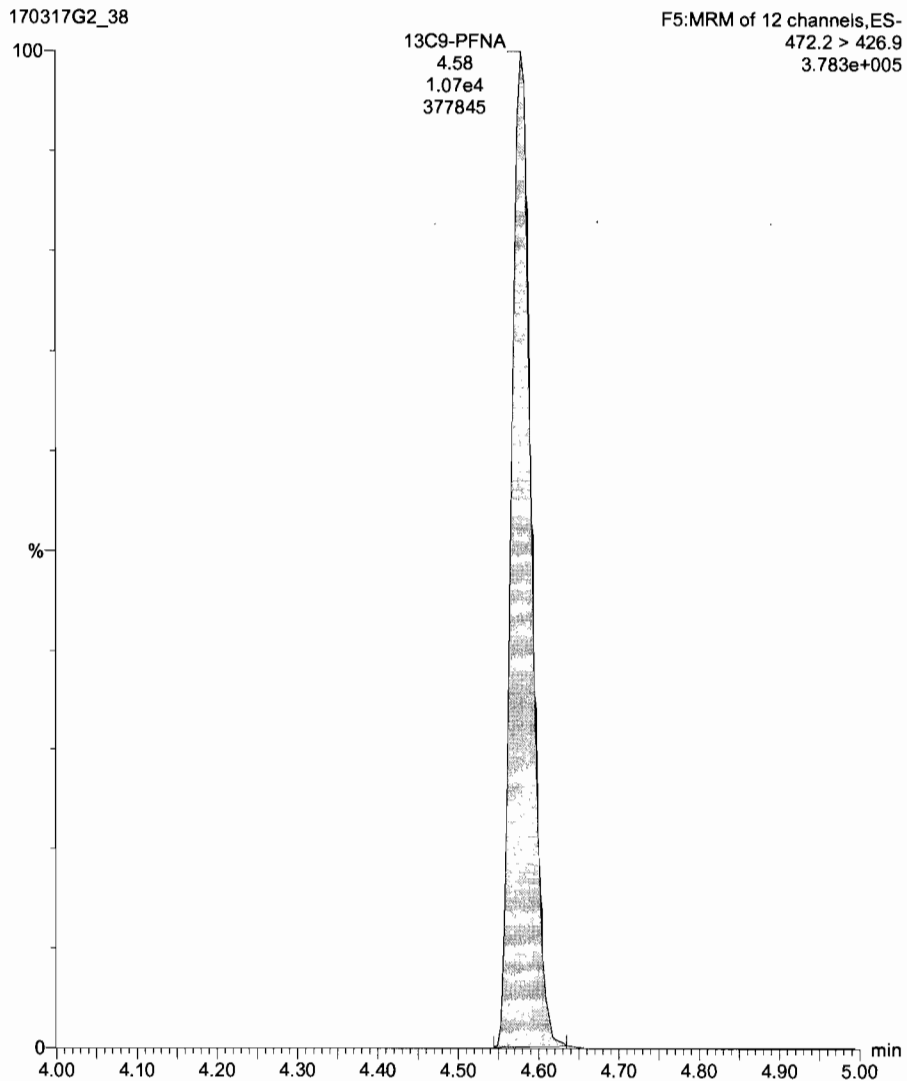
Last Altered: Monday, March 20, 2017 8:15:17 AM Pacific Daylight Time

Printed: Monday, March 20, 2017 8:15:21 AM Pacific Daylight Time

Name: 170317G2_38, Date: 17-Mar-2017, Time: 23:32:36, ID: ST170317G2-4 PFC CS2 17C1703, Description: PFC CS2 17C1703 A

13C9-PFNA

170317G2_38



Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-2.qld

Last Altered: Tuesday, March 21, 2017 11:49:33 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 11:50:20 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170320G3_2, Date: 20-Mar-2017, Time: 14:57:26, ID: ST170320G3-1 PFC CS2 17C2020, Description: PFC CS2 17C2020 A

#	Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	7.28e3	8.22e3		1.000	2.98	4.84	96.9
2	2 PFHpA	363 > 318.9	1.43e4	1.79e4		1.000	3.84	5.71	114.1
3	3 PFHxS	398.9 > 79.6	5.66e3	7.70e3		1.000	3.96	5.11	102.2
4	4 PFOA	413 > 368.7	1.13e4	3.15e4		1.000	4.24	5.00	100.0
5	5 PFNA	463 > 418.8	7.83e3	8.29e3		1.000	4.59	5.37	107.4
6	6 PFOS	499 > 79.9	1.26e3	4.96e3		1.000	4.66	5.89	117.8
7	7 13C3-PFBS	302.0 > 98.8	8.22e3	1.69e4	0.501	1.000	2.98	12.1	96.9
8	8 13C4-PFHpA	367.2 > 321.8	1.79e4	1.69e4	1.237	1.000	3.84	10.7	85.6
9	9 18O2-PFHxS	403 > 102.6	7.70e3	1.69e4	0.495	1.000	3.96	11.5	91.9
10	10 13C2-PFOA	414.9 > 369.7	3.15e4	9.99e3	3.221	1.000	4.24	12.2	98.0
11	11 13C5-PFNA	468.2 > 422.9	8.29e3	1.07e4	0.979	1.000	4.59	9.89	79.1
12	12 13C8-PFOS	507.0 > 79.9	4.96e3	6.25e3	1.080	1.000	4.66	9.20	73.6
13	13 13C5-PFHxA	318 > 272.9	3.19e4	3.19e4	1.000	1.000	3.34	12.5	100.0
14	14 13C3-PFHxS	401.9 > 79.9	1.69e4	1.69e4	1.000	1.000	3.96	12.5	100.0
15	15 13C8-PFOA	421.3 > 376	9.99e3	9.99e3	1.000	1.000	4.24	12.5	100.0
16	16 13C9-PFNA	472.2 > 426.9	1.07e4	1.07e4	1.000	1.000	4.59	12.5	100.0
17	17 13C4-PFOS	503.0 > 79.9	6.25e3	6.25e3	1.000	1.000	4.66	12.5	100.0

75-125
↓
60-150
↓
50-150
60-150

AC
3/21/17

✓ EJ 3/21/17

Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:52:13 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 11:53:28 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Compound name: PFBS

	Name	ID	Acq.Date	Acq.Time
1	170320G3_1	IPA	20-Mar-17	14:44:39
2	170320G3_2	ST170320G3-1 PFC CS2 17C2020	20-Mar-17	14:57:26
3	170320G3_3	IPA	20-Mar-17	15:10:01
4	170320G3_4	1700311-03@10X OF-SOW-091DP-0317 0.12...	20-Mar-17	15:22:38
5	170320G3_5	1700311-06@10X OF-SOW-091M-0317 0.127...	20-Mar-17	15:35:09
6	170320G3_6	IPA	20-Mar-17	15:47:42
7	170320G3_7	ST170320G3-2 PFC CS2 17C2020	20-Mar-17	16:00:32
8	170320G3_8	IPA	20-Mar-17	16:12:52

LC Calibration Standards Review Checklist

Q1

Calibration ID:	L M H	ION Ratio	Concentration	C-Cals Name	Sign Date	Correct I-Cal	Manual Integrations	
<u>ST170320G3-1</u>	<u>LMH</u>	<u>N/A</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>N/A</u>
<u>↓ -2</u>	<u>LMH</u>	<u>↓</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>↓</u>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	L M H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Full Mass Cal. Date: 12/7/10

Run Log Present:

of Samples per Sequence Checked:

Reviewed By: eg 3/21/17
Initials/Date

Comments:
 List 6, 2 trans.

Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:30:07 Pacific Daylight Time

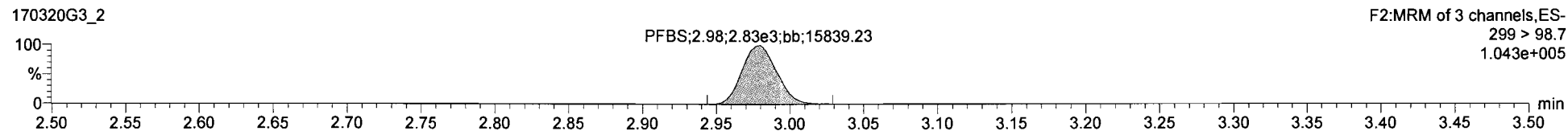
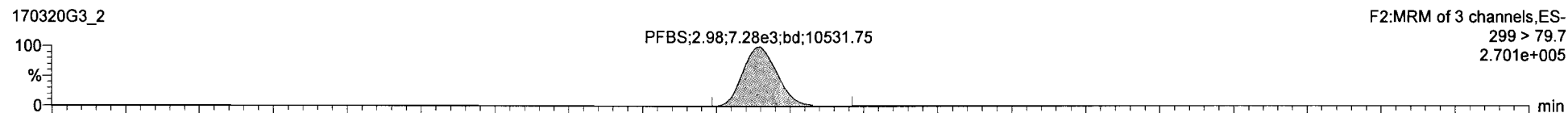
Printed: Tuesday, March 21, 2017 11:30:34 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

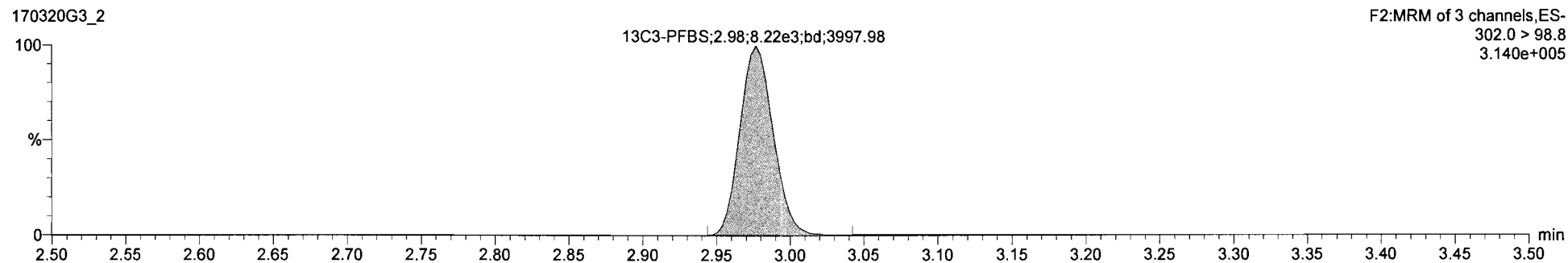
Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: ST170320G3-1 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_2, Date: 20-Mar-2017, Time: 14:57:26, Instrument: , Lab: , User:

PFBS



13C3-PFBS



Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:30:07 Pacific Daylight Time

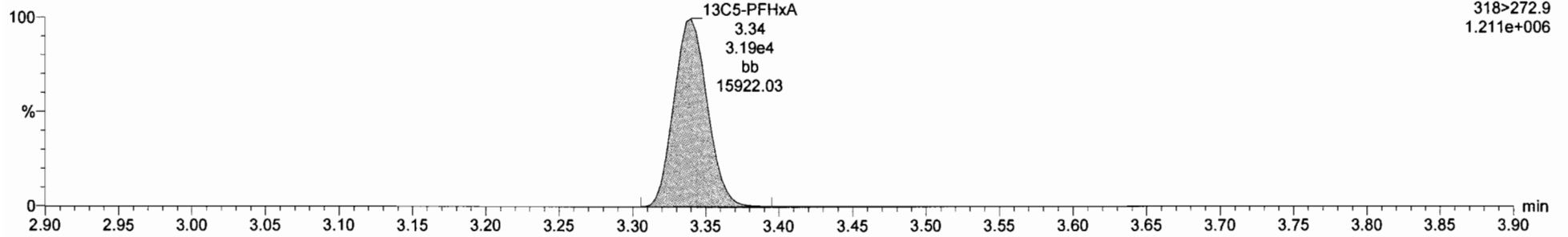
Printed: Tuesday, March 21, 2017 11:30:34 Pacific Daylight Time

ID: ST170320G3-1 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_2, Date: 20-Mar-2017, Time: 14:57:26, Instrument: , Lab: , User:

13C5-PFHxA

170320G3_2

F3:MRM of 1 channel,ES-
318>272.9
1.211e+006

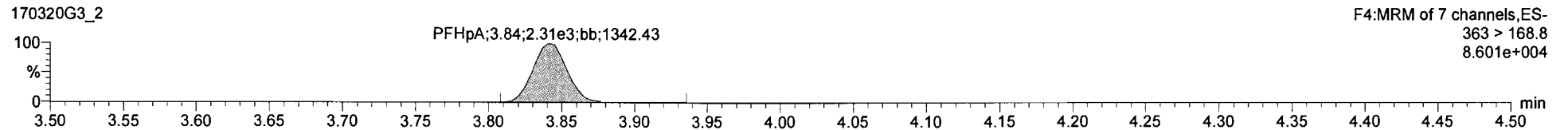
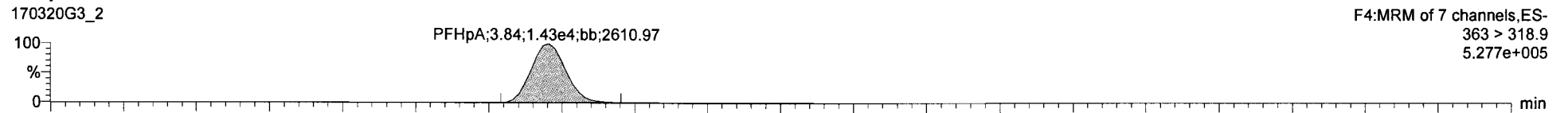


Dataset: Untitled

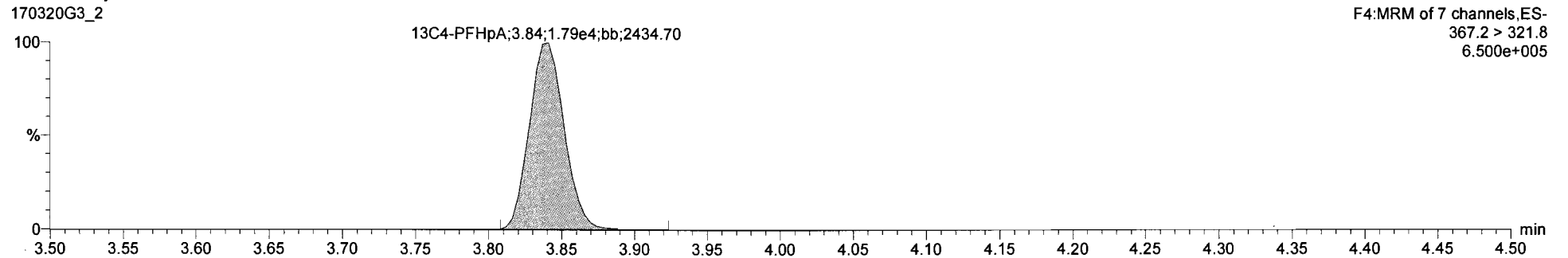
Last Altered: Tuesday, March 21, 2017 11:30:07 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:30:34 Pacific Daylight Time

ID: ST170320G3-1 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_2, Date: 20-Mar-2017, Time: 14:57:26, Instrument: , Lab: , User:

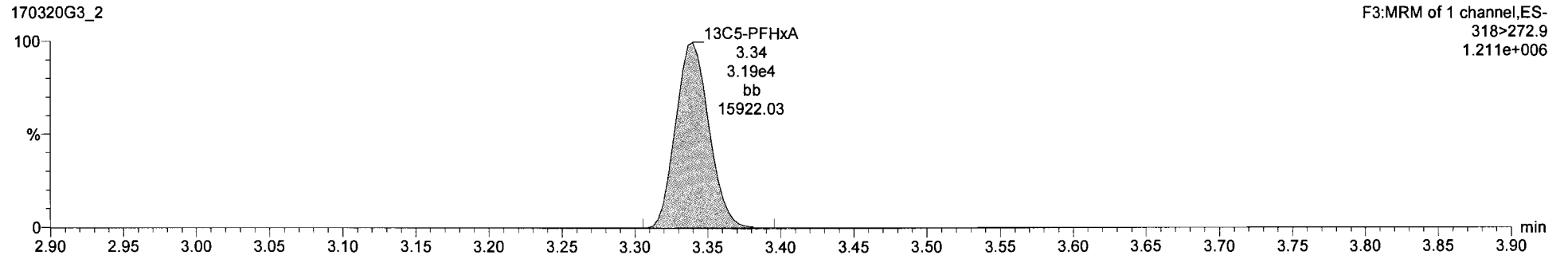
PFHpA



13C4-PFHpA



13C5-PFHxA



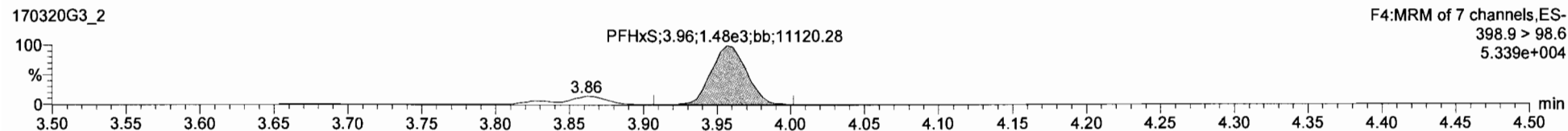
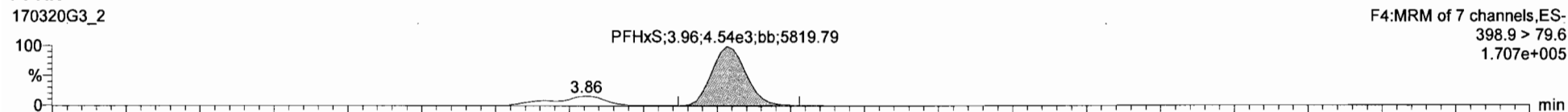
Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:30:07 Pacific Daylight Time

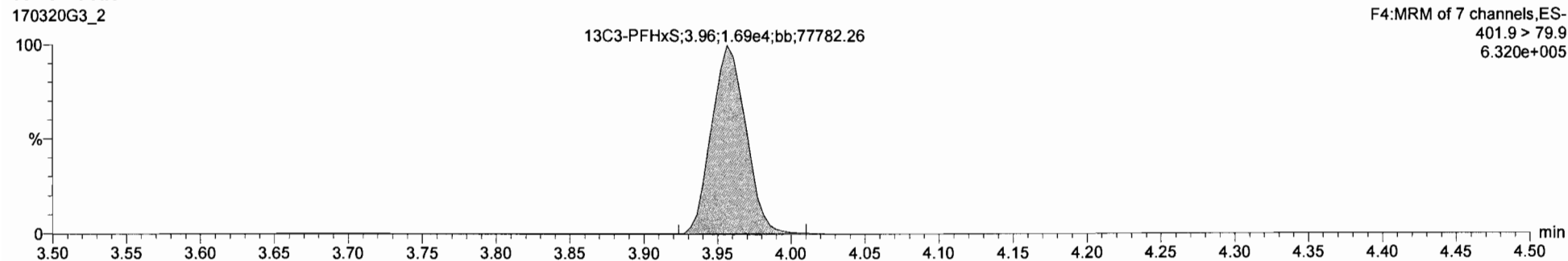
Printed: Tuesday, March 21, 2017 11:30:34 Pacific Daylight Time

ID: ST170320G3-1 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_2, Date: 20-Mar-2017, Time: 14:57:26, Instrument: , Lab: , User:

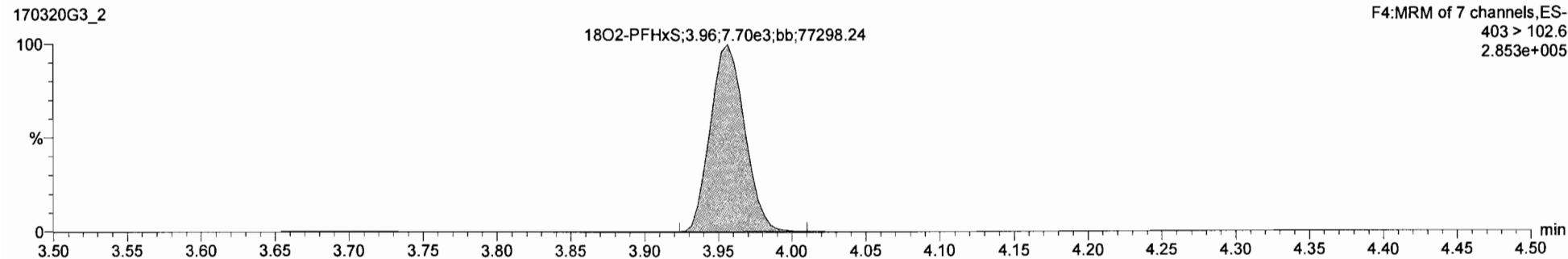
PFHxS



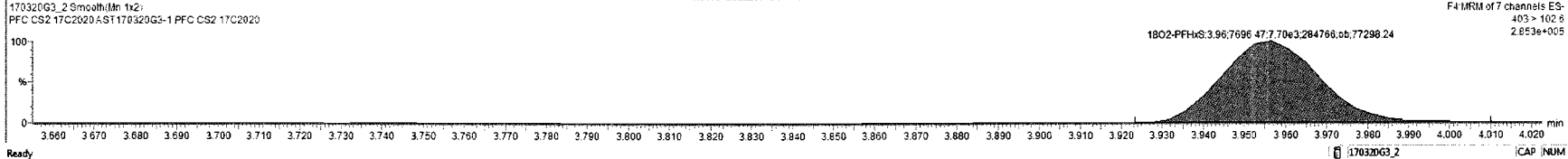
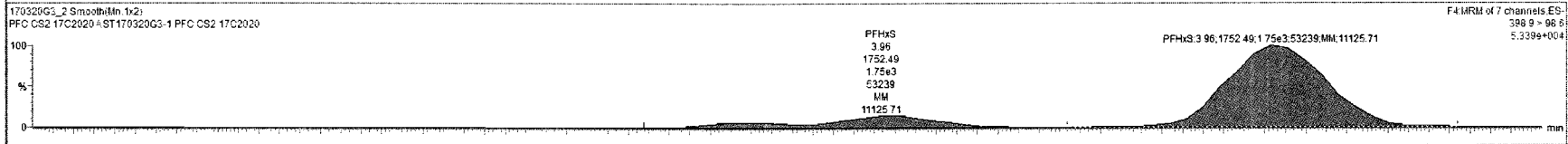
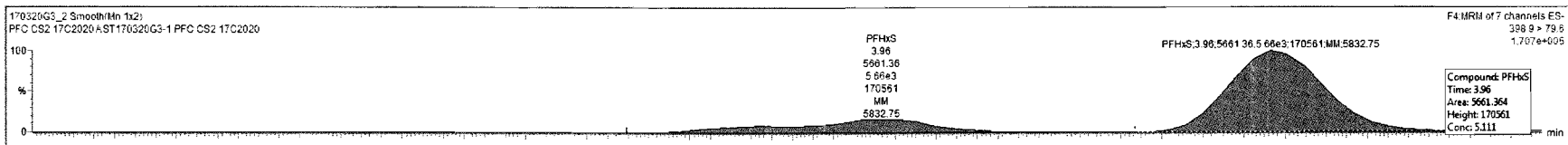
13C3-PFHxS



18O2-PFHxS



Item	Name	Trace	Area	RRF	Wt/Avl	Prod.RT	RT	Conc	>MDL	%Rec	DL
1	PFBS	299 > 79.7	7.28e3		1.000	2.99	2.99	4.84	NO	96.9	0.0000006
2	PFHpA	363 > 318.9	1.43e4		1.000	3.64	3.64	5.71	YES	114.1	0.0000000
3	PFHxS	396.9 > 79.8	3.99e3		1.000	3.99	3.99	6.11	YES	102.2	0.0000000
4	PFDA	413 > 368.7	1.13e4		1.000	4.24	4.24	5.90	YES	100.0	0.0000000
5	PFNA	463 > 418.8	7.83e3		1.000	4.59	4.59	5.37	YES	107.4	0.0000000
6	PFOS	499 > 79.9	8.22e3		1.000	4.66	4.66	4.20	YES	83.9	0.1405401
7	13C3-PFBS	302.9 > 98.0	8.22e3	0.501	1.000	2.99	2.99	12.1	NO	96.9	0.0077565
8	13C4-PFHpA	367.2 > 321.8	1.79e4	1.24	1.000	3.64	3.64	10.7	NO	85.6	0.0106787
9	18O2-PFHxS	403 > 102.8	7.70e3	0.495	1.000	3.99	3.99	11.5	NO	91.9	0.0063690
10	13C2-PFOA	414.9 > 389.7	3.15e4	3.22	1.000	4.24	4.24	12.2	NO	98.0	0.0058752
11	13C5-PFNA	468.2 > 422.9	8.29e3	0.979	1.000	4.59	4.59	9.88	NO	79.1	0.0087455
12	13C8-PFOS	507.8 > 79.9	4.96e3	1.08	1.000	4.66	4.66	9.20	NO	73.6	0.0098977
13	13C5-PFHpA	318 > 272.9	3.19e4	1.00	1.000	3.25	3.24	12.5	NO	100.0	0.0019627
14	13C3-PFHxS	401.9 > 79.9	1.89e4	1.00	1.000	3.94	3.96	12.9	NO	100.0	0.0004015
15	13C8-PFOA	421.3 > 378	9.98e3	1.00	1.000	4.22	4.24	12.9	NO	100.0	0.0068399
16	13C9-PFNA	472.2 > 428.9	1.07e4	1.00	1.000	4.58	4.59	12.5	NO	100.0	0.0007750
17	13C4-PFOS	503.8 > 79.9	6.25e3	1.00	1.000	4.67	4.66	12.5	NO	100.0	0.0019415
18	Total PFBS	299 > 79.7	7.28e3		1.000	3.11		4.84	NO		
19	Total PFHxS	398.9 > 79.6	6.75e3		1.000	4.09		6.00	NO		
20	Total PFDA	413 > 368.7	1.14e4		1.000	4.39		5.90	NO		
21	Total PFOS	499 > 79.9	1.26e3		1.000	4.67		6.17	NO		0.1405401

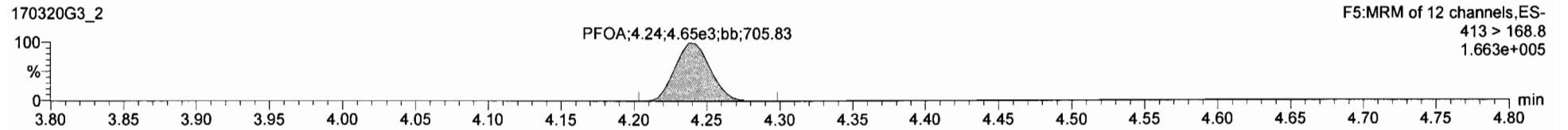
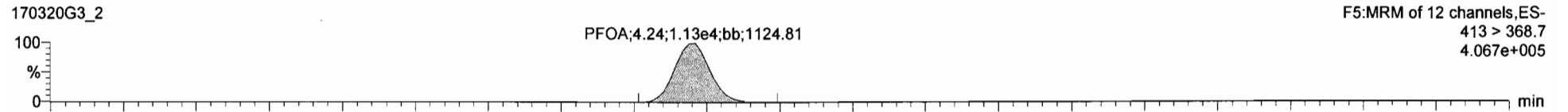


Dataset: Untitled

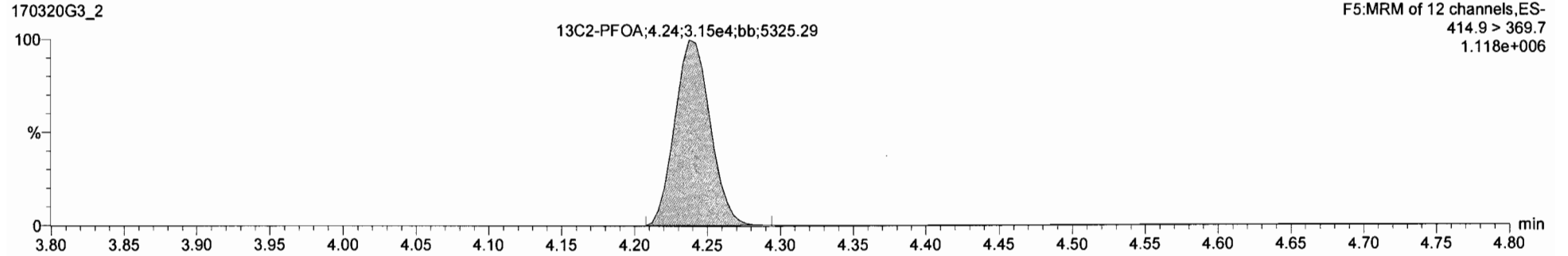
Last Altered: Tuesday, March 21, 2017 11:30:07 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:30:34 Pacific Daylight Time

ID: ST170320G3-1 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_2, Date: 20-Mar-2017, Time: 14:57:26, Instrument: , Lab: , User:

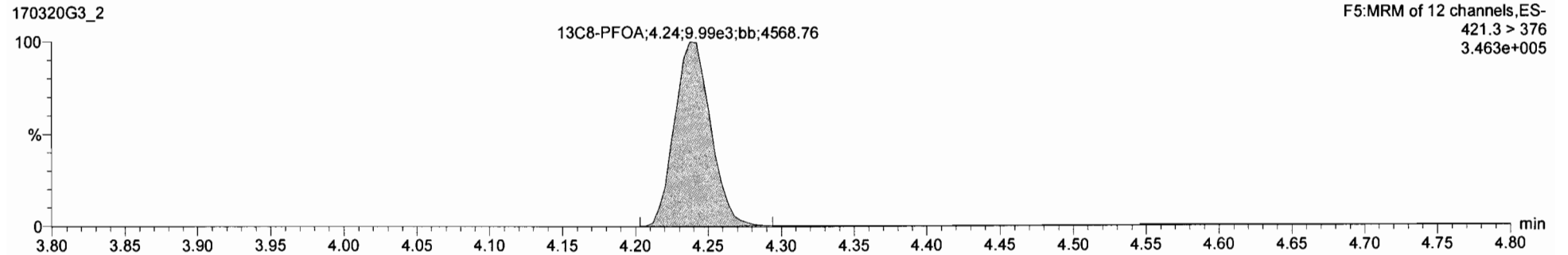
PFOA



13C2-PFOA



13C8-PFOA



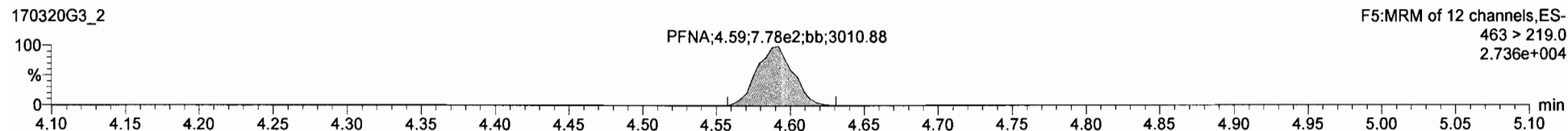
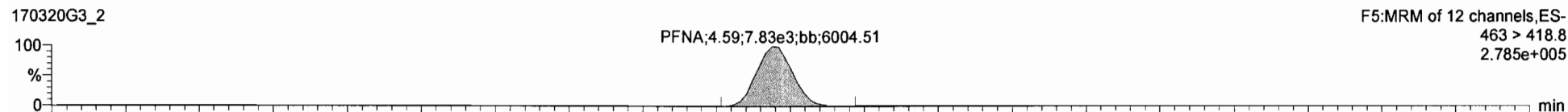
Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:30:07 Pacific Daylight Time

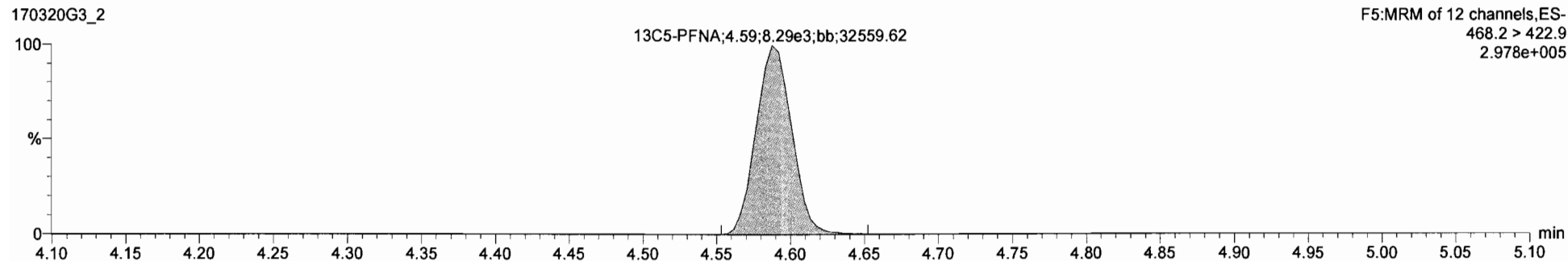
Printed: Tuesday, March 21, 2017 11:30:34 Pacific Daylight Time

ID: ST170320G3-1 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_2, Date: 20-Mar-2017, Time: 14:57:26, Instrument: , Lab: , User:

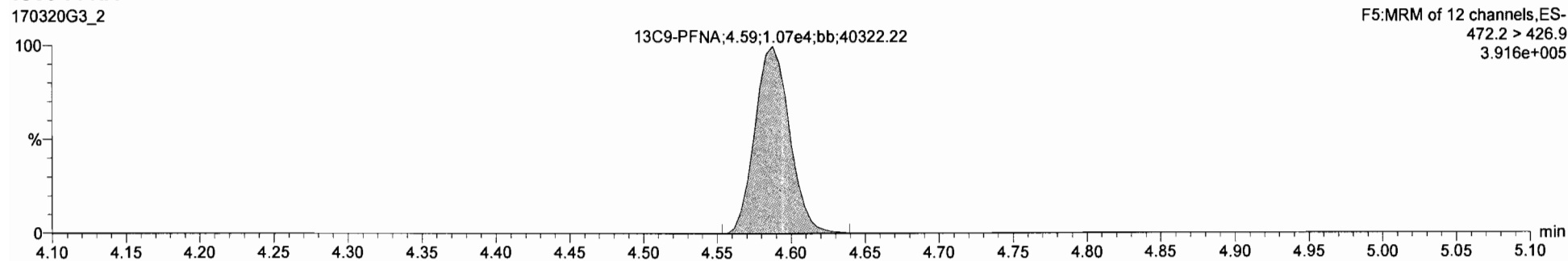
PFNA



13C5-PFNA



13C9-PFNA

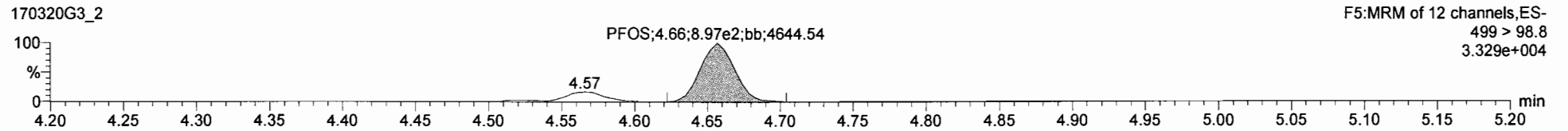
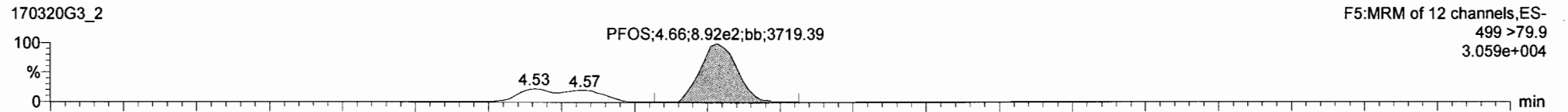


Dataset: Untitled

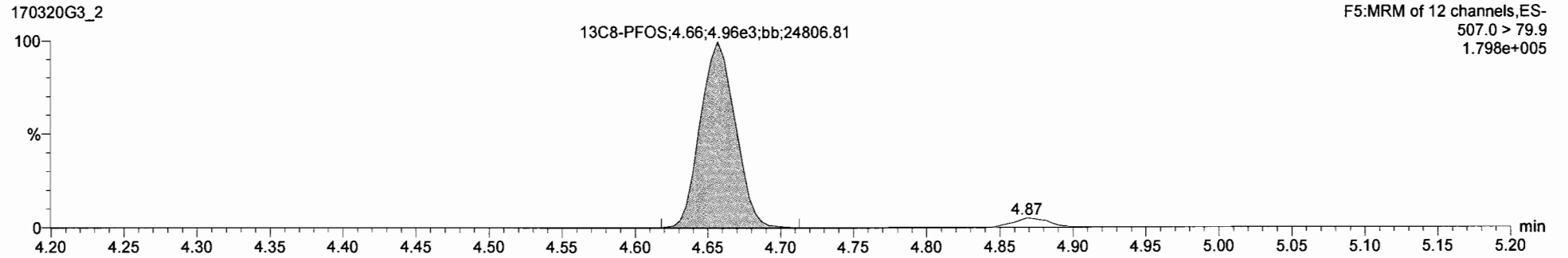
Last Altered: Tuesday, March 21, 2017 11:30:07 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:30:34 Pacific Daylight Time

ID: ST170320G3-1 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_2, Date: 20-Mar-2017, Time: 14:57:26, Instrument: , Lab: , User:

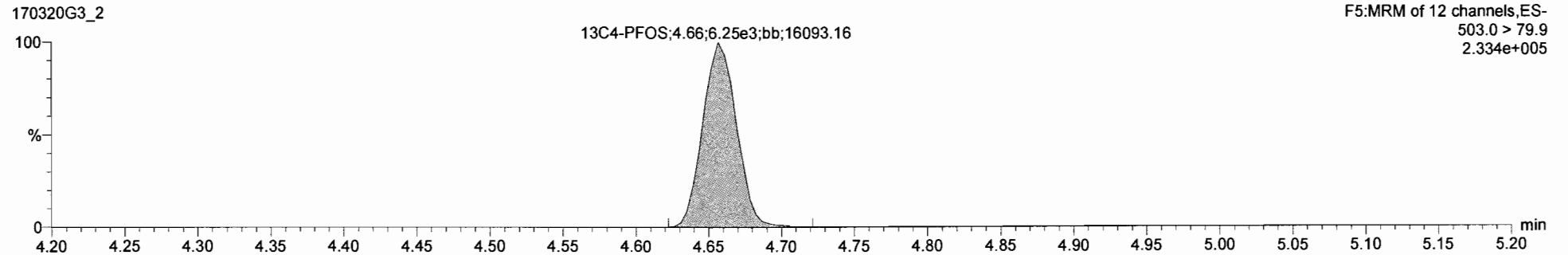
PFOS



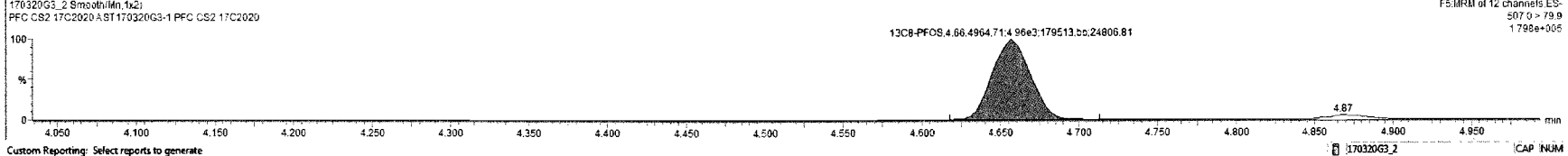
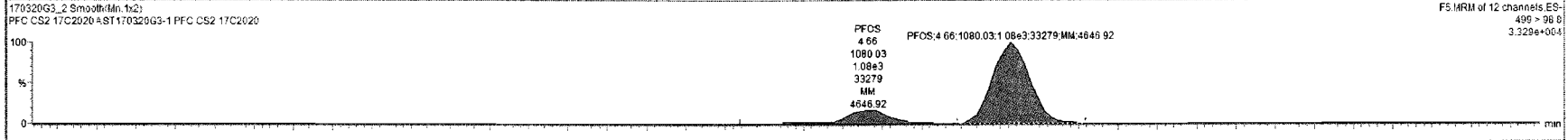
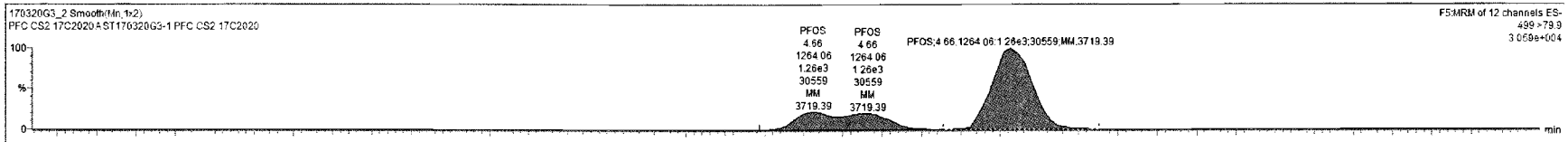
13C8-PFOS



13C4-PFOS



Peak	Name	Traces	Area	RRF	WtVol	Prod.RT	RT	Conc	>MDL	%Rec	DL
1	PFBS	299 > 78.7	7.28e3		1.000	2.98	2.98	4.84	NO	96.9	0.0000000
2	PFHpA	363 > 318.9	1.42e4		1.000	3.84	3.84	5.71	YES	114.1	0.0000000
3	PFHxS	398.9 > 79.6	5.66e3		1.000	3.96	3.96	5.11	YES	102.2	0.0000000
4	PFDA	413 > 368.7	1.13e4		1.000	4.24	4.24	5.00	YES	100.0	0.0000000
5	PFNA	483 > 418.8	7.83e3		1.000	4.59	4.59	5.37	YES	107.4	0.0000000
6	PFOS	499 > 79.9	7.29e3		1.000	4.66	4.66	5.89	YES	117.0	0.1405401
7	13C3-PFOS	302.0 > 98.8	9.22e3	0.501	1.000	2.96	2.96	12.1	NO	96.9	0.0077585
8	13C4-PFHpA	387.2 > 321.8	1.79e4	1.24	1.000	3.84	3.84	10.7	NO	85.6	0.0106797
9	13C2-PFHxS	403 > 102.8	7.70e3	0.495	1.000	3.96	3.96	11.5	NO	91.9	0.0003690
10	13C2-PFNA	414.9 > 369.7	3.15e4	3.22	1.000	4.24	4.24	12.2	NO	98.0	0.0058752
11	13C8-PFOS	468.2 > 422.9	6.29e3	0.979	1.000	4.59	4.59	9.89	NO	79.1	0.0007455
12	13C8-PFOS	507.0 > 79.9	4.96e3	1.08	1.000	4.66	4.66	9.20	NO	73.6	0.0008977
13	13C5-PFHpA	318.272.9	3.19e4	1.00	1.000	3.29	3.34	12.5	NO	100.0	0.0019627
14	13C3-PFHxS	401.9 > 79.9	1.85e4	1.00	1.000	3.94	3.96	12.5	NO	100.0	0.0004018
15	13C8-PFDA	421.3 > 378	9.59e3	1.00	1.000	4.22	4.24	12.5	NO	100.0	0.0068999
16	13C8-PFNA	472.2 > 426.9	1.07e4	1.00	1.000	4.56	4.59	12.5	NO	100.0	0.0007750
17	13C4-PFOS	503.0 > 79.9	8.25e3	1.00	1.000	4.67	4.66	12.5	NO	100.0	0.0019418
18	Total PFBS	299 > 78.7	7.28e3		1.000	3.11		4.84			
19	Total PFHxS	398.9 > 79.6	6.75e3		1.000	4.09		6.00			
20	Total PFDA	413 > 368.7	1.14e4		1.000	4.39		5.00			
21	Total PFOS	499 > 79.9	1.64e3		1.000	4.67		7.86			0.1405401



Custom Reporting: Select reports to generate

170320G3_2 CAP NUM

Dataset: U:\G1.PRO\Results\2017\170320G3\170320G3-7.qld

Last Altered: Tuesday, March 21, 2017 11:38:07 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:40:35 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57
Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170320G3_7, Date: 20-Mar-2017, Time: 16:00:32, ID: ST170320G3-2 PFC CS2 17C2020, Description: PFC CS2 17C2020 A

#	Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec
1	1 PFBS	299 > 79.7	8.20e3	8.46e3		1.000	2.98	5.31	106.2
2	2 PFHpA	363 > 318.9	1.52e4	2.13e4		1.000	3.85	5.10	101.9
3	3 PFHxS	398.9 > 79.6	6.34e3	8.72e3		1.000	3.96	5.05	101.0
4	4 PFOA	413 > 368.7	1.44e4	3.74e4		1.000	4.24	5.37	107.3
5	5 PFNA	463 > 418.8	1.05e4	1.10e4		1.000	4.59	5.39	107.8
6	6 PFOS	499 > 79.9	1.42e3	6.70e3		1.000	4.65	4.93	98.7
7	7 13C3-PFBS	302.0 > 98.8	8.46e3	2.13e4	0.501	1.000	2.98	9.90	79.2
8	8 13C4-PFHpA	367.2 > 321.8	2.13e4	2.13e4	1.237	1.000	3.85	10.1	80.9
9	9 18O2-PFHxS	403 > 102.6	8.72e3	2.13e4	0.495	1.000	3.96	10.3	82.8
10	10 13C2-PFOA	414.9 > 369.7	3.74e4	1.20e4	3.221	1.000	4.25	12.1	96.6
11	11 13C5-PFNA	468.2 > 422.9	1.10e4	1.32e4	0.979	1.000	4.58	10.7	85.2
12	12 13C8-PFOS	507.0 > 79.9	6.70e3	7.98e3	1.080	1.000	4.65	9.72	77.8
13	13 13C5-PFHxA	318 > 272.9	3.54e4	3.54e4	1.000	1.000	3.34	12.5	100.0
14	14 13C3-PFHxS	401.9 > 79.9	2.13e4	2.13e4	1.000	1.000	3.96	12.5	100.0
15	15 13C8-PFOA	421.3 > 376	1.20e4	1.20e4	1.000	1.000	4.24	12.5	100.0
16	16 13C9-PFNA	472.2 > 426.9	1.32e4	1.32e4	1.000	1.000	4.59	12.5	100.0
17	17 13C4-PFOS	503.0 > 79.9	7.98e3	7.98e3	1.000	1.000	4.65	12.5	100.0

75-125
↓
60-150
↓
50-150
60-150

AC
3/21/17

✓ 18 3/21/17

Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:52:13 Pacific Daylight Time

Printed: Tuesday, March 21, 2017 11:53:28 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Compound name: PFBS

	Name	ID	Acq.Date	Acq.Time
1	170320G3_1	IPA	20-Mar-17	14:44:39
2	170320G3_2	ST170320G3-1 PFC CS2 17C2020	20-Mar-17	14:57:26
3	170320G3_3	IPA	20-Mar-17	15:10:01
4	170320G3_4	1700311-03@10X OF-SOW-091DP-0317 0.12...	20-Mar-17	15:22:38
5	170320G3_5	1700311-06@10X OF-SOW-091M-0317 0.127...	20-Mar-17	15:35:09
6	170320G3_6	IPA	20-Mar-17	15:47:42
7	170320G3_7	ST170320G3-2 PFC CS2 17C2020	20-Mar-17	16:00:32
8	170320G3_8	IPA	20-Mar-17	16:12:52

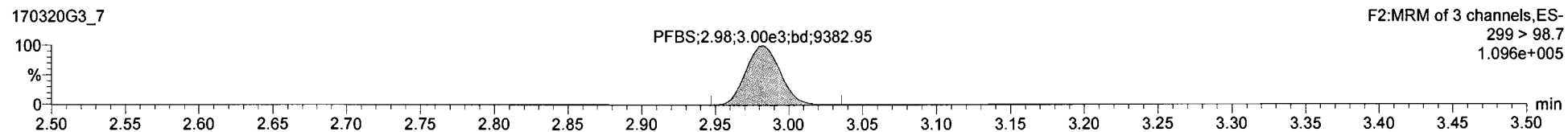
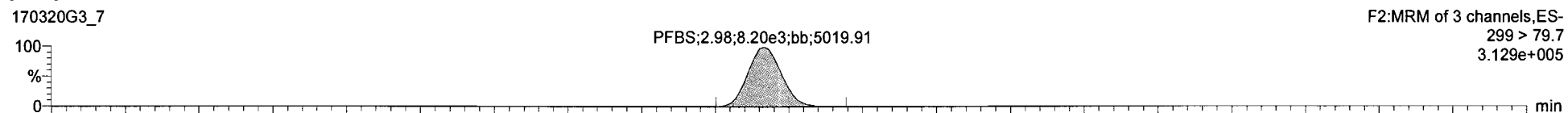
Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:30:43 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:30:47 Pacific Daylight Time

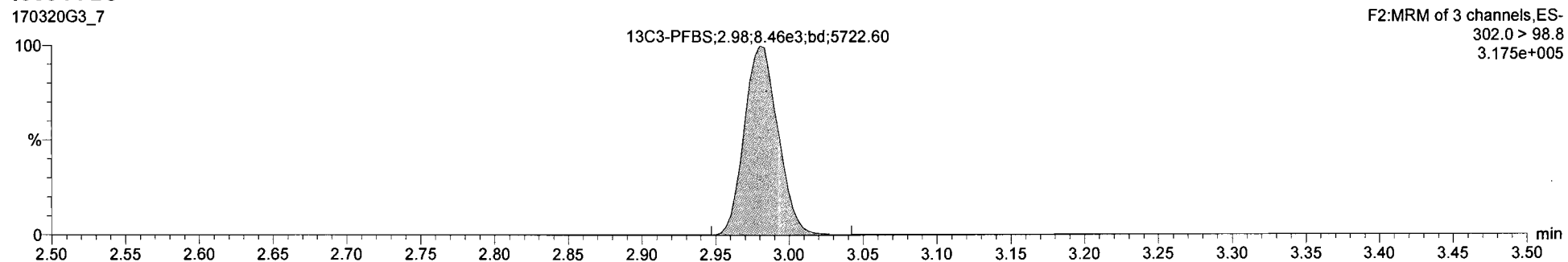
Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 20 Mar 2017 10:42:57
Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: ST170320G3-2 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_7, Date: 20-Mar-2017, Time: 16:00:32, Instrument: , Lab: , User:

PFBS



13C3-PFBS



Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:30:43 Pacific Daylight Time

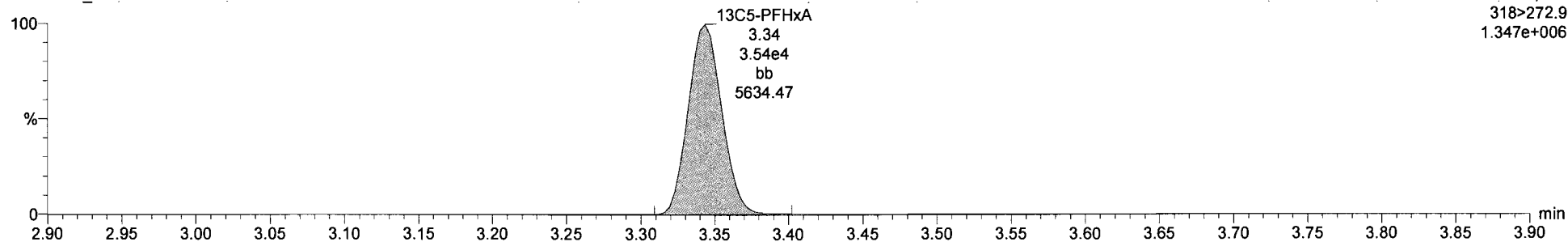
Printed: Tuesday, March 21, 2017 11:30:47 Pacific Daylight Time

ID: ST170320G3-2 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_7, Date: 20-Mar-2017, Time: 16:00:32, Instrument: , Lab: , User:

13C5-PFHxA

170320G3_7

F3:MRM of 1 channel,ES-
318>272.9
1.347e+006

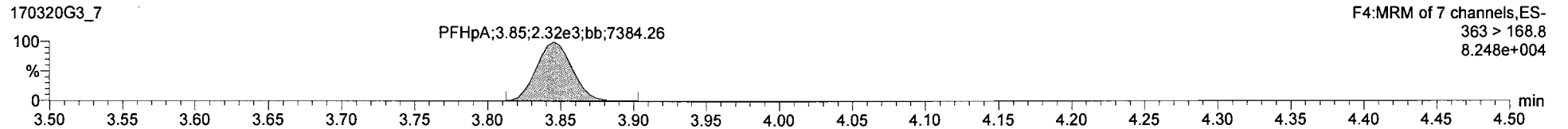
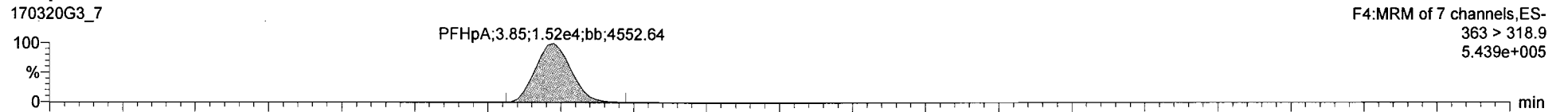


Dataset: Untitled

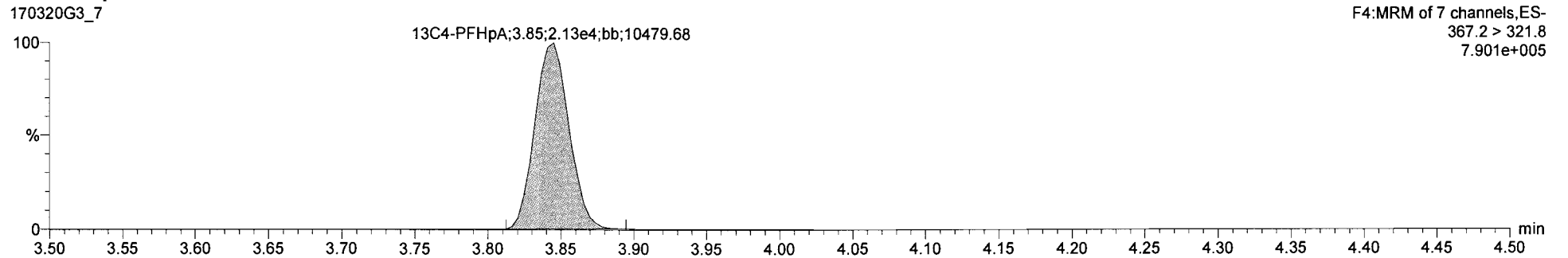
Last Altered: Tuesday, March 21, 2017 11:30:43 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:30:47 Pacific Daylight Time

ID: ST170320G3-2 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_7, Date: 20-Mar-2017, Time: 16:00:32, Instrument: , Lab: , User:

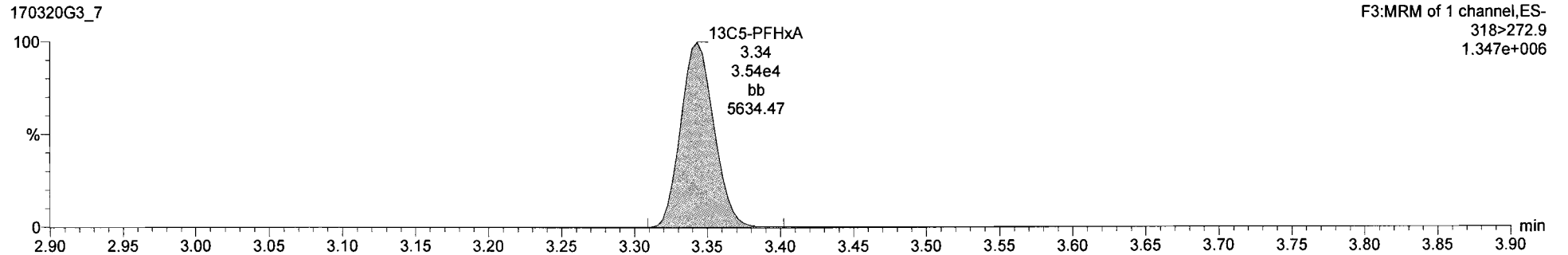
PFHpA



13C4-PFHpA



13C5-PFHxA

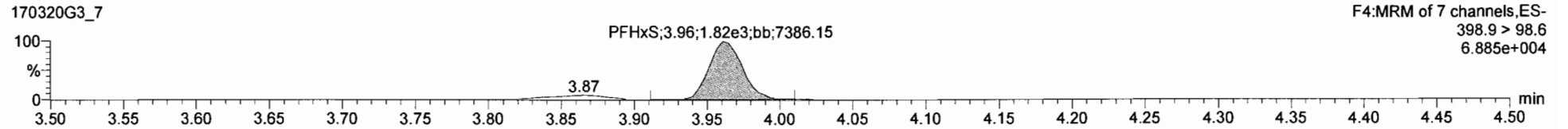
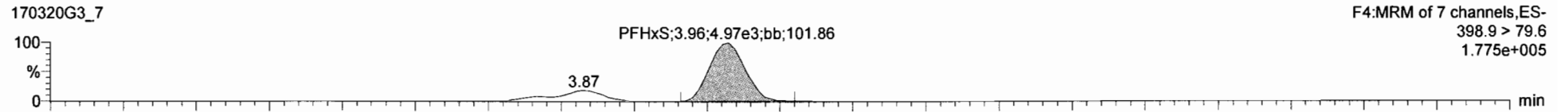


Dataset: Untitled

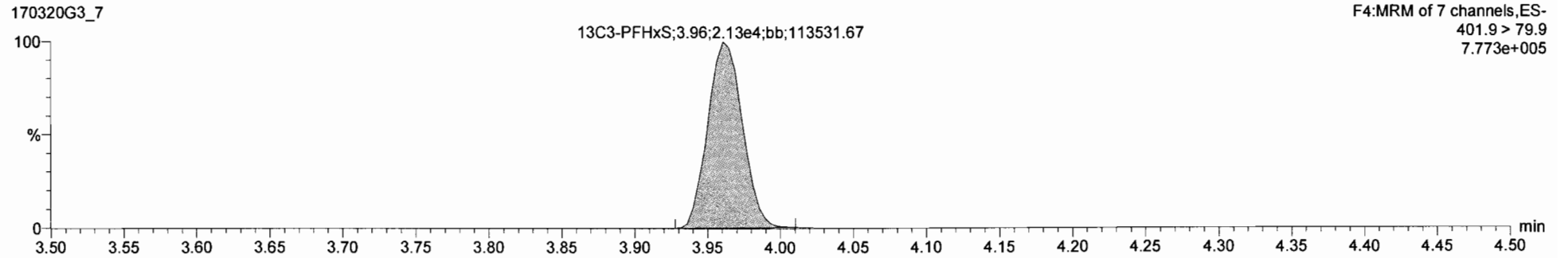
Last Altered: Tuesday, March 21, 2017 11:30:43 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:30:47 Pacific Daylight Time

ID: ST170320G3-2 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_7, Date: 20-Mar-2017, Time: 16:00:32, Instrument: , Lab: , User:

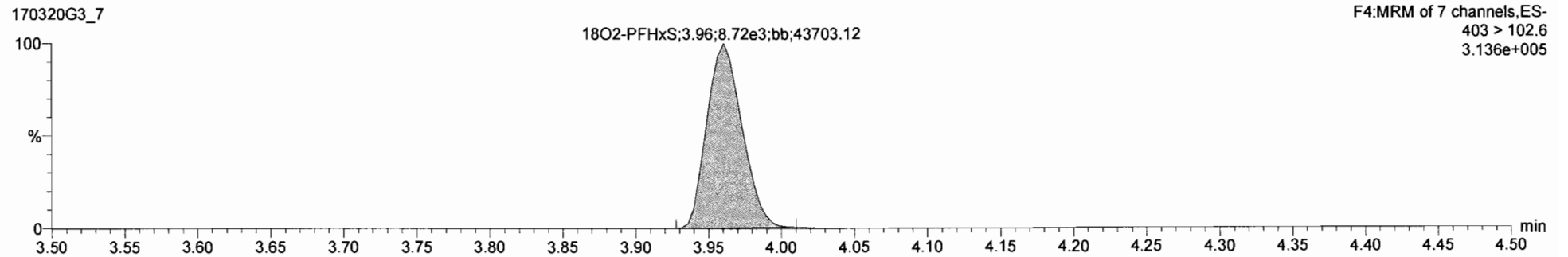
PFHxS



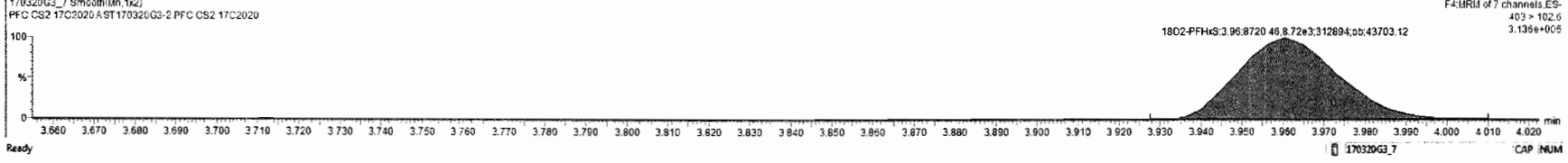
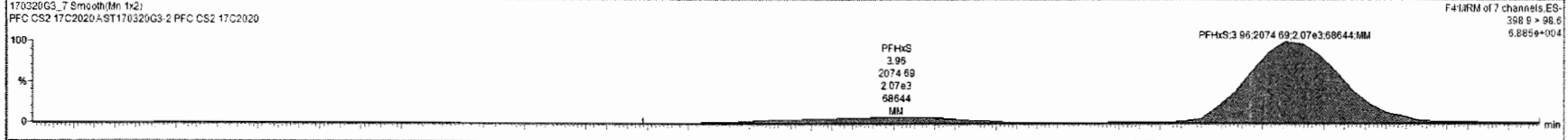
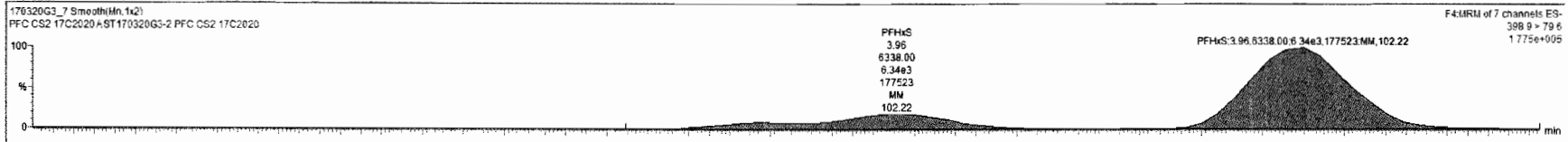
13C3-PFHxS



18O2-PFHxS



Name	Conc.	DL	%Rec	EMPC	Abs.Rept	RSR	RT	#	SA	RA	YN	RRT	Acq.Date	Acq.Time	# Chr.Noise	ID	Sample Text	Factor	SN	Cal File	MDL
1 PFBS	5.3886059	0.0000	106.2		8.198e3	2.58	1	7	0.366	YES	1.001	20-Mar-17	16:00:32	11.682	ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
2 PFHpA	5.0953498	0.0000	101.9		1.522e4	3.85	2	8			1.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
3 PFHxS	5.0496378	0.9678	101.0		6.330e3	3.96	3	9			1.001	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	YES	
4 PFOA	5.3656547	0.0000	107.3		1.443e4	4.24	4	10			0.999	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	YES	
5 PFNA	5.3882355	0.0000	107.8		1.046e4	4.58	5	11			1.001	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	YES	
6 PFOS	4.9344317	0.260	98.7		1.423e3	4.65	6	12			1.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	YES	
7 13C3-PFBS	9.8863496	0.00446	79.2		8.455e3	0.581	2.58	7	14		0.891	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
8 13C4-PFHpA	10.118687	0.00245	80.9		2.130e4	1.237	3.85	8	14		0.971	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
9 18O2-PFHxS	10.348582	0.000563	82.8		8.770e3	0.495	3.96	9	14		1.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
10 13C2-PFOA	12.072355	0.000921	96.6		3.743e4	3.221	4.25	10	15		1.001	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
11 13C5-PFNA	10.654768	0.00742	85.2		1.104e4	0.979	4.58	11	16		0.999	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
12 13C8-PFOS	9.7209597	0.0158	77.8		6.794e3	1.080	4.65	12	17		1.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
13 13C5-PFHxS	12.500000	0.00555	100.0		3.539e4	1.000	3.34	13	13		0.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
14 13C3-PFHxS	12.500000	0.000275	100.0		2.130e4	1.000	3.96	14	14		0.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
15 13C8-PFOA	12.500000	0.00123	100.0		1.203e4	1.000	4.24	15	15		0.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
16 13C9-PFNA	12.500000	0.000996	100.0		1.322e4	1.000	4.59	16	16		0.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
17 13C4-PFOS	12.500000	0.00104	100.0		7.983e3	1.000	4.65	17	17		0.000	20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
18 Total PFBS	5.3089059							18				20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
19 Total PFHxS	5.0496378							19				20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
20 Total PFOA	5.3656547							20				20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
21 Total PFOS	6.7204802	0.260						21				20-Mar-17	16:00:32		ST170320G	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	



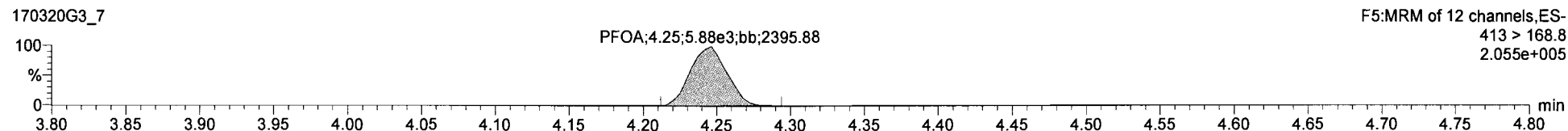
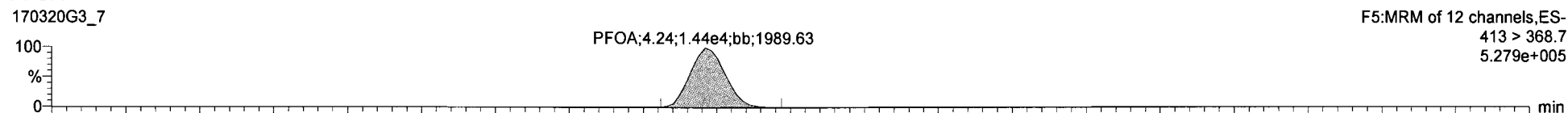
Dataset: Untitled

Last Altered: Tuesday, March 21, 2017 11:30:43 Pacific Daylight Time

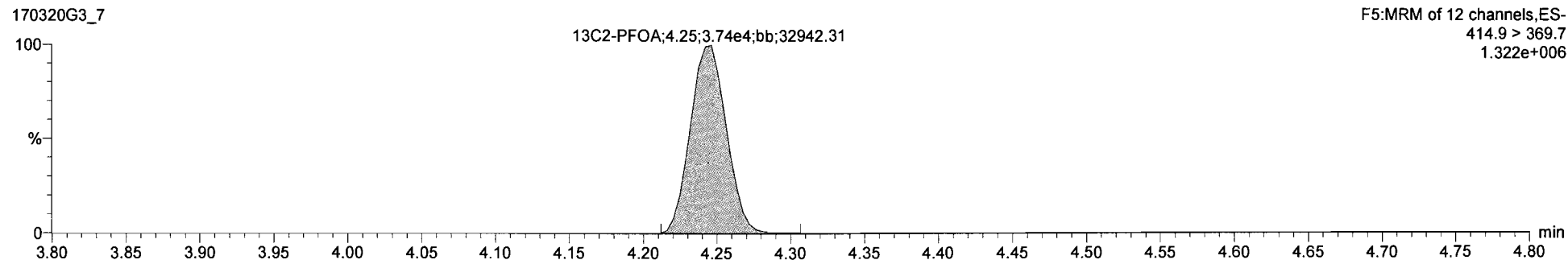
Printed: Tuesday, March 21, 2017 11:30:47 Pacific Daylight Time

ID: ST170320G3-2 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_7, Date: 20-Mar-2017, Time: 16:00:32, Instrument: , Lab: , User:

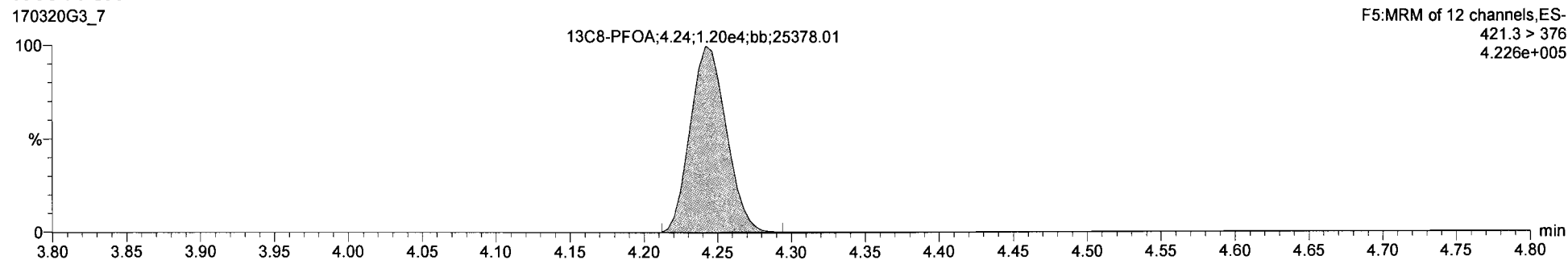
PFOA



13C2-PFOA



13C8-PFOA

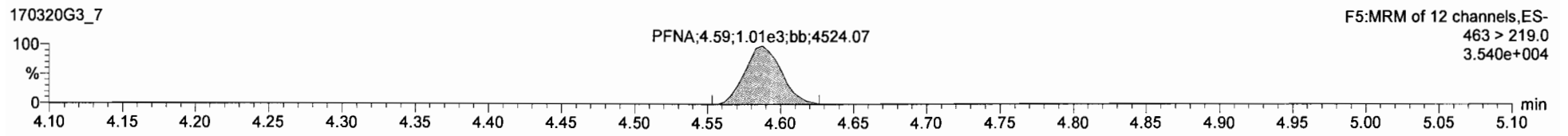
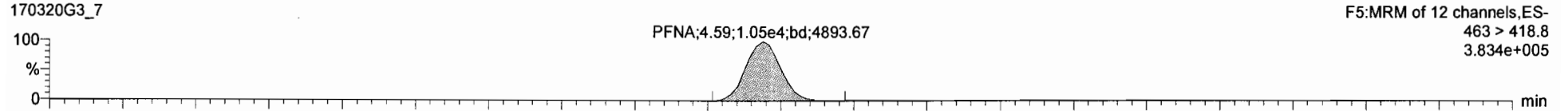


Dataset: Untitled

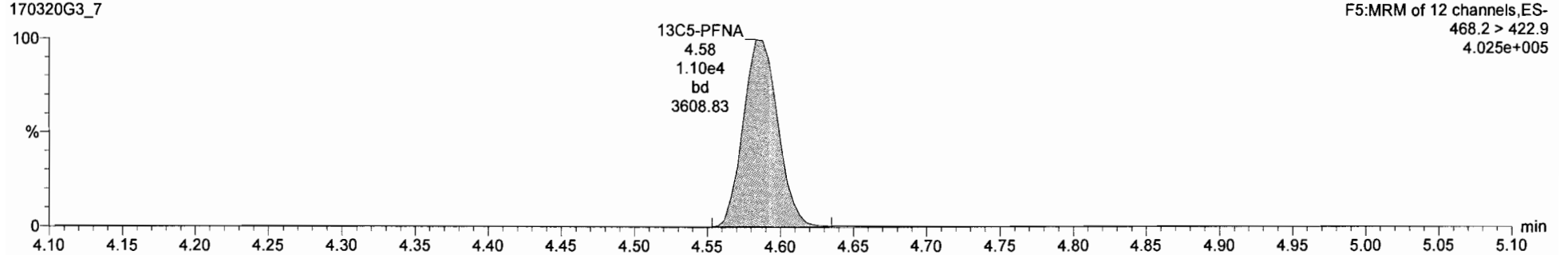
Last Altered: Tuesday, March 21, 2017 11:30:43 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:30:47 Pacific Daylight Time

ID: ST170320G3-2 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_7, Date: 20-Mar-2017, Time: 16:00:32, Instrument: , Lab: , User:

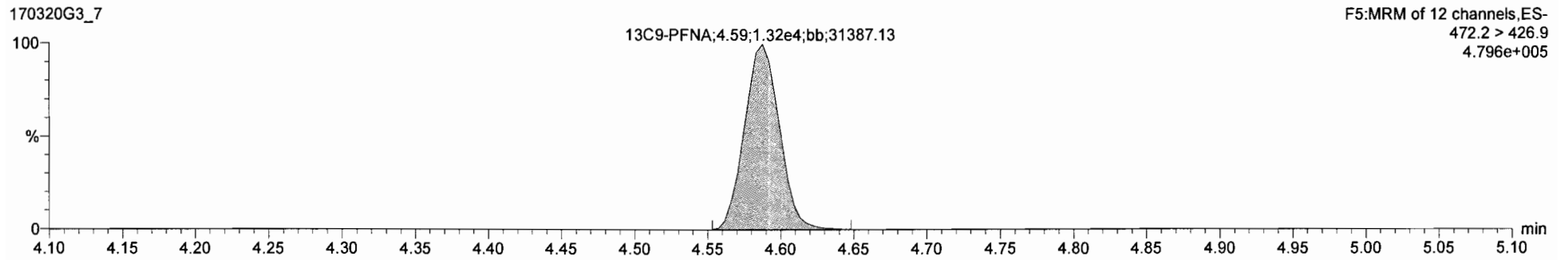
PFNA



13C5-PFNA



13C9-PFNA

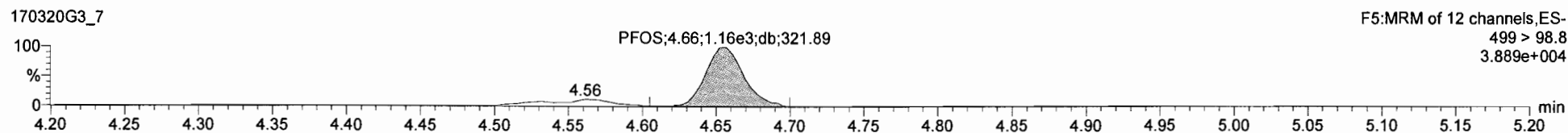
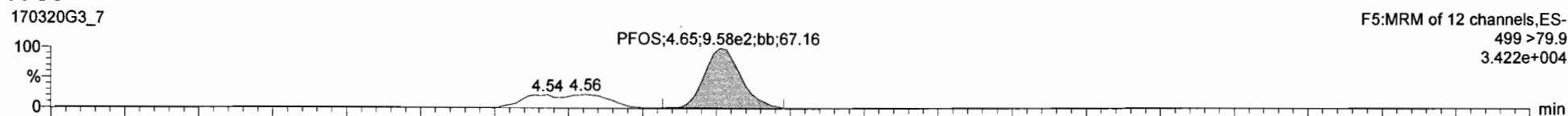


Dataset: Untitled

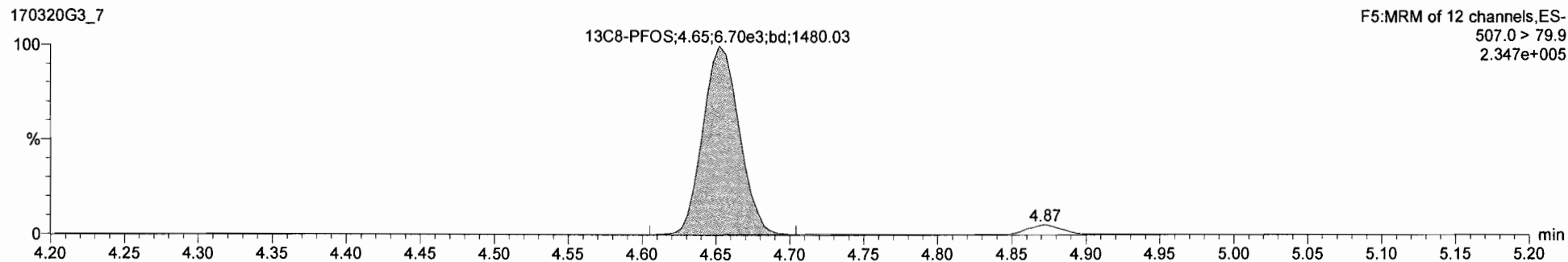
Last Altered: Tuesday, March 21, 2017 11:30:43 Pacific Daylight Time
Printed: Tuesday, March 21, 2017 11:30:47 Pacific Daylight Time

ID: ST170320G3-2 PFC CS2 17C2020, Description: PFC CS2 17C2020 A, Name: 170320G3_7, Date: 20-Mar-2017, Time: 16:00:32, Instrument: , Lab: , User:

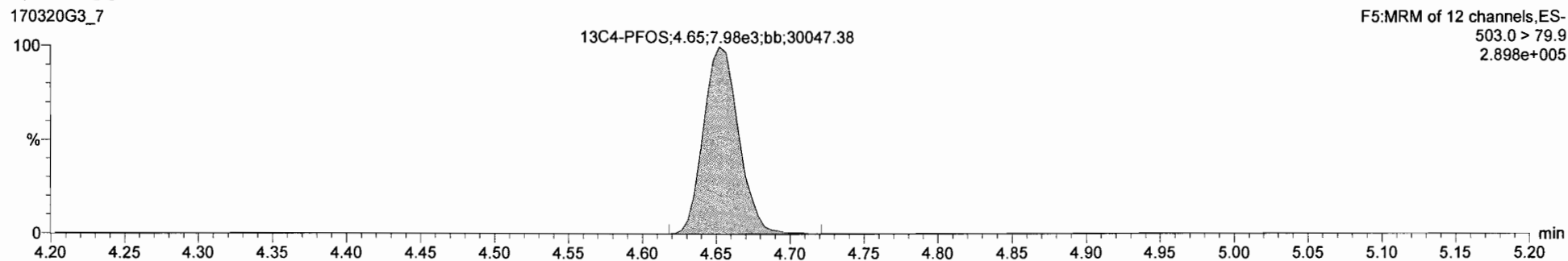
PFOS



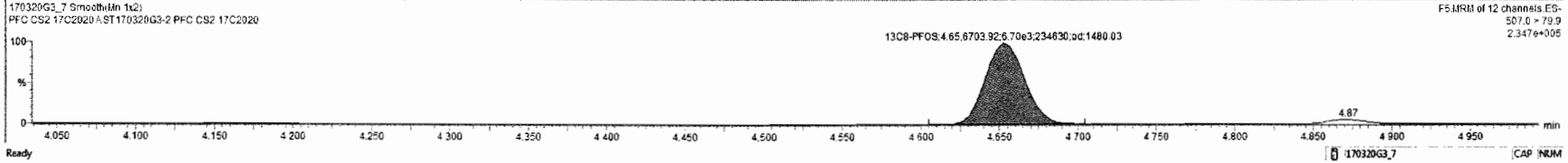
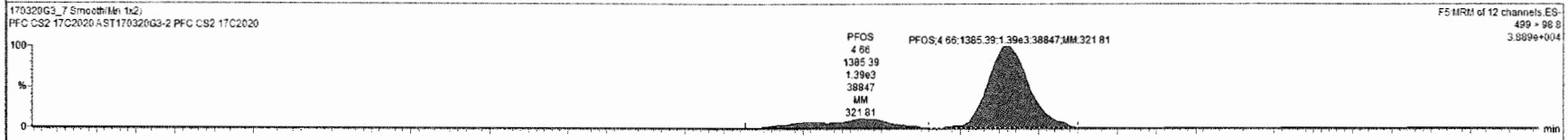
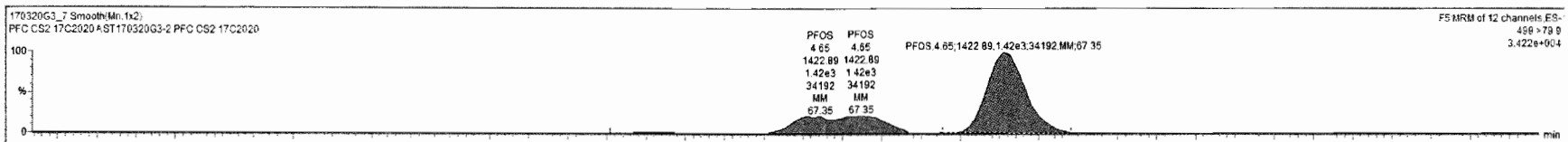
13C8-PFOS



13C4-PFOS



Name	Conc.	DL	%Rec	EMPC	Abs Resp	R/R	RT	#	Est	RA	Y/N	RRT	Acq Date	Acq Time	# Chr	Noise ID	Sample Text	Factor1	SW	Cal File	>MDL
1 PFBS	5.3095059	0.0000	100.2		8.195e3	2.96	1	7	0.368	YES	1.001	20-Mar-17	16:00:32	11.682	ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
2 PFHpA	5.0953498	0.0000	101.9		1.522e4	3.85	2	8			1.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
3 PFHxS	5.0496378	0.0478	101.0		6.338e3	3.96	3	9			1.001	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	YES	
4 PFDA	5.3658547	0.0000	107.3		1.443e4	4.24	4	10			0.999	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	YES	
5 PFNA	5.3882355	0.0000	107.8		1.048e4	4.59	5	11			1.001	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	YES	
6 PFOS	4.9344317	0.260	88.7		1.425e3	4.65	6	12			1.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	YES	
7 13C3-PFBS	9.8993496	0.00446	79.2		8.455e3	0.501	2.96	7	14		0.891	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
8 13C4-PFHpA	10.116897	0.00245	80.9		2.132e4	1.237	3.85	8	14		0.971	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
9 18O2-PFHxS	10.348582	0.000583	82.8		8.720e3	0.495	3.96	9	14		1.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
10 13C2-PFOA	12.072555	0.000921	96.6		3.743e4	3.221	4.25	10	15		1.001	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
11 13C5-PFNA	10.684788	0.00742	85.2		1.104e4	0.979	4.58	11	16		0.999	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	MD	
12 13C8-PFOS	9.7209597	0.0150	77.8		6.704e3	1.080	4.65	12	17		1.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
13 13C5-PFHxS	12.500000	0.00555	100.0		3.539e4	1.000	3.34	13	13		0.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
14 13C3-PFHxS	12.500000	0.000275	100.0		2.139e4	1.000	3.96	14	14		0.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
15 13C8-PFOA	12.500000	0.00123	100.0		1.203e4	1.000	4.24	15	15		0.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
16 13C5-PFNA	12.500000	0.000996	100.0		1.322e4	1.000	4.59	16	16		0.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
17 13C4-PFOS	12.500000	0.00104	100.0		7.983e3	1.000	4.65	17	17		0.000	20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
18 Total PFBS	5.3095059							18				20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
19 Total PFHxS	5.0496378							19				20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
20 Total PFDA	5.3658547							20				20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	
21 Total PFOS	6.7204802	0.260						21				20-Mar-17	16:00:32		ST170320G...	PFC CS2 17C20...	1.0	1.00	C18_V...	NO	



INITIAL CALIBRATION

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time
 Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
 Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Compound name: PFBS

Correlation coefficient: $r = 0.997984$, $r^2 = 0.995973$
 Calibration curve: $2.26993 * x + 0.0687359$
 Response type: Internal Std (Ref 7), Area * (IS Conc. / IS Area)
 Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

ES 3/16/17

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	0.250	3.02	6.04e2	1.14e4	0.262	4.9	2.66
2	2 170316G1_3	0.500	3.02	9.80e2	1.15e4	0.439	-12.2	2.13
3	3 170316G1_4	1.00	3.02	1.88e3	1.07e4	0.934	-6.6	2.19
4	4 170316G1_5	2.00	3.02	3.81e3	1.17e4	1.76	-11.9	2.03
5	5 170316G1_6	5.00	3.02	6.42e3	6.47e3	5.43	8.6	2.48
6	6 170316G1_7	10.0	3.02	1.49e4	6.71e3	12.2	21.7	2.77
7	7 170316G1_8	50.0	3.02	8.35e4	9.63e3	47.7	-4.5	2.17
8	8 170316G1_9	100	3.02	1.48e5	8.14e3	100	0.0	2.27

✓ AC 3/17/17

Compound name: PFHpA

Correlation coefficient: $r = 0.997479$, $r^2 = 0.994964$
 Calibration curve: $1.72647 * x + 0.128291$
 Response type: Internal Std (Ref 8), Area * (IS Conc. / IS Area)
 Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	0.250	3.89	1.15e3	2.52e4	0.256	2.4	2.28
2	2 170316G1_3	0.500	3.89	2.02e3	2.80e4	0.449	-10.2	1.81
3	3 170316G1_4	1.00	3.89	3.91e3	2.82e4	0.929	-7.1	1.73
4	4 170316G1_5	2.00	3.89	7.07e3	2.95e4	1.66	-16.9	1.50
5	5 170316G1_6	5.00	3.89	1.18e4	1.54e4	5.48	9.6	1.92
6	6 170316G1_7	10.0	3.89	2.74e4	1.60e4	12.3	23.4	2.14
7	7 170316G1_8	50.0	3.89	1.72e5	2.43e4	51.2	2.3	1.77
8	8 170316G1_9	100	3.89	2.88e5	2.16e4	96.5	-3.5	1.67

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Compound name: PFHxS

Correlation coefficient: $r = 0.999182$, $r^2 = 0.998364$

Calibration curve: $1.78157 * x + 0.0886791$

Response type: Internal Std (Ref 9), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	0.250	4.01	5.14e2	1.00e4	0.309	23.7	2.56
2	2 170316G1_3	0.500	4.00	7.92e2	1.13e4	0.443	-11.4	1.76
3	3 170316G1_4	1.00	4.00	1.38e3	1.07e4	0.857	-14.3	1.62
4	4 170316G1_5	2.00	4.01	2.78e3	1.08e4	1.76	-12.1	1.61
5	5 170316G1_6	5.00	4.00	4.90e3	6.49e3	5.25	5.0	1.89
6	6 170316G1_7	10.0	4.00	1.12e4	6.99e3	11.2	11.6	2.00
7	7 170316G1_8	50.0	4.01	6.89e4	9.95e3	48.5	-3.0	1.73
8	8 170316G1_9	100	4.01	1.26e5	8.79e3	100	0.5	1.79

Compound name: PFOA

Correlation coefficient: $r = 0.997916$, $r^2 = 0.995836$

Calibration curve: $0.871455 * x + 0.142235$

Response type: Internal Std (Ref 10), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	0.250	4.29	1.33e3	4.34e4	0.276	10.4	1.53
2	2 170316G1_3	0.500	4.28	1.87e3	4.50e4	0.431	-13.8	1.04
3	3 170316G1_4	1.00	4.28	3.27e3	4.37e4	0.912	-8.8	0.937
4	4 170316G1_5	2.00	4.29	5.68e3	4.40e4	1.69	-15.6	0.806
5	5 170316G1_6	5.00	4.28	1.01e4	2.57e4	5.47	9.5	0.983
6	6 170316G1_7	10.0	4.28	2.29e4	2.65e4	12.2	22.3	1.08
7	7 170316G1_8	50.0	4.29	1.38e5	4.09e4	48.3	-3.4	0.844
8	8 170316G1_9	100	4.29	2.58e5	3.71e4	99.5	-0.5	0.868

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Compound name: PFNA

Correlation coefficient: $r = 0.998066$, $r^2 = 0.996135$

Calibration curve: $2.1673 * x + 0.184413$

Response type: Internal Std (Ref 11), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	0.250	4.62	6.11e2	1.21e4	0.207	-17.0	2.54
2	2 170316G1_3	0.500	4.62	1.30e3	1.34e4	0.475	-5.0	2.43
3	3 170316G1_4	1.00	4.62	2.08e3	1.14e4	0.964	-3.6	2.27
4	4 170316G1_5	2.00	4.62	4.12e3	1.26e4	1.80	-10.2	2.04
5	5 170316G1_6	5.00	4.62	8.37e3	7.73e3	6.16	23.1	2.71
6	6 170316G1_7	10.0	4.62	1.70e4	8.57e3	11.4	13.8	2.48
7	7 170316G1_8	50.0	4.62	1.20e5	1.35e4	51.1	2.2	2.22
8	8 170316G1_9	100	4.62	2.27e5	1.35e4	96.7	-3.3	2.10

Compound name: PFOS

Correlation coefficient: $r = 0.996947$, $r^2 = 0.993903$

Calibration curve: $0.553136 * x + -0.0763074$

Response type: Internal Std (Ref 12), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	0.250	4.68	6.60e1	9.00e3	0.304	21.5	0.367
2	2 170316G1_3	0.500	4.68	1.15e2	9.58e3	0.409	-18.1	0.300
3	3 170316G1_4	1.00	4.68	2.68e2	6.85e3	1.02	2.3	0.489
4	4 170316G1_5	2.00	4.68	5.07e2	7.38e3	1.69	-15.6	0.429
5	5 170316G1_6	5.00	4.68	1.38e3	6.63e3	4.84	-3.1	0.520
6	6 170316G1_7	10.0	4.68	3.13e3	6.01e3	11.9	19.2	0.652
7	7 170316G1_8	50.0	4.68	2.11e4	1.06e4	45.4	-9.3	0.500
8	8 170316G1_9	100	4.68	4.74e4	1.04e4	103	3.2	0.570

Vista Analytical Laboratory Q2

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Compound name: 13C3-PFBS

Response Factor: 0.501217

RRF SD: 0.0718441, Relative SD: 14.3339

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	3.02	1.14e4	2.01e4	14.1	13.1	0.567
2	2 170316G1_3	12.5	3.01	1.15e4	2.08e4	13.8	10.1	0.552
3	3 170316G1_4	12.5	3.02	1.07e4	2.10e4	12.7	1.7	0.510
4	4 170316G1_5	12.5	3.02	1.17e4	1.95e4	14.9	19.6	0.599
5	5 170316G1_6	12.5	3.02	6.47e3	1.62e4	9.98	-20.1	0.400
6	6 170316G1_7	12.5	3.02	6.71e3	1.65e4	10.1	-18.9	0.406
7	7 170316G1_8	12.5	3.02	9.63e3	1.97e4	12.2	-2.8	0.487
8	8 170316G1_9	12.5	3.02	8.14e3	1.67e4	12.2	-2.7	0.488

Compound name: 13C4-PFHpA

Response Factor: 1.23676

RRF SD: 0.19033, Relative SD: 15.3894

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	3.89	2.52e4	2.01e4	12.7	1.7	1.26
2	2 170316G1_3	12.5	3.89	2.80e4	2.08e4	13.6	8.7	1.34
3	3 170316G1_4	12.5	3.88	2.82e4	2.10e4	13.6	8.5	1.34
4	4 170316G1_5	12.5	3.89	2.95e4	1.95e4	15.3	22.1	1.51
5	5 170316G1_6	12.5	3.89	1.54e4	1.62e4	9.65	-22.8	0.954
6	6 170316G1_7	12.5	3.89	1.60e4	1.65e4	9.77	-21.9	0.966
7	7 170316G1_8	12.5	3.89	2.43e4	1.97e4	12.4	-0.7	1.23
8	8 170316G1_9	12.5	3.89	2.16e4	1.67e4	13.1	4.4	1.29

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Compound name: 18O2-PFHxS

Response Factor: 0.494506

RRF SD: 0.0543219, Relative SD: 10.9851

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

Curve type: RF

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	4.00	1.00e4	2.01e4	12.7	1.3	0.501
2	2 170316G1_3	12.5	4.00	1.13e4	2.08e4	13.7	9.4	0.541
3	3 170316G1_4	12.5	4.00	1.07e4	2.10e4	12.8	2.4	0.506
4	4 170316G1_5	12.5	4.00	1.08e4	1.95e4	14.0	11.8	0.553
5	5 170316G1_6	12.5	4.00	6.49e3	1.62e4	10.1	-18.9	0.401
6	6 170316G1_7	12.5	4.00	6.99e3	1.65e4	10.7	-14.4	0.423
7	7 170316G1_8	12.5	4.00	9.95e3	1.97e4	12.7	1.9	0.504
8	8 170316G1_9	12.5	4.00	8.79e3	1.67e4	13.3	6.5	0.527

Compound name: 13C2-PFOA

Response Factor: 3.22114

RRF SD: 0.38407, Relative SD: 11.9234

Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)

Curve type: RF

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	4.28	4.34e4	1.22e4	13.8	10.6	3.56
2	2 170316G1_3	12.5	4.28	4.50e4	1.28e4	13.6	9.0	3.51
3	3 170316G1_4	12.5	4.28	4.37e4	1.34e4	12.6	1.0	3.25
4	4 170316G1_5	12.5	4.29	4.40e4	1.25e4	13.6	9.1	3.51
5	5 170316G1_6	12.5	4.28	2.57e4	9.83e3	10.2	-18.7	2.62
6	6 170316G1_7	12.5	4.28	2.65e4	1.01e4	10.2	-18.4	2.63
7	7 170316G1_8	12.5	4.29	4.09e4	1.21e4	13.1	4.5	3.36
8	8 170316G1_9	12.5	4.28	3.71e4	1.12e4	12.9	3.0	3.32

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Compound name: 13C5-PFNA

Response Factor: 0.979217

RRF SD: 0.10379, Relative SD: 10.5993

Response type: Internal Std (Ref 16), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	4.62	1.21e4	1.24e4	12.4	-1.0	0.970
2	2 170316G1_3	12.5	4.62	1.34e4	1.25e4	13.7	9.3	1.07
3	3 170316G1_4	12.5	4.62	1.14e4	1.25e4	11.6	-7.0	0.911
4	4 170316G1_5	12.5	4.62	1.26e4	1.15e4	14.0	12.4	1.10
5	5 170316G1_6	12.5	4.62	7.73e3	9.48e3	10.4	-16.7	0.815
6	6 170316G1_7	12.5	4.62	8.57e3	9.78e3	11.2	-10.5	0.876
7	7 170316G1_8	12.5	4.62	1.35e4	1.33e4	13.0	3.8	1.02
8	8 170316G1_9	12.5	4.62	1.35e4	1.26e4	13.7	9.6	1.07

Compound name: 13C8-PFOS

Response Factor: 1.07987

RRF SD: 0.129751, Relative SD: 12.0155

Response type: Internal Std (Ref 17), Area * (IS Conc. / IS Area)

Curve type: RF

	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	4.68	9.00e3	6.79e3	15.3	22.6	1.32
2	2 170316G1_3	12.5	4.68	9.58e3	8.34e3	13.3	6.5	1.15
3	3 170316G1_4	12.5	4.68	6.85e3	6.53e3	12.1	-2.9	1.05
4	4 170316G1_5	12.5	4.68	7.38e3	6.74e3	12.7	1.5	1.10
5	5 170316G1_6	12.5	4.68	6.63e3	7.58e3	10.1	-19.1	0.874
6	6 170316G1_7	12.5	4.68	6.01e3	6.06e3	11.5	-8.1	0.992
7	7 170316G1_8	12.5	4.68	1.06e4	9.54e3	12.8	2.5	1.11
8	8 170316G1_9	12.5	4.68	1.04e4	9.93e3	12.1	-3.0	1.05

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Compound name: 13C5-PFHxA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 13), Area * (IS Conc. / IS Area)

Curve type: RF

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	3.37	3.44e4	3.44e4	12.5	0.0	1.00
2	2 170316G1_3	12.5	3.37	3.66e4	3.66e4	12.5	0.0	1.00
3	3 170316G1_4	12.5	3.37	3.56e4	3.56e4	12.5	0.0	1.00
4	4 170316G1_5	12.5	3.38	3.60e4	3.60e4	12.5	0.0	1.00
5	5 170316G1_6	12.5	3.37	2.57e4	2.57e4	12.5	0.0	1.00
6	6 170316G1_7	12.5	3.37	2.54e4	2.54e4	12.5	0.0	1.00
7	7 170316G1_8	12.5	3.38	3.19e4	3.19e4	12.5	0.0	1.00
8	8 170316G1_9	12.5	3.37	2.77e4	2.77e4	12.5	0.0	1.00

Compound name: 13C3-PFHxS

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

Curve type: RF

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	4.01	2.01e4	2.01e4	12.5	0.0	1.00
2	2 170316G1_3	12.5	4.00	2.08e4	2.08e4	12.5	0.0	1.00
3	3 170316G1_4	12.5	4.00	2.10e4	2.10e4	12.5	0.0	1.00
4	4 170316G1_5	12.5	4.01	1.95e4	1.95e4	12.5	0.0	1.00
5	5 170316G1_6	12.5	4.00	1.62e4	1.62e4	12.5	0.0	1.00
6	6 170316G1_7	12.5	4.00	1.65e4	1.65e4	12.5	0.0	1.00
7	7 170316G1_8	12.5	4.01	1.97e4	1.97e4	12.5	0.0	1.00
8	8 170316G1_9	12.5	4.00	1.67e4	1.67e4	12.5	-0.0	1.00

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Compound name: 13C8-PFOA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)

Curve type: RF

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	4.28	1.22e4	1.22e4	12.5	0.0	1.00
2	2 170316G1_3	12.5	4.28	1.28e4	1.28e4	12.5	0.0	1.00
3	3 170316G1_4	12.5	4.28	1.34e4	1.34e4	12.5	0.0	1.00
4	4 170316G1_5	12.5	4.28	1.25e4	1.25e4	12.5	0.0	1.00
5	5 170316G1_6	12.5	4.28	9.83e3	9.83e3	12.5	0.0	1.00
6	6 170316G1_7	12.5	4.28	1.01e4	1.01e4	12.5	0.0	1.00
7	7 170316G1_8	12.5	4.29	1.21e4	1.21e4	12.5	0.0	1.00
8	8 170316G1_9	12.5	4.28	1.12e4	1.12e4	12.5	0.0	1.00

Compound name: 13C9-PFNA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 16), Area * (IS Conc. / IS Area)

Curve type: RF

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	4.62	1.24e4	1.24e4	12.5	0.0	1.00
2	2 170316G1_3	12.5	4.62	1.25e4	1.25e4	12.5	0.0	1.00
3	3 170316G1_4	12.5	4.62	1.25e4	1.25e4	12.5	0.0	1.00
4	4 170316G1_5	12.5	4.62	1.15e4	1.15e4	12.5	0.0	1.00
5	5 170316G1_6	12.5	4.62	9.48e3	9.48e3	12.5	0.0	1.00
6	6 170316G1_7	12.5	4.62	9.78e3	9.78e3	12.5	0.0	1.00
7	7 170316G1_8	12.5	4.62	1.33e4	1.33e4	12.5	0.0	1.00
8	8 170316G1_9	12.5	4.62	1.26e4	1.26e4	12.5	0.0	1.00

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:25:27 Pacific Daylight Time

Compound name: 13C4-PFOS

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 17), Area * (IS Conc. / IS Area)

Curve type: RF

#	Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170316G1_2	12.5	4.68	6.79e3	6.79e3	12.5	0.0	1.00
2	2 170316G1_3	12.5	4.68	8.34e3	8.34e3	12.5	0.0	1.00
3	3 170316G1_4	12.5	4.68	6.53e3	6.53e3	12.5	0.0	1.00
4	4 170316G1_5	12.5	4.68	6.74e3	6.74e3	12.5	0.0	1.00
5	5 170316G1_6	12.5	4.68	7.58e3	7.58e3	12.5	0.0	1.00
6	6 170316G1_7	12.5	4.68	6.06e3	6.06e3	12.5	0.0	1.00
7	7 170316G1_8	12.5	4.68	9.54e3	9.54e3	12.5	0.0	1.00
8	8 170316G1_9	12.5	4.68	9.93e3	9.93e3	12.5	0.0	1.00

Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:26:14 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

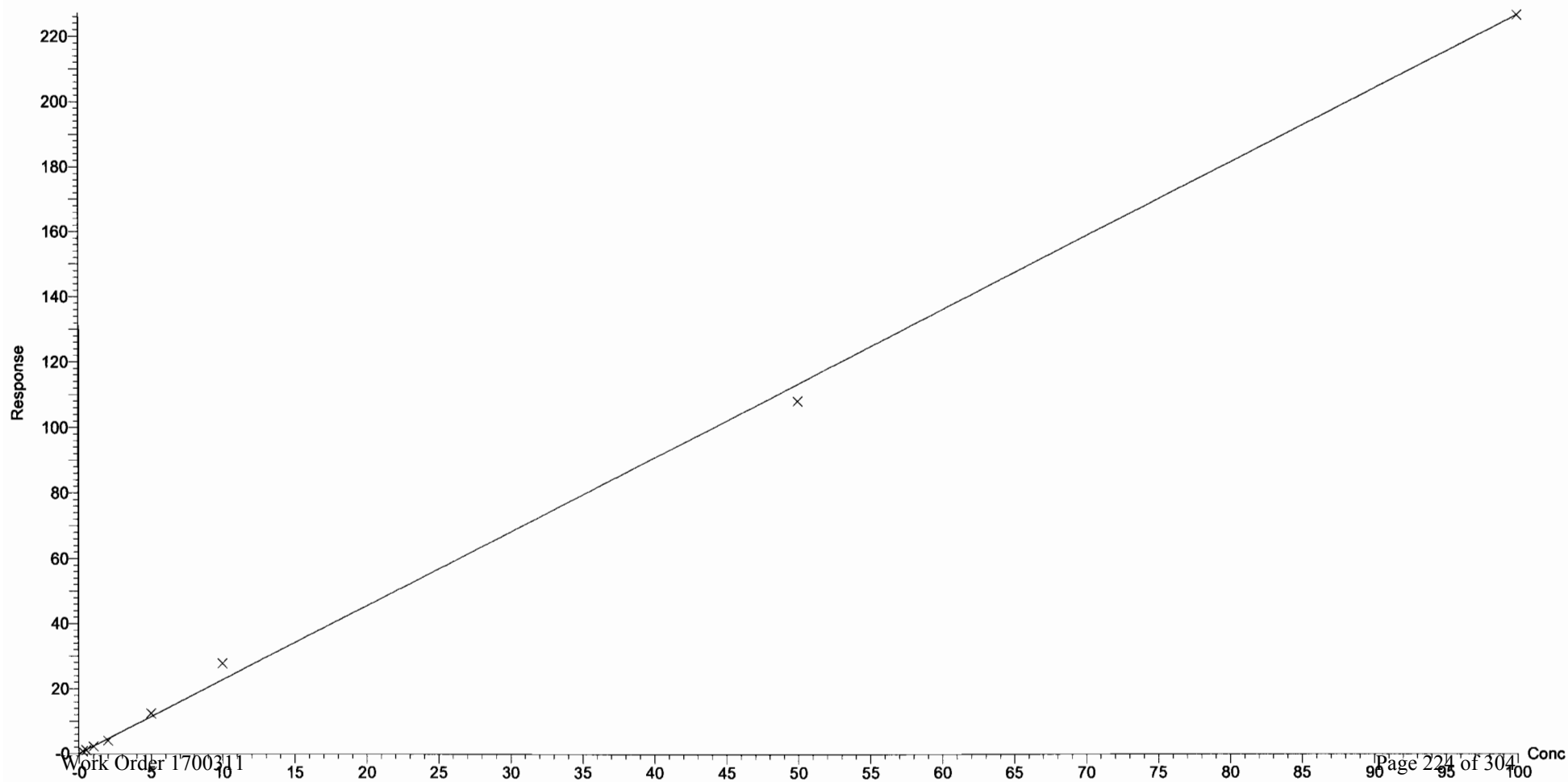
Compound name: PFBS

Correlation coefficient: $r = 0.997984$, $r^2 = 0.995973$

Calibration curve: $2.26993 * x + 0.0687359$

Response type: Internal Std (Ref 7), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:26:14 Pacific Daylight Time

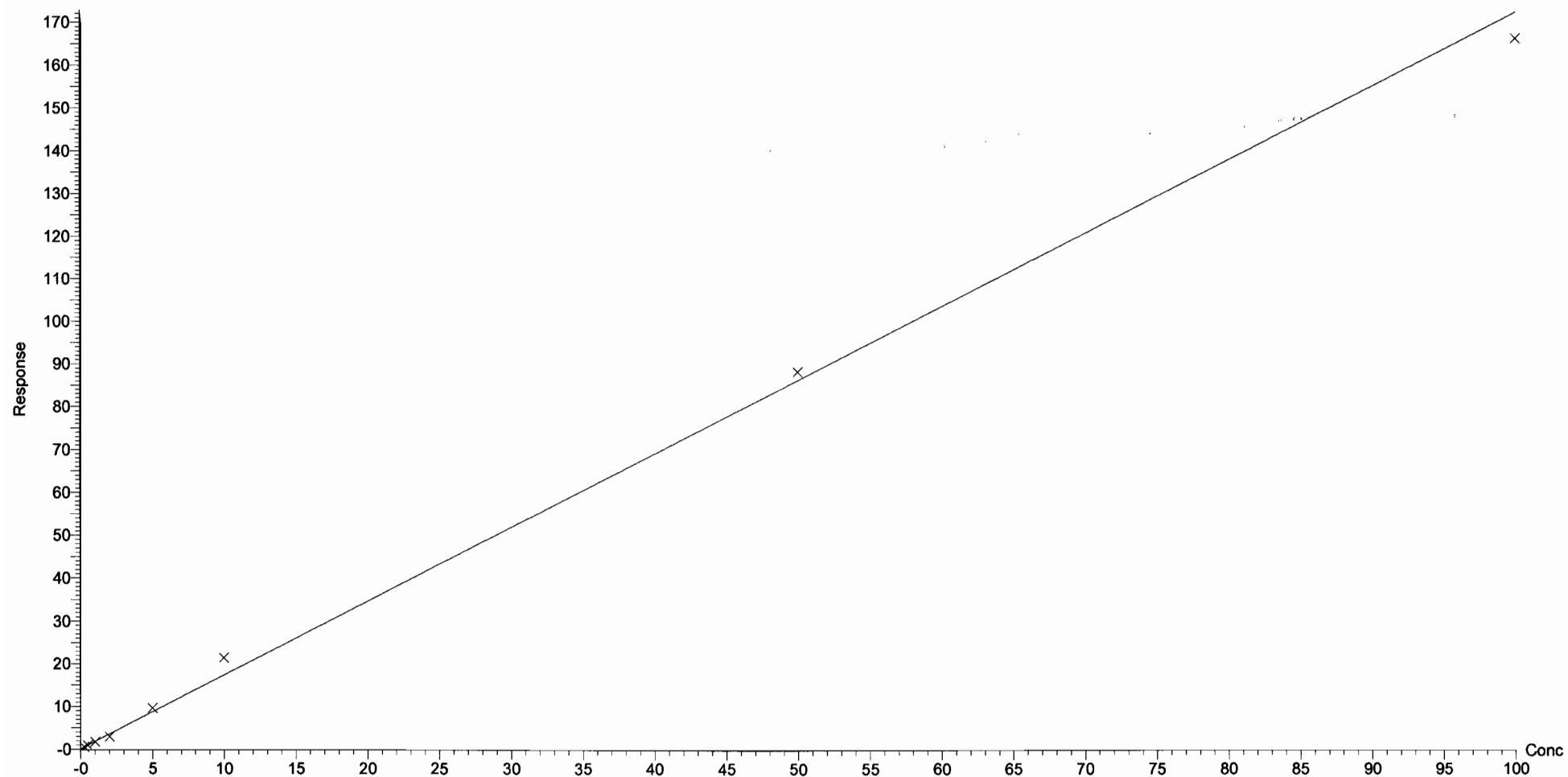
Compound name: PFHpA

Correlation coefficient: $r = 0.997479$, $r^2 = 0.994964$

Calibration curve: $1.72647 * x + 0.128291$

Response type: Internal Std (Ref 8), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:26:14 Pacific Daylight Time

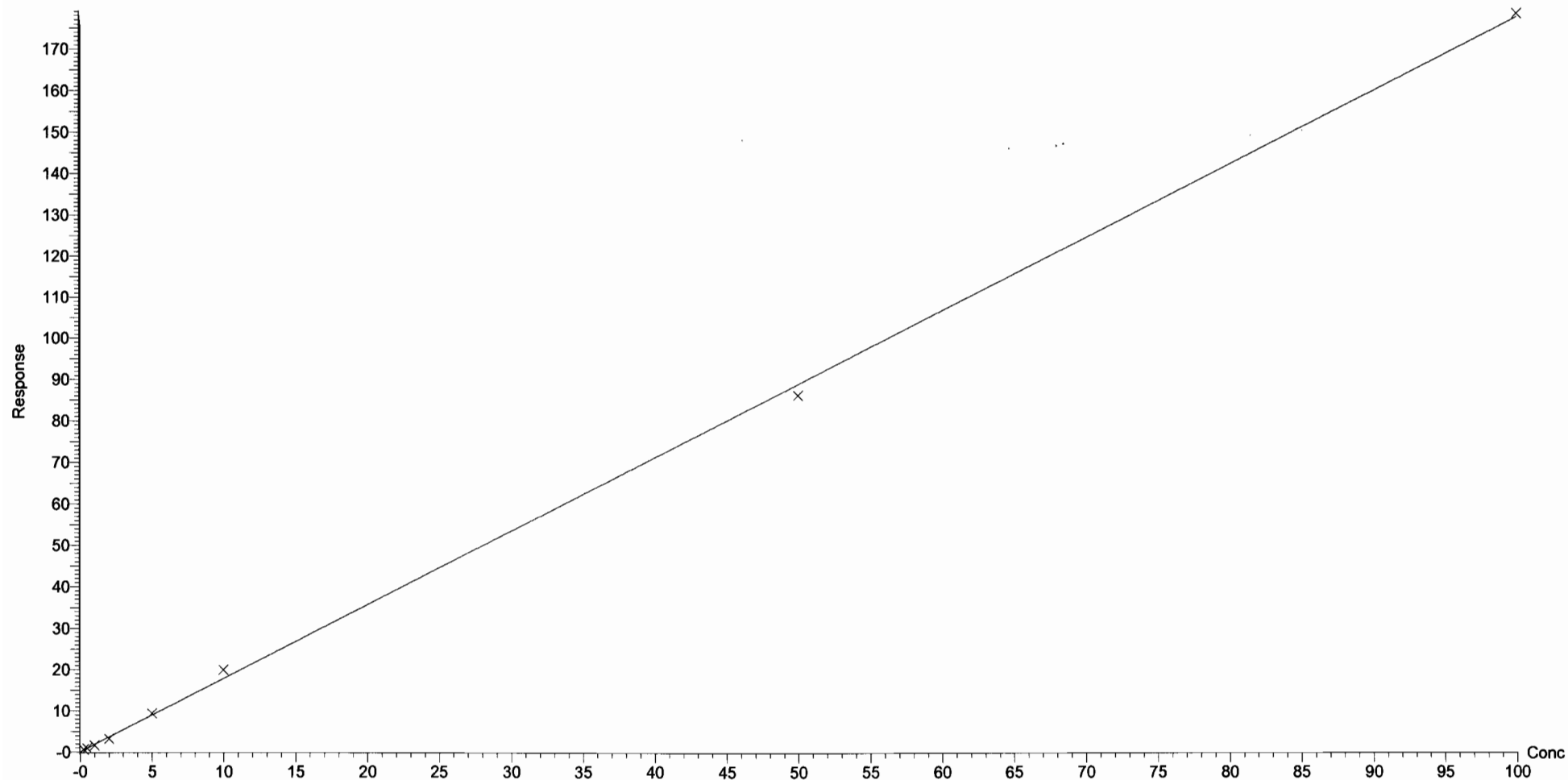
Compound name: PFHxS

Correlation coefficient: $r = 0.999182$, $r^2 = 0.998364$

Calibration curve: $1.78157 * x + 0.0886791$

Response type: Internal Std (Ref 9), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:26:14 Pacific Daylight Time

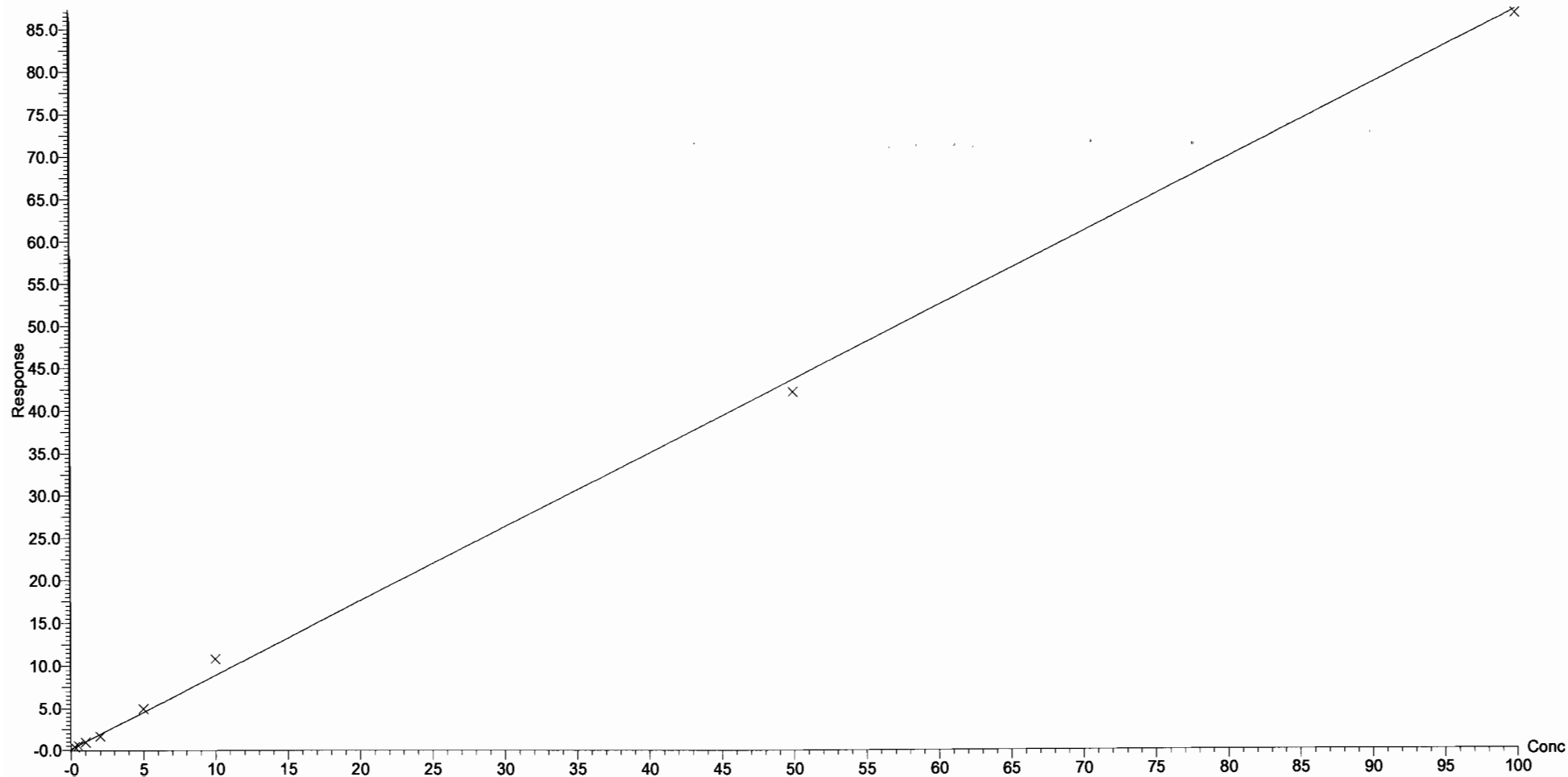
Compound name: PFOA

Correlation coefficient: $r = 0.997916$, $r^2 = 0.995836$

Calibration curve: $0.871455 * x + 0.142235$

Response type: Internal Std (Ref 10), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:26:14 Pacific Daylight Time

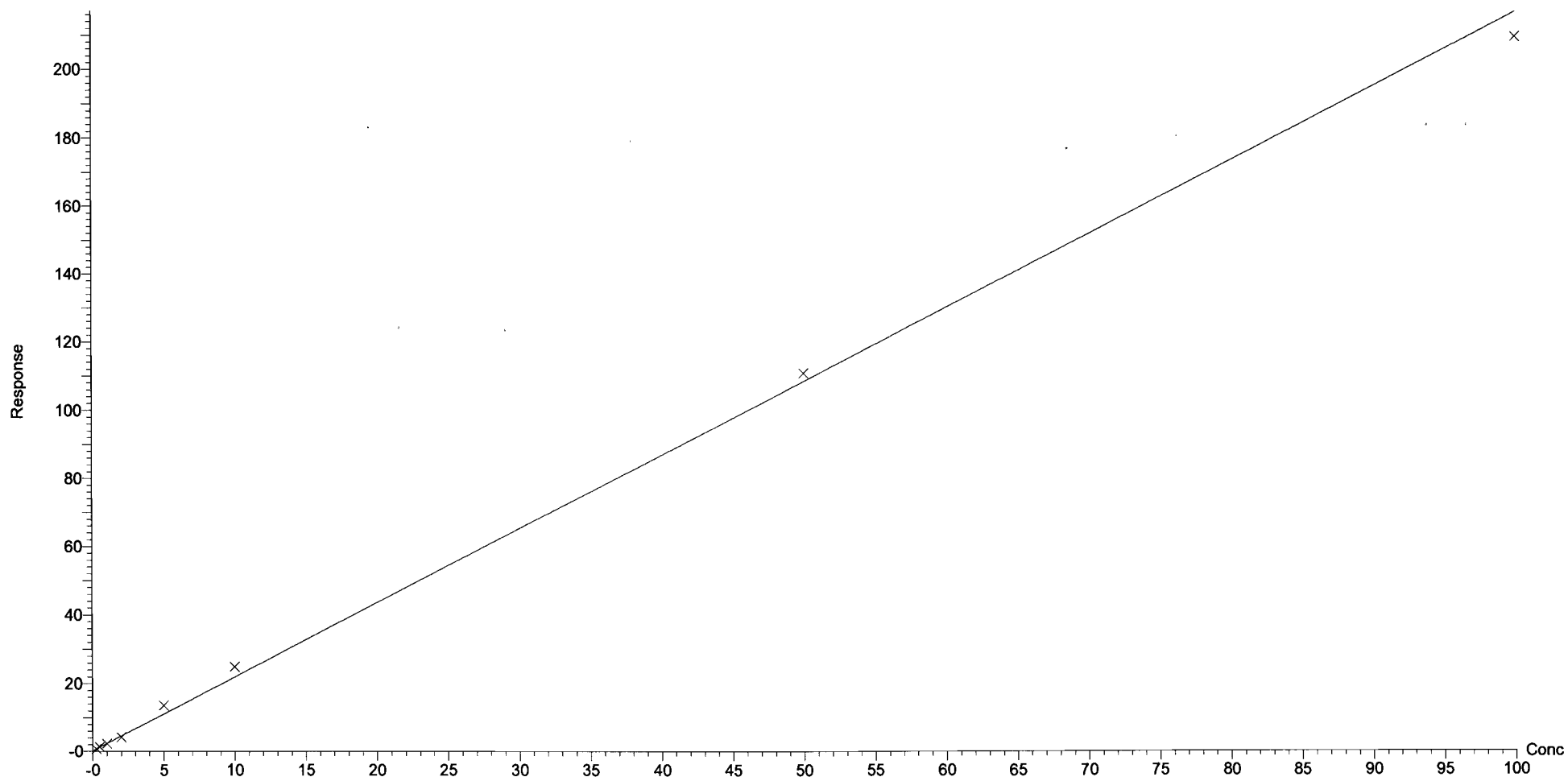
Compound name: PFNA

Correlation coefficient: $r = 0.998066$, $r^2 = 0.996135$

Calibration curve: $2.1673 * x + 0.184413$

Response type: Internal Std (Ref 11), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-CRV.qld

Last Altered: Thursday, March 16, 2017 13:24:03 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:26:14 Pacific Daylight Time

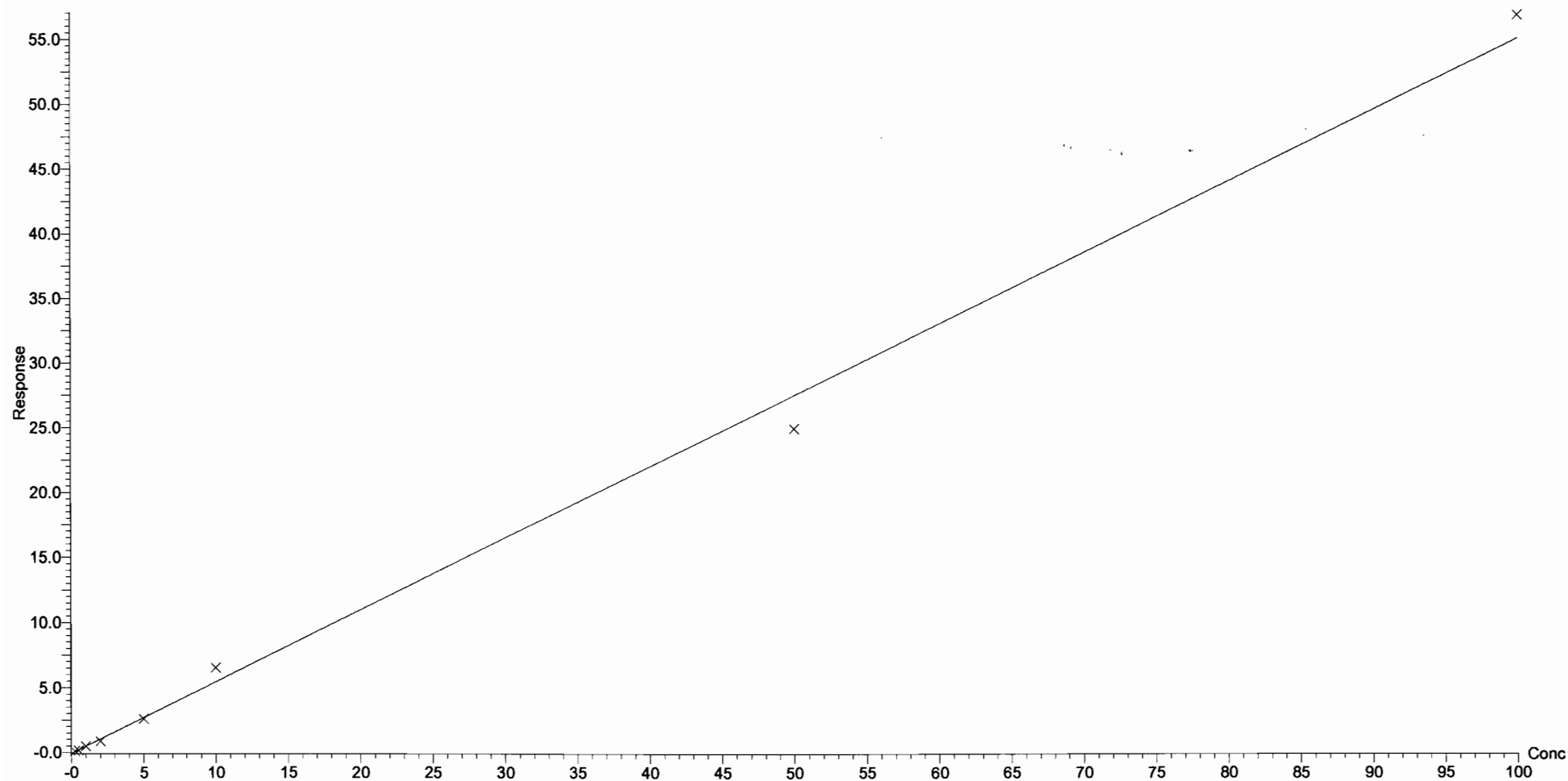
Compound name: PFOS

Correlation coefficient: $r = 0.996947$, $r^2 = 0.993903$

Calibration curve: $0.553136 * x + -0.0763074$

Response type: Internal Std (Ref 12), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Dataset: Untitled

Last Altered: Friday, March 17, 2017 08:50:58 Pacific Daylight Time
Printed: Friday, March 17, 2017 08:51:49 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Compound name: PFBS

	Name	ID	Acq.Date	Acq.Time
1	170316G1_1	IPA	16-Mar-17	10:18:02
2	170316G1_2	ST170316G1-1 PFC CS-2 17C1502	16-Mar-17	10:30:20
3	170316G1_3	ST170316G1-2 PFC CS-1 17C1503	16-Mar-17	10:42:47
4	170316G1_4	ST170316G1-3 PFC CS0 17C1504	16-Mar-17	10:55:20
5	170316G1_5	ST170316G1-4 PFC CS1 17C1505	16-Mar-17	11:07:54
6	170316G1_6	ST170316G1-5 PFC CS2 17C1603	16-Mar-17	11:20:35
7	170316G1_7	ST170316G1-6 PFC CS3 17C1602	16-Mar-17	11:33:10
8	170316G1_8	ST170316G1-7 PFC CS4 17C1508	16-Mar-17	11:45:43
9	170316G1_9	ST170316G1-8 PFC CS5 17C1509	16-Mar-17	11:58:17
10	170316G1_10	IPA	16-Mar-17	12:11:12
11	170316G1_11	SS170316G1-1 PFC SSS 17C1510	16-Mar-17	12:23:32
12	170316G1_12	IPA	16-Mar-17	12:36:04
13	170316G1_13	B7C0045-BS1 OPR 0.125	16-Mar-17	12:48:40
14	170316G1_14	B7C0050-BS1 OPR 0.125	16-Mar-17	13:01:10
15	170316G1_15	B7C0063-BS1 OPR 0.125	16-Mar-17	13:58:32
16	170316G1_16	B7C0073-BS1 OPR 0.125	16-Mar-17	14:10:43
17	170316G1_17	IPA	16-Mar-17	14:23:14
18	170316G1_18	B7C0045-BLK1 Method Blank 0.125	16-Mar-17	14:35:47
19	170316G1_19	B7C0050-BLK1 Method Blank 0.125	16-Mar-17	14:48:20
20	170316G1_20	B7C0063-BLK1 Method Blank 0.125	16-Mar-17	15:00:53
21	170316G1_21	B7C0073-BLK1 Method Blank 0.125	16-Mar-17	15:13:28
22	170316G1_22	1700304-01 Field Blank (420-117740-1) 0.12255	16-Mar-17	15:25:56
23	170316G1_23	IPA	16-Mar-17	16:11:28
24	170316G1_24	B7C0073-BLK1 Method Blank 0.125	16-Mar-17	16:23:45
25	170316G1_25	1700304-01 Field Blank (420-117740-1) 0.12255	16-Mar-17	16:36:18
26	170316G1_26	1700299-01 MATPEW100 0.12287	16-Mar-17	16:48:51
27	170316G1_27	1700299-02 MATPEW101 0.11464	16-Mar-17	17:01:50
28	170316G1_28	1700299-03 MATPEW102 0.12518	16-Mar-17	17:14:11
29	170316G1_29	1700311-02@5X OF-SOW-091D-0317 0.12329	16-Mar-17	17:26:47
30	170316G1_30	1700311-03@5X OF-SOW-091DP-0317 0.124...	16-Mar-17	17:39:24
31	170316G1_31	1700311-06@5X OF-SOW-091M-0317 0.12783	16-Mar-17	17:51:55

Ⓐ RI. Bad injection. EJ 3/17/17

Dataset: Untitled

Last Altered: Friday, March 17, 2017 08:50:58 Pacific Daylight Time
Printed: Friday, March 17, 2017 08:51:49 Pacific Daylight Time

Compound name: PFBS

	Name	ID	Acq.Date	Acq.Time
32	170316G1_32	1700311-01 OF-SOW-091A-0317 0.11879	16-Mar-17	18:04:26
33	170316G1_33	1700311-02 OF-SOW-091D-0317 0.12329	16-Mar-17	18:16:55
34	170316G1_34	1700311-03 OF-SOW-091DP-0317 0.12421	16-Mar-17	18:29:40
35	170316G1_35	1700311-04 OF-EB030817 0.12212	16-Mar-17	18:42:01
36	170316G1_36	IPA	16-Mar-17	18:54:35
37	170316G1_37	ST170316G1-9 PFC CS2 17C1603	16-Mar-17	19:07:10
38	170316G1_38	IPA	16-Mar-17	19:19:41
39	170316G1_39	1700311-05 OF-SOW-091K-0317 0.12112	16-Mar-17	19:32:15
40	170316G1_40	1700311-06 OF-SOW-091M-0317 0.12783	16-Mar-17	19:44:47
41	170316G1_41	1700311-07 OF-FB030817 0.12533	16-Mar-17	19:57:20
42	170316G1_42	1700311-08 OF-SOW-091L-0317 0.11948	16-Mar-17	20:09:53
43	170316G1_43	1700311-09 OF14-GW05-0317 0.12223	16-Mar-17	20:22:27
44	170316G1_44	1700314-01 OUTFALL #1 0.125	16-Mar-17	20:34:56
45	170316G1_45	1700314-02 OUTFALL #2 0.125	16-Mar-17	20:47:29
46	170316G1_46	1700314-03 OUTFALL #2A 0.125	16-Mar-17	21:00:02
47	170316G1_47	1700314-04 OUTFALL #3 0.125	16-Mar-17	21:12:35
48	170316G1_48	1700314-05 OUTFALL #4 0.125	16-Mar-17	21:25:09
49	170316G1_49	1700314-06 PFC FIELD BLANK@ OUTFALL#...	16-Mar-17	21:37:42
50	170316G1_50	IPA	16-Mar-17	21:50:15
51	170316G1_51	ST170316G1-10 PFC CS2 17C1603	16-Mar-17	22:02:48
52	170316G1_52	IPA	16-Mar-17	22:15:21
53	170316G1_53	B7C0050-MS1 Matrix Spike 0.125	16-Mar-17	22:27:55
54	170316G1_54	B7C0050-MSD1 Matrix Spike Dup 0.125	16-Mar-17	22:40:46
55	170316G1_55	1700304-02RE1@10XB-104-Trailer(420-1177...	16-Mar-17	22:53:00
56	170316G1_56	1700304-02RE1 B-104 -Trailer (420-117740-2)...	16-Mar-17	23:05:34
57	170316G1_57	IPA	16-Mar-17	23:18:06
58	170316G1_58	ST170316G1-11 PFC CS2 17C1603	16-Mar-17	23:30:41
59	170316G1_59	IPA	16-Mar-17	23:43:14

Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

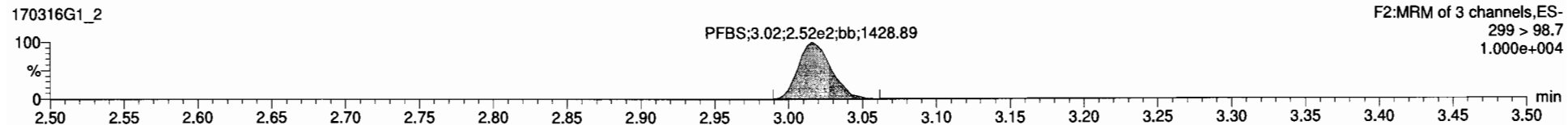
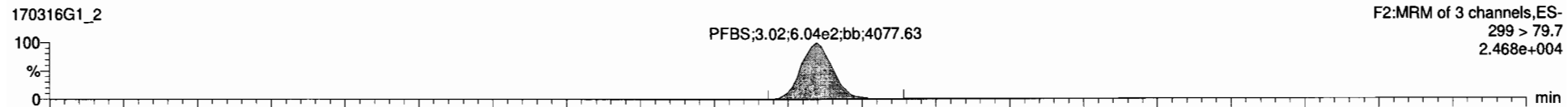
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

Method: U:\G1.pro\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

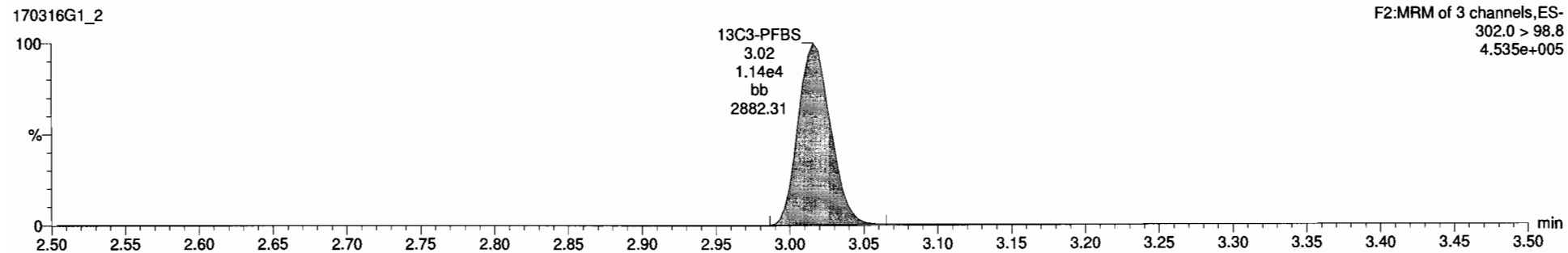
Calibration: 16 Mar 2017 13:27:05

ID: ST170316G1-1 PFC CS-2 17C1502, Description: PFC CS-2 17C1502 A, Name: 170316G1_2, Date: 16-Mar-2017, Time: 10:30:20, Instrument: , Lab: , User:

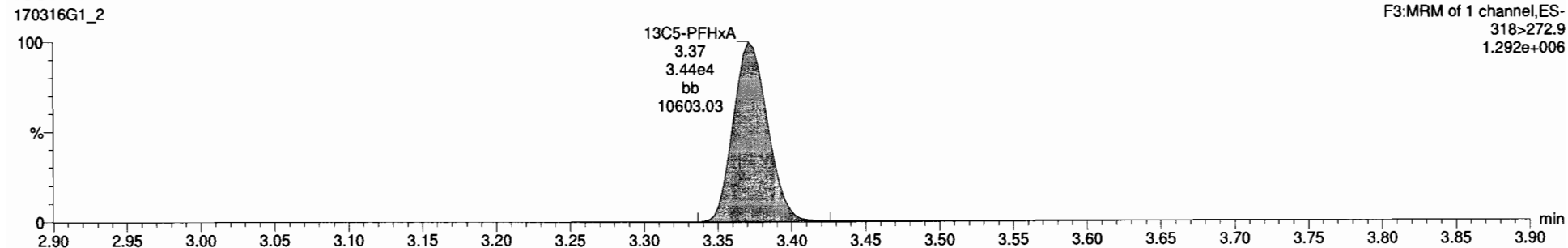
PFBS



13C3-PFBS



13C5-PFHxA



Dataset: Untitled

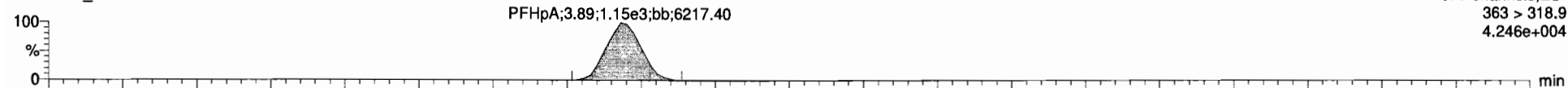
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

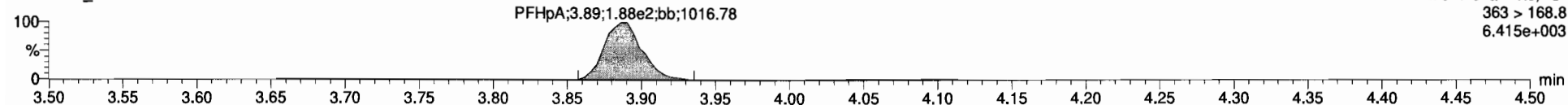
ID: ST170316G1-1 PFC CS-2 17C1502, Description: PFC CS-2 17C1502 A, Name: 170316G1_2, Date: 16-Mar-2017, Time: 10:30:20, Instrument: , Lab: , User:

PFHpA

170316G1_2

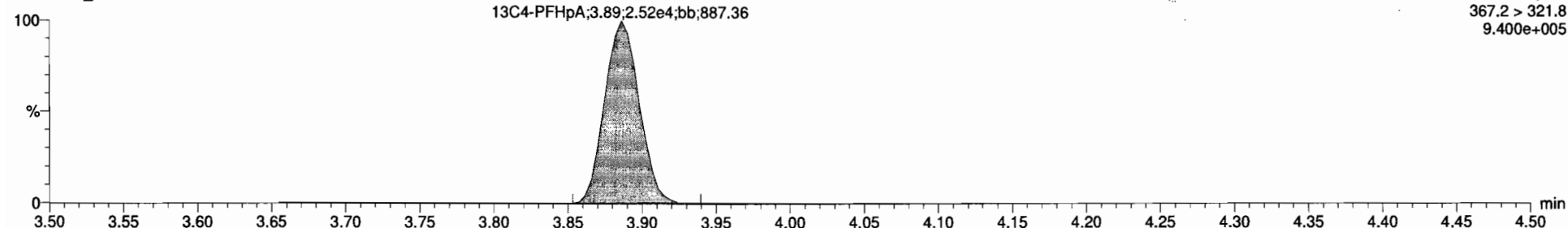


170316G1_2



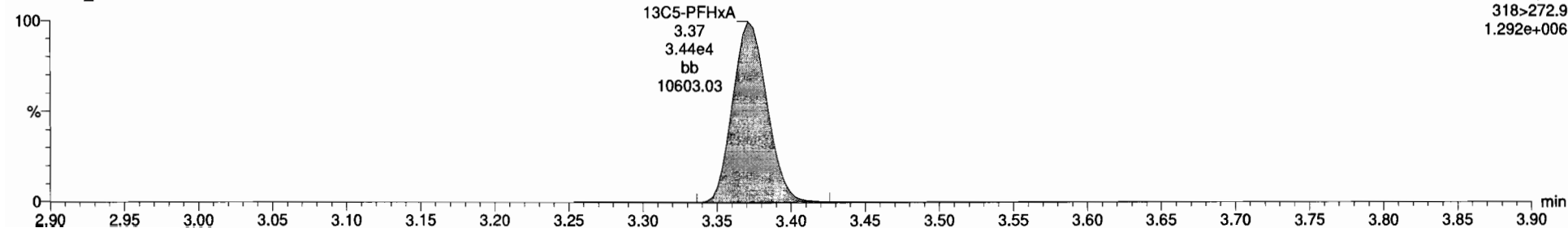
13C4-PFHxA

170316G1_2



13C5-PFHxA

170316G1_2



Dataset: Untitled

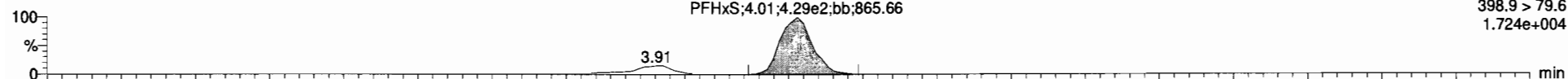
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

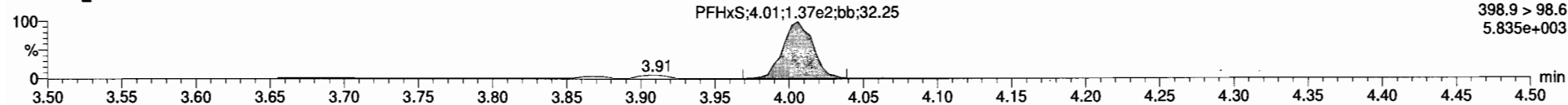
ID: ST170316G1-1 PFC CS-2 17C1502, Description: PFC CS-2 17C1502 A, Name: 170316G1_2, Date: 16-Mar-2017, Time: 10:30:20, Instrument: , Lab: , User:

PFHxS

170316G1_2

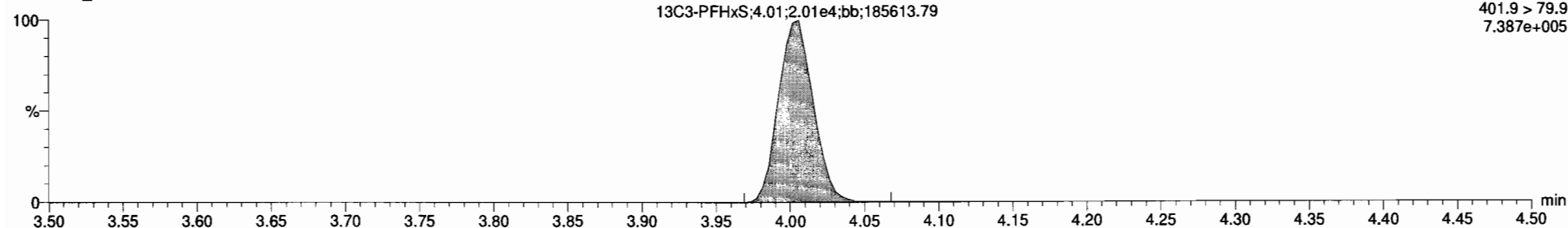


170316G1_2



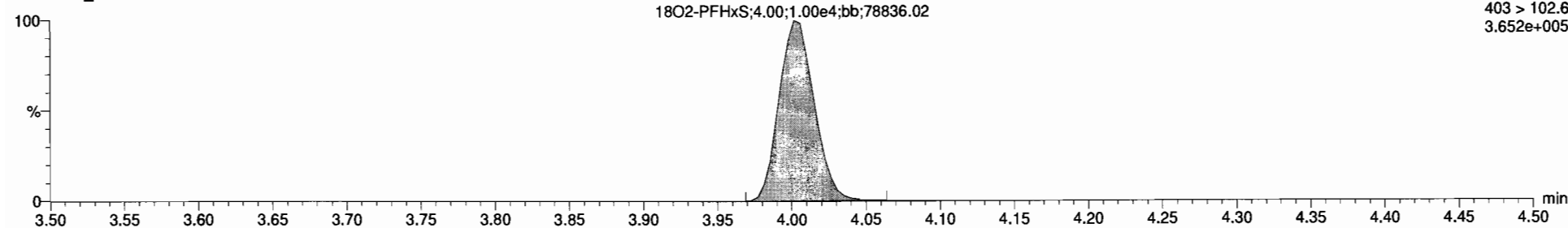
13C3-PFHxS

170316G1_2

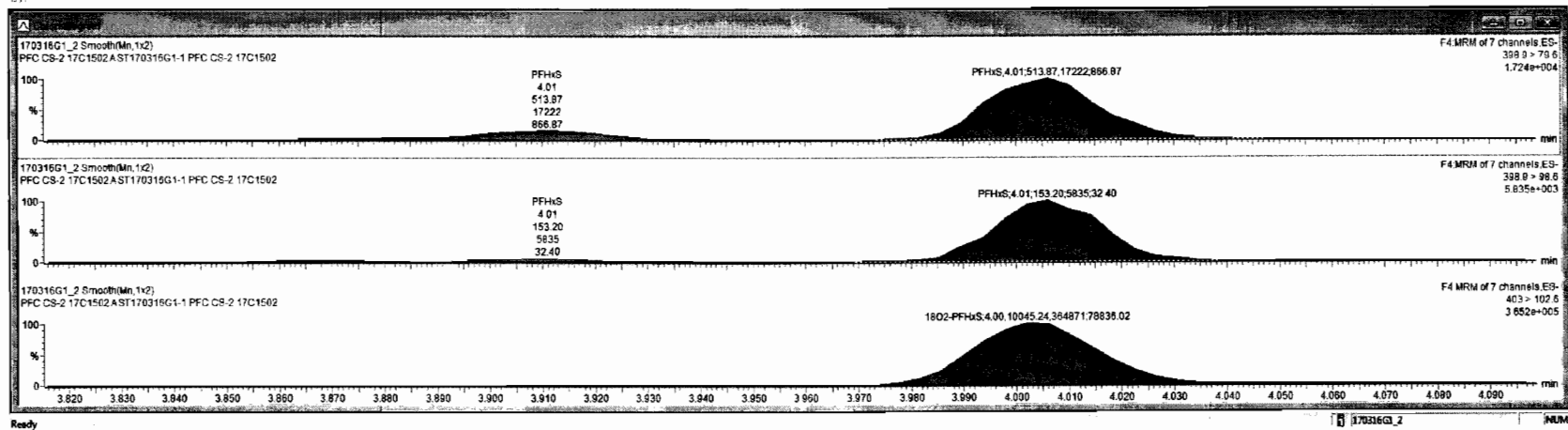


18O2-PFHxS

170316G1_2



Name	Trace	Area	RP	WHOL	Prod	RT	Conc	MDL	SLD	DL	
1	PFBS	299 > 79.7	6.04e2	1.000	3.02	3.02	0.262	NO	104.9		
2	PFHpA	363 > 318.9	1.15e3	1.000	3.89	3.89	0.256	NO	102.4		
3	PFHxA	403 > 398.7	2.14e3	1.000	3.90	3.91	0.302	NO	123.7		
4	PFOA	413 > 368.7	1.33e3	1.000	4.28	4.29	0.278	NO	115.4		
5	PFNA	483 > 418.8	6.11e2	1.000	4.62	4.62	0.207	NO	83.0		
6	PFOS	499 > 79.9	6.00e1	1.000	4.68	4.68	0.304	NO	121.5	0.1857068	
7	13C3-PFBS	302.0 > 96.8	1.14e4	0.501	1.000	2.99	3.02	14.1	NO	113.1	0.0132582
8	13C4-PFHpA	387.2 > 321.8	2.52e4	1.24	1.000	3.88	3.89	12.7	NO	101.7	0.0362073
9	18O2-PFHxA	403 > 102.6	1.00e4	0.495	1.000	4.01	4.00	12.7	NO	101.3	0.0003963
10	13C2-PFOA	414.9 > 389.7	4.34e4	3.22	1.000	4.28	4.28	13.8	NO	110.6	0.0078876
11	13C5-PFNA	488.2 > 422.9	1.21e4	0.879	1.000	4.62	4.62	12.4	NO	99.0	0.0005903
12	13C6-PFOS	507.0 > 79.9	9.00e3	1.08	1.000	4.68	4.68	15.3	NO	122.6	0.0008647
13	13C5-PFHxA	318 > 272.9	3.44e4	1.00	1.000	3.29	3.37	12.5	NO	100.0	0.0029473
14	13C3-PFHxA	401.9 > 79.9	2.81e4	1.00	1.000	3.94	4.01	12.5	NO	100.0	0.0091884
15	13C6-PFOA	421.3 > 378	1.22e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0218813
16	13C8-PFNA	472.2 > 426.9	1.24e4	1.00	1.000	4.58	4.62	12.5	NO	100.0	0.0185737
17	13C4-PFOS	503.0 > 79.9	6.79e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0044733
18	Total PFBS	299 > 79.7	6.04e2	1.000				0.262	NO		
19	Total PFHxA	398.9 > 79.6	5.92e2	1.000				0.310	NO		
20	Total PFOA	413 > 368.7	1.37e3	1.000				0.276	NO		
21	Total PFOS	499 > 79.9	7.17e1	1.000				0.456	NO		0.1857068



Dataset: Untitled

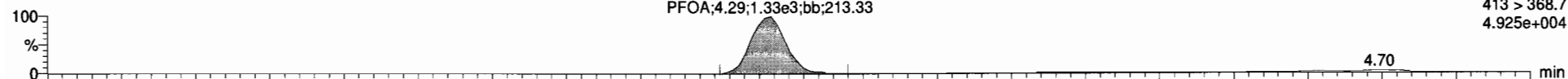
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

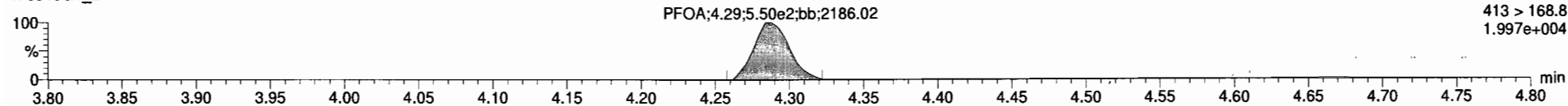
ID: ST170316G1-1 PFC CS-2 17C1502, Description: PFC CS-2 17C1502 A, Name: 170316G1_2, Date: 16-Mar-2017, Time: 10:30:20, Instrument: , Lab: , User:

PFOA

170316G1_2

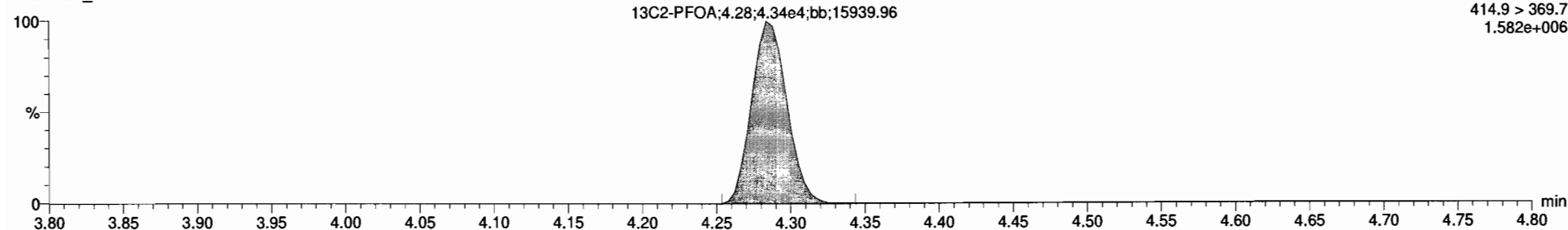


170316G1_2



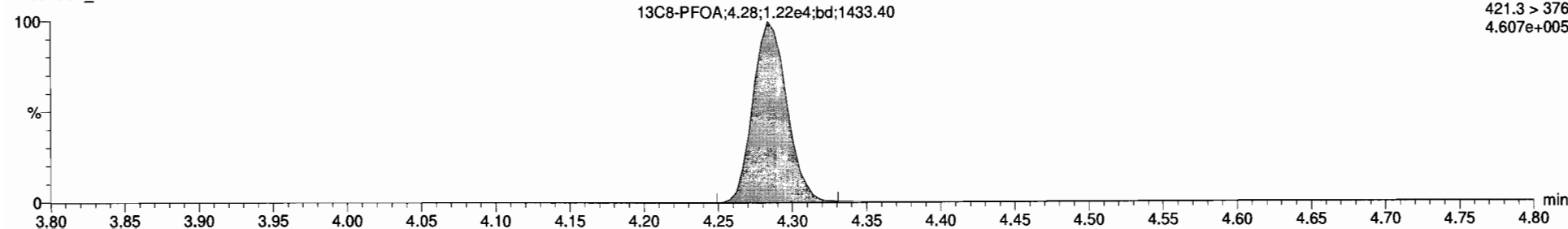
13C2-PFOA

170316G1_2



13C8-PFOA

170316G1_2



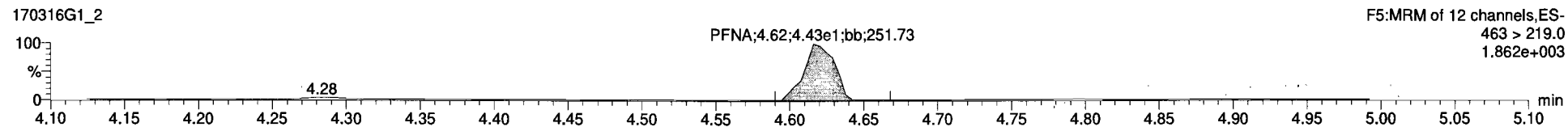
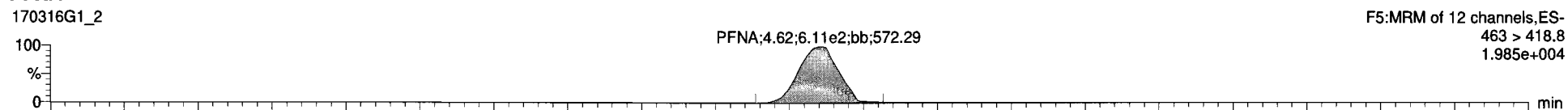
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

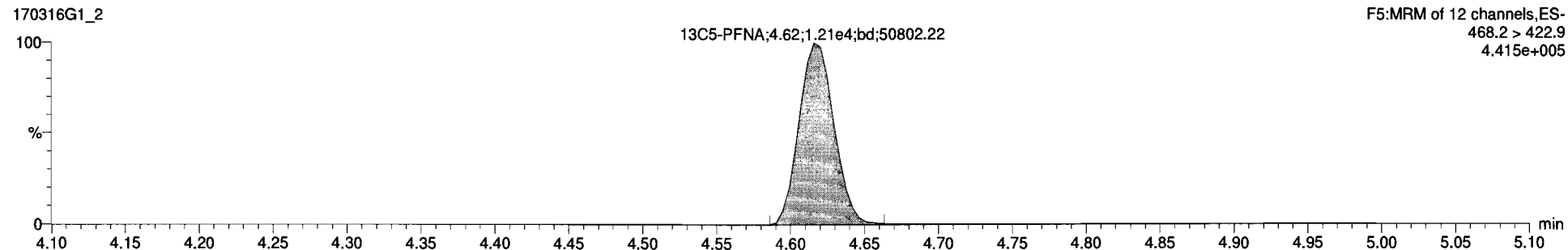
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-1 PFC CS-2 17C1502, Description: PFC CS-2 17C1502 A, Name: 170316G1_2, Date: 16-Mar-2017, Time: 10:30:20, Instrument: , Lab: , User:

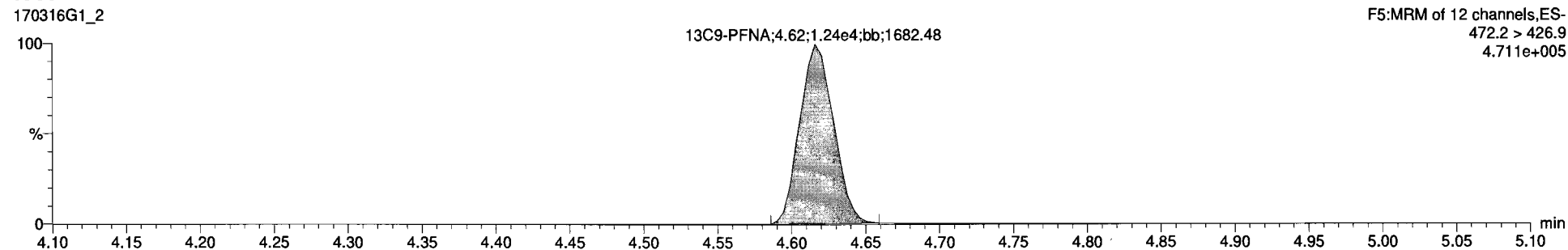
PFNA



13C5-PFNA



13C9-PFNA



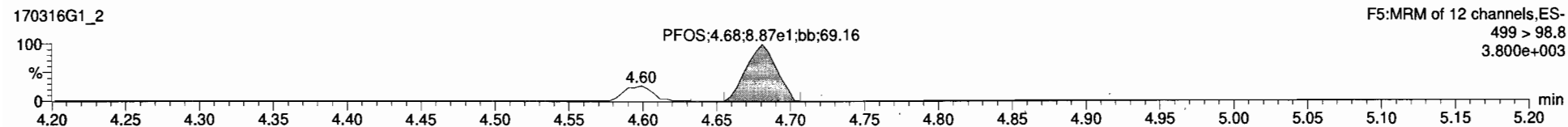
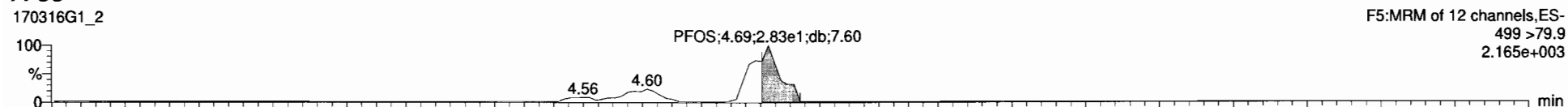
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

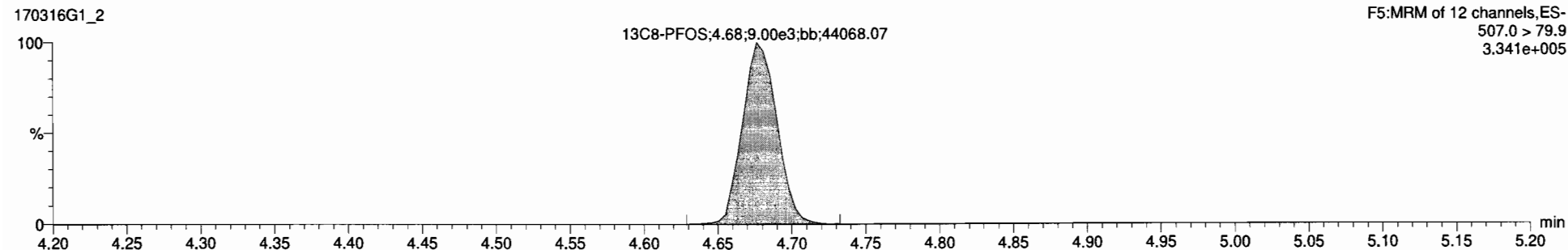
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-1 PFC CS-2 17C1502, Description: PFC CS-2 17C1502 A, Name: 170316G1_2, Date: 16-Mar-2017, Time: 10:30:20, Instrument: , Lab: , User:

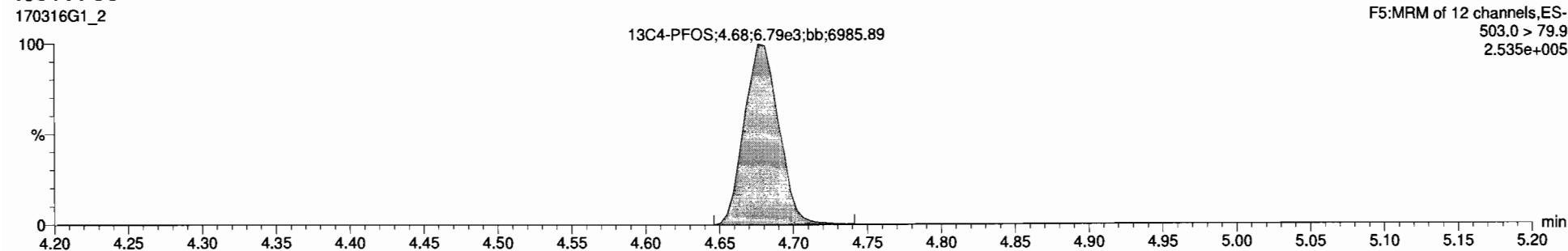
PFOS



13C8-PFOS



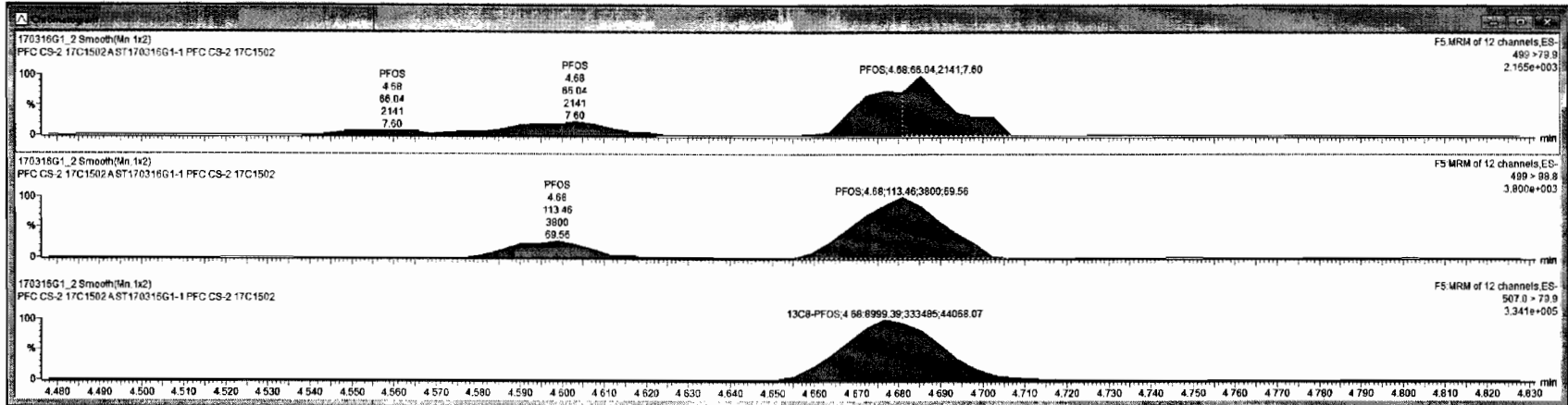
13C4-PFOS





170316G1_2 - ST170316C1-1 PFC CS-2 17C1502 - PFC CS-2 17C1502A

#	Name	Trace	Area	RRF	WtWtL	Prod.RT	RT	Comp.	INDC	%Rec	DL
1	PFBS	299 > 79.7	8.04e2		1.000	3.02	3.02	0.262	NO	104.9	
2	PFHpA	363 > 318.9	1.15e3		1.000	3.89	3.89	0.256	NO	102.4	
3	PFHxS	398.9 > 79.6	5.14e2		1.000	4.00	4.01	0.309	NO	123.7	
4	PFOA	413 > 368.7	1.33e3		1.000	4.28	4.29	0.276	NO	110.4	
5	PFNA	463 > 418.8	5.11e2		1.000	4.62	4.62	0.207	NO	83.0	
6	PFOS	499 > 79.9	6.02e1		1.000	4.68	4.68	0.304	NO	121.5	0.1857068
7	13C3-PFBS	302.0 > 98.8	1.14e4	0.501	1.000	2.59	3.02	14.1	NO	113.1	0.0132552
8	13C4-PFHpA	367.2 > 321.8	2.52e4	1.24	1.000	3.88	3.89	12.7	NO	101.7	0.0362873
9	18O2-PFHxS	483 > 102.6	1.00e4	0.495	1.000	4.01	4.00	12.7	NO	101.3	0.0003963
10	13C2-PFOA	414.9 > 369.7	4.34e4	3.22	1.000	4.28	4.28	13.8	NO	110.8	0.0020878
11	13C5-PFNA	468.2 > 422.9	1.21e4	0.979	1.000	4.62	4.62	12.4	NO	99.0	0.0005903
12	13C8-PFOS	507.0 > 79.9	9.00e3	1.08	1.000	4.68	4.68	15.3	NO	122.6	0.0008647
13	13C5-PFHxA	318 > 272.5	3.44e4	1.00	1.000	3.29	3.37	12.5	NO	100.0	0.0029473
14	13C1-PFHxS	461.9 > 79.9	2.01e4	1.00	1.000	3.94	4.01	12.5	NO	100.0	0.0001684
15	13C8-PFOA	421.3 > 376	1.22e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0218913
16	13C8-PFNA	472.2 > 426.9	1.24e4	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0185737
17	13C4-PFOS	503.0 > 79.9	5.79e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0044733
18	Total PFBS	299 > 79.7	8.04e2		1.000	3.11		0.262	NO		
19	Total PFHxS	398.9 > 79.6	5.92e2		1.000	4.00		0.310	NO		
20	Total PFOA	413 > 368.7	1.37e3		1.000	4.39		0.278	NO		
21	Total PFOS	499 > 79.9	7.17e1		1.000	4.67		0.456	NO		0.1857068



Ready

170316G1_2 NUM

Dataset: Untitled

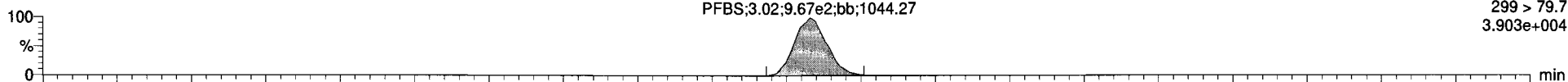
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-2 PFC CS-1 17C1503, Description: PFC CS-1 17C1503 A, Name: 170316G1_3, Date: 16-Mar-2017, Time: 10:42:47, Instrument: , Lab: , User:

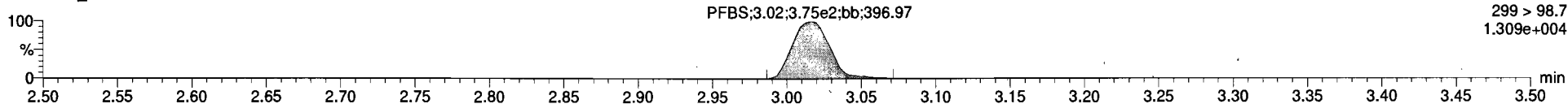
PFBS

170316G1_3



F2:MRM of 3 channels,ES-
299 > 79.7
3.903e+004

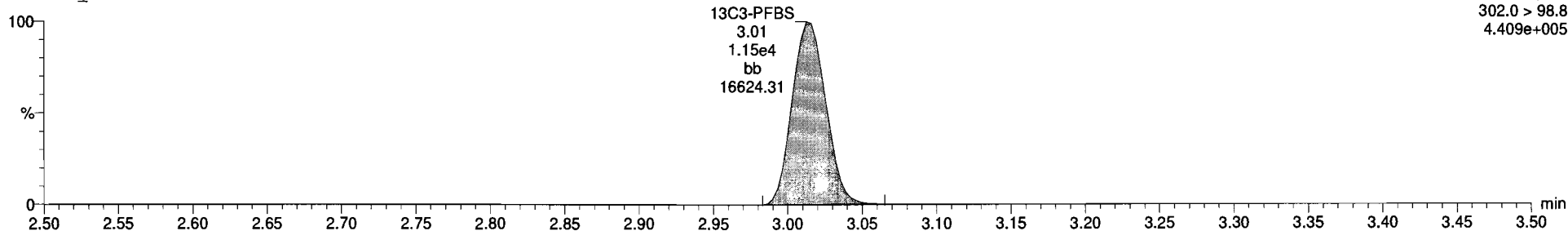
170316G1_3



F2:MRM of 3 channels,ES-
299 > 98.7
1.309e+004

13C3-PFBS

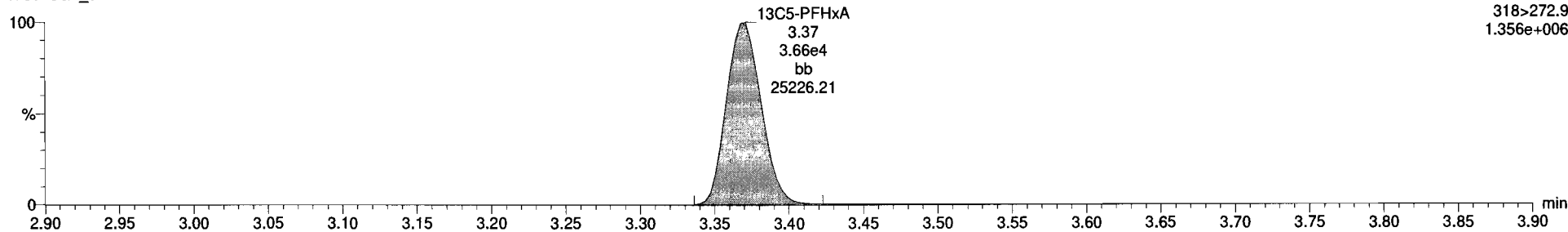
170316G1_3



F2:MRM of 3 channels,ES-
302.0 > 98.8
4.409e+005

13C5-PFHxA

170316G1_3



F3:MRM of 1 channel,ES-
318>272.9
1.356e+006

Dataset: Untitled

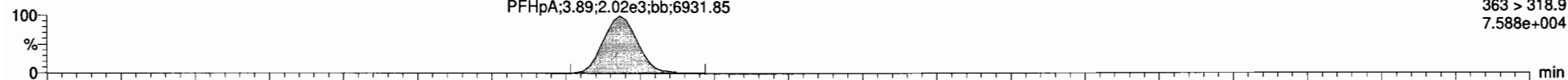
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

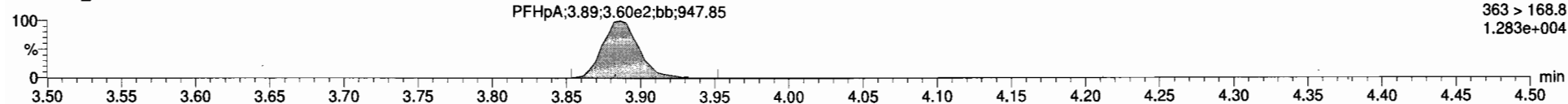
ID: ST170316G1-2 PFC CS-1 17C1503, Description: PFC CS-1 17C1503 A, Name: 170316G1_3, Date: 16-Mar-2017, Time: 10:42:47, Instrument: , Lab: , User:

PFHpA

170316G1_3

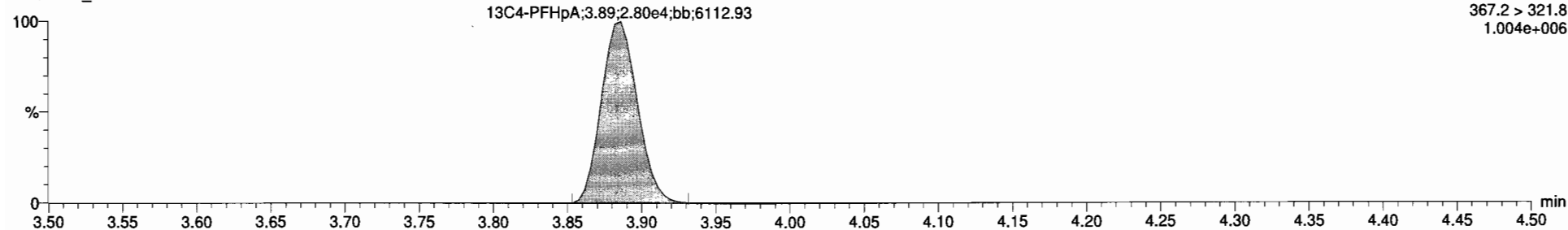


170316G1_3



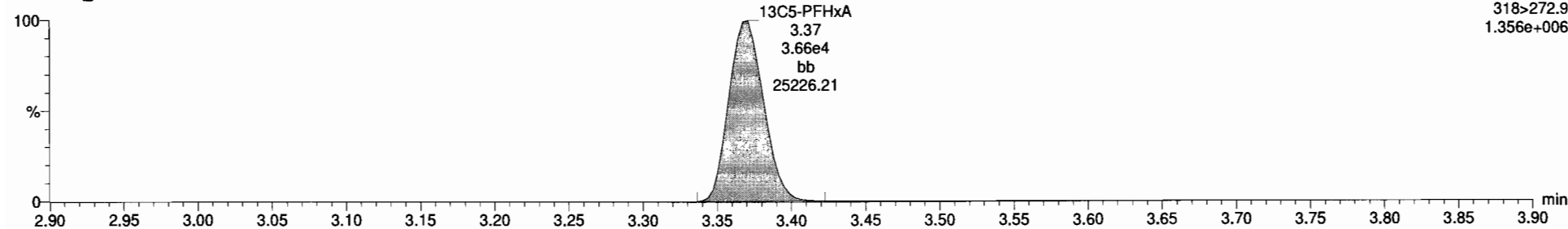
13C4-PFHpA

170316G1_3



13C5-PFHxA

170316G1_3



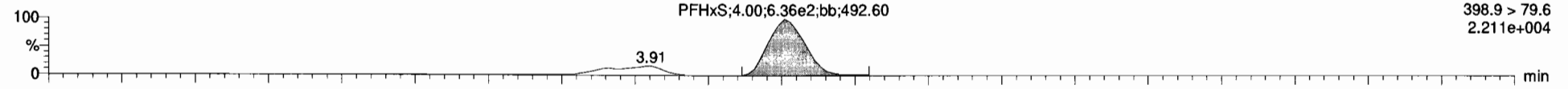
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

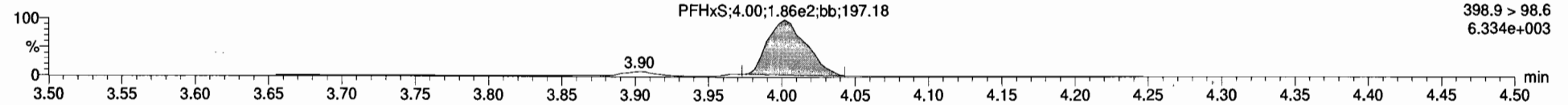
ID: ST170316G1-2 PFC CS-1 17C1503, Description: PFC CS-1 17C1503 A, Name: 170316G1_3, Date: 16-Mar-2017, Time: 10:42:47, Instrument: , Lab: , User:

PFHxS

170316G1_3

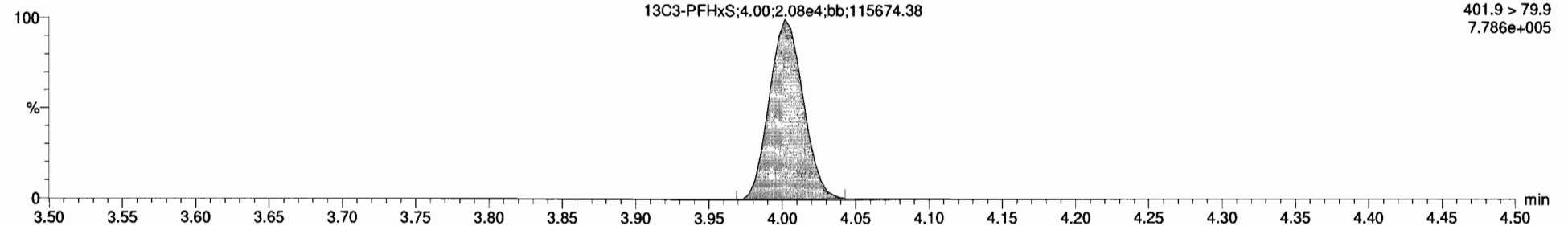


170316G1_3



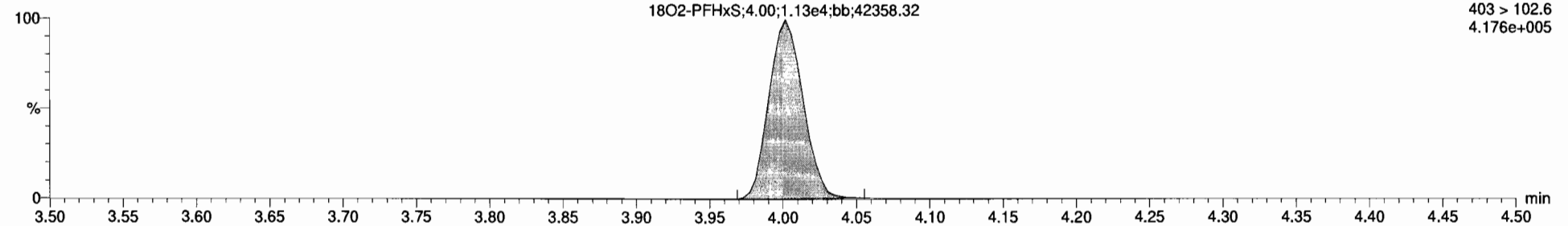
13C3-PFHxS

170316G1_3

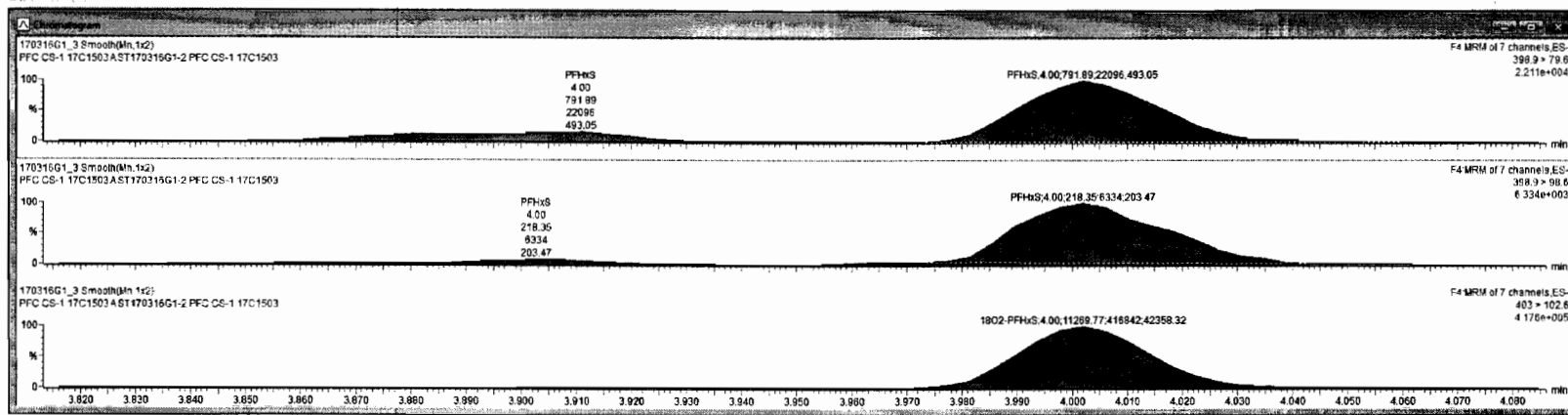


18O2-PFHxS

170316G1_3



Name	Trace	Area	RRP	Wt%/Vol	Prod Ref	RT	Conc	MOL	%Rec	DL	
1	PFBS	299 > 79.7	9.80e2	1.000	3.01	3.02	0.439	NO	87.8		
2	PFHpA	363 > 318.8	2.02e3	1.000	3.89	3.89	0.448	NO	89.8		
3	PFOS	508.9 > 79.9	1.22e2	1.000	4.67	4.60	0.443	NO	88.8		
4	PFOA	413 > 368.7	1.87e3	1.000	4.28	4.28	0.431	NO	86.2		
5	PFNA	463 > 418.8	1.30e3	1.000	4.62	4.62	0.475	NO	95.0		
6	PFOS	499 > 79.9	1.15e2	1.000	4.68	4.66	0.499	NO	81.9	0.1486011	
7	13C3-PFBS	302.0 > 88.8	1.15e4	0.581	1.000	2.99	3.01	13.8	NO	110.1	0.0621284
8	13C4-PFHpA	367.2 > 321.8	2.00e4	1.24	1.000	3.88	3.89	13.8	NO	100.7	0.0632296
9	18O2-PFOS	403 > 102.8	1.13e4	0.496	1.000	4.00	4.00	13.7	NO	109.4	0.0606012
10	13C3-PFOA	414.9 > 369.7	4.50e4	3.22	1.000	4.28	4.28	13.6	NO	109.0	0.0647342
11	13C5-PFNA	468.2 > 422.9	1.34e4	0.979	1.000	4.62	4.62	13.7	NO	109.0	0.0612449
12	13C8-PFOS	507.0 > 79.9	0.59e3	1.08	1.000	4.68	4.68	13.5	NO	106.5	0.0192782
13	13C5-PFHpA	318 > 272.9	3.66e4	1.00	1.000	3.29	3.37	12.5	NO	100.0	0.0612388
14	13C3-PFNA	401.9 > 79.9	2.88e4	1.00	1.000	3.94	4.00	12.5	NO	100.0	0.0602702
15	13C3-PFOA	421.3 > 378	1.28e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0616182
16	13C3-PFNA	472.2 > 426.9	1.25e4	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0324225
17	13C4-PFOS	503.0 > 79.9	8.34e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0657445
18	Total PFBS	299 > 79.7	9.80e2	1.000	3.11		0.439	NO			
19	Total PFHpA	363 > 318.8	8.45e2	1.000	4.09		0.454	NO			
20	Total PFOA	413 > 368.7	1.93e3	1.000	4.30		0.431	NO			
21	Total PFOS	499 > 79.9	1.22e2	1.000	4.67		0.564	NO		0.1486011	

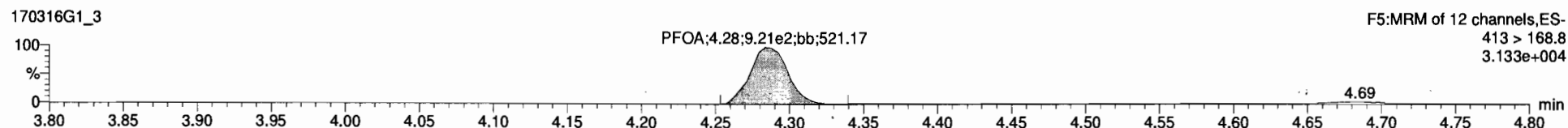
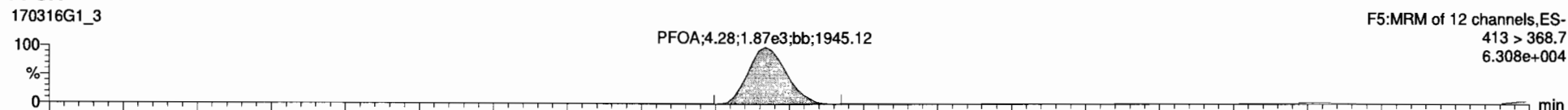


Dataset: Untitled

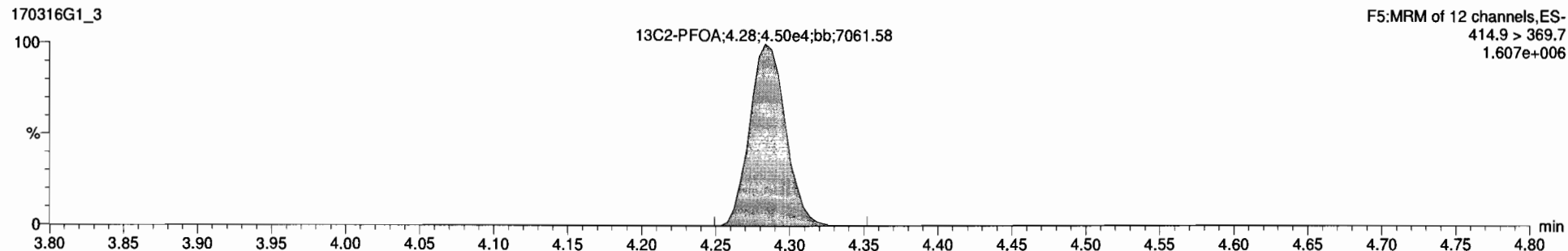
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-2 PFC CS-1 17C1503, Description: PFC CS-1 17C1503 A, Name: 170316G1_3, Date: 16-Mar-2017, Time: 10:42:47, Instrument: , Lab: , User:

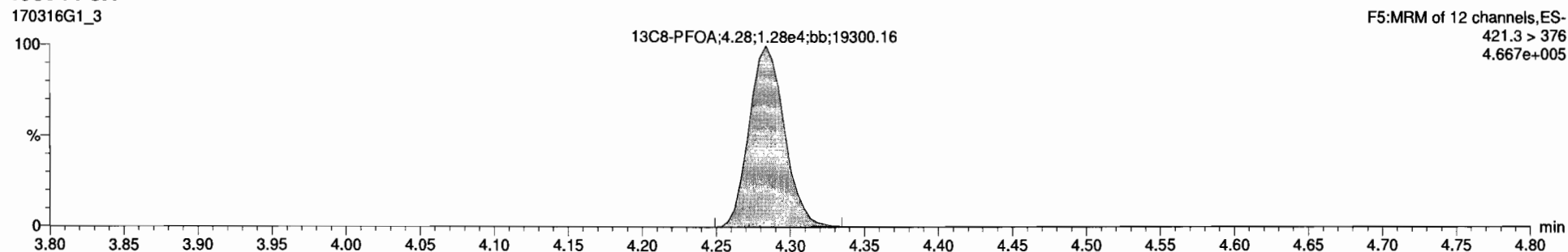
PFOA



13C2-PFOA



13C8-PFOA



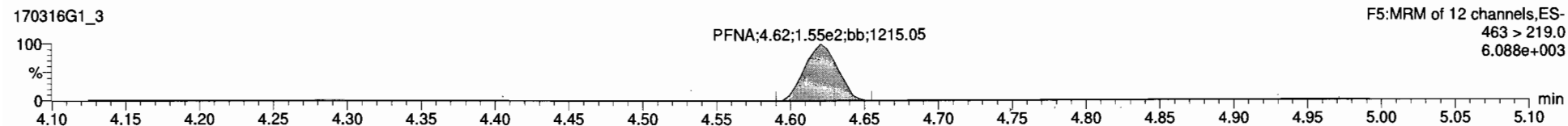
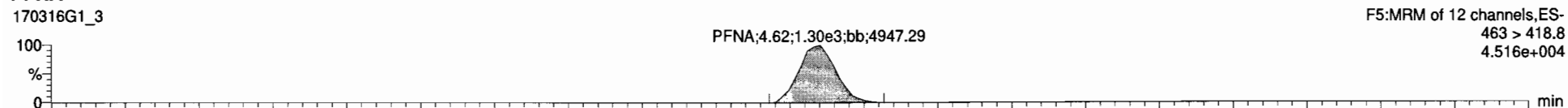
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

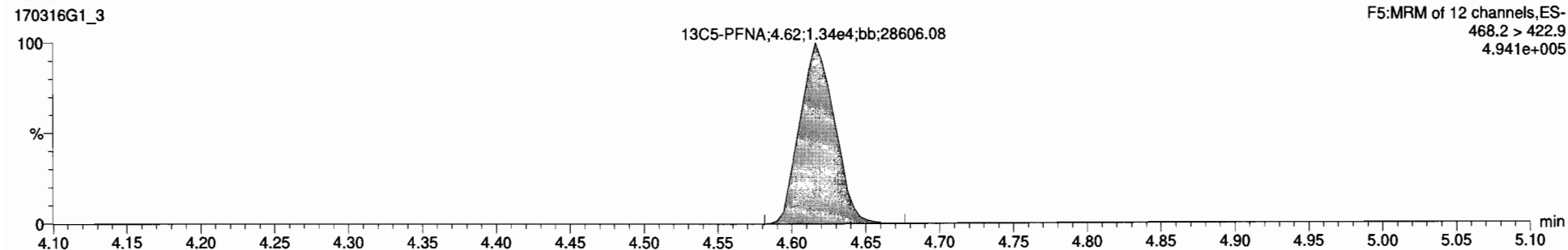
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-2 PFC CS-1 17C1503, Description: PFC CS-1 17C1503 A, Name: 170316G1_3, Date: 16-Mar-2017, Time: 10:42:47, Instrument: , Lab: , User:

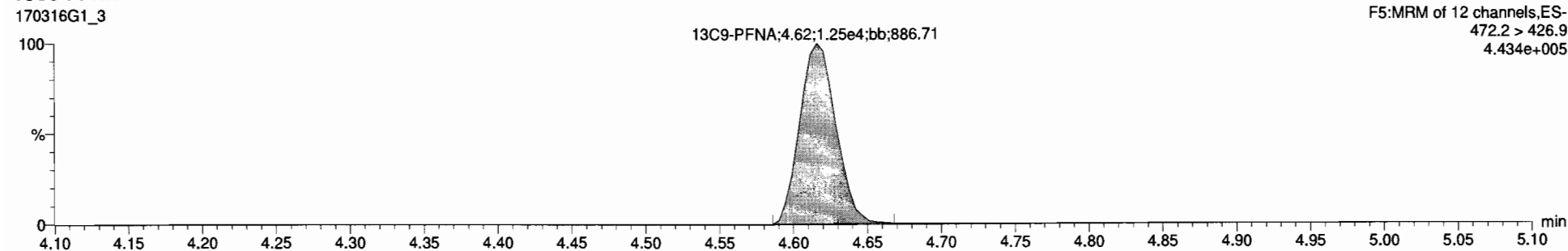
PFNA



13C5-PFNA



13C9-PFNA



Dataset: Untitled

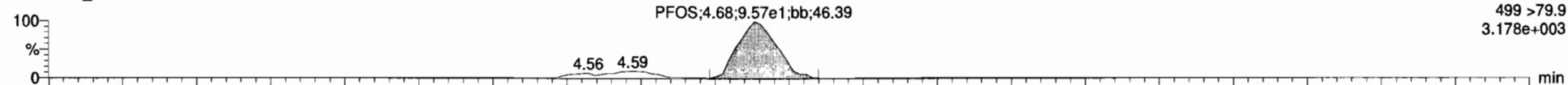
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

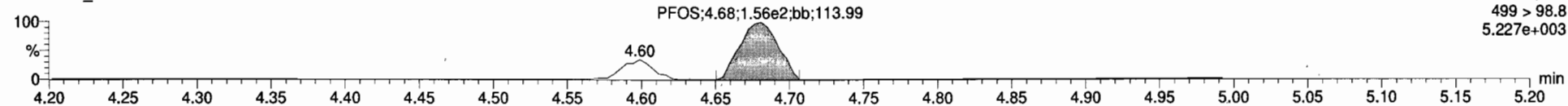
ID: ST170316G1-2 PFC CS-1 17C1503, Description: PFC CS-1 17C1503 A, Name: 170316G1_3, Date: 16-Mar-2017, Time: 10:42:47, Instrument: , Lab: , User:

PFOS

170316G1_3

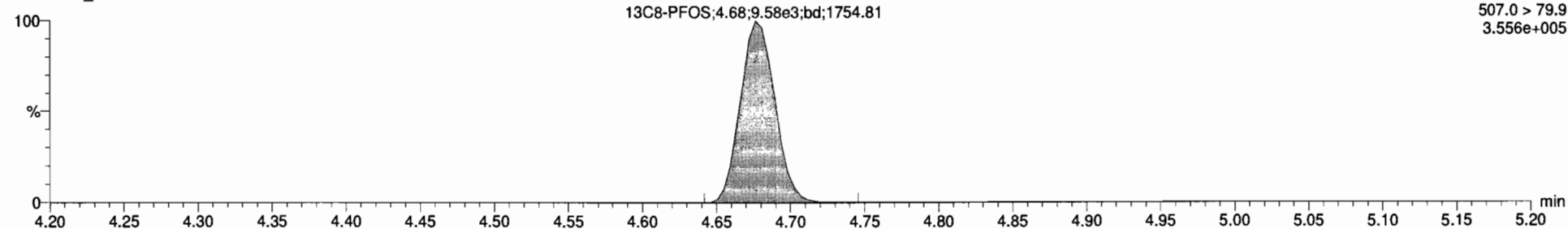


170316G1_3



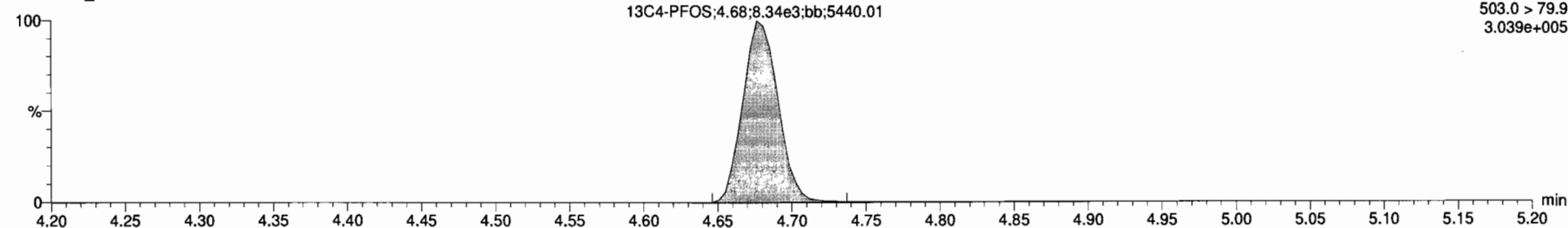
13C8-PFOS

170316G1_3

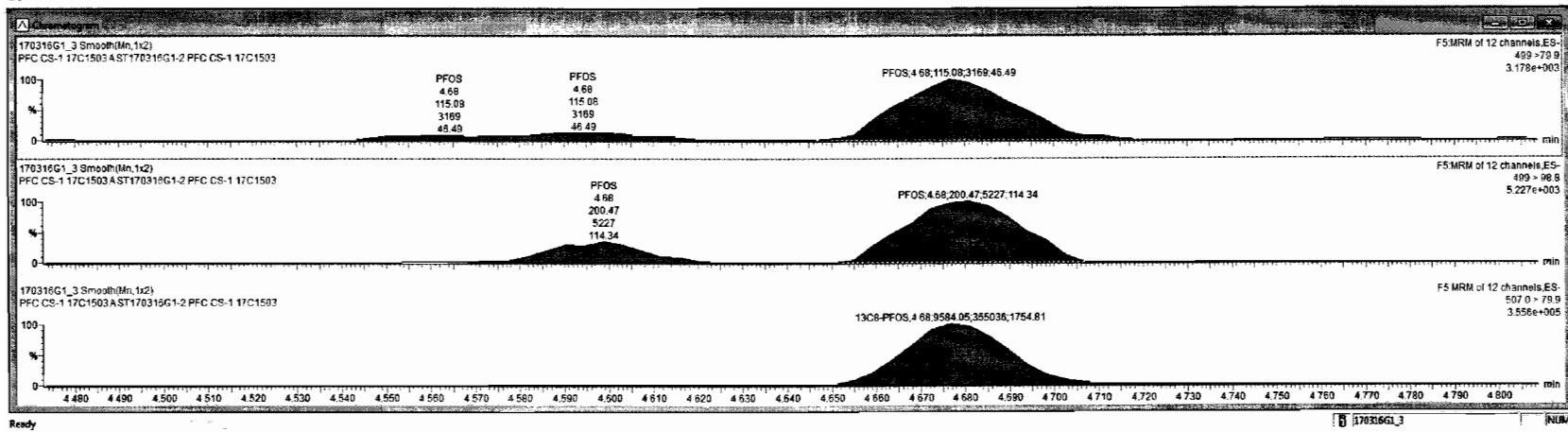


13C4-PFOS

170316G1_3



Name	Trace	Area	RPF	WWAL	Pred.RT	RT	Conc.	WML	uRec	DL
1	PFBS	299 > 79.7	9.80e2		1.000	3.01	3.02	0.439	NO	87.8
2	PFHpA	363 > 318.9	2.02e3		1.000	3.89	3.89	0.449	NO	89.6
3	PFHxS	398.9 > 79.6	7.92e2		1.000	4.00	4.00	0.443	NO	88.6
4	PFOA	413 > 368.7	1.87e3		1.000	4.28	4.28	0.431	NO	86.2
5	PFNA	463 > 418.8	1.30e3		1.000	4.62	4.62	0.475	NO	95.0
6	PFOS	468 > 79.9	9.58e3		1.000	4.68	4.68	0.469	NO	97.9
7	13C-PFBS	502.9 > 98.8	1.15e4	0.591	1.000	2.99	3.01	13.0	NO	110.1
8	13C-PFHpA	567.2 > 321.8	2.80e4	1.24	1.000	3.88	3.89	13.8	NO	108.7
9	13C-PFHxS	403 > 102.6	1.13e4	0.495	1.000	4.00	4.00	13.7	NO	109.4
10	13C-PFOA	414.9 > 369.7	4.59e4	3.22	1.000	4.28	4.28	13.6	NO	109.0
11	13C-PFNA	468.2 > 422.9	1.34e4	0.979	1.000	4.62	4.62	13.7	NO	109.3
12	13C-PFOS	507.0 > 79.9	9.58e3	1.08	1.000	4.68	4.68	13.3	NO	106.5
13	13C-PFHpA	318 > 272.9	3.86e4	1.00	1.000	3.29	3.37	12.5	NO	100.0
14	13C-PFHxS	401.9 > 79.9	2.08e4	1.00	1.000	3.94	4.00	12.5	NO	100.0
15	13C-PFOA	421.3 > 376	1.28e4	1.00	1.000	4.22	4.28	12.5	NO	100.0
16	13C-PFNA	472.2 > 426.9	1.25e4	1.00	1.000	4.56	4.62	12.5	NO	100.0
17	13C-PFOS	503.0 > 79.9	8.34e3	1.00	1.000	4.67	4.68	12.5	NO	100.0
18	Total PFBS	299 > 79.7	9.80e2		1.000	3.11		0.439	NO	
19	Total PFHxS	398.9 > 79.6	9.45e2		1.000	4.09		0.454	NO	
20	Total PFOA	413 > 368.7	1.93e3		1.000	4.39		0.431	NO	
21	Total PFOS	499 > 79.9	1.22e2		1.000	4.67		0.564	NO	0.1468011



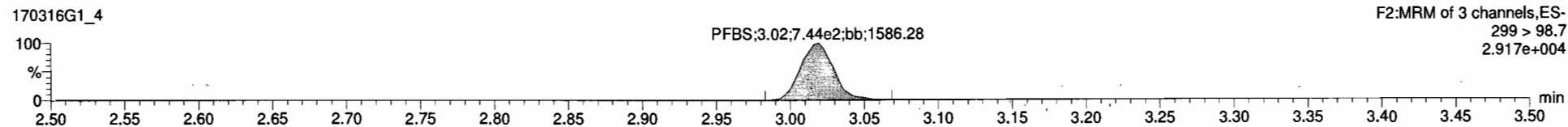
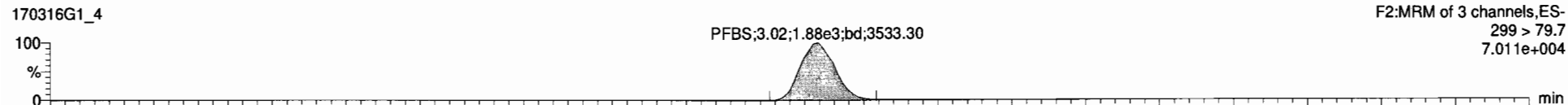
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

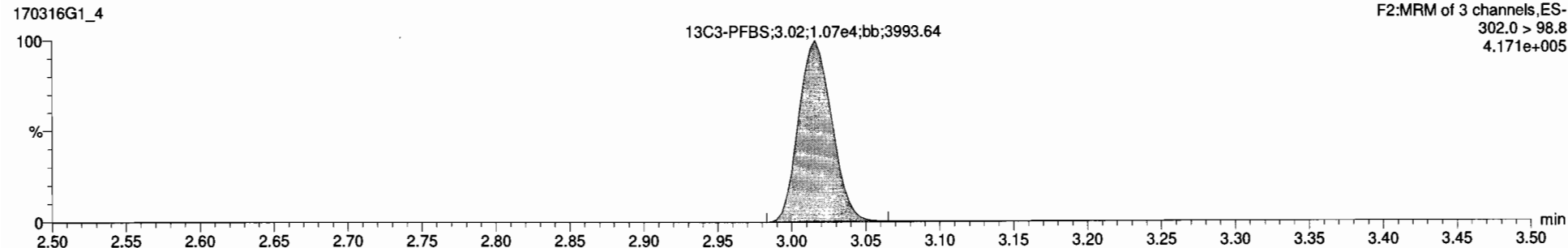
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-3 PFC CS0 17C1504, Description: PFC CS0 17C1504 A, Name: 170316G1_4, Date: 16-Mar-2017, Time: 10:55:20, Instrument: , Lab: , User:

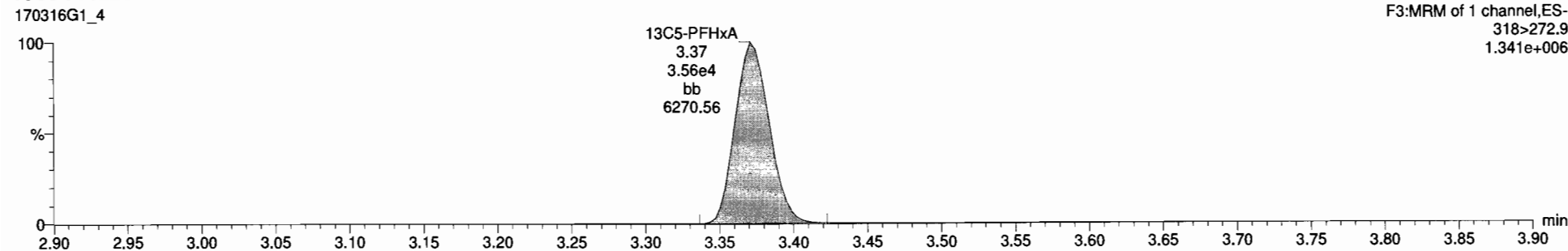
PFBS



13C3-PFBS



13C5-PFHxA

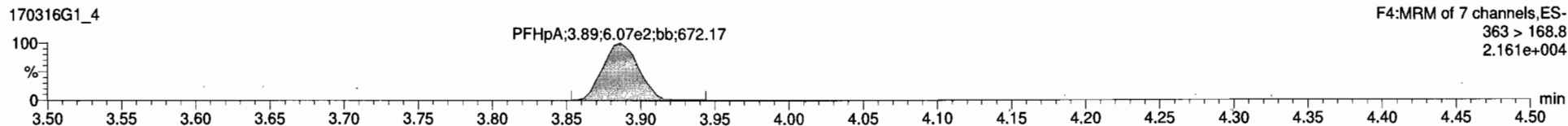


Dataset: Untitled

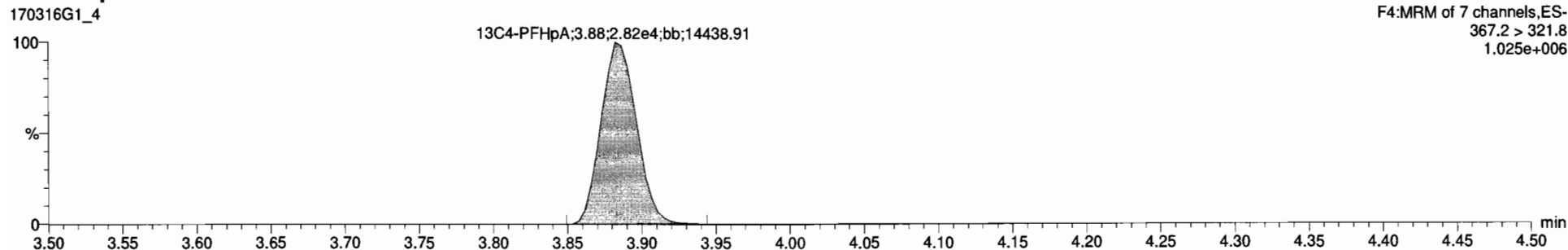
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-3 PFC CS0 17C1504, Description: PFC CS0 17C1504 A, Name: 170316G1_4, Date: 16-Mar-2017, Time: 10:55:20, Instrument: , Lab: , User:

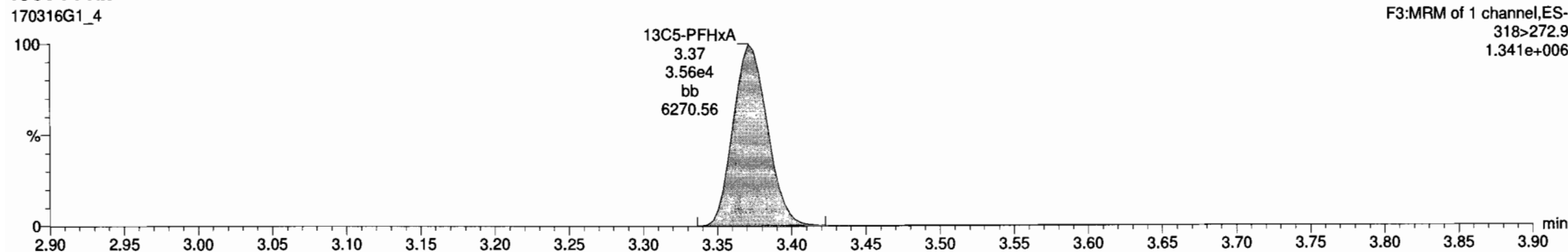
PFHpA



13C4-PFHpA



13C5-PFHxA

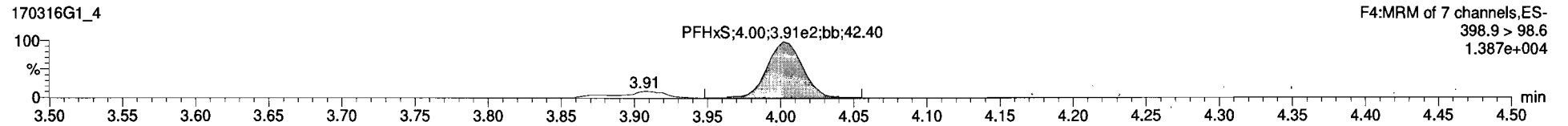
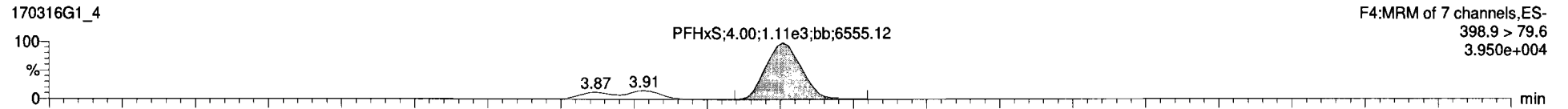


Dataset: Untitled

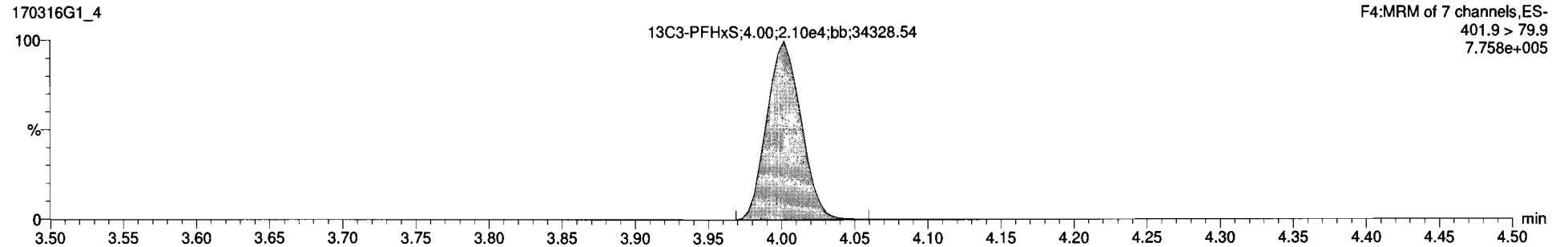
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-3 PFC CS0 17C1504, Description: PFC CS0 17C1504 A, Name: 170316G1_4, Date: 16-Mar-2017, Time: 10:55:20, Instrument: , Lab: , User:

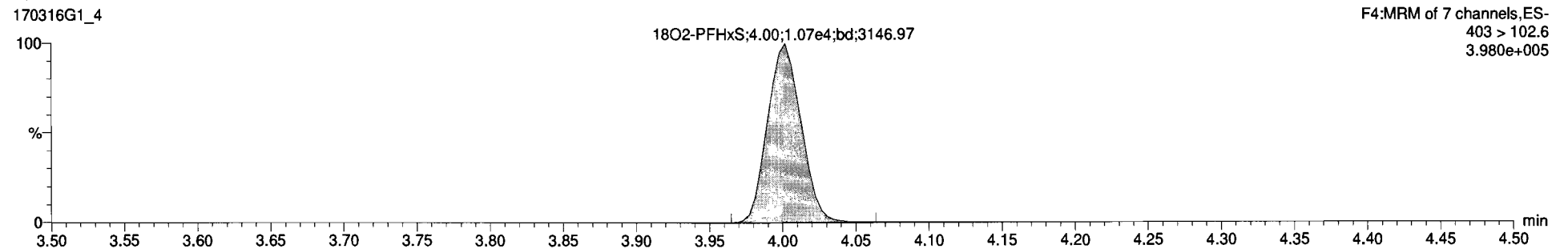
PFHxS



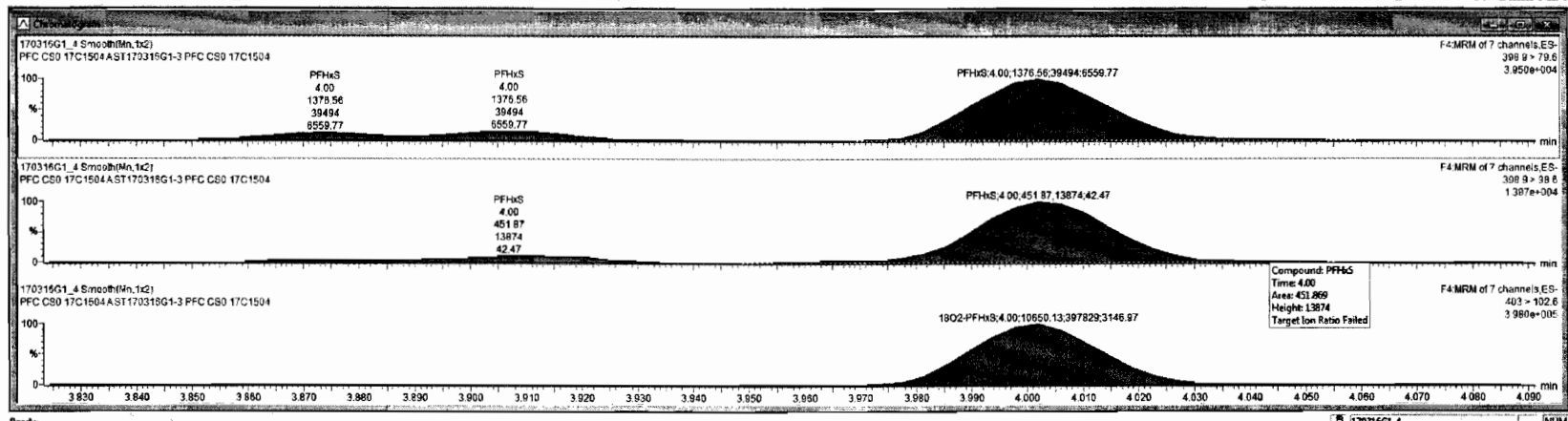
13C3-PFHxS



18O2-PFHxS



SI	Name	Trace	Area	RRR	WVAVL	PeakRT	RT	Conc.	MRU	%Rec	DL
1	PFBS	299 > 79.7	1.88e3		1.000	3.02	3.02	0.934	NO	93.4	
2	PFHxA	383 > 318.8	3.91e3		1.000	3.88	3.89	0.929	NO	92.9	
3	PFHxS	386.9 > 79.6	1.64e3		1.000	4.00	4.00	0.933	NO	93.3	
4	PFOA	413 > 368.7	3.37e3		1.000	4.28	4.28	0.912	NO	91.2	
5	PFNA	463 > 418.8	2.08e3		1.000	4.62	4.62	0.964	NO	96.4	
6	PFOS	499 > 79.9	2.89e2		1.000	4.68	4.68	1.02	NO	102.3	0.1493747
7	13C3-PFBS	382.8 > 88.8	1.07e4	0.501	1.000	2.99	3.02	12.7	NO	101.7	0.0083920
8	13C4-PFHxA	387.2 > 321.8	2.52e4	1.24	1.000	3.88	3.88	13.6	NO	105.5	0.0023139
9	18O2-PFHxS	483 > 182.6	1.07e4	0.495	1.000	4.00	4.00	12.8	NO	102.4	0.0103178
10	13C2-PFOA	414.9 > 388.7	4.37e4	3.22	1.000	4.28	4.28	12.6	NO	101.0	0.0036867
11	13C5-PFNA	488.2 > 422.9	1.14e4	0.979	1.000	4.62	4.62	11.6	NO	93.0	0.0120587
12	13C8-PFOS	587.8 > 79.9	6.65e3	1.08	1.000	4.68	4.68	12.1	NO	97.1	0.0022184
13	13C5-PFHxA	318 > 272.9	3.58e4	1.00	1.000	3.29	3.37	12.5	NO	100.0	0.0049636
14	13C3-PFHxS	401.9 > 79.9	2.10e4	1.00	1.000	3.94	4.00	12.5	NO	100.0	0.0009103
15	13C8-PFOA	421.3 > 376	1.34e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0083857
16	13C8-PFNA	472.2 > 426.8	1.25e4	1.00	1.000	4.58	4.62	12.5	NO	100.0	0.0012402
17	13C4-PFOS	583.8 > 79.9	6.53e3	1.00	1.000	4.87	4.68	12.5	NO	100.0	0.0459233
18	Total PFBS	299 > 79.7	1.89e3		1.000	3.11		0.934	NO		
19	Total PFHxS	386.9 > 79.6	1.64e3		1.000	4.09		0.933	NO		
20	Total PFOA	413 > 368.7	3.37e3		1.000	4.39		0.912	NO		
21	Total PFOS	499 > 79.9	2.89e2		1.000	4.67		1.23	NO		0.1493747



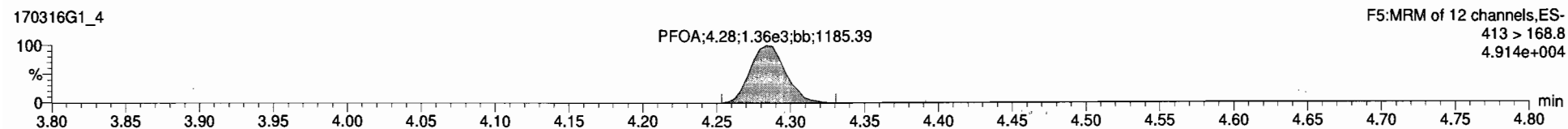
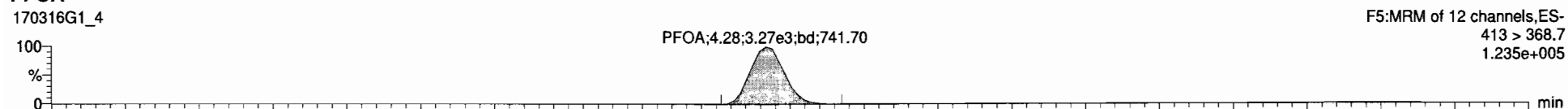
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

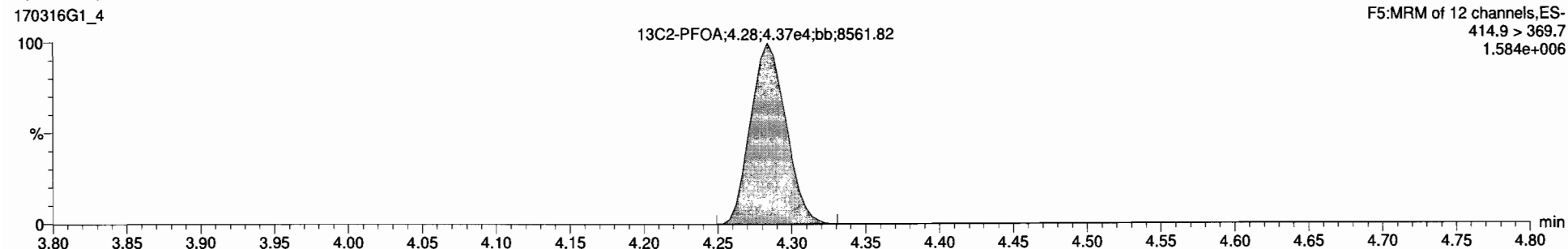
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-3 PFC CS0 17C1504, Description: PFC CS0 17C1504 A, Name: 170316G1_4, Date: 16-Mar-2017, Time: 10:55:20, Instrument: , Lab: , User:

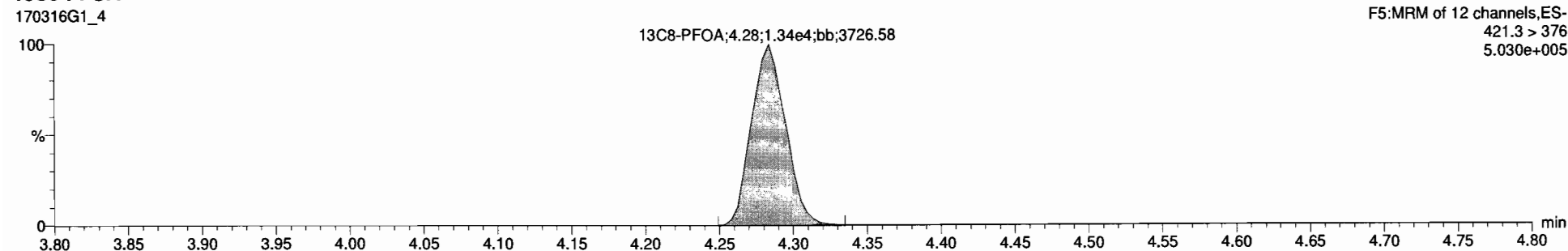
PFOA



13C2-PFOA



13C8-PFOA



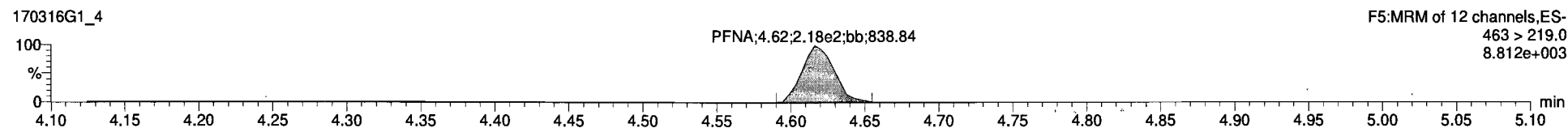
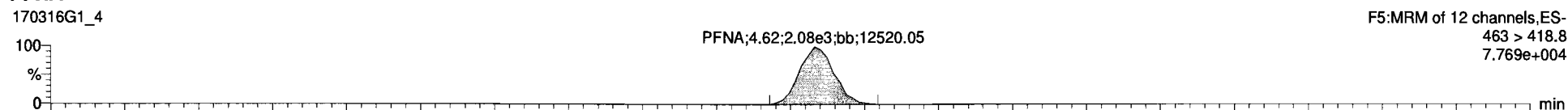
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

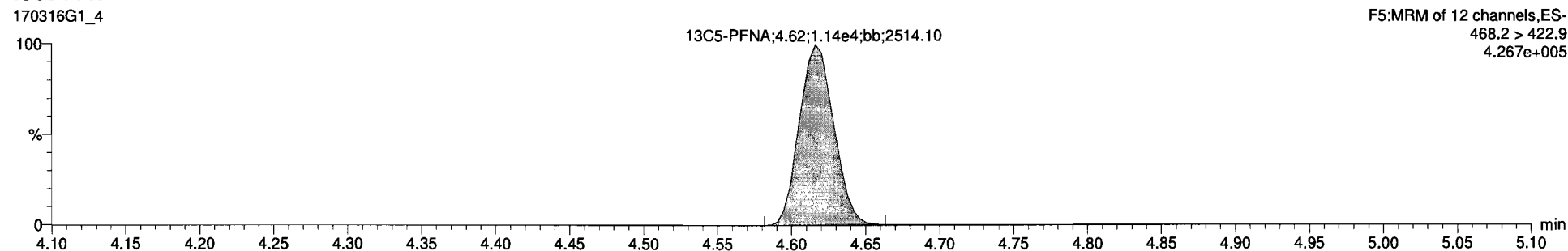
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-3 PFC CS0 17C1504, Description: PFC CS0 17C1504 A, Name: 170316G1_4, Date: 16-Mar-2017, Time: 10:55:20, Instrument: , Lab: , User:

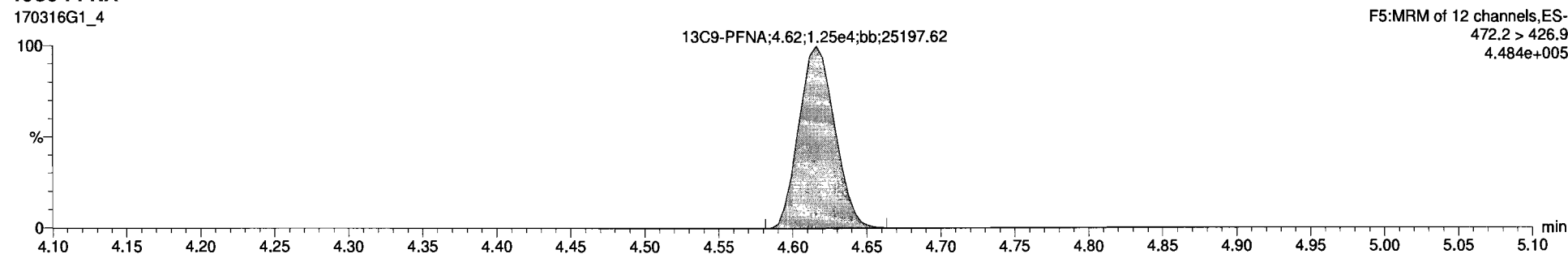
PFNA



13C5-PFNA



13C9-PFNA

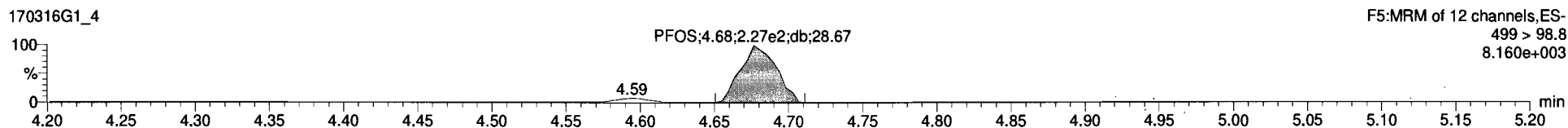
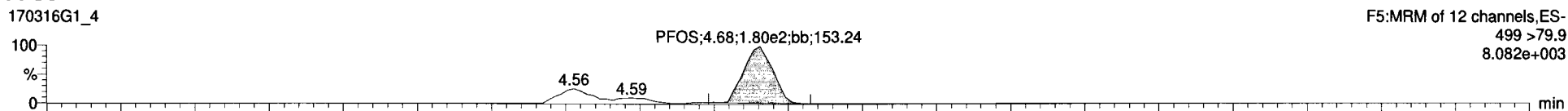


Dataset: Untitled

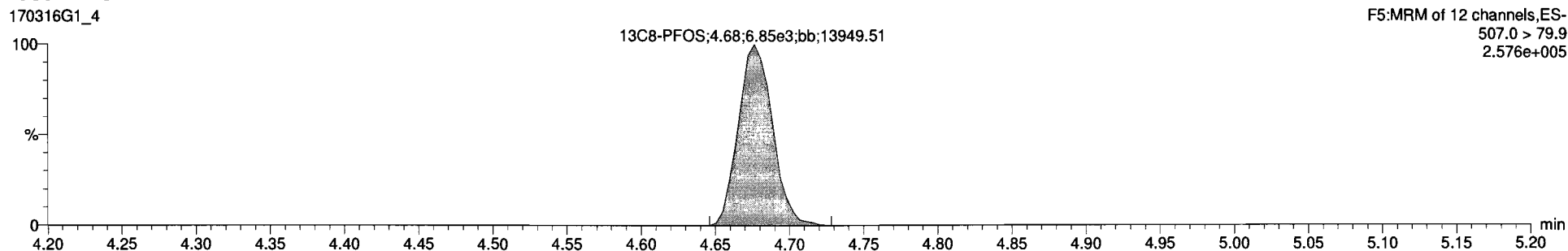
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-3 PFC CS0 17C1504, Description: PFC CS0 17C1504 A, Name: 170316G1_4, Date: 16-Mar-2017, Time: 10:55:20, Instrument: , Lab: , User:

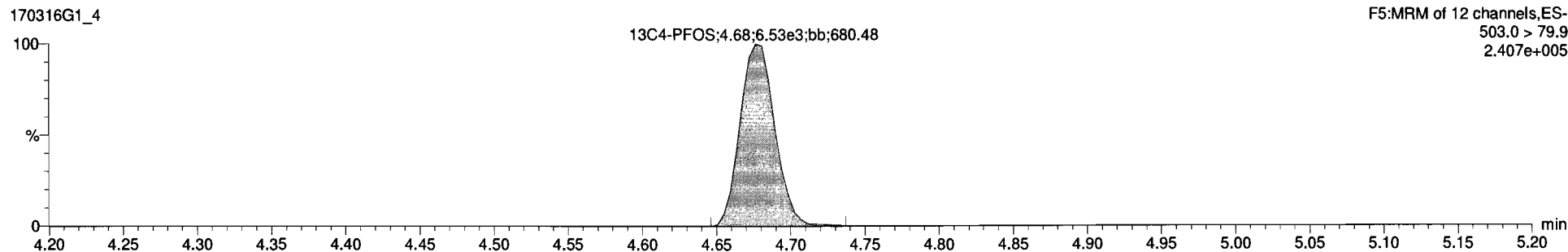
PFOS



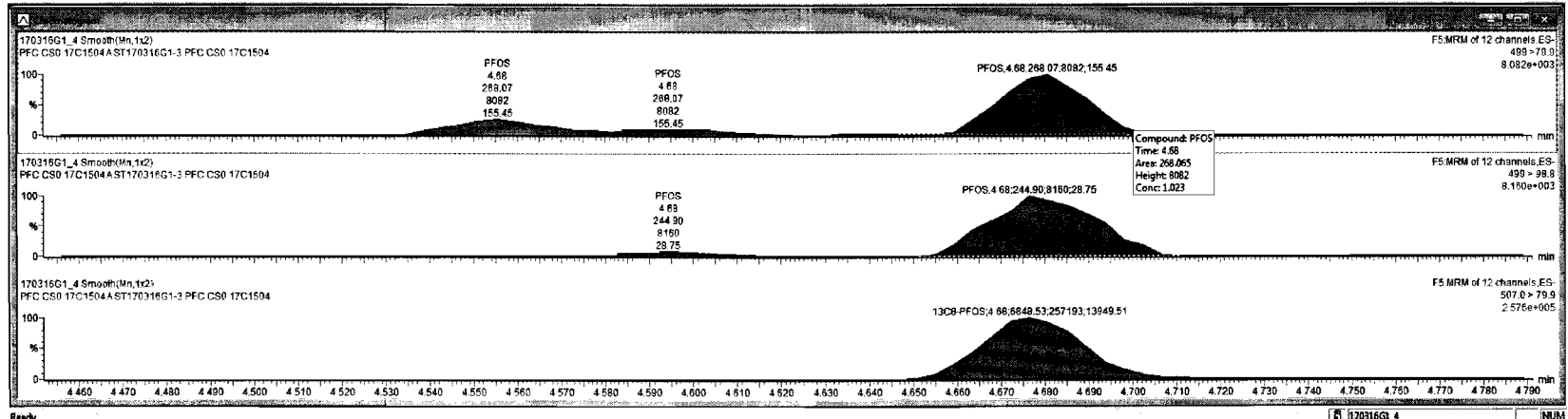
13C8-PFOS



13C4-PFOS



Name	Trace	Area	RRF	WtVol	ProdRT	RT	Conc.	MDL	%Rec	DL	
1	PFBS	299 > 79.7	1.88e3	1.000	3.02	3.02	0.934	NO	93.4		
2	PFHpA	363 > 318.8	3.91e3	1.000	3.88	3.88	0.929	NO	92.9		
3	PFHxS	396.9 > 79.6	1.38e3	1.000	4.00	4.00	0.857	NO	85.7		
4	PFDA	413 > 368.7	3.27e3	1.000	4.28	4.28	0.912	NO	91.2		
5	PFNA	463 > 418.8	2.89e3	1.000	4.62	4.62	0.964	NO	96.4		
6	PFOS	499 > 79.9	2.89e3	1.000	4.67	4.68	1.23	NO	8.54e3		
7	13C3-PFBS	302.9 > 98.8	1.07e4	0.501	1.000	2.99	3.02	12.7	NO	101.7	0.01633920
8	13C4-PFHpA	387.2 > 321.8	2.82e4	1.24	1.000	3.88	3.88	13.6	NO	108.5	0.0223198
9	18O2-PFHxS	403 > 102.8	1.07e4	0.495	1.000	4.00	4.00	12.8	NO	102.4	0.01031178
10	13C2-PFOA	414.9 > 369.7	4.37e4	3.22	1.000	4.28	4.28	12.6	NO	101.0	0.0035667
11	13C5-PFNA	468.2 > 422.9	1.14e4	0.879	1.000	4.62	4.62	11.6	NO	93.0	0.0120587
12	13C8-PFOS	507.0 > 79.9	6.85e3	1.06	1.000	4.68	4.68	12.1	NO	97.1	0.0022184
13	13C3-PFHpA	318 > 272.9	3.56e4	1.00	1.000	3.29	3.37	12.5	NO	100.0	0.0049636
14	13C3-PFHxS	401.9 > 79.9	2.10e4	1.00	1.000	3.94	4.00	12.5	NO	100.0	0.0009103
15	13C8-PFOA	421.3 > 376	1.34e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0083057
16	13C5-PFNA	472.2 > 426.9	1.25e4	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0012402
17	13C4-PFOS	503.0 > 79.9	6.53e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0458233
18	Total PFBS	299 > 79.7	1.88e3	1.000	3.02	3.02	0.934	NO			
19	Total PFHxS	396.9 > 79.6	1.64e3	1.000	4.00	4.00	0.853	NO			
20	Total PFDA	413 > 368.7	3.27e3	1.000	4.28	4.28	0.912	NO			
21	Total PFOS	499 > 79.9	2.89e3	1.000	4.67	4.68	1.23	NO			0.1483747



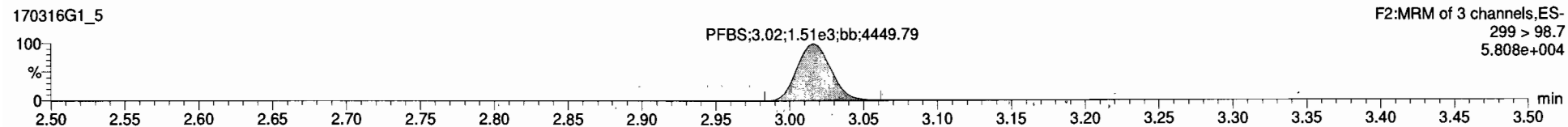
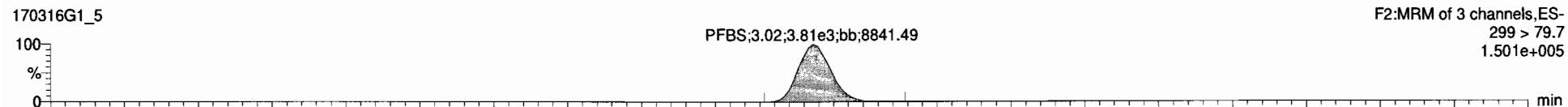
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

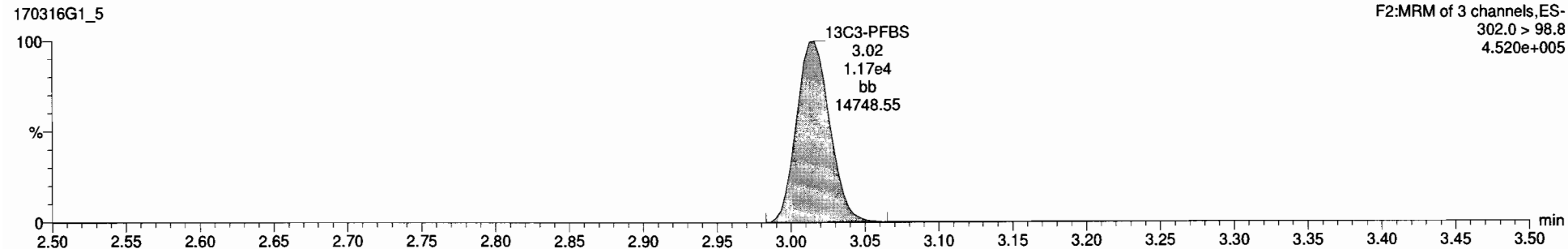
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-4 PFC CS1 17C1505, Description: PFC CS1 17C1505 A, Name: 170316G1_5, Date: 16-Mar-2017, Time: 11:07:54, Instrument: , Lab: , User:

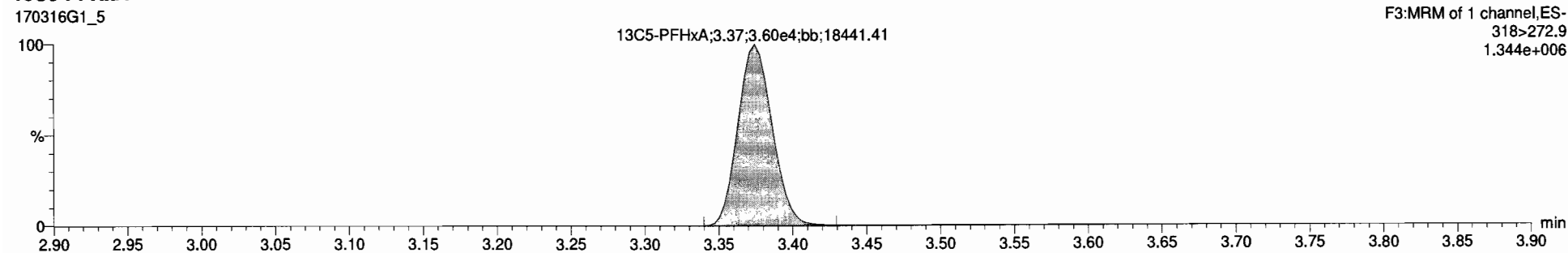
PFBS



13C3-PFBS



13C5-PFHxA



Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

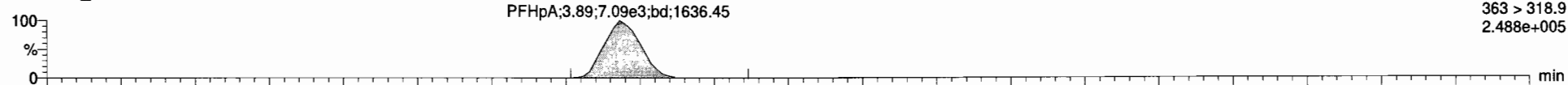
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-4 PFC CS1 17C1505, Description: PFC CS1 17C1505 A, Name: 170316G1_5, Date: 16-Mar-2017, Time: 11:07:54, Instrument: , Lab: , User:

PFHpA

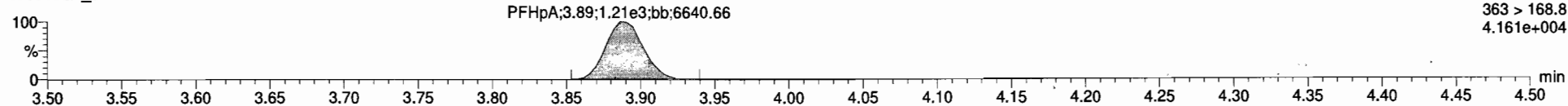
170316G1_5

F4:MRM of 7 channels,ES-
363 > 318.9
2.488e+005



170316G1_5

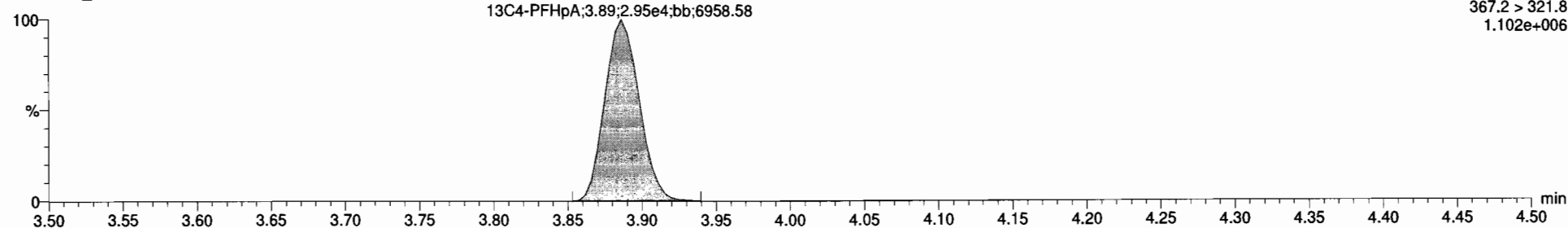
F4:MRM of 7 channels,ES-
363 > 168.8
4.161e+004



13C4-PFHpA

170316G1_5

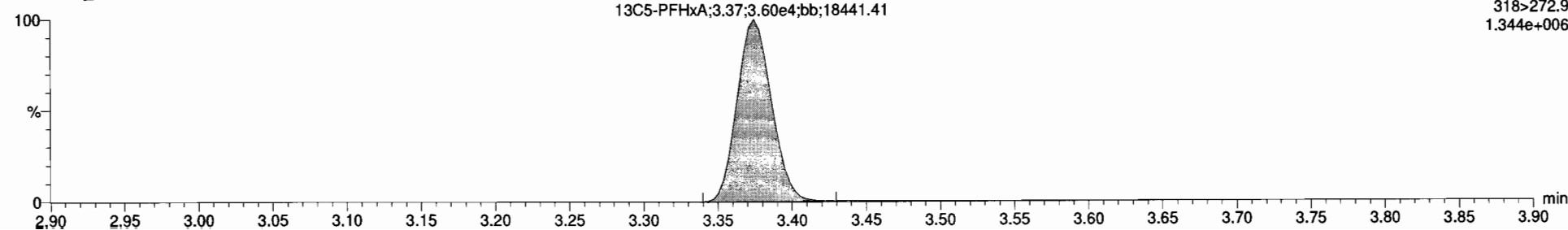
F4:MRM of 7 channels,ES-
367.2 > 321.8
1.102e+006



13C5-PFHxA

170316G1_5

F3:MRM of 1 channel,ES-
318>272.9
1.344e+006



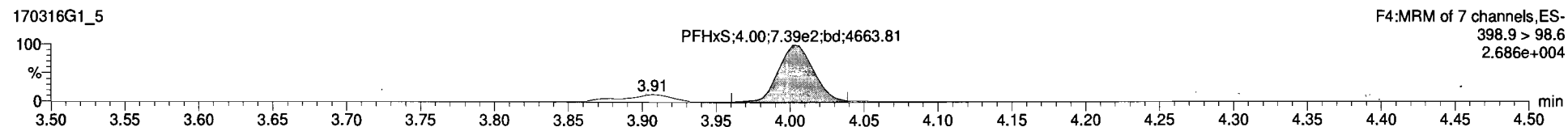
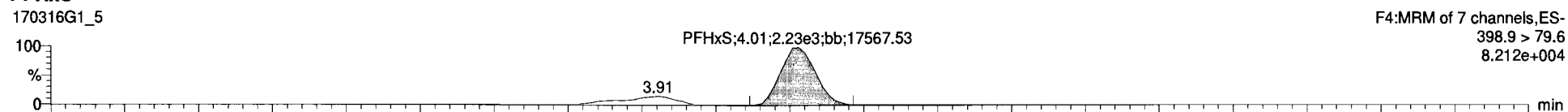
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

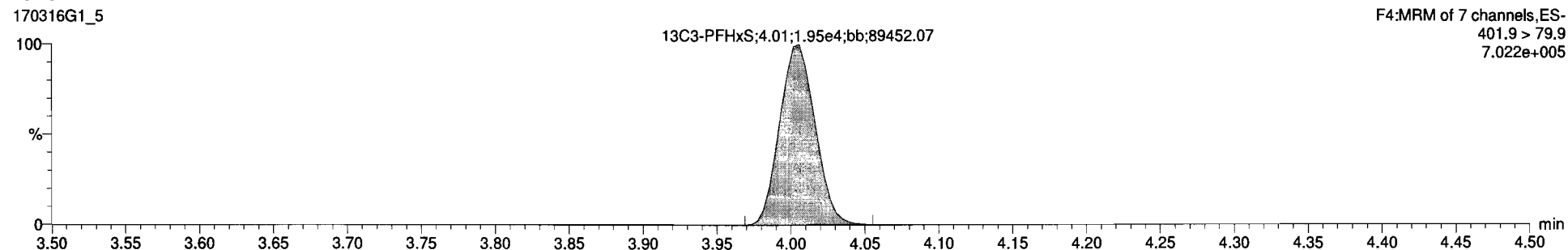
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-4 PFC CS1 17C1505, Description: PFC CS1 17C1505 A, Name: 170316G1_5, Date: 16-Mar-2017, Time: 11:07:54, Instrument: , Lab: , User:

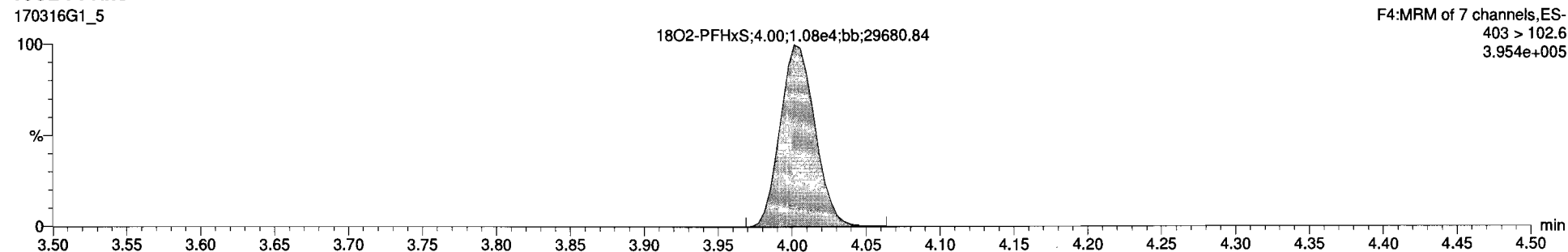
PFHxS



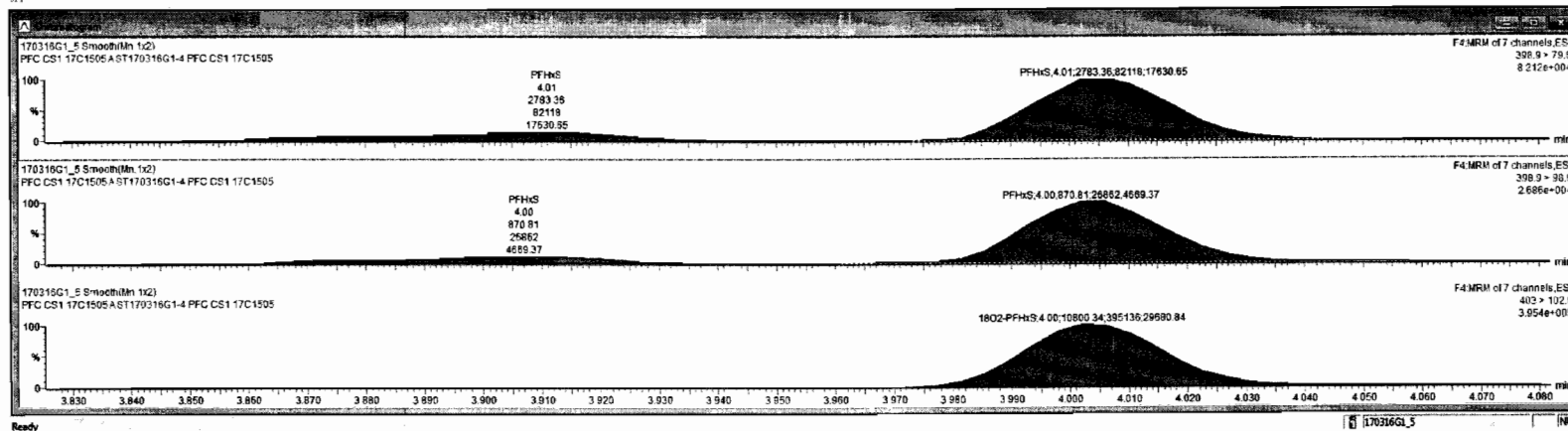
13C3-PFHxS



18O2-PFHxS



ID	Name	Tracks	Avg	RRF	WFWA	PrdRT	RT	Cont.	%MDL	%Rec	DL
1	PFBS	299 > 79.7	3.81e3		1.000	3.02	3.02	1.76	NO	88.1	
2	PFHxA	363 > 318.9	7.07e3		1.000	3.89	3.89	1.66	NO	83.1	
3	PFHxS	388.9 > 79.8	8.17e3		1.000	4.00	4.01	1.79	NO	81.8	
4	PFOA	413 > 368.7	5.88e3		1.000	4.29	4.29	1.69	NO	84.4	
5	PFNA	483 > 418.8	4.12e3		1.000	4.62	4.62	1.80	NO	89.8	
6	PFOS	499 > 79.9	5.07e3		1.000	4.68	4.68	1.69	NO	84.4	0.1574018
7	13C1-PFBS	302.0 > 98.8	1.17e4	0.501	1.000	2.99	3.02	14.9	NO	118.6	0.0027187
8	13C4-PFHxA	367.2 > 321.8	2.95e4	1.24	1.000	3.88	3.89	15.3	NO	122.1	0.0056950
9	18O2-PFHxS	403 > 192.6	1.06e4	0.495	1.000	4.01	4.00	14.0	NO	111.8	0.0611966
10	13C2-PFOA	414.9 > 369.7	4.40e4	3.22	1.000	4.28	4.29	13.6	NO	109.1	0.0046710
11	13C5-PFNA	468.2 > 422.9	1.26e4	0.976	1.000	4.62	4.62	14.0	NO	112.4	0.0326380
12	13C8-PFOS	507.6 > 79.9	7.36e3	1.86	1.000	4.68	4.68	12.7	NO	101.5	0.0151389
13	13C5-PFHxA	318-272.9	3.60e4	1.80	1.000	3.29	3.35	12.5	NO	100.0	0.0018646
14	13C3-PFHxS	401.9 > 79.9	1.95e4	1.80	1.000	3.94	4.01	12.5	NO	100.0	0.0053483
15	13C6-PFOA	421.3 > 376	1.25e4	1.80	1.000	4.22	4.28	12.5	NO	100.0	0.0111688
16	13C3-PFNA	472.2 > 426.9	1.15e4	1.80	1.000	4.56	4.62	12.5	NO	100.0	0.0095083
17	13C4-PFOS	503.0 > 79.9	6.74e3	1.80	1.000	4.67	4.68	12.5	NO	100.0	0.0007028
18	Total PFBS	299 > 79.7	3.81e3		1.000	3.11		1.76	NO		
19	Total PFHxS	388.9 > 79.8	3.31e3		1.000	4.09		2.00	NO		
20	Total PFOA	413 > 368.7	5.71e3		1.000	4.39		1.69	NO		
21	Total PFOS	499 > 79.9	6.63e3		1.000	4.67		2.44	NO		0.1574018



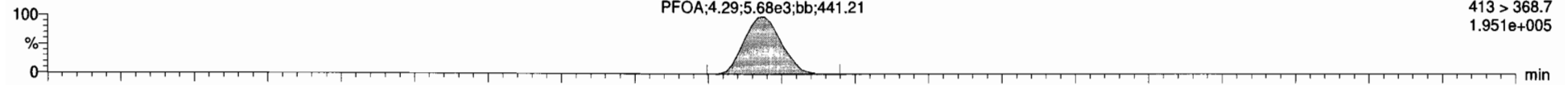
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-4 PFC CS1 17C1505, Description: PFC CS1 17C1505 A, Name: 170316G1_5, Date: 16-Mar-2017, Time: 11:07:54, Instrument: , Lab: , User:

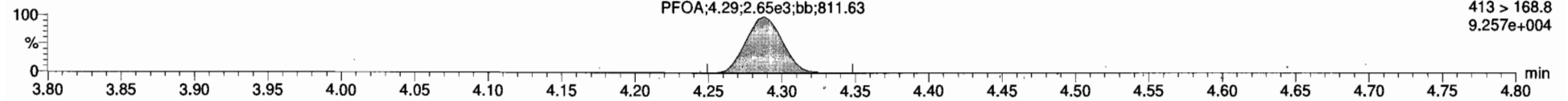
PFOA

170316G1_5



F5:MRM of 12 channels,ES-
413 > 368.7
1.951e+005

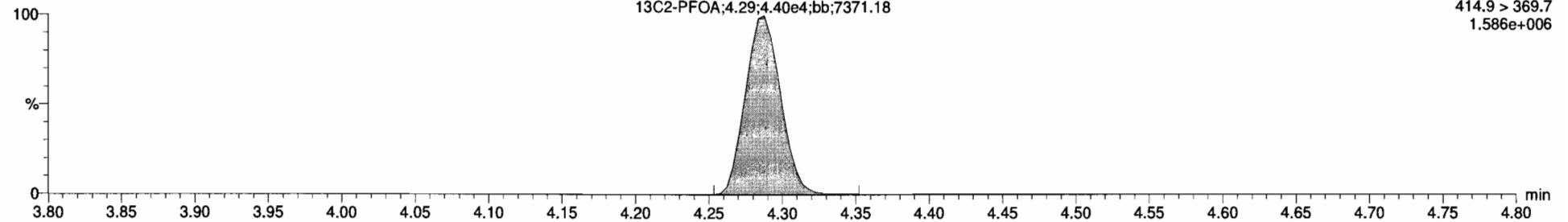
170316G1_5



F5:MRM of 12 channels,ES-
413 > 168.8
9.257e+004

13C2-PFOA

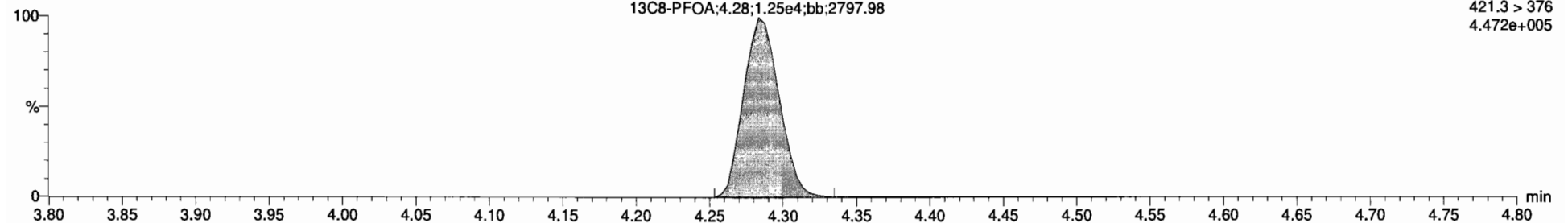
170316G1_5



F5:MRM of 12 channels,ES-
414.9 > 369.7
1.586e+006

13C8-PFOA

170316G1_5



F5:MRM of 12 channels,ES-
421.3 > 376
4.472e+005

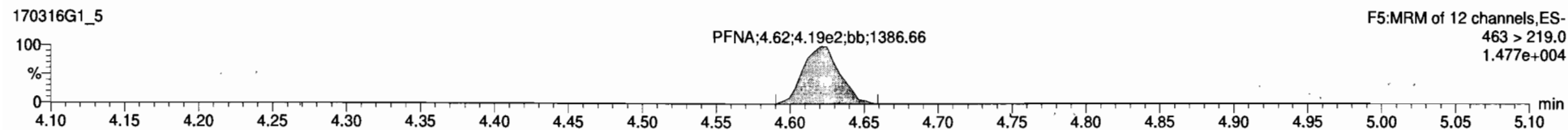
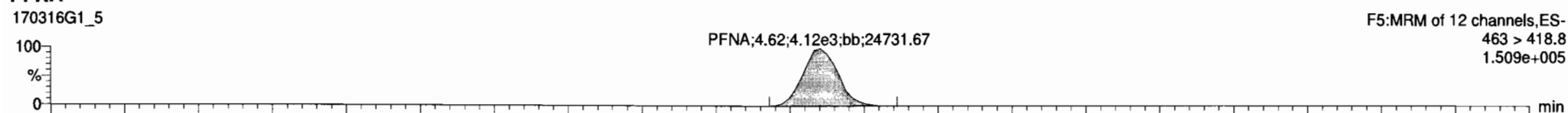
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

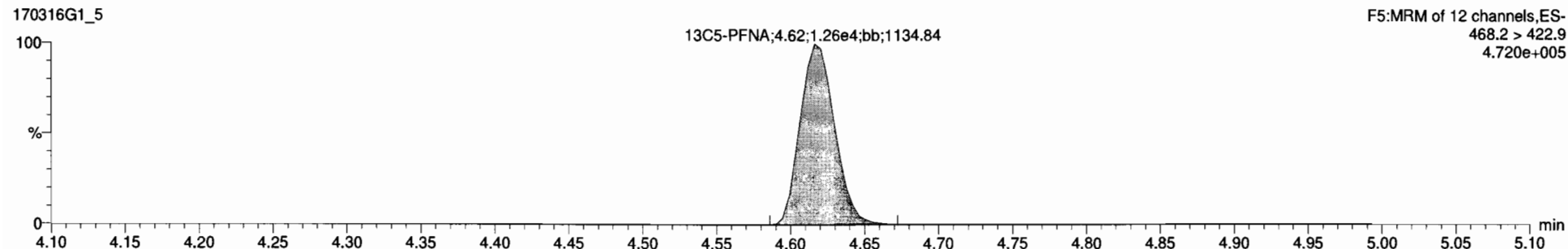
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-4 PFC CS1 17C1505, Description: PFC CS1 17C1505 A, Name: 170316G1_5, Date: 16-Mar-2017, Time: 11:07:54, Instrument: , Lab: , User:

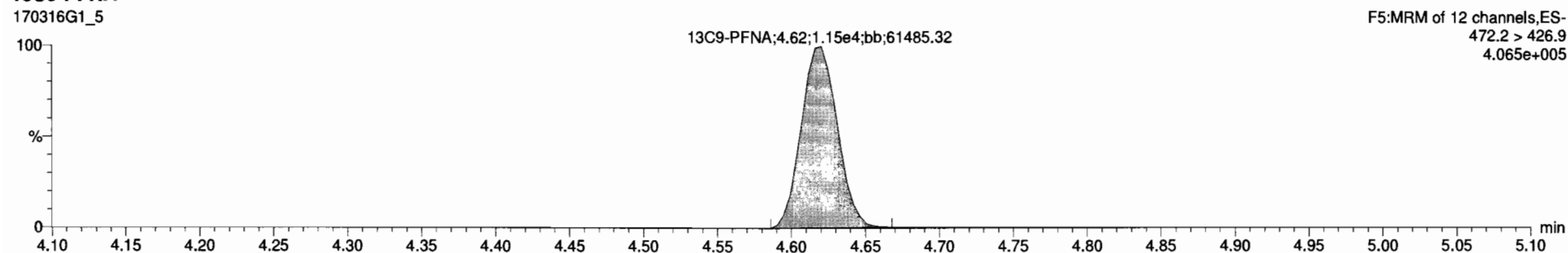
PFNA



13C5-PFNA



13C9-PFNA



Dataset: Untitled

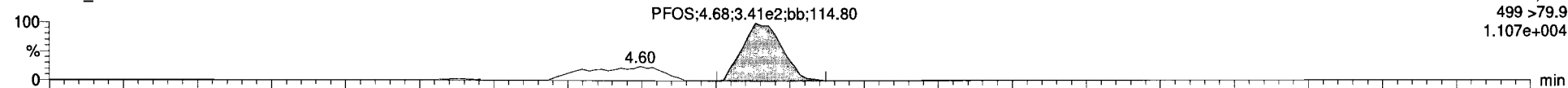
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

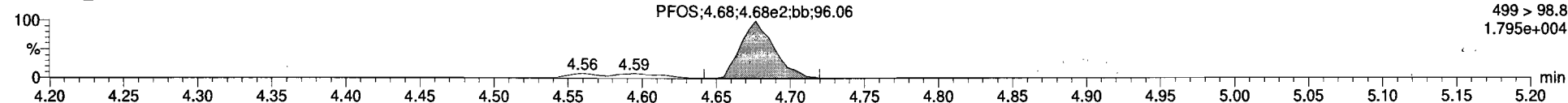
ID: ST170316G1-4 PFC CS1 17C1505, Description: PFC CS1 17C1505 A, Name: 170316G1_5, Date: 16-Mar-2017, Time: 11:07:54, Instrument: , Lab: , User:

PFOS

170316G1_5

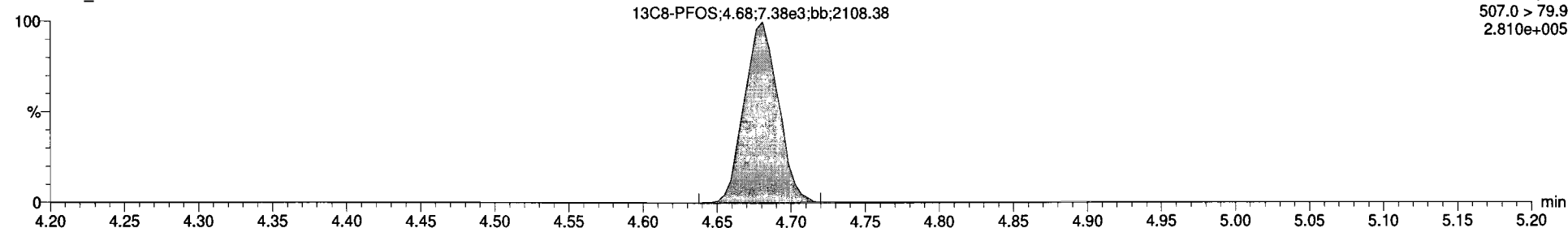


170316G1_5



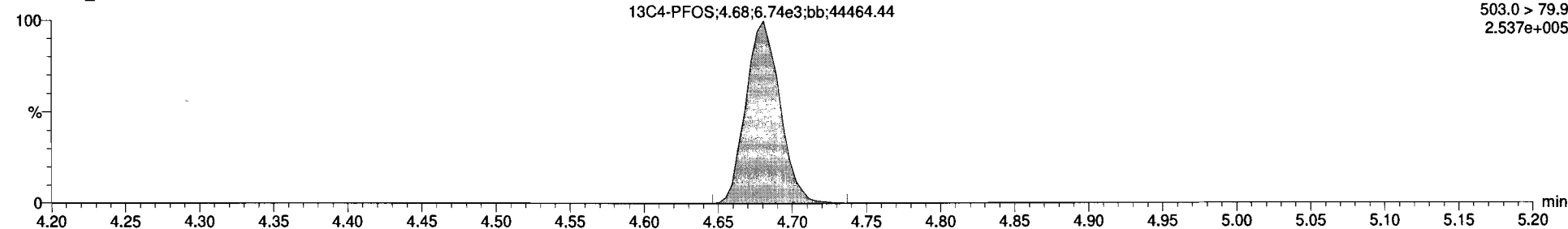
13C8-PFOS

170316G1_5

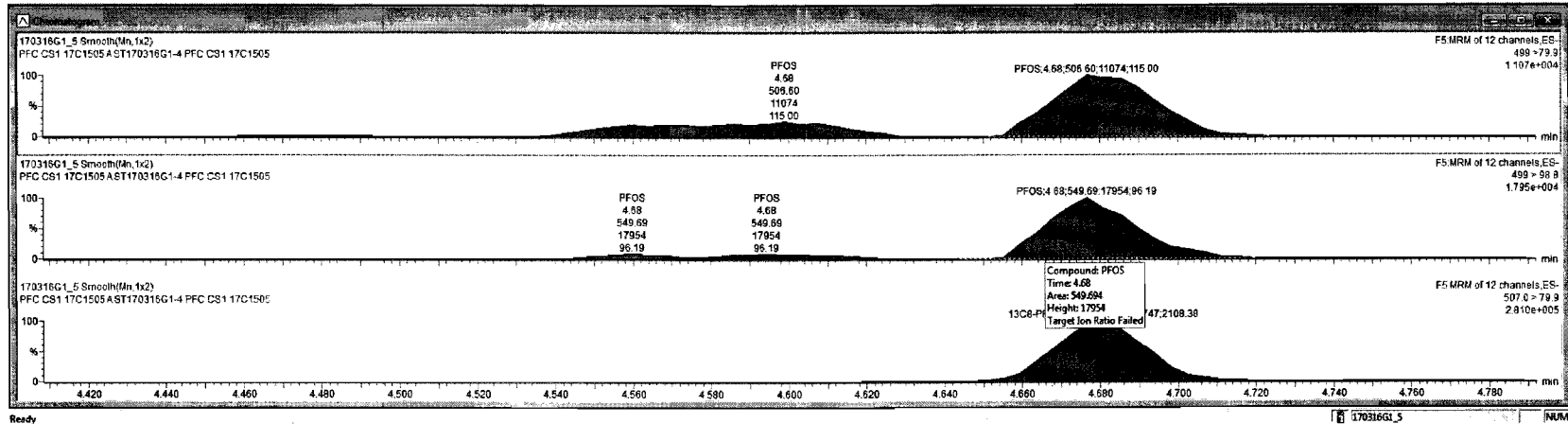


13C4-PFOS

170316G1_5



Name	Trace	Area	RRF	WtPct	Pred RT	RT	Conc.	Wt%	%Rec	DL	
1	PFBS	299 > 79.7	3.81e3	1.000	3.02	3.02	1.76	NO	88.1		
2	PFHpA	363 > 318.9	7.07e3	1.000	3.89	3.89	1.06	NO	83.1		
3	PFHxS	398.9 > 79.6	2.78e3	1.000	4.00	4.01	1.76	NO	87.9		
4	PFDA	413 > 368.7	5.88e3	1.000	4.29	4.29	1.89	NO	84.4		
5	PFNA	483 > 418.6	4.12e3	1.000	4.62	4.62	1.80	NO	89.6		
6	PFOS	503.0 > 79.9	6.74e3	1.000	4.67	4.68	1.69	NO	84.4	0.1574018	
7	13C3-PFBS	302.0 > 98.8	1.17e4	0.501	1.000	2.99	3.02	14.9	NO	119.6	0.0027197
8	13C4-PFHpA	367.2 > 321.8	2.95e4	1.24	1.000	3.88	3.89	15.3	NO	122.1	0.0658950
9	13C2-PFHxS	403 > 102.8	1.38e4	0.496	1.000	4.01	4.00	14.0	NO	111.6	0.0311966
10	13C2-PFDA	414.9 > 389.7	4.40e4	3.22	1.000	4.28	4.29	13.6	NO	109.1	0.0848710
11	13C5-PFNA	468.2 > 422.9	1.26e4	0.979	1.000	4.62	4.62	14.0	NO	112.4	0.0328330
12	13C3-PFOS	507.0 > 79.9	7.38e3	1.06	1.000	4.68	4.68	12.7	NO	101.5	0.0151389
13	13C5-PFHpA	318 > 272.9	3.60e4	1.00	1.000	3.29	3.38	12.5	NO	100.0	0.010946
14	13C3-PFHxS	401.9 > 79.9	1.95e4	1.00	1.000	3.94	4.01	12.5	NO	100.0	0.0003493
15	13C3-PFDA	421.3 > 376	1.25e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.011688
16	13C3-PFNA	472.2 > 426.9	1.15e4	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0005083
17	13C4-PFOS	503.0 > 79.9	6.74e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0007028
18	Total PFBS	299 > 79.7	3.81e3		1.000	3.11	1.76	NO			
19	Total PFHpA	368.9 > 79.6	3.31e3		1.000	4.09	2.00	NO			
20	Total PFHxS	413 > 368.7	5.71e3		1.000	4.39	1.89	NO			
21	Total PFDA	413 > 368.7	5.71e3		1.000	4.39	1.89	NO			
22	Total PFOS	499 > 79.9	6.83e3		1.000	4.67	2.44	NO		0.1574018	



Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

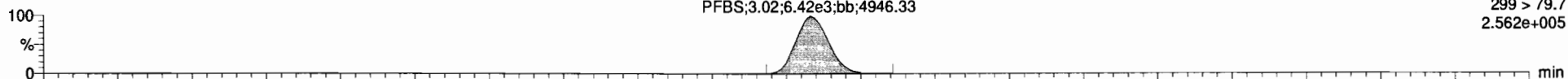
ID: ST170316G1-5 PFC CS2 17C1603, Description: PFC CS2 17C1603 A, Name: 170316G1_6, Date: 16-Mar-2017, Time: 11:20:35, Instrument: , Lab: , User:

PFBS

170316G1_6

PFBS;3.02;6.42e3;bb;4946.33

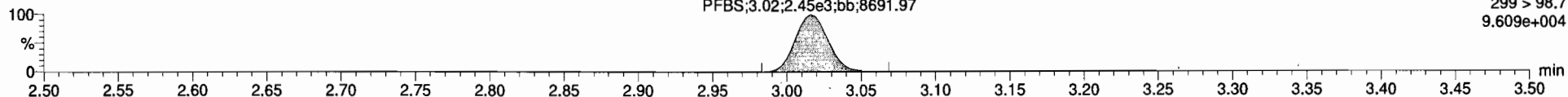
F2:MRM of 3 channels,ES-
299 > 79.7
2.562e+005



170316G1_6

PFBS;3.02;2.45e3;bb;8691.97

F2:MRM of 3 channels,ES-
299 > 98.7
9.609e+004

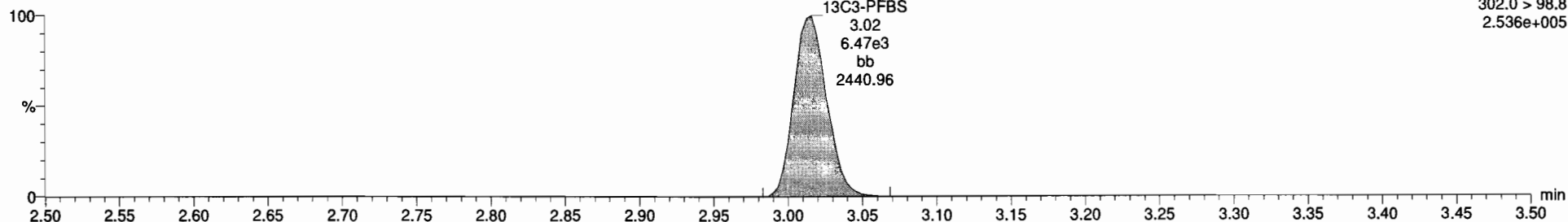


13C3-PFBS

170316G1_6

13C3-PFBS
3.02
6.47e3
bb
2440.96

F2:MRM of 3 channels,ES-
302.0 > 98.8
2.536e+005

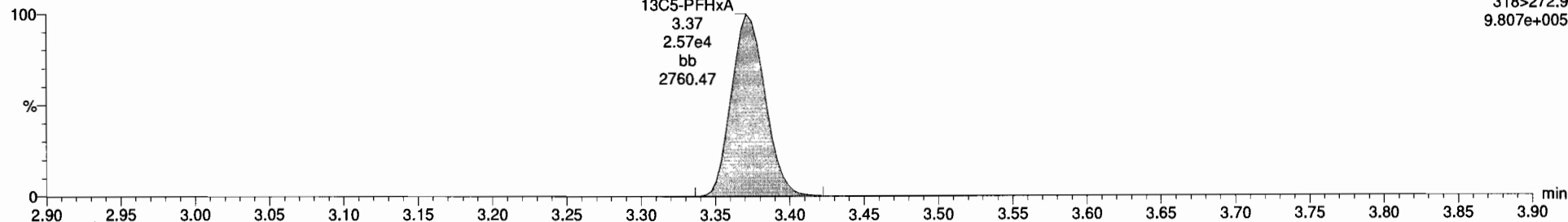


13C5-PFHxA

170316G1_6

13C5-PFHxA
3.37
2.57e4
bb
2760.47

F3:MRM of 1 channel,ES-
318>272.9
9.807e+005



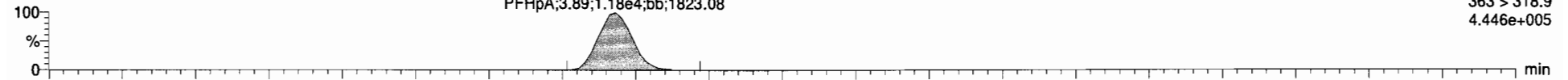
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

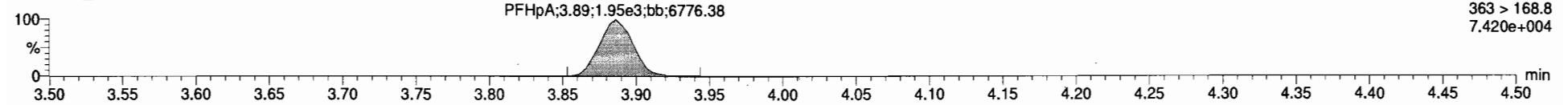
ID: ST170316G1-5 PFC CS2 17C1603, Description: PFC CS2 17C1603 A, Name: 170316G1_6, Date: 16-Mar-2017, Time: 11:20:35, Instrument: , Lab: , User:

PFHpA

170316G1_6

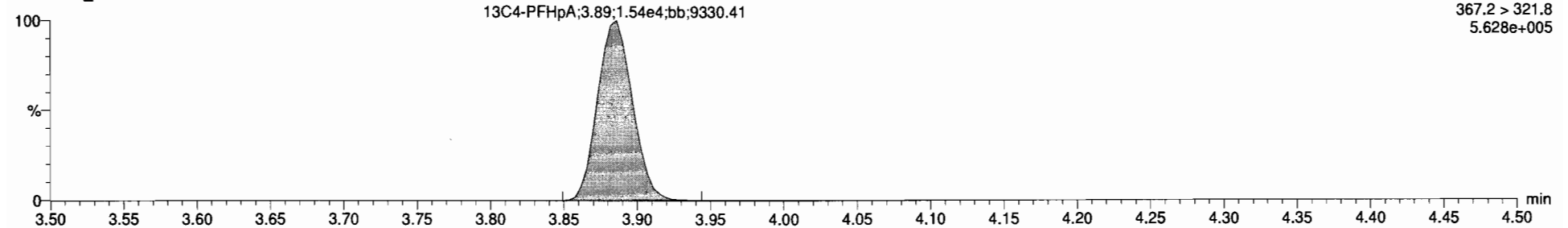


170316G1_6



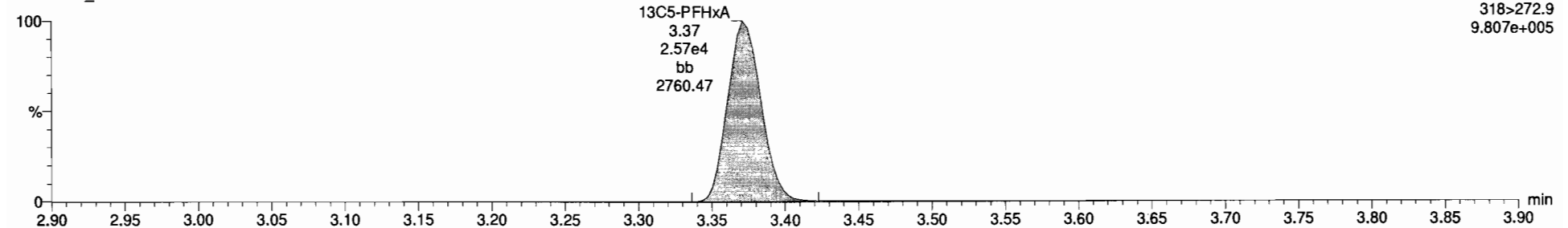
13C4-PFHpA

170316G1_6



13C5-PFHxA

170316G1_6



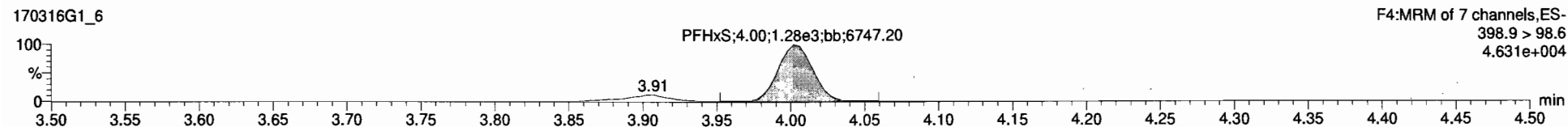
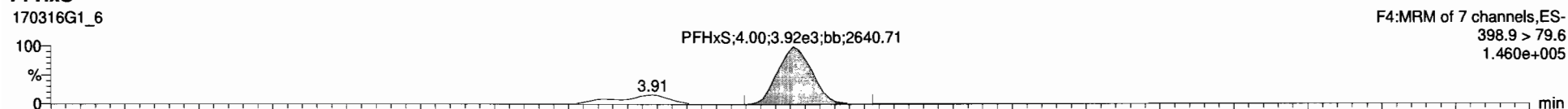
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

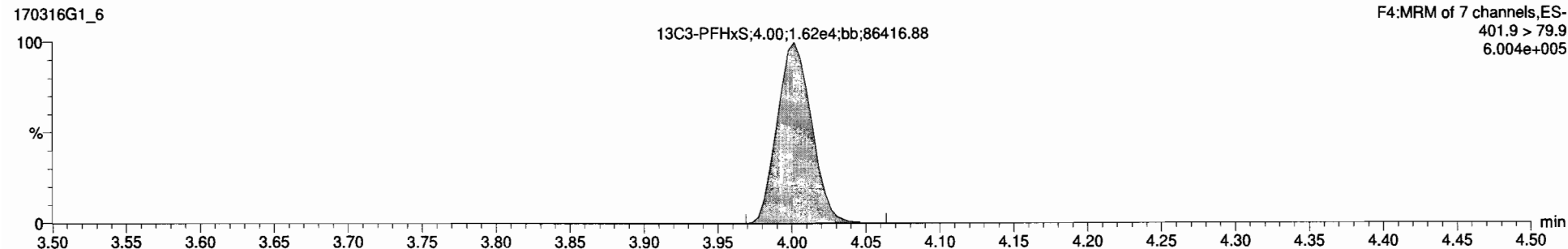
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-5 PFC CS2 17C1603, Description: PFC CS2 17C1603 A, Name: 170316G1_6, Date: 16-Mar-2017, Time: 11:20:35, Instrument: , Lab: , User:

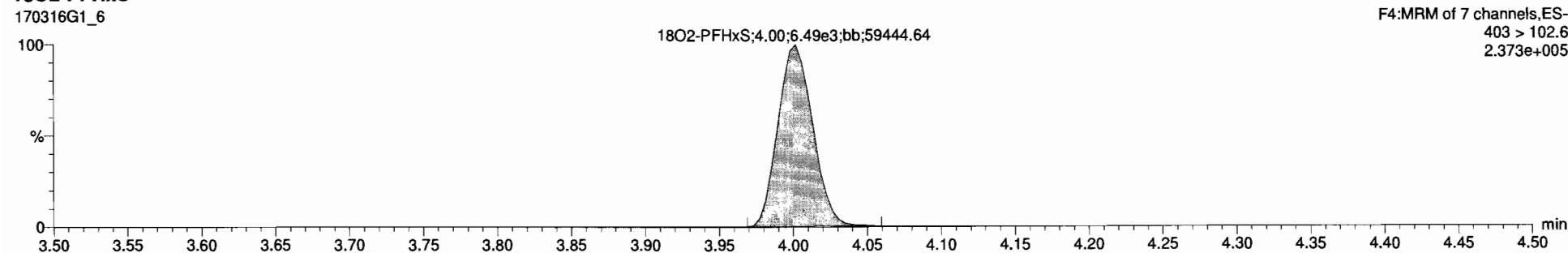
PFHxS



13C3-PFHxS



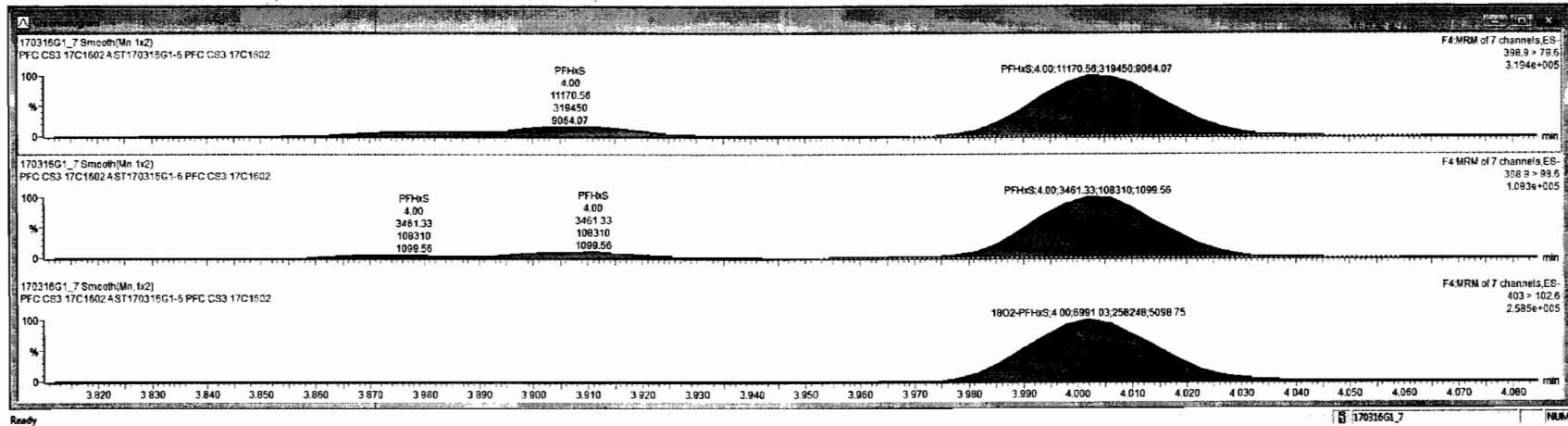
18O2-PFHxS





170316G1_7 - ST170316G1-6 PFC CS3 17C1602 - PFC CS2 17C1602 A

#	Name	Trace	Area	RRP	WENL	Prod.RT	RT	Conc.	HL	%Rec	DL
1	PFBS	299 > 79.7	1.49e4		1.000	3.02	3.02	12.2	YES	121.7	
2	PFHpA	363 > 318.9	2.74e4		1.000	3.99	3.89	12.3	YES	123.4	
3	PFHxS	398.9 > 79.8	1.33e4		1.000	4.09	4.09	13.2	YES	111.8	
4	PFOA	413 > 368.7	2.29e4		1.000	4.29	4.29	12.2	YES	122.3	
5	PFNA	463 > 418.6	1.70e4		1.000	4.62	4.62	11.4	YES	113.8	
6	PFOS	499 > 79.9	3.13e3		1.000	4.68	4.68	11.9	YES	118.2	0.1512181
7	13C3-PFBS	302.0 > 98.8	6.71e3	0.501	1.000	2.99	3.02	10.1	NO	81.1	0.0051806
8	13C4-PFHpA	367.2 > 321.8	1.60e4	1.24	1.000	3.88	3.89	9.77	NO	78.1	0.0090334
9	18O2-PFHxS	403 > 102.6	6.99e3	0.495	1.000	4.00	4.00	10.7	NO	85.6	0.0051051
10	13C3-PFOA	414.9 > 368.7	2.65e4	3.22	1.000	4.28	4.28	10.2	NO	81.6	0.0062592
11	13C5-PFNA	468.2 > 422.9	8.57e3	0.979	1.000	4.62	4.62	11.2	NO	89.5	0.0007183
12	13C8-PFOS	507.0 > 79.9	6.01e3	1.08	1.000	4.68	4.68	11.5	NO	91.9	0.0099084
13	13C5-PFHxS	318 > 272.9	2.54e4	1.00	1.000	3.29	3.37	12.5	NO	100.0	0.0038198
14	13C5-PFHxS	401.9 > 79.9	1.85e4	1.00	1.000	3.94	4.00	12.5	NO	100.0	0.0029823
15	13C8-PFOA	421.3 > 376	1.01e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0010584
16	13C5-PFNA	472.2 > 428.9	9.78e3	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0008613
17	13C4-PFOS	503.0 > 79.9	6.05e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0067292
18	Total PFBS	299 > 79.7	1.49e4		1.000	3.11		12.2	NO		
19	Total PFHxS	398.9 > 79.8	1.33e4		1.000	4.09		13.2	NO		
20	Total PFOA	413 > 368.7	2.31e4		1.000	4.39		12.2	NO		
21	Total PFOS	499 > 79.9	4.15e3		1.000	4.67		16.0	NO		0.1512181

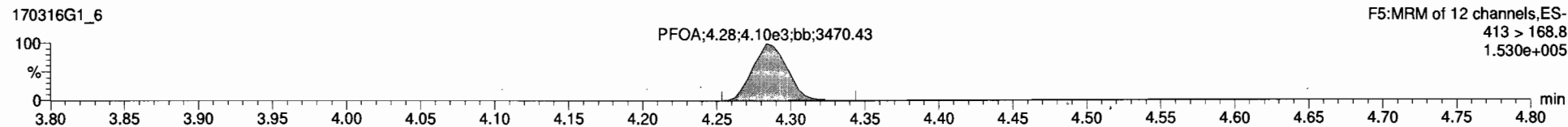
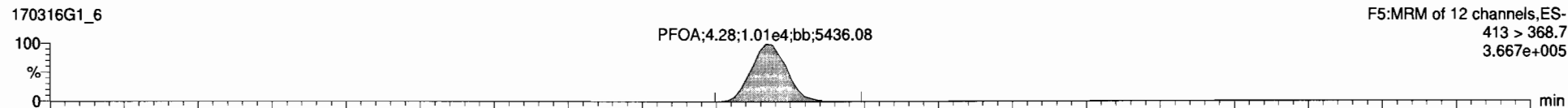


Dataset: Untitled

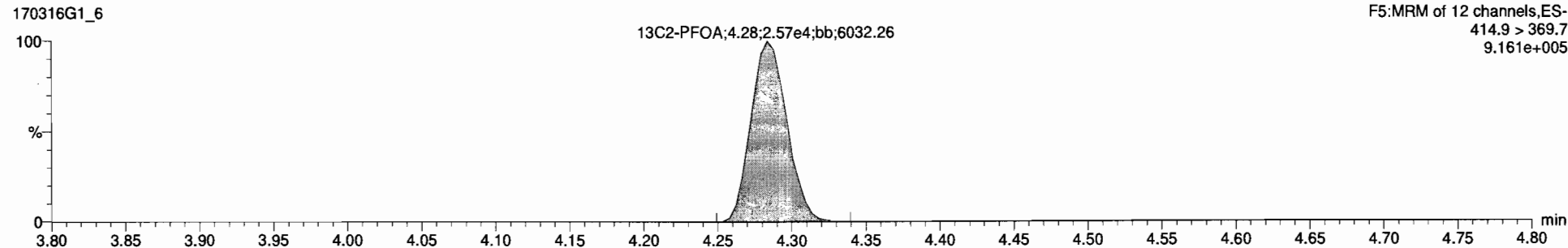
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-5 PFC CS2 17C1603, Description: PFC CS2 17C1603 A, Name: 170316G1_6, Date: 16-Mar-2017, Time: 11:20:35, Instrument: , Lab: , User:

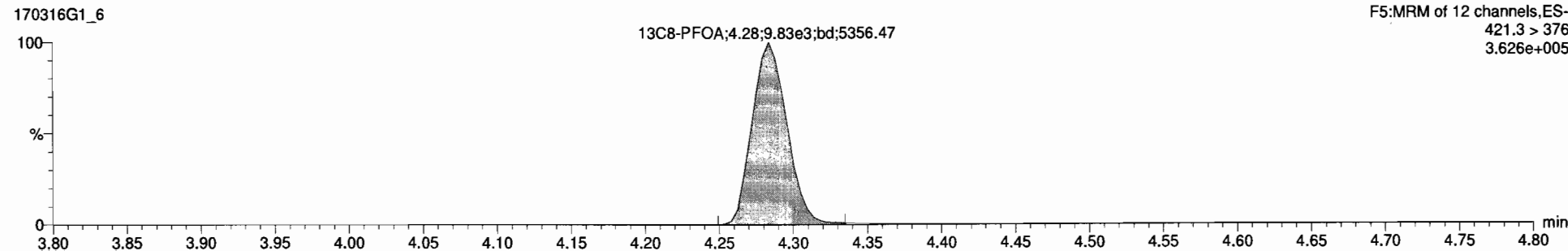
PFOA



13C2-PFOA



13C8-PFOA



Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

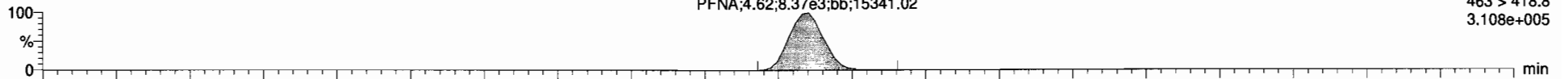
ID: ST170316G1-5 PFC CS2 17C1603, Description: PFC CS2 17C1603 A, Name: 170316G1_6, Date: 16-Mar-2017, Time: 11:20:35, Instrument: , Lab: , User:

PFNA

170316G1_6

PFNA;4.62;8.37e3;bb;15341.02

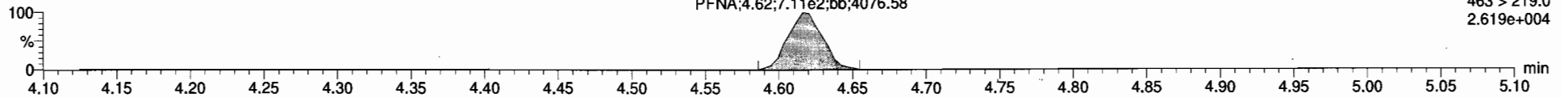
F5:MRM of 12 channels,ES-
463 > 418.8
3.108e+005



170316G1_6

PFNA;4.62;7.11e2;bb;4076.58

F5:MRM of 12 channels,ES-
463 > 219.0
2.619e+004

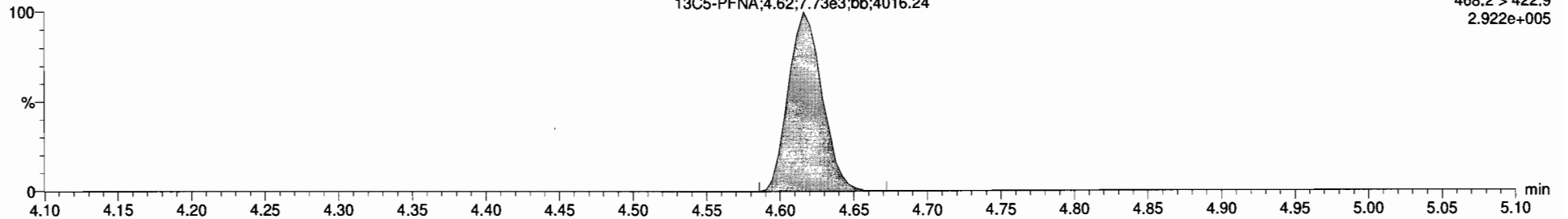


13C5-PFNA

170316G1_6

13C5-PFNA;4.62;7.73e3;bb;4016.24

F5:MRM of 12 channels,ES-
468.2 > 422.9
2.922e+005

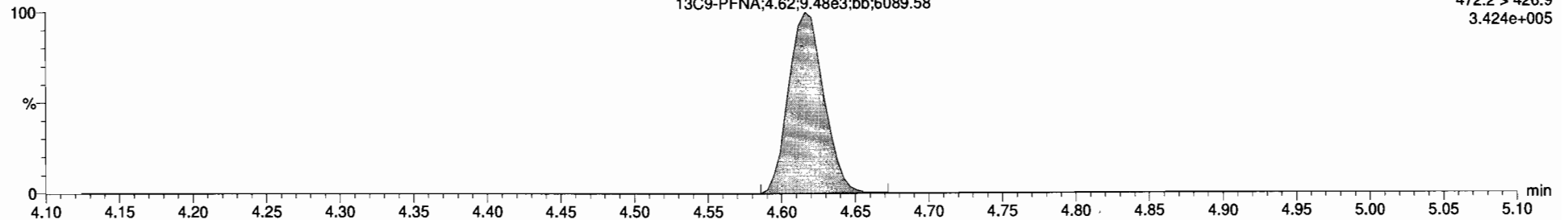


13C9-PFNA

170316G1_6

13C9-PFNA;4.62;9.48e3;bb;6089.58

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.424e+005



Dataset: Untitled

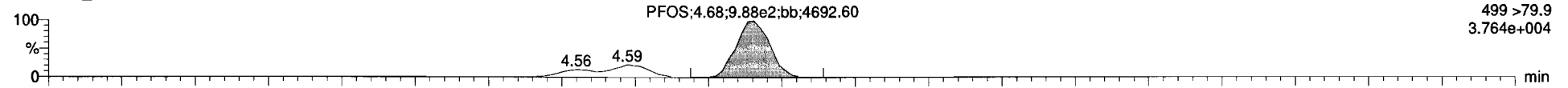
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

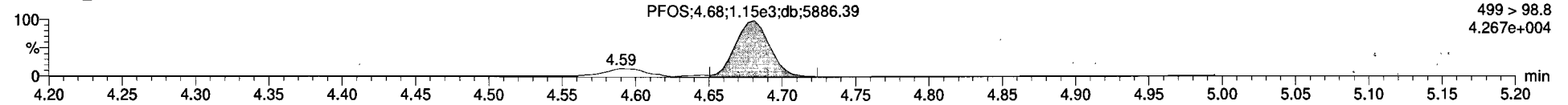
ID: ST170316G1-5 PFC CS2 17C1603, Description: PFC CS2 17C1603 A, Name: 170316G1_6, Date: 16-Mar-2017, Time: 11:20:35, Instrument: , Lab: , User:

PFOS

170316G1_6

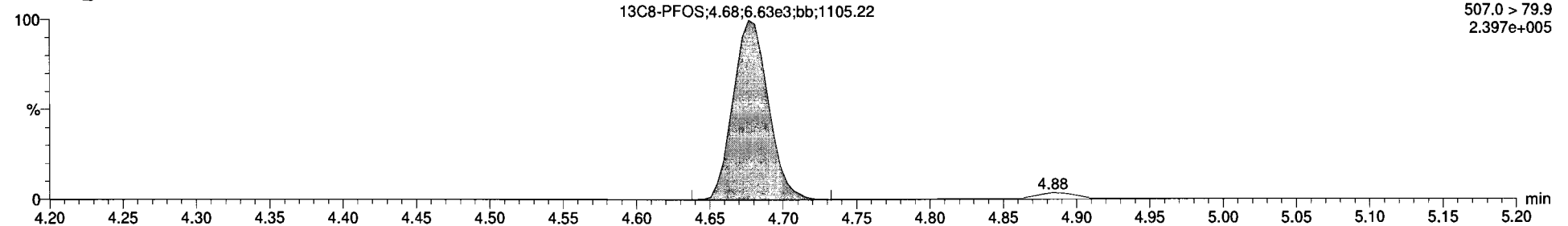


170316G1_6



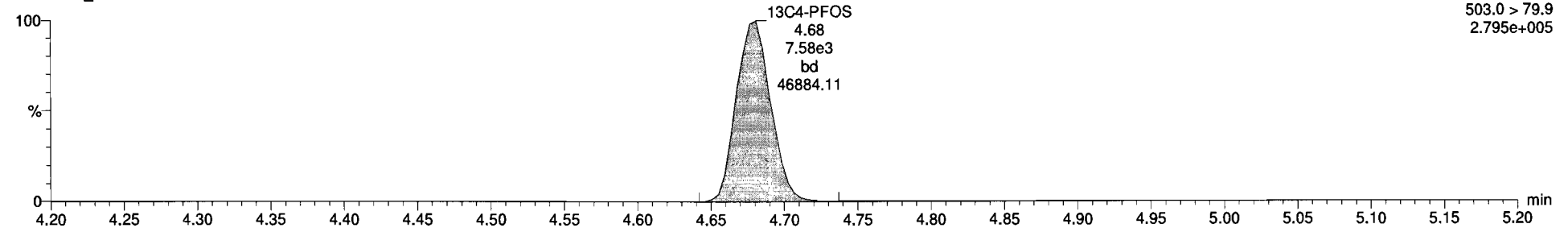
13C8-PFOS

170316G1_6



13C4-PFOS

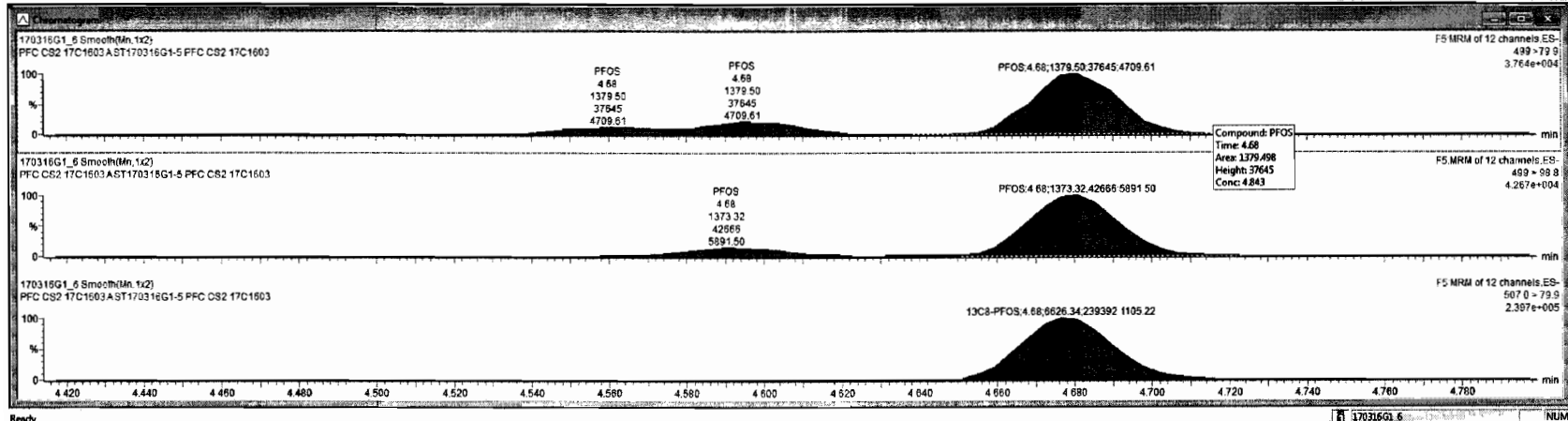
170316G1_6





170316G1_6_ST170316G1-5 PFC CS2 17C1603 - PFC CS2 17C1603A

Peak	Name	Time	Area	RRF	WVVL	Prod.RT	RT	Conc.	MDL	%Rec	DC
1	PFBS	299 > 79.7	6.42e3		1.000	3.02	3.02	5.43	NO	108.6	
2	PFHpA	363 > 318.9	1.18e4		1.000	3.89	3.89	5.48	YES	109.6	
3	PFHxS	396.9 > 79.6	4.90e3		1.000	4.00	4.00	5.25	YES	105.0	
4	PFOA	413 > 388.7	1.01e4		1.000	4.28	4.28	5.47	YES	109.5	
5	PFNA	463 > 418.8	8.37e3		1.000	4.62	4.62	6.16	YES	123.1	
6	PFOS	499 > 79.9	1.74e3		1.000	4.68	4.68	4.94	YES	96.9	0.1386407
7	13C3-PFBS	302.0 > 96.8	6.47e3	0.501	1.000	2.99	3.02	9.90	NO	79.9	0.0107520
8	13C4-PFHpA	367.2 > 321.8	1.54e4	1.24	1.000	3.88	3.89	9.65	NO	77.2	0.0025366
9	18O2-PFHxS	403 > 102.6	8.49e3	0.495	1.000	4.00	4.00	10.1	NO	81.1	0.0045282
10	13C2-PFOA	414.8 > 388.7	2.57e4	3.22	1.000	4.28	4.28	10.2	NO	81.3	0.0045588
11	13C3-PFNA	468.2 > 422.9	7.73e3	0.979	1.000	4.62	4.62	10.4	NO	83.3	0.0087757
12	13C8-PFOS	507.0 > 79.9	6.63e3	1.00	1.000	4.68	4.68	10.1	NO	80.9	0.0224292
13	13C3-PFHpA	316 > 272.9	2.57e4	1.00	1.000	3.29	3.37	12.5	NO	100.0	0.0113206
14	13C3-PFHxS	401.9 > 79.9	1.62e4	1.00	1.000	3.94	4.00	12.5	NO	100.0	0.0003616
15	13C8-PFOA	421.3 > 376	9.63e3	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0056341
16	13C8-PFNA	472.2 > 426.9	9.48e3	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0051317
17	13C4-PFOS	503.0 > 79.9	7.50e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0006665
18	Total PFBS	299 > 79.7	6.42e3		1.000	3.11		5.43	NO		
19	Total PFHxS	396.9 > 79.6	5.85e3		1.000	4.09		6.10	NO		
20	Total PFOA	413 > 388.7	1.02e4		1.000	4.39		5.47	NO		
21	Total PFOS	499 > 79.9	1.74e3		1.000	4.67		6.36	NO		0.1386407



Dataset: Untitled

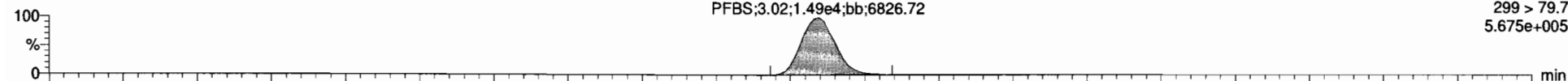
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

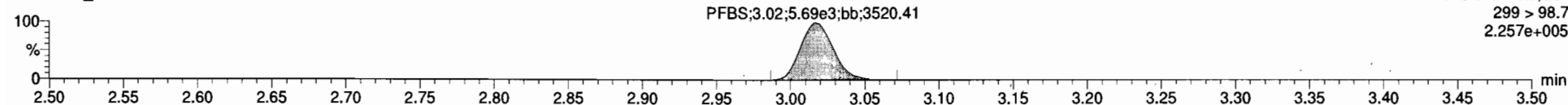
ID: ST170316G1-6 PFC CS3 17C1602, Description: PFC CS3 17C1602 A, Name: 170316G1_7, Date: 16-Mar-2017, Time: 11:33:10, Instrument: , Lab: , User:

PFBS

170316G1_7

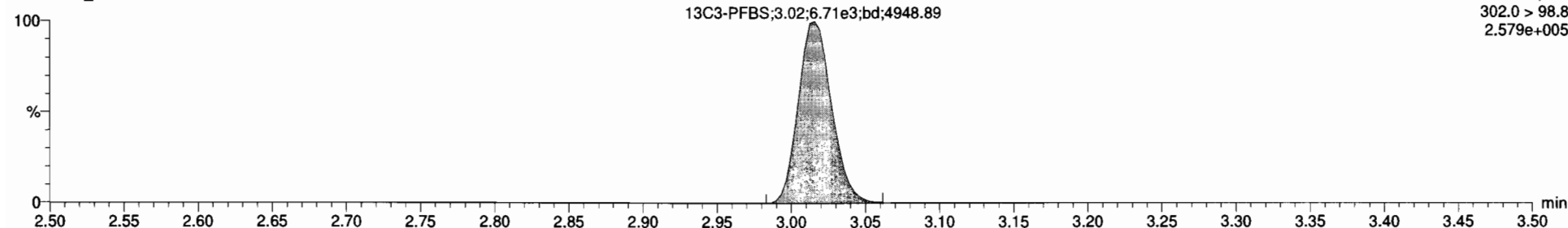


170316G1_7



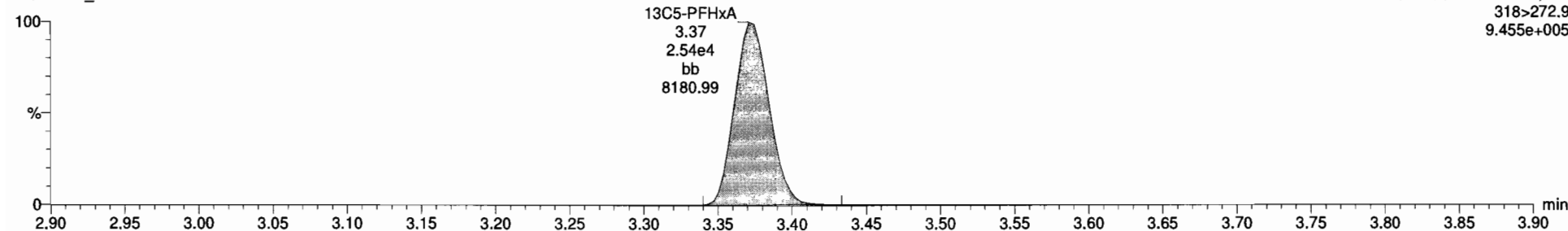
13C3-PFBS

170316G1_7



13C5-PFHxA

170316G1_7



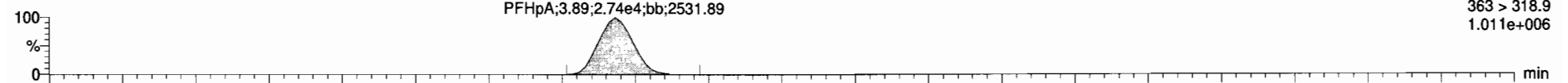
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

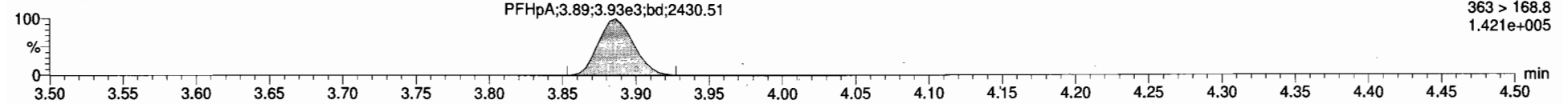
ID: ST170316G1-6 PFC CS3 17C1602, Description: PFC CS3 17C1602 A, Name: 170316G1_7, Date: 16-Mar-2017, Time: 11:33:10, Instrument: , Lab: , User:

PFHpA

170316G1_7

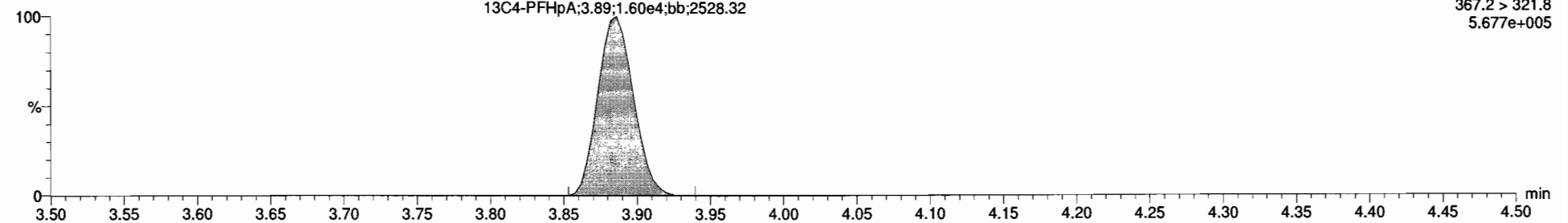


170316G1_7



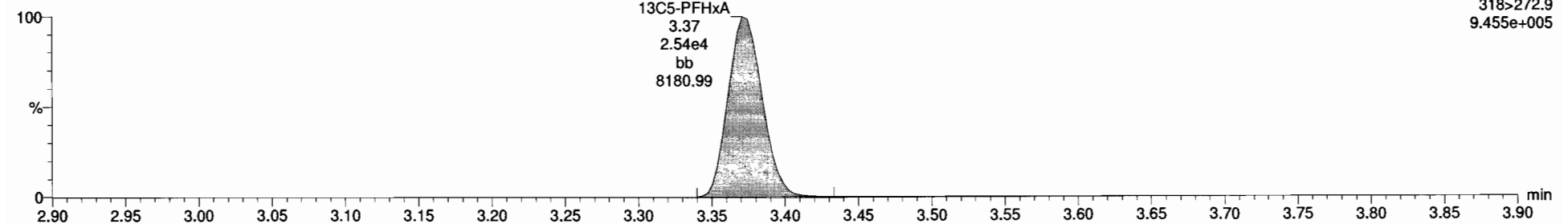
13C4-PFHpA

170316G1_7



13C5-PFHxA

170316G1_7

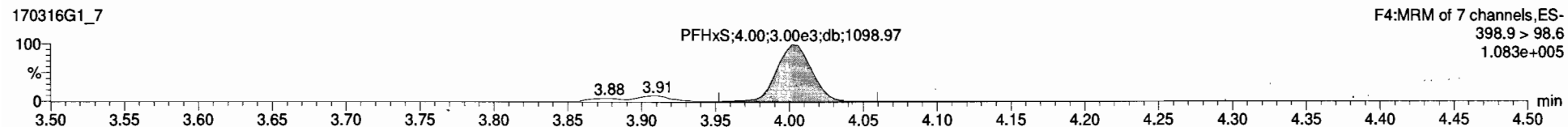
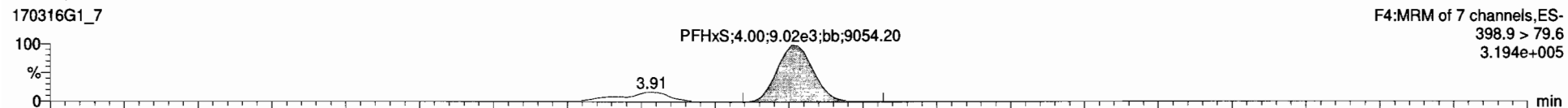


Dataset: Untitled

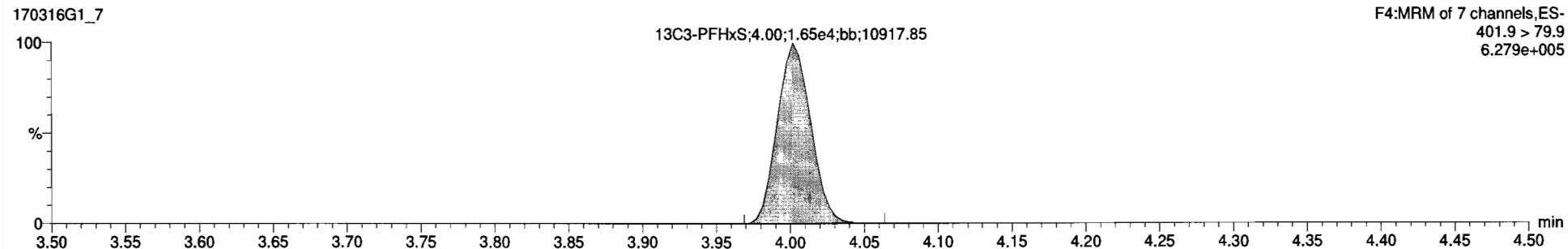
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-6 PFC CS3 17C1602, Description: PFC CS3 17C1602 A, Name: 170316G1_7, Date: 16-Mar-2017, Time: 11:33:10, Instrument: , Lab: , User:

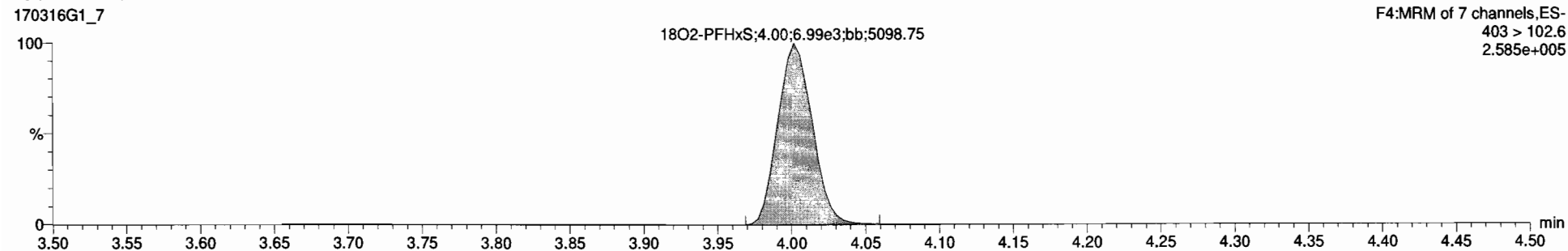
PFHxS



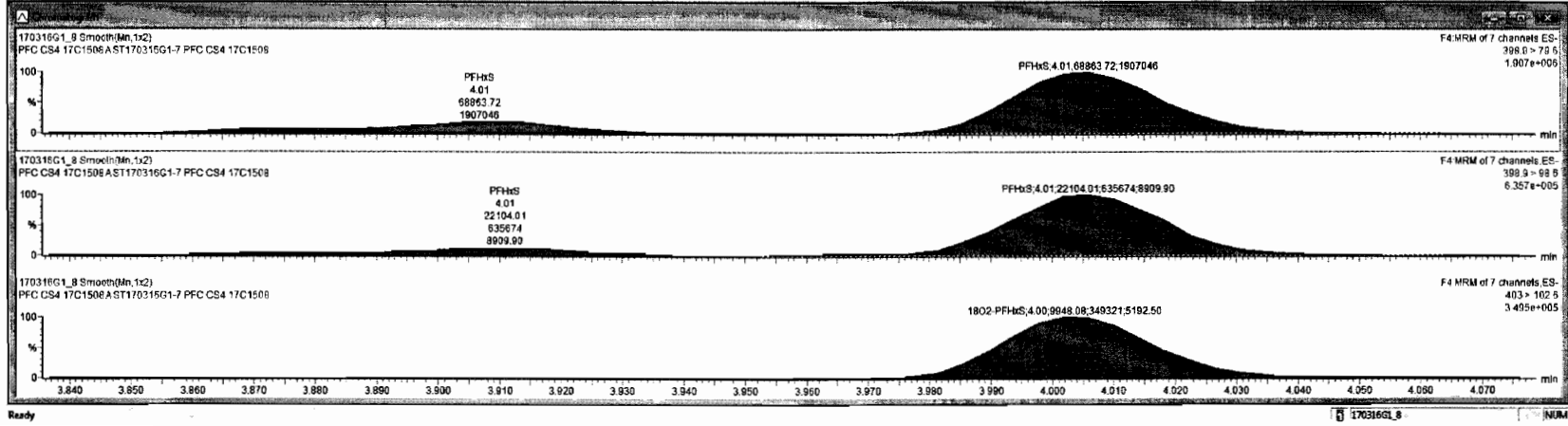
13C3-PFHxS



18O2-PFHxS



Name	Trace	Area	RSP	WHVM	Prod.RT	RT	Conc.	MUL	%Rec	DL	
1	PFBS	299 > 79.7	8.35e4	1.000	3.02	3.02	47.7	YES	95.5	0.0000000	
2	PFHpA	383 > 79.6	1.72e5	1.000	3.89	3.89	51.2	YES	102.3	0.0000000	
3	PFHxS	398.9 > 79.6	6.89e4	1.000	4.00	4.01	48.5	YES	97.0	0.0000000	
4	PFDA	413 > 368.7	1.36e5	1.000	4.29	4.29	48.3	YES	96.6	0.0000000	
5	PFNA	463 > 418.8	1.26e5	1.000	4.62	4.62	51.1	YES	102.2	0.0000000	
6	PFOS	499 > 79.9	2.11e4	1.000	4.69	4.68	49.4	YES	90.7	0.1437419	
7	13C3-PFBS	362.0 > 86.8	9.53e3	0.501	1.000	3.00	3.02	12.2	NO	97.2	0.0086632
8	13C4-PFNA	367.2 > 321.8	2.43e4	1.24	1.000	3.66	3.89	12.4	NO	99.3	0.0038455
9	18O2-PFHxS	403 > 102.8	9.95e3	0.495	1.000	4.01	4.00	12.7	NO	101.9	0.0061974
10	13C2-PFDA	414.9 > 369.7	4.09e4	3.22	1.000	4.29	4.29	13.1	NO	104.5	0.0085126
11	13C5-PFNA	468.2 > 422.9	1.35e4	0.979	1.000	4.62	4.62	13.0	NO	103.8	0.0031032
12	13C8-PFOS	507.0 > 79.9	1.06e4	1.00	1.000	4.68	4.68	12.8	NO	102.5	0.0072081
13	13C5-PFHxA	318-272.9	3.19e4	1.00	1.000	3.29	3.38	12.5	NO	100.0	0.0013942
14	13C3-PFHxS	401.9 > 79.9	1.97e4	1.00	1.000	3.94	4.01	12.6	NO	100.0	0.0011898
15	13C8-PFDA	423.3 > 376	1.21e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0009180
16	13C8-PFNA	472.2 > 428.9	1.33e4	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0015849
17	13C4-PFOS	503.0 > 79.9	9.54e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0190891
18	Total PFBS	299 > 79.7	8.35e4		1.000	3.11			NO		
19	Total PFHpA	383 > 79.6	8.32e4		1.000	4.09			NO		
20	Total PFHxS	413 > 368.7	1.36e5		1.000	4.39			NO		
21	Total PFOS	499 > 79.9	2.76e4		1.000	4.87			NO		0.1437419



Dataset: Untitled

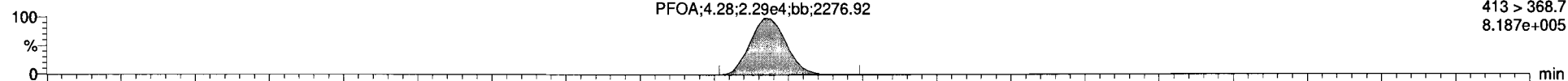
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

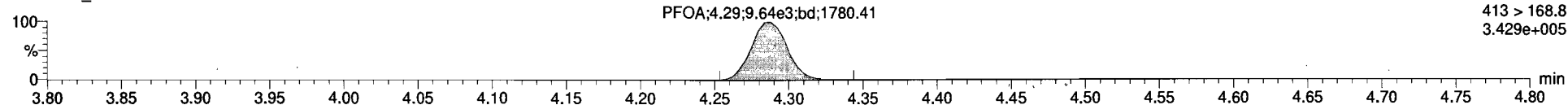
ID: ST170316G1-6 PFC CS3 17C1602, Description: PFC CS3 17C1602 A, Name: 170316G1_7, Date: 16-Mar-2017, Time: 11:33:10, Instrument: , Lab: , User:

PFOA

170316G1_7

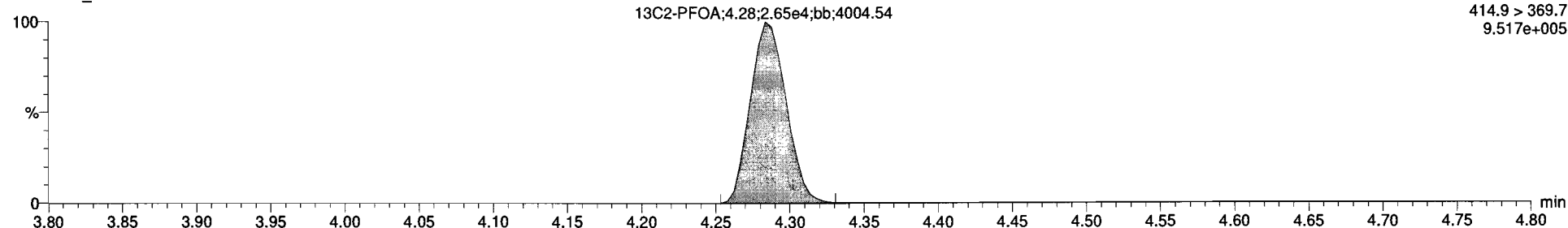


170316G1_7



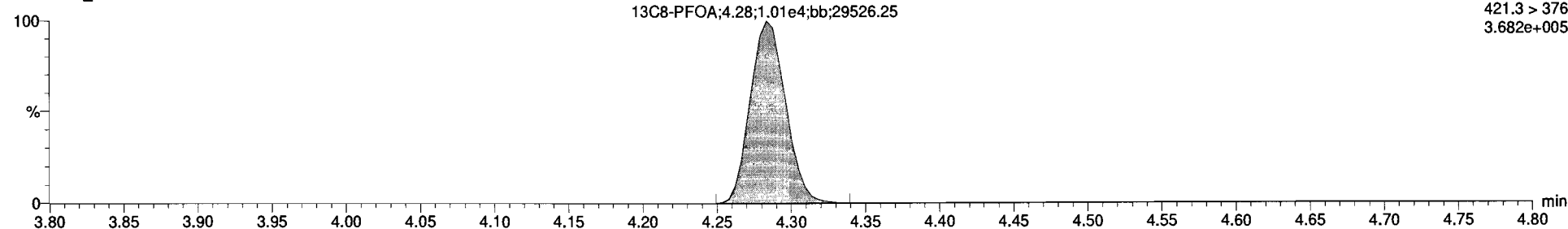
13C2-PFOA

170316G1_7



13C8-PFOA

170316G1_7



Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

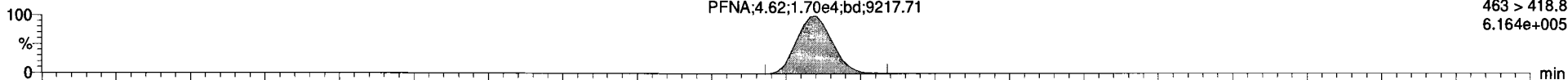
ID: ST170316G1-6 PFC CS3 17C1602, Description: PFC CS3 17C1602 A, Name: 170316G1_7, Date: 16-Mar-2017, Time: 11:33:10, Instrument: , Lab: , User:

PFNA

170316G1_7

PFNA;4.62;1.70e4;bd;9217.71

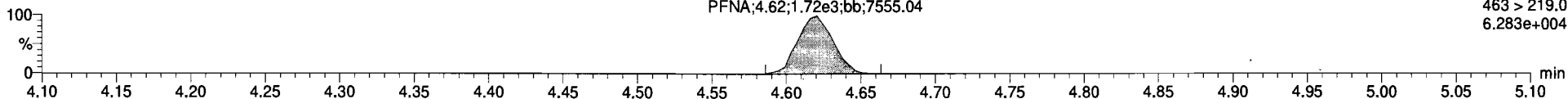
F5:MRM of 12 channels,ES-
463 > 418.8
6.164e+005



170316G1_7

PFNA;4.62;1.72e3;bb;7555.04

F5:MRM of 12 channels,ES-
463 > 219.0
6.283e+004

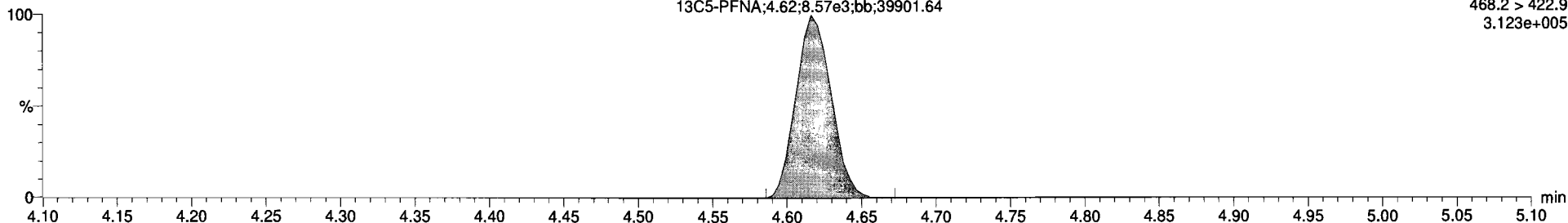


13C5-PFNA

170316G1_7

13C5-PFNA;4.62;8.57e3;bb;39901.64

F5:MRM of 12 channels,ES-
468.2 > 422.9
3.123e+005

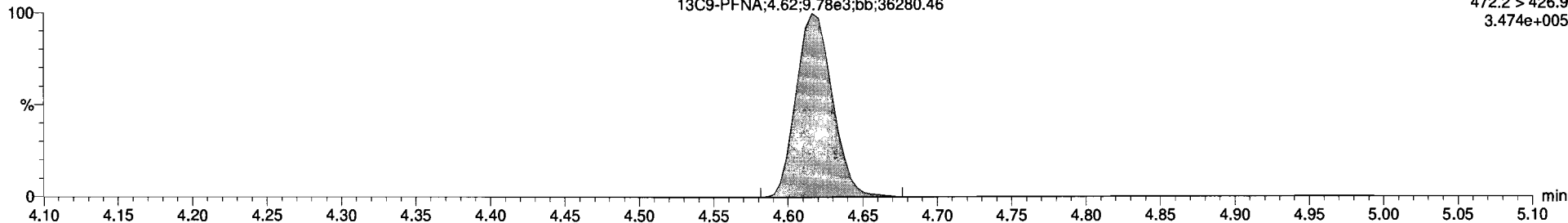


13C9-PFNA

170316G1_7

13C9-PFNA;4.62;9.78e3;bb;36280.46

F5:MRM of 12 channels,ES-
472.2 > 426.9
3.474e+005



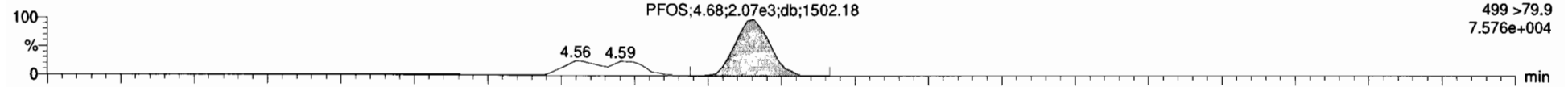
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

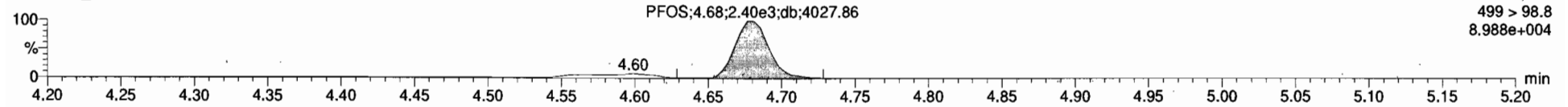
ID: ST170316G1-6 PFC CS3 17C1602, Description: PFC CS3 17C1602 A, Name: 170316G1_7, Date: 16-Mar-2017, Time: 11:33:10, Instrument: , Lab: , User:

PFOS

170316G1_7

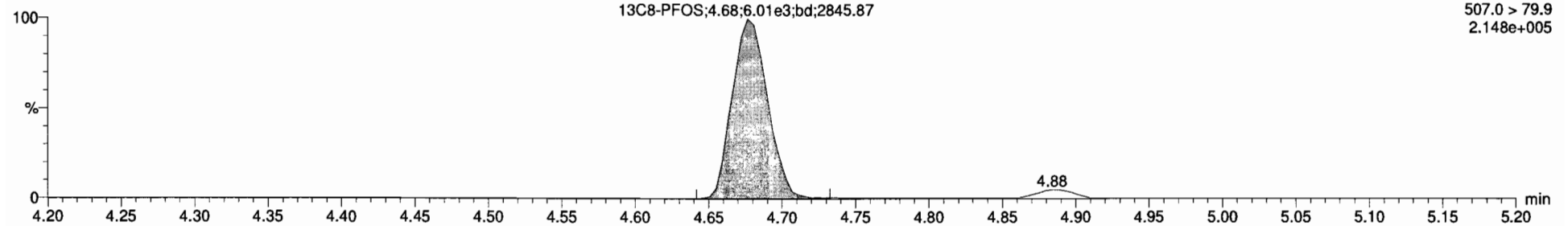


170316G1_7



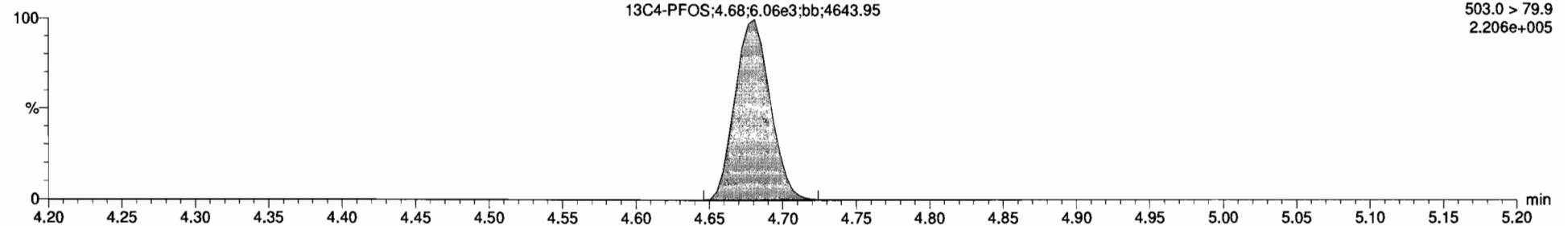
13C8-PFOS

170316G1_7

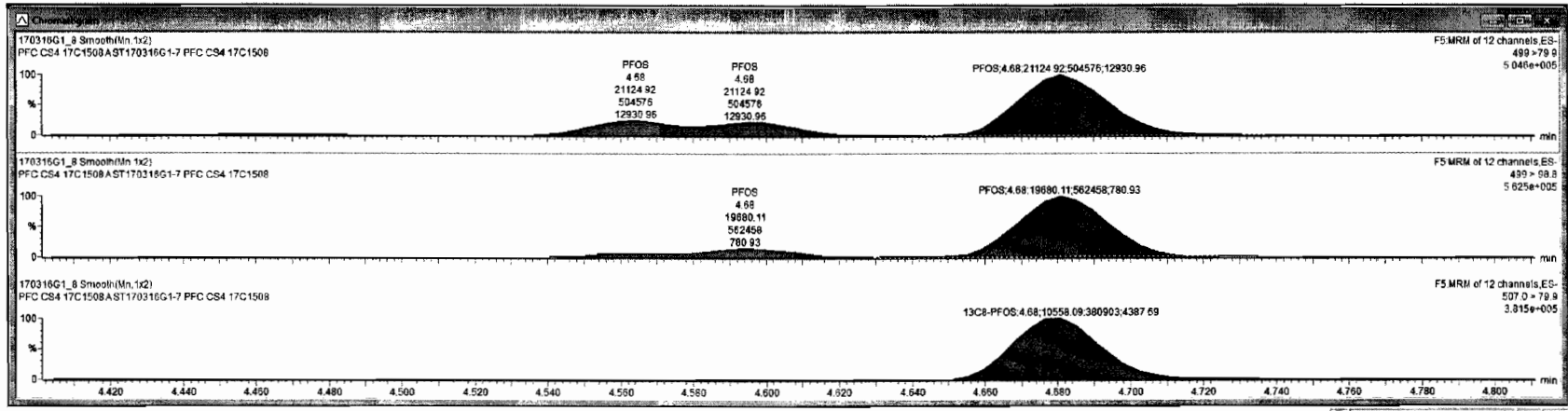


13C4-PFOS

170316G1_7



SL	Name	Trace	Area	RFI	WtAvt	Prod RT	RT	Conc	>MCL	%Rec	DL
1	PFBS	299 > 79.7	8.35e4		1.000	3.02	3.02	47.7	YES	95.5	0.0000000
2	PFHpA	363 > 319.9	1.72e5		1.000	3.89	3.89	51.2	YES	102.3	0.0000000
3	PFHxS	398.9 > 79.8	6.89e4		1.000	4.00	4.01	48.5	YES	97.0	0.0000000
4	PFOA	413 > 368.7	1.38e5		1.000	4.29	4.29	48.3	YES	96.6	0.0000000
5	PFNA	463 > 418.8	1.20e5		1.000	4.62	4.62	51.1	YES	102.2	0.0000000
6	PFOS	468 > 79.9	2.11e4		1.000	4.68	4.68	45.4	YES	90.7	0.1437419
7	13C3-PFBS	302.0 > 98.8	9.63e3	0.501	1.000	3.00	3.02	12.2	NO	97.2	0.0066632
8	13C4-PFHpA	367.2 > 321.8	2.43e4	1.24	1.000	3.88	3.89	12.4	NO	99.3	0.0038455
9	18O2-PFHxS	403 > 102.6	9.95e3	0.495	1.000	4.01	4.00	12.7	NO	101.9	0.0061974
10	13C2-PFOA	414.9 > 369.7	4.09e4	3.22	1.000	4.29	4.29	13.1	NO	104.5	0.0065126
11	13C5-PFNA	466.2 > 422.9	1.35e4	0.979	1.000	4.62	4.62	13.0	NO	103.8	0.0031832
12	13C8-PFOS	507.0 > 79.9	1.06e4	1.06	1.000	4.68	4.68	12.8	NO	102.5	0.0072661
13	13C5-PFHxA	318 > 272.9	3.19e4	1.00	1.000	3.29	3.38	12.5	NO	100.0	0.0012942
14	13C3-PFHxS	401.3 > 79.9	1.97e4	1.00	1.000	3.94	4.01	12.5	NO	100.0	0.0011898
15	13C8-PFOA	421.3 > 376	1.21e4	1.00	1.000	4.22	4.29	12.5	NO	100.0	0.0009180
16	13C8-PFNA	472.2 > 426.9	1.33e4	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0015849
17	13C4-PFOS	503.0 > 79.9	9.54e3	1.00	1.000	4.67	4.68	12.5	NO	100.0	0.0190891
18	Total PFBS	299 > 79.7	8.35e4		1.000	3.11		47.7	NO		
19	Total PFHxS	398.9 > 79.8	8.32e4		1.000	4.09		51.5	NO		
20	Total PFOA	413 > 368.7	1.38e5		1.000	4.39		48.3	NO		
21	Total PFOS	469 > 79.9	2.76e4		1.000	4.67		58.7	NO		0.1437419



Dataset: Untitled

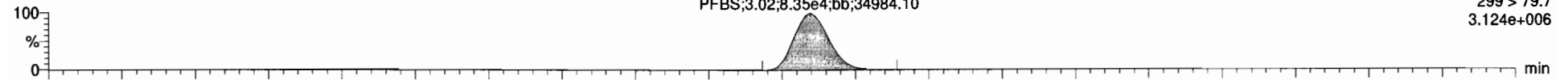
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

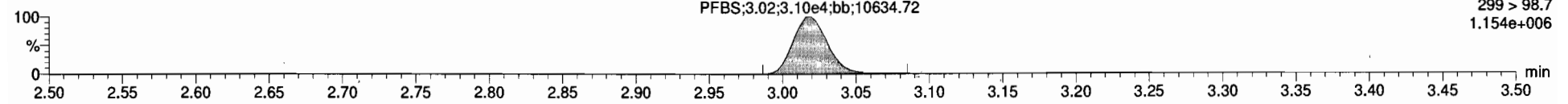
ID: ST170316G1-7 PFC CS4 17C1508, Description: PFC CS4 17C1508 A, Name: 170316G1_8, Date: 16-Mar-2017, Time: 11:45:43, Instrument: , Lab: , User:

PFBS

170316G1_8

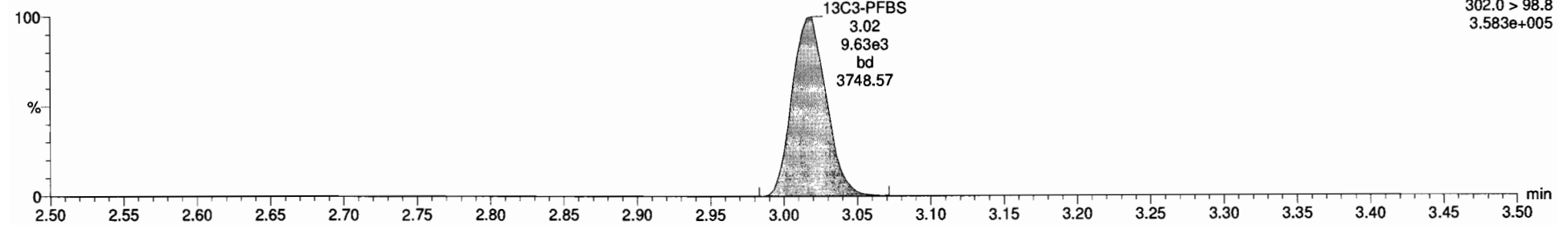


170316G1_8



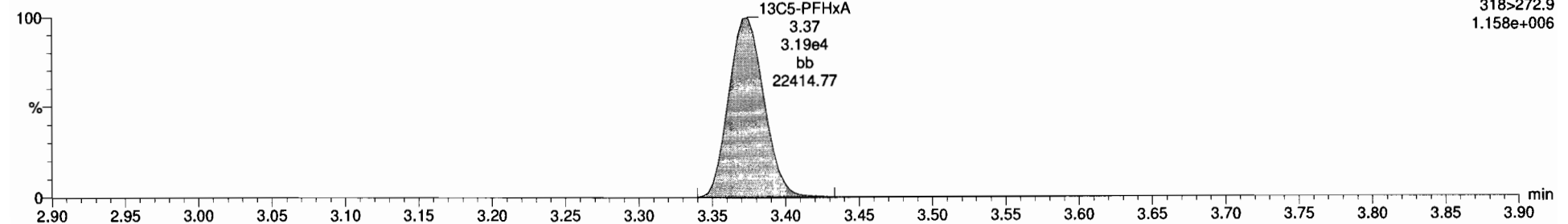
13C3-PFBS

170316G1_8



13C5-PFHxA

170316G1_8



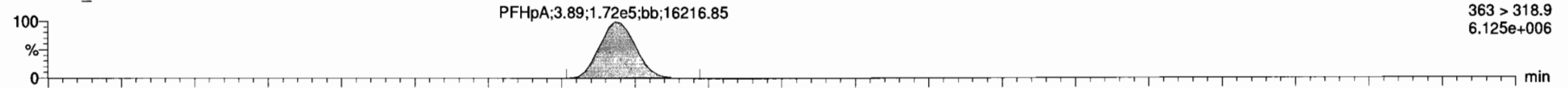
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

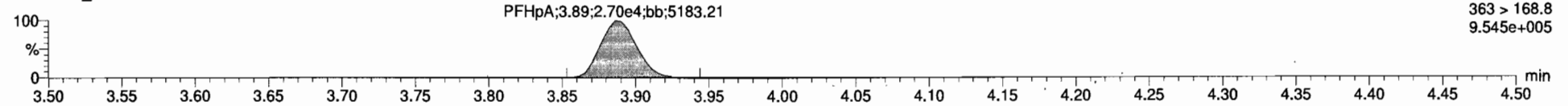
ID: ST170316G1-7 PFC CS4 17C1508, Description: PFC CS4 17C1508 A, Name: 170316G1_8, Date: 16-Mar-2017, Time: 11:45:43, Instrument: , Lab: , User:

PFHpA

170316G1_8

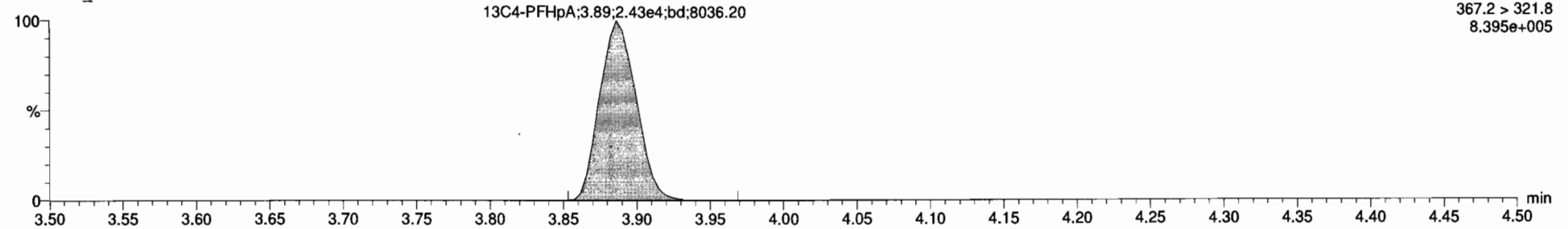


170316G1_8



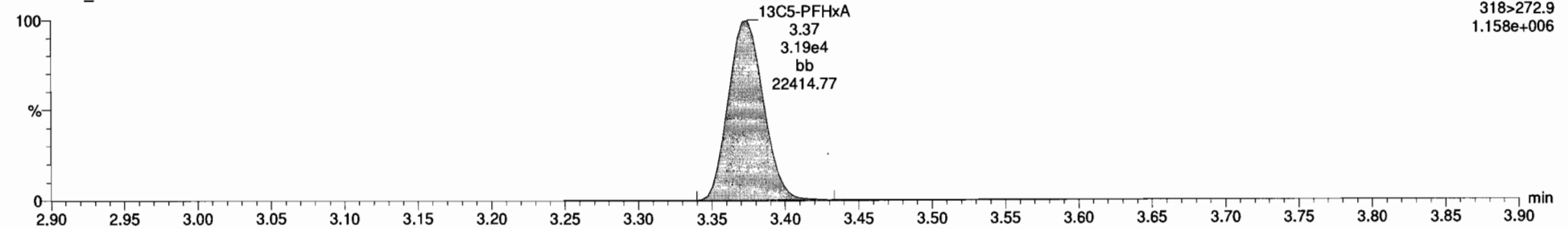
13C4-PFHpA

170316G1_8



13C5-PFHxA

170316G1_8



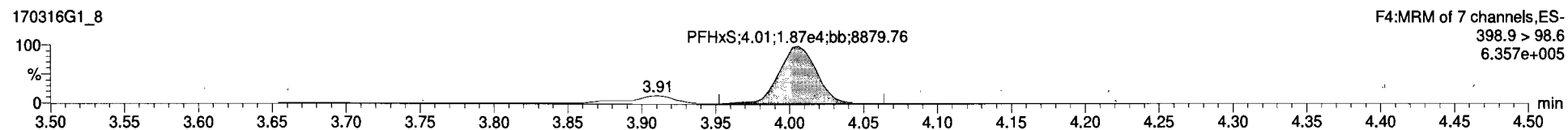
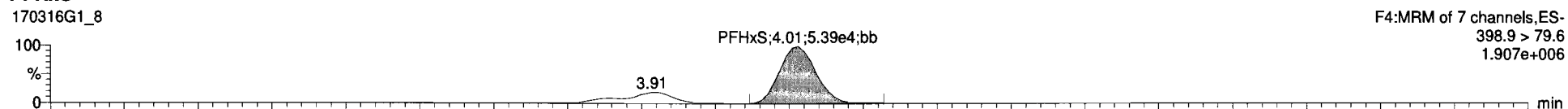
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

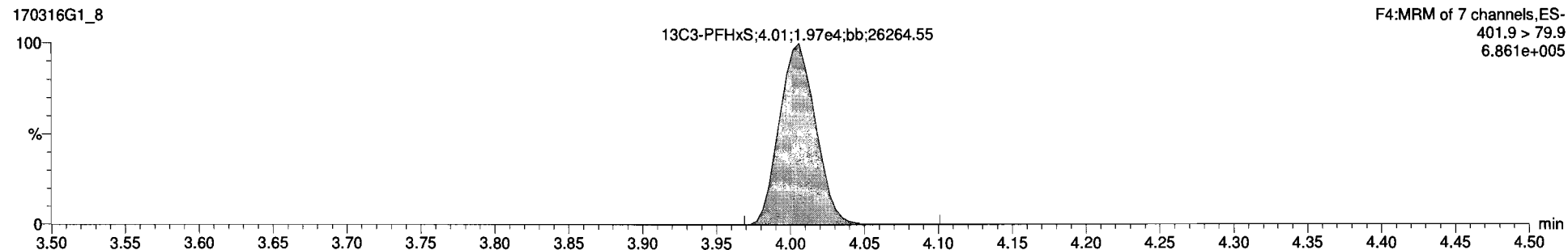
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-7 PFC CS4 17C1508, Description: PFC CS4 17C1508 A, Name: 170316G1_8, Date: 16-Mar-2017, Time: 11:45:43, Instrument: , Lab: , User:

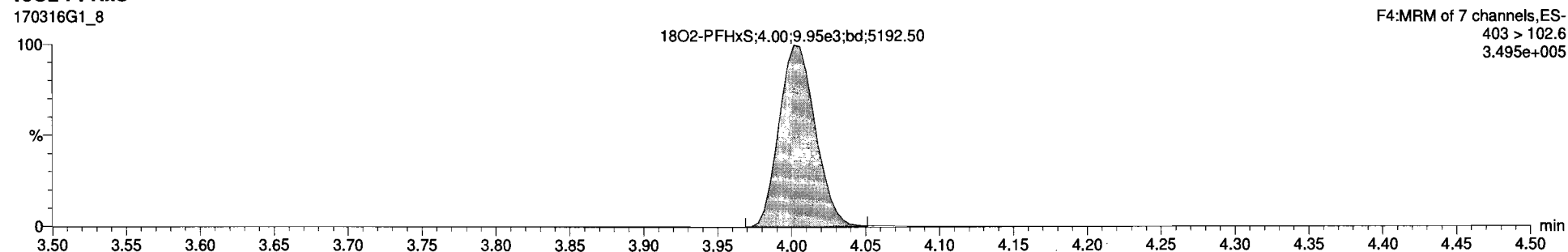
PFHxS



13C3-PFHxS

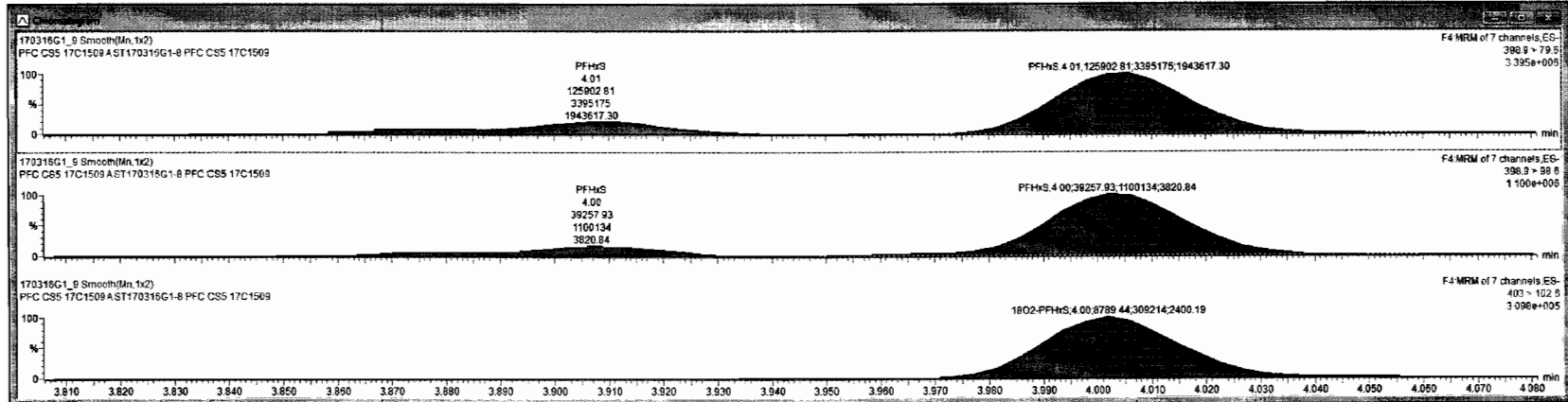


18O2-PFHxS



170316G1_9 - ST170316G1-8 PFC CS5 17C1509 - PFC CS5 17C1509 A

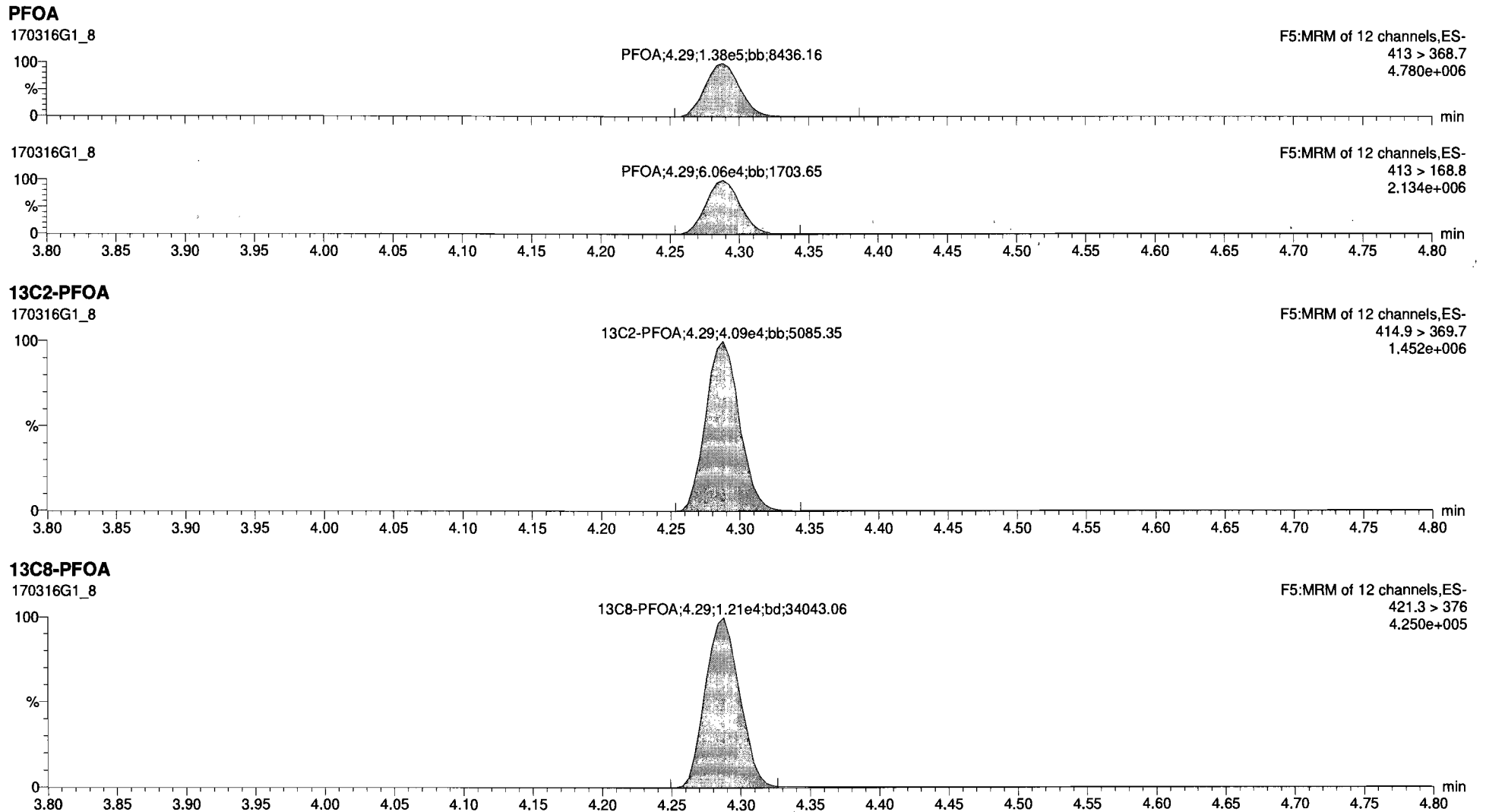
Name	Trace	Area	RFI	WVVol	Prod RT	RT	Conc.	>MDL	%Rec	DL
1	PFBS	299 > 79.7	1.48e5	1.000	3.02	3.02	100	YES	100.0	0.0000000
2	PFHpA	363 > 318.9	2.88e5	1.000	3.89	3.89	96.5	YES	96.5	0.0000000
3	PFHxA	396.9 > 79.6	1.26e5	1.000	4.09	4.09	100	YES	100.0	0.0000000
4	PFOA	413 > 368.7	2.58e5	1.000	4.28	4.28	99.5	YES	99.5	0.0000000
5	PFNA	463 > 418.8	2.27e5	1.000	4.62	4.62	96.7	YES	96.7	0.0000000
6	PFOS	499 > 79.9	4.74e4	1.000	4.68	4.68	103	YES	103.2	0.2030753
7	13Cl-PFBS	302.9 > 98.8	8.14e3	8.591	1.900	2.99	3.02	NO	97.3	0.0026335
8	13Cl-PFHpA	367.9 > 321.8	2.18e4	1.24	1.000	3.88	3.89	NO	104.4	0.0052535
9	18O2-PFHxS	403 > 102.6	8.79e3	8.495	1.000	4.00	4.00	NO	106.5	0.0142050
10	13Cl-PFOA	414.9 > 368.7	3.71e4	3.22	1.000	4.26	4.28	NO	103.0	0.0061034
11	13Cl-PFNA	466.2 > 422.9	1.35e4	8.979	1.000	4.62	4.62	NO	109.6	0.0010453
12	13Cl-PFOS	507.9 > 79.9	1.04e4	1.05	1.000	4.68	4.68	NO	97.8	0.0278964
13	13Cl-PFHxA	316 > 272.9	2.77e4	1.00	1.000	3.29	3.37	NO	100.0	0.0048797
14	13Cl-PFHxS	461.9 > 79.9	1.67e4	1.00	1.000	3.94	4.00	NO	100.0	0.0002701
15	13Cl-PFOA	421.3 > 376	1.12e4	1.00	1.000	4.22	4.28	NO	100.0	0.0048459
16	13Cl-PFNA	472.2 > 426.9	1.26e4	1.00	1.000	4.56	4.62	NO	100.0	0.0028648
17	13Cl-PFOS	503.0 > 79.9	8.93e3	1.00	1.000	4.67	4.68	NO	100.0	0.0008597
18	Total PFBS	299 > 79.7	1.48e5	1.000	3.11			NO		
19	Total PFHxS	396.9 > 79.6	1.53e5	1.000	4.09			NO		
20	Total PFOA	413 > 368.7	2.58e5	1.000	4.39			NO		
21	Total PFOS	499 > 79.9	6.21e4	1.000	4.67		136	NO		0.2030753



Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-7 PFC CS4 17C1508, Description: PFC CS4 17C1508 A, Name: 170316G1_8, Date: 16-Mar-2017, Time: 11:45:43, Instrument: , Lab: , User:



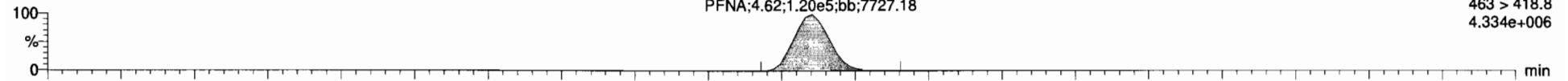
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

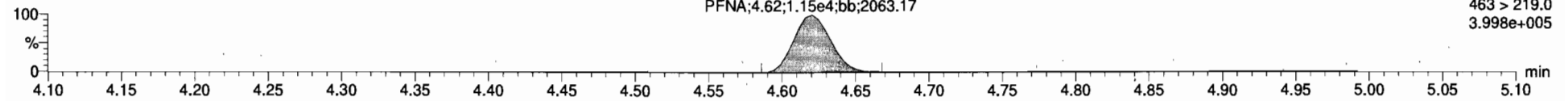
ID: ST170316G1-7 PFC CS4 17C1508, Description: PFC CS4 17C1508 A, Name: 170316G1_8, Date: 16-Mar-2017, Time: 11:45:43, Instrument: , Lab: , User:

PFNA

170316G1_8

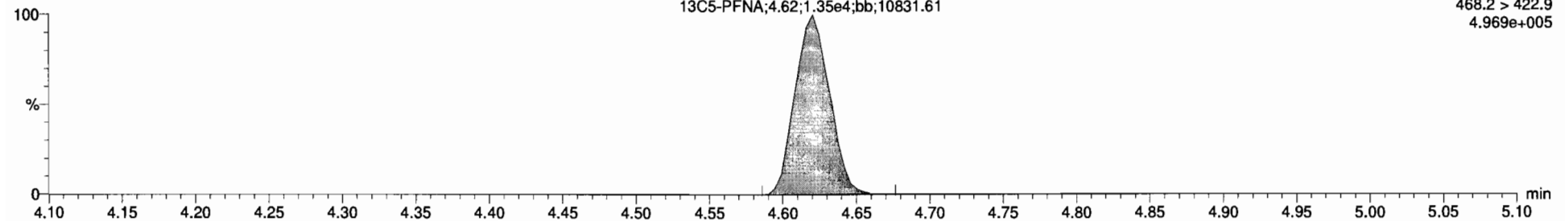


170316G1_8



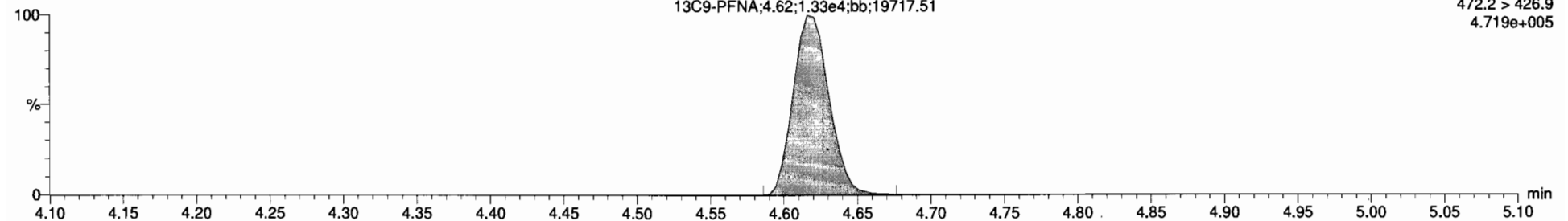
13C5-PFNA

170316G1_8



13C9-PFNA

170316G1_8



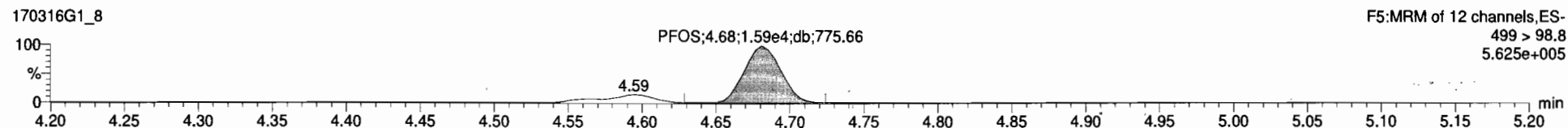
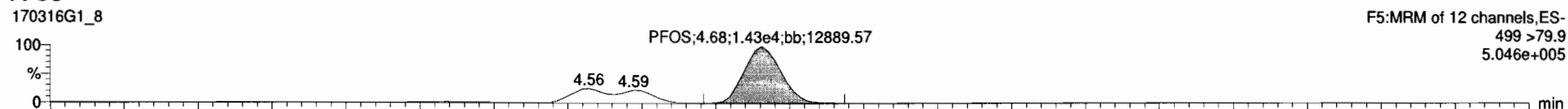
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

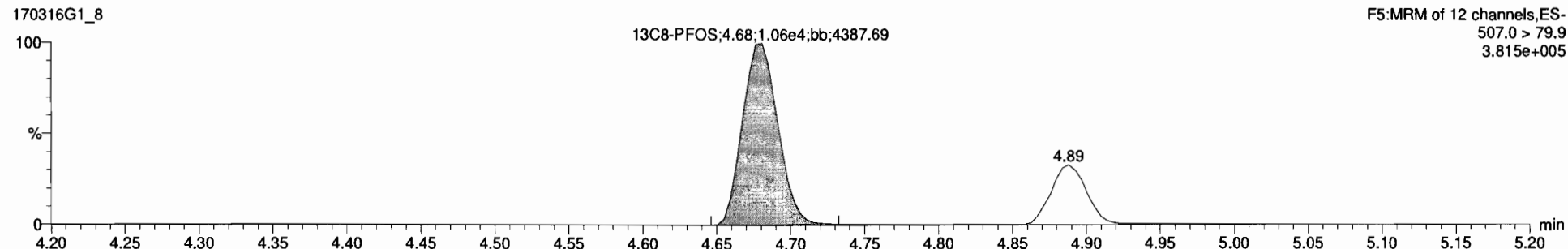
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-7 PFC CS4 17C1508, Description: PFC CS4 17C1508 A, Name: 170316G1_8, Date: 16-Mar-2017, Time: 11:45:43, Instrument: , Lab: , User:

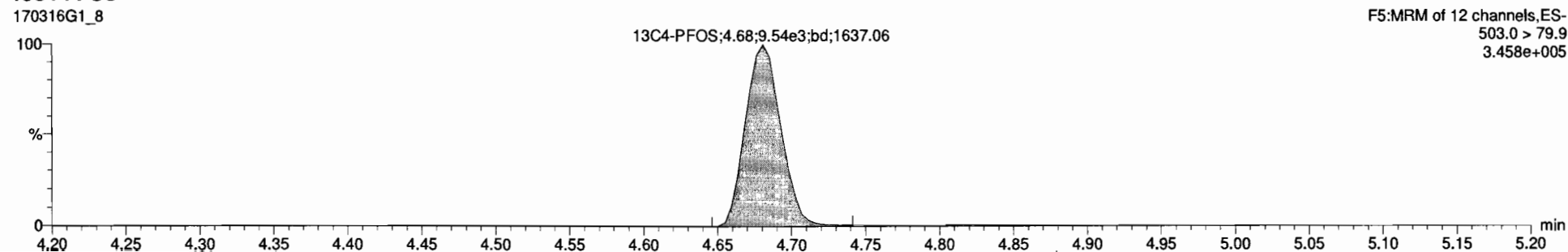
PFOS



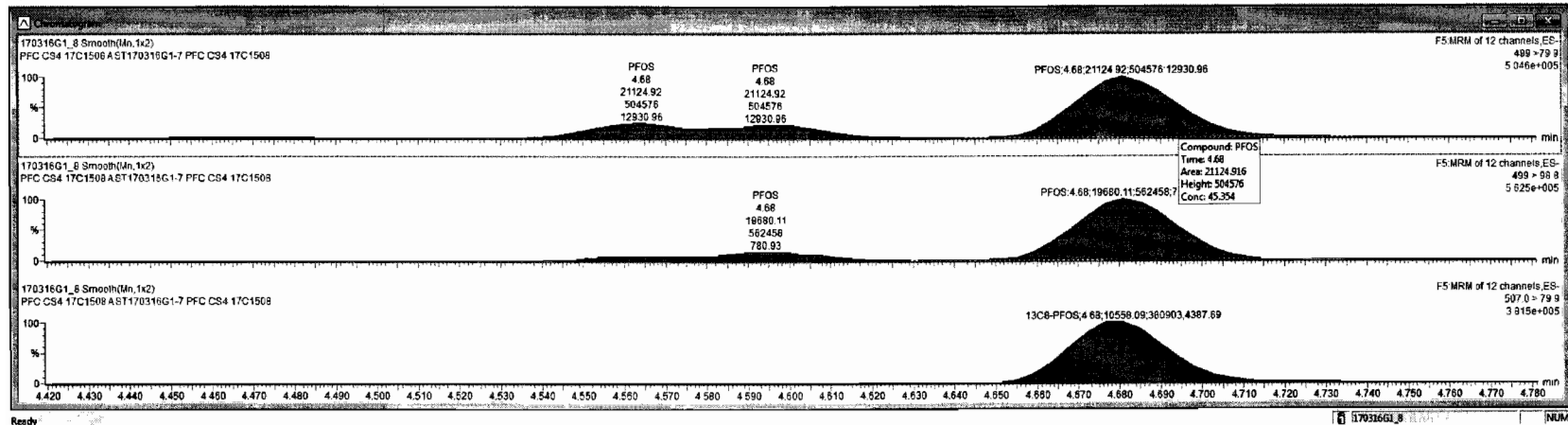
13C8-PFOS



13C4-PFOS



Name	Conc.	DL	%Rec	EMPC	Abs Resp	RRF	RT	#	Sp	Rk	Y/N	RRT	AcqDate	AcqTime	*ChrName	D	Sample Text	Factor1	SWI	CalFile	MDL
1 PFBS	47.744946		95.5		8.35164	3.02	1	7	0	371	YES	1.000	16-Mar-17	11:45:43	168.408	ST170316G...	PFC CS4 17C15...	1.0	1.00		YES
2 PFHpA	51.157680		102.3		1.71765	3.89	2	8				1.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		YES
3 PFHxS	48.519153		97.0		6.8864	4.01	3	9				1.001	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		YES
4 PFOA	48.288075		96.6		1.38045	4.29	4	10				1.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		YES
5 PFNA	51.099934		102.2		1.19845	4.62	5	11				1.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		YES
6 PFOS	48.657311	0.144	99.3		2.7124	4.68	6	12				1.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		YES
7 13C3-PFBS	12.155975	0.00900	97.2		9.52693	0.501	3.02	17	14			0.895	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
8 13C4-PFHpA	12.414904	0.00385	99.3		2.42664	1.237	3.89	8	14			0.970	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
9 18O2-PFHxS	12.732950	0.00620	101.9		9.94593	0.495	4.00	9	14			0.999	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
10 13C2-PFOA	13.068213	0.00651	104.5		4.08664	3.221	4.29	10	15			1.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
11 13C5-PFNA	12.974493	0.00310	103.8		1.35064	0.979	4.62	11	16			1.001	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
12 13CB-PFOS	12.810994	0.00727	102.5		1.05664	1.080	4.68	12	17			1.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
13 13C5-PFHpA	12.500000	0.00139	100.0		3.18764	1.000	3.38	13	13			0.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
14 13C3-PFHxS	12.500000	0.00119	100.0		1.97564	1.000	4.01	14	14			0.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
15 13CB-PFOA	12.500000	0.00918	100.0		1.21464	1.000	4.29	15	15			0.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
16 13CB-PFNA	12.500000	0.00153	100.0		1.32864	1.000	4.62	16	16			0.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
17 13C4-PFOS	12.500000	0.0191	100.0		9.54063	1.000	4.68	17	17			0.000	16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
18 Total PFBS	47.744946						18						16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
19 Total PFHxS	56.528517						19						16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
20 Total PFOA	48.288075						20						16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO
21 Total PFOS	58.657311	0.144					21						16-Mar-17	11:45:43		ST170316G...	PFC CS4 17C15...	1.0	1.00		NO



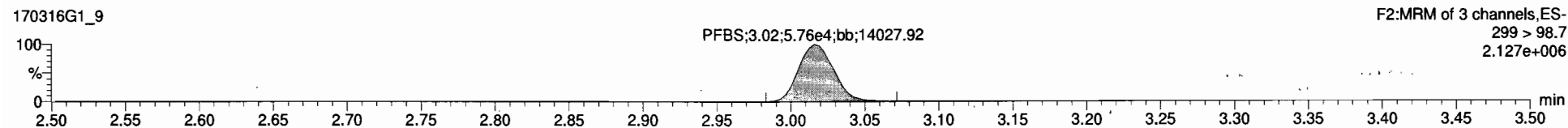
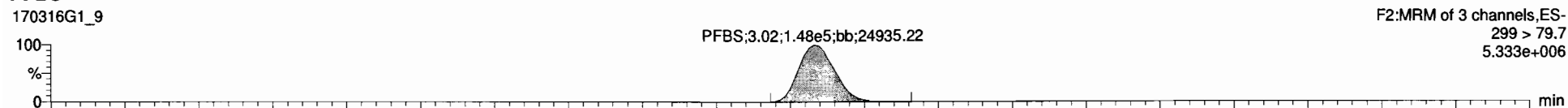
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

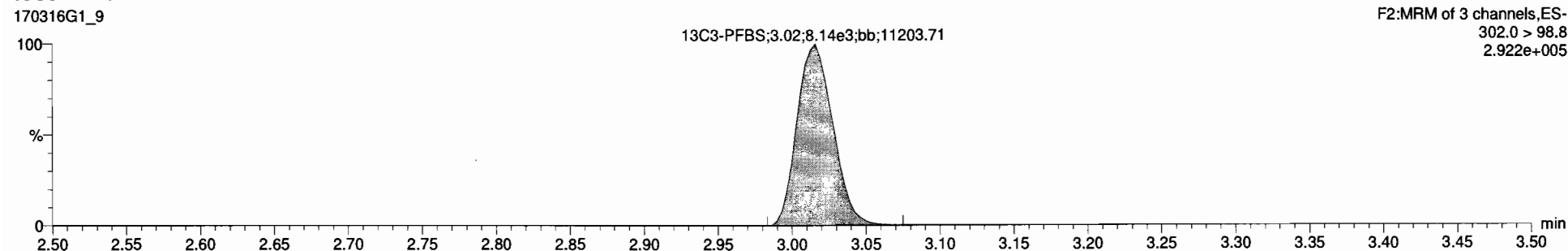
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-8 PFC CS5 17C1509, Description: PFC CS5 17C1509 A, Name: 170316G1_9, Date: 16-Mar-2017, Time: 11:58:17, Instrument: , Lab: , User:

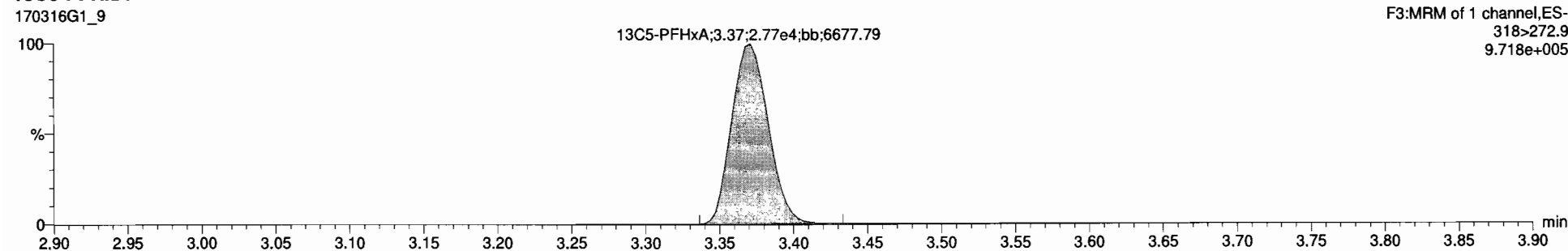
PFBS



13C3-PFBS



13C5-PFHxA

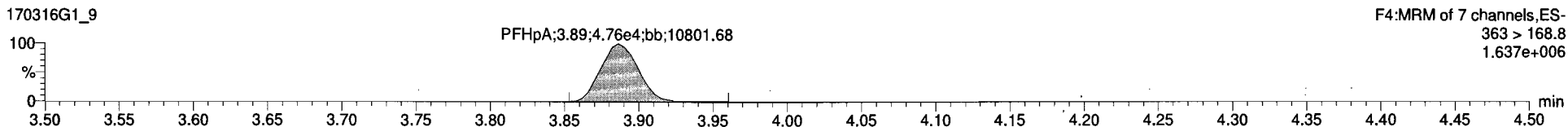
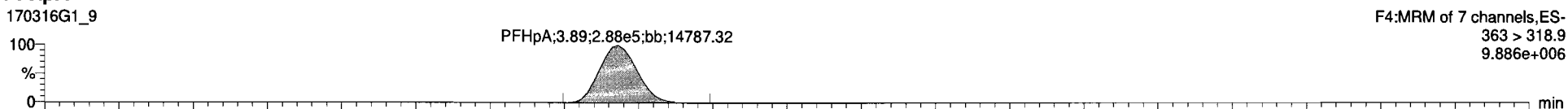


Dataset: Untitled

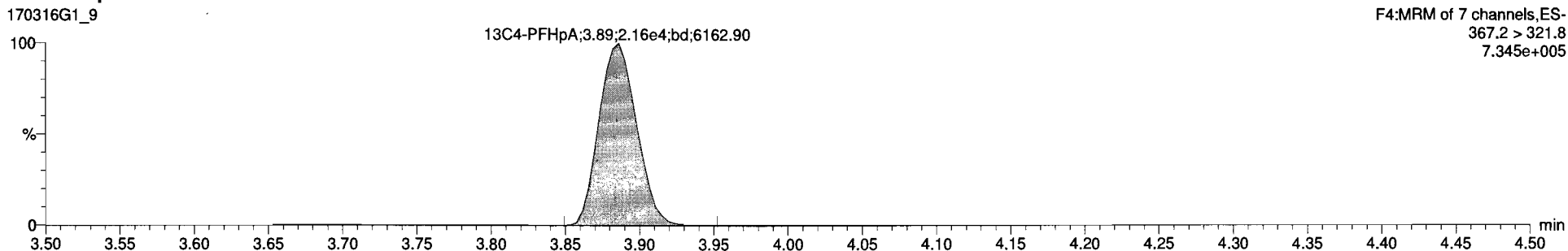
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-8 PFC CS5 17C1509, Description: PFC CS5 17C1509 A, Name: 170316G1_9, Date: 16-Mar-2017, Time: 11:58:17, Instrument: , Lab: , User:

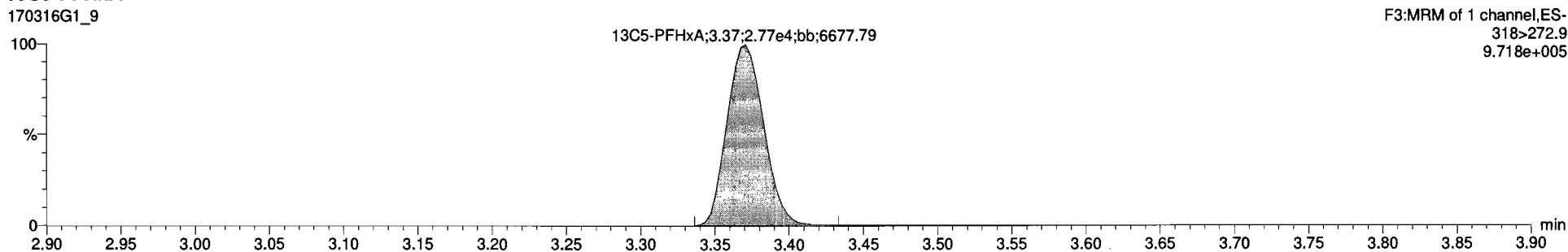
PFHpA



13C4-PFHpA



13C5-PFHxA



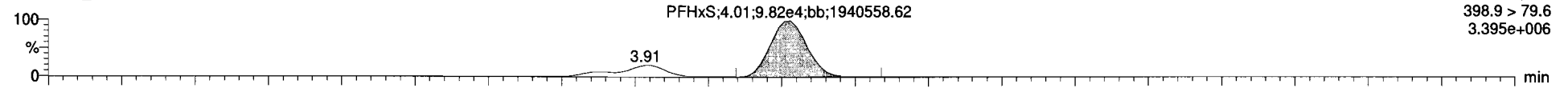
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

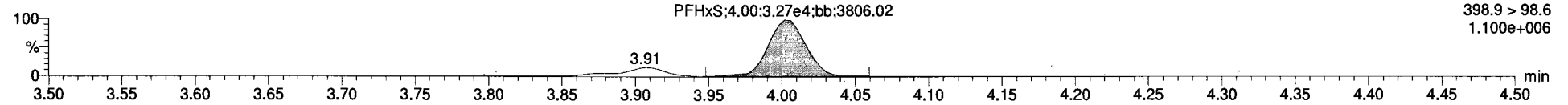
ID: ST170316G1-8 PFC CS5 17C1509, Description: PFC CS5 17C1509 A, Name: 170316G1_9, Date: 16-Mar-2017, Time: 11:58:17, Instrument: , Lab: , User:

PFHxS

170316G1_9

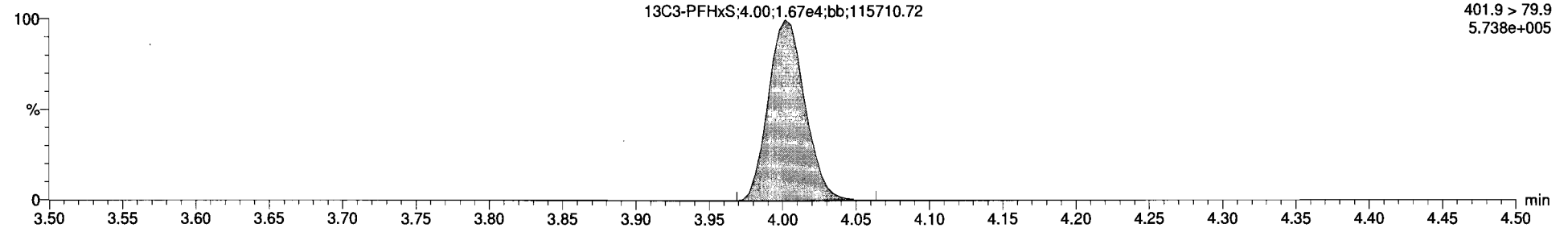


170316G1_9



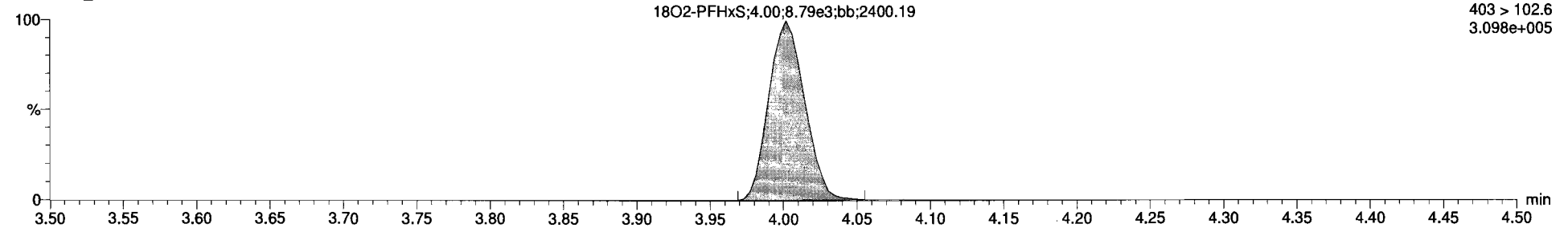
13C3-PFHxS

170316G1_9

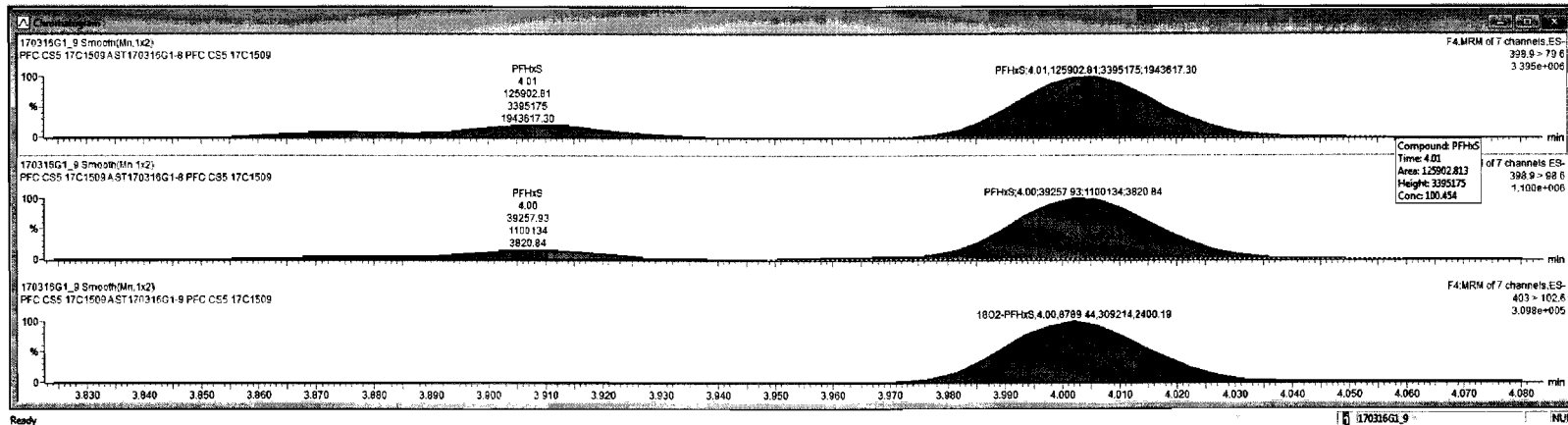


18O2-PFHxS

170316G1_9



Name	Conc.	DL	%Rec	EMPC	Alts.Rept	RPF	RT	#	IS	IA	YN	RRT	Acq Date	Acq Time	1 st Chr	Holder	D	Sample Prod	Factor1	SWI	Cal File	>MDL
PFBS	100.00874	100.0			1.479e5		3.02	1	7	0.389	YES	1.000	16-Mar-17	11:58:17	151.358	ST170316G		PFC CSS 17C15	1.0	1.00		YES
PFHpA	96.476769	96.5			2.875e5		3.89	2	8			1.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		YES
PFHxS	100.453118	100.5			1.259e5		4.91	3	9			1.001	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		YES
PFDA	99.453118	99.5			2.589e5		4.29	4	10			1.001	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		YES
PFMA	96.973444	96.7			2.289e5		4.62	5	11			1.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		YES
PFOS	102.21119	0.203	102.2		4.143e4		4.68	6	12			1.001	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		YES
13C3-PFBS	12.163858	0.09283	97.3		8.141e2	0.581	3.02	7	14			0.895	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C4-PFHpA	13.056008	0.09525	104.4		2.156e4	1.237	3.89	8	14			0.971	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
1802-PFHxS	13.310402	0.0142	106.5		8.789e3	6.485	4.00	9	14			1.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C2-PFDA	12.873248	0.00610	103.0		3.714e4	3.221	4.28	10	15			1.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C5-PFMA	13.706123	0.00185	109.6		1.350e4	0.979	4.62	11	16			1.001	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C6-PFOS	12.123405	0.0277	97.0		1.040e4	1.080	4.68	12	17			0.999	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C3-PFHpA	12.900090	0.00498	100.0		2.773e4	1.000	3.37	13	13			0.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C3-PFHxS	12.500000	0.000270	100.0		1.689e4	1.000	4.00	14	14			0.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C3-PFDA	12.500000	0.00485	100.0		1.120e4	1.000	4.28	15	15			0.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C5-PFMA	12.500000	0.00258	100.0		1.258e4	1.000	4.62	16	16			0.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
13C4-PFOS	12.500000	0.000859	109.0		9.928e3	1.000	4.68	17	17			0.000	16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
Total PFBS	100.00874						18						16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
Total PFHxS	121.89041						19						16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
Total PFDA	99.453118						20						16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO
Total PFOS	135.55828	0.203					21						16-Mar-17	11:58:17		ST170316G		PFC CSS 17C15	1.0	1.00		NO



Dataset: Untitled

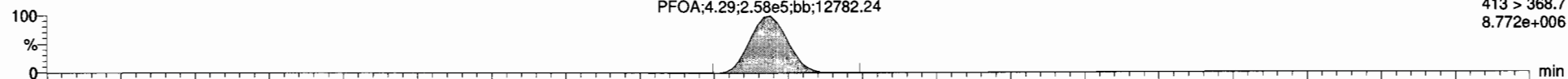
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

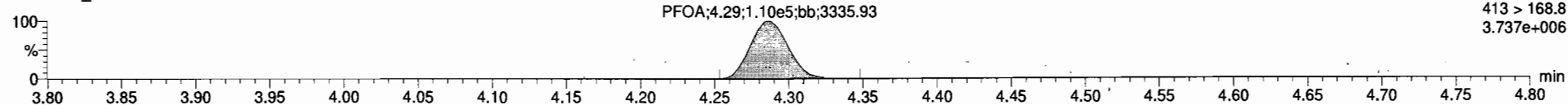
ID: ST170316G1-8 PFC CS5 17C1509, Description: PFC CS5 17C1509 A, Name: 170316G1_9, Date: 16-Mar-2017, Time: 11:58:17, Instrument: , Lab: , User:

PFOA

170316G1_9

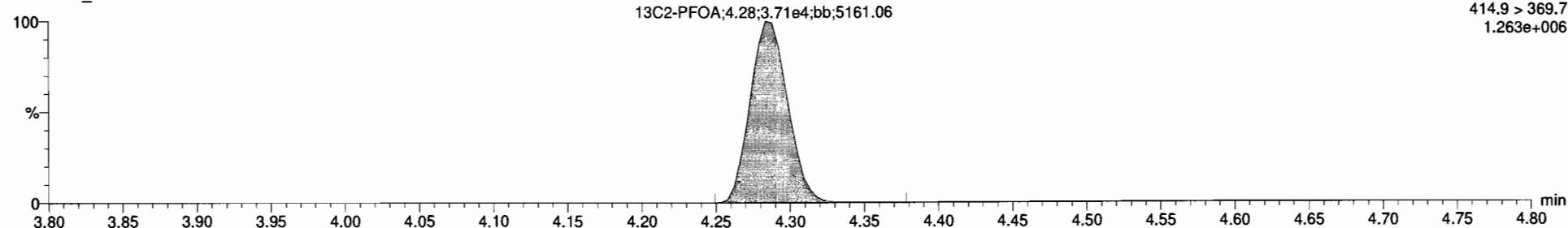


170316G1_9



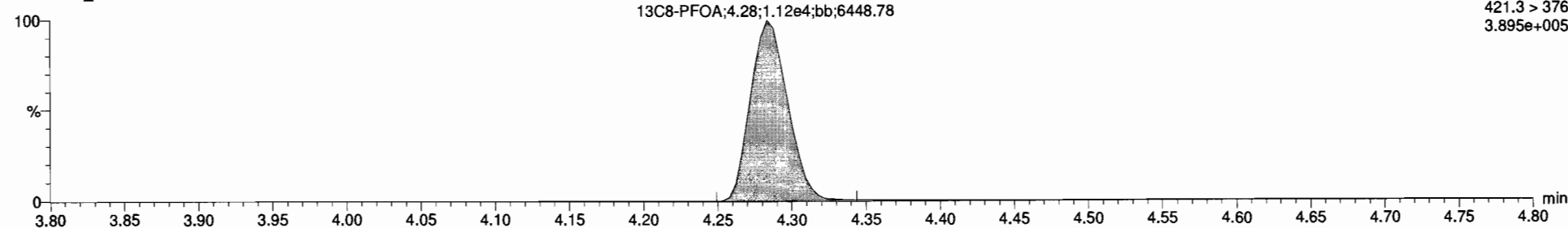
13C2-PFOA

170316G1_9



13C8-PFOA

170316G1_9



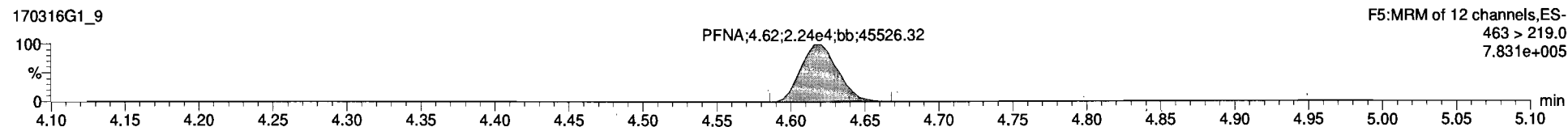
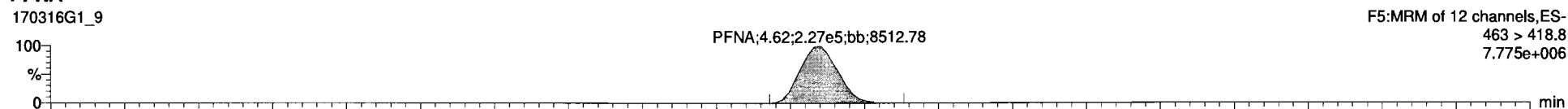
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time

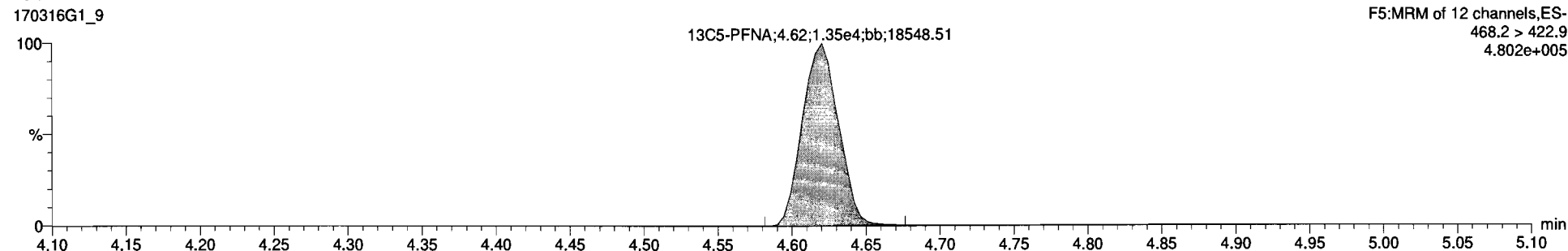
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-8 PFC CS5 17C1509, Description: PFC CS5 17C1509 A, Name: 170316G1_9, Date: 16-Mar-2017, Time: 11:58:17, Instrument: , Lab: , User:

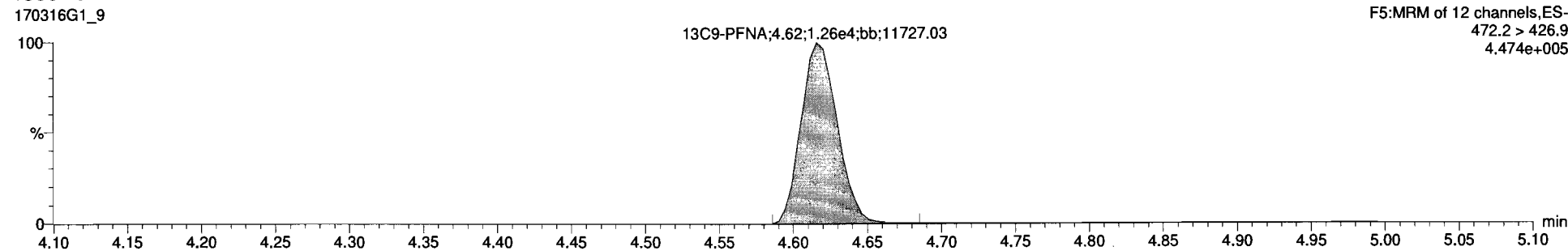
PFNA



13C5-PFNA



13C9-PFNA

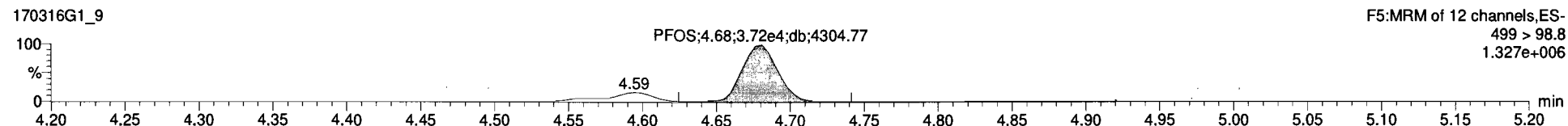
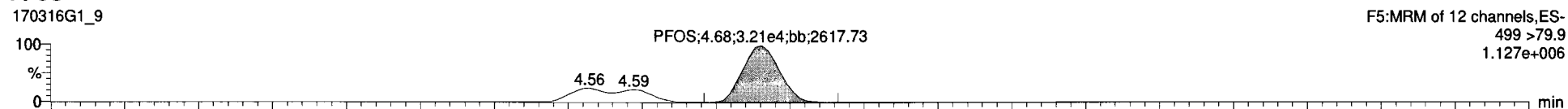


Dataset: Untitled

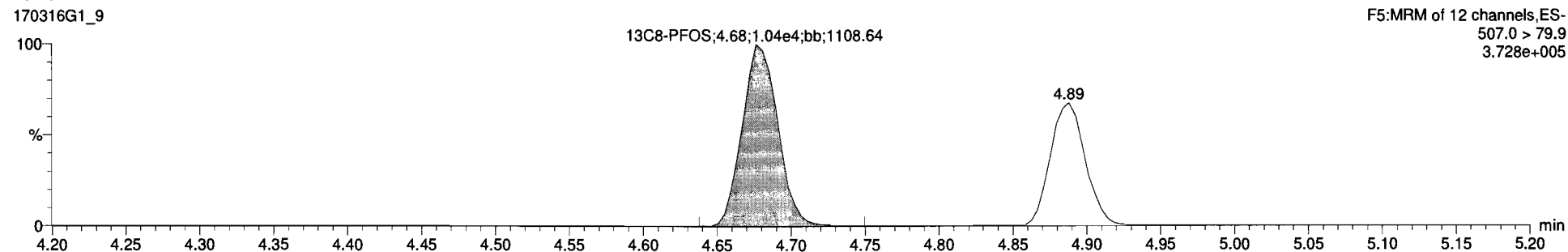
Last Altered: Thursday, March 16, 2017 13:27:05 Pacific Daylight Time
Printed: Thursday, March 16, 2017 13:28:00 Pacific Daylight Time

ID: ST170316G1-8 PFC CS5 17C1509, Description: PFC CS5 17C1509 A, Name: 170316G1_9, Date: 16-Mar-2017, Time: 11:58:17, Instrument: , Lab: , User:

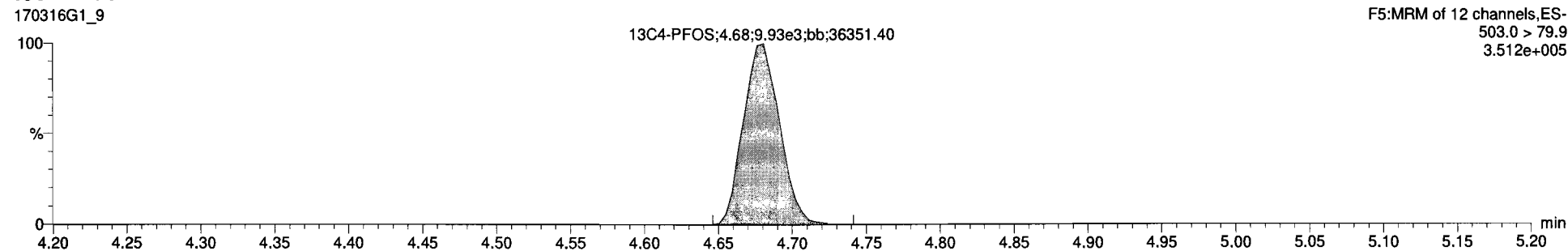
PFOS



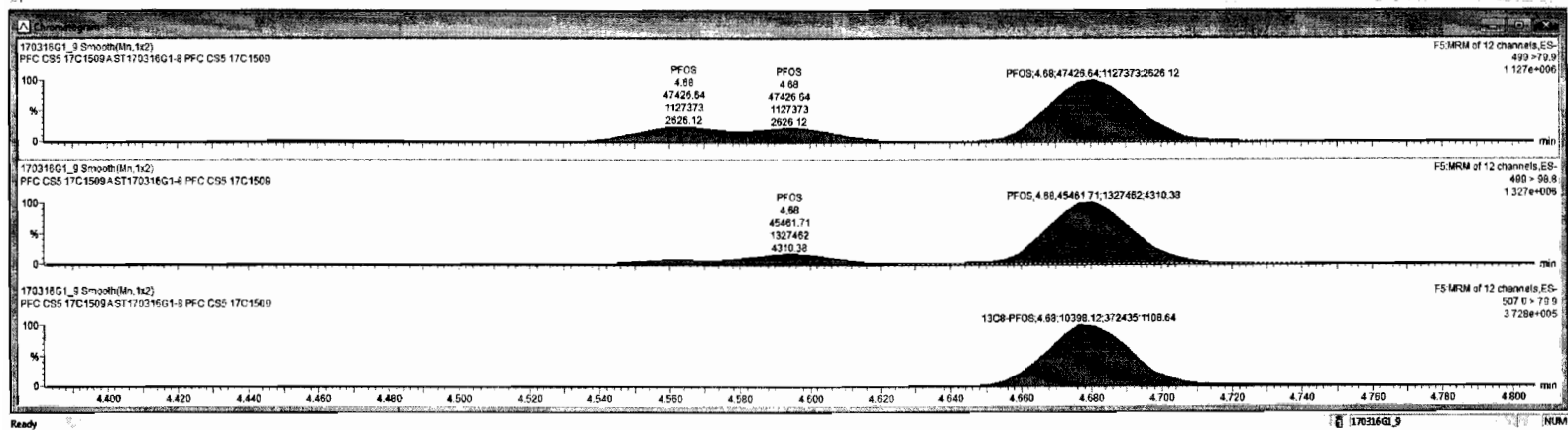
13C8-PFOS



13C4-PFOS



ID	Name	Trace	Area	PFOS	WVVol	Wdth	HT	Date	WMD	%Rec	DL
1	PFBS	299 > 79.7	1.48e5		1.000	3.02	3.02	100	YES	100.0	0.0000000
2	PFHpA	383 > 318.9	2.88e5		1.000	3.89	3.89	96.5	YES	96.5	0.0000000
3	PFHxS	388.9 > 79.6	1.26e5		1.000	4.90	4.91	100	YES	100.5	0.0000000
4	PFOA	413 > 368.7	2.50e5		1.000	4.28	4.29	99.5	YES	99.5	0.0000000
5	PFNA	483 > 418.8	2.27e5		1.000	4.62	4.62	98.7	YES	98.7	0.0000000
6	PFOS	499 > 79.9	6.21e4		1.000	4.87	4.88	100	YES	100.0	0.0000000
7	13C3-PFOS	502.0 > 98.8	8.14e3	0.501	1.000	2.90	3.02	12.2	NO	97.5	0.0028335
8	13C4-PFHpA	387.2 > 321.8	2.16e4	1.24	1.000	3.88	3.89	15.1	NO	104.4	0.0052558
9	18O2-PFHxS	483 > 102.6	8.79e3	0.495	1.000	4.90	4.90	13.3	NO	106.5	0.0142050
10	13C2-PFOA	414.9 > 389.7	3.71e4	3.22	1.000	4.28	4.28	12.9	NO	103.0	0.0061034
11	13C2-PFNA	480.2 > 422.9	1.35e4	0.979	1.000	4.62	4.62	13.7	NO	109.8	0.0018463
12	13C2-PFOS	507.0 > 79.9	1.64e4	1.00	1.000	4.88	4.88	12.1	NO	97.0	0.0278964
13	13C5-PFHpA	318-272.9	2.77e4	1.80	1.000	3.29	3.37	12.5	NO	106.0	0.0046797
14	13C3-PFHxS	481.9 > 79.9	1.67e4	1.00	1.000	3.84	4.00	12.5	NO	100.0	0.0002701
15	13C6-PFOA	421.3 > 378	1.12e4	1.00	1.000	4.22	4.28	12.5	NO	100.0	0.0048459
16	13C8-PFNA	472.2 > 428.9	1.26e4	1.00	1.000	4.56	4.62	12.5	NO	100.0	0.0028946
17	13C4-PFOS	503.0 > 79.9	9.93e3	1.00	1.000	4.87	4.88	12.5	NO	100.0	0.0008597
18	Total PFBS	299 > 79.7	1.48e5		1.000	3.11		100	NO		
19	Total PFHxS	388.9 > 79.6	1.53e5		1.000	4.09		122	NO		
20	Total PFOA	413 > 368.7	2.58e5		1.000	4.36		96.5	NO		
21	Total PFOS	499 > 79.9	6.21e4		1.000	4.87		136	NO		0.2030753



Dataset: U:\G1.PRO\Results\2017\170316G1\170316G1-11.qld

Last Altered: Thursday, March 16, 2017 14:27:32 Pacific Daylight Time

Printed: Thursday, March 16, 2017 14:28:49 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

Name: 170316G1_11, Date: 16-Mar-2017, Time: 12:23:32, ID: SS170316G1-1 PFC SSS 17C1510, Description: PFC SSS 17C01510 A

#	Name	Trace	Response	IS Resp	RRF	Wt/Vol	RT	Conc.	%Rec
1	1 PFBS (A)	299 > 79.7	1.55e4	1.09e4		1.000	3.02	7.76 89.7 77.6	
2	2 PFHpA	363 > 318.9	3.41e4	2.51e4		1.000	3.89	9.75	97.5
3	3 PFHxS (A)	398.9 > 79.6	1.22e4	1.03e4		1.000	4.01	8.28 90.8 82.8	
4	4 PFOA	413 > 368.7	2.79e4	4.17e4		1.000	4.29	9.45	94.5
5	5 PFNA	463 > 418.8	2.15e4	1.23e4		1.000	4.62	10.0	100.1
6	6 PFOS (A)	499 > 79.9	2.91e3	8.65e3		1.000	4.68	7.73 83.3 77.3	
7	7 13C3-PFBS	302.0 > 98.8	1.09e4	1.89e4	0.501	1.000	3.02	14.4	115.3
8	8 13C4-PFHpA	367.2 > 321.8	2.51e4	1.89e4	1.237	1.000	3.89	13.4	107.2
9	9 18O2-PFHxS	403 > 102.6	1.03e4	1.89e4	0.495	1.000	4.01	13.8	110.1
10	10 13C2-PFOA	414.9 > 369.7	4.17e4	1.22e4	3.221	1.000	4.29	13.3	106.1
11	11 13C5-PFNA	468.2 > 422.9	1.23e4	1.18e4	0.979	1.000	4.62	13.3	106.4
12	12 13C8-PFOS	507.0 > 79.9	8.65e3	6.92e3	1.080	1.000	4.68	14.5	115.7
13	13 13C5-PFHxA	318 > 272.9	3.23e4	3.23e4	1.000	1.000	3.37	12.5	100.0
14	14 13C3-PFHxS	401.9 > 79.9	1.89e4	1.89e4	1.000	1.000	4.01	12.5	100.0
15	15 13C8-PFOA	421.3 > 376	1.22e4	1.22e4	1.000	1.000	4.29	12.5	100.0
16	16 13C9-PFNA	472.2 > 426.9	1.18e4	1.18e4	1.000	1.000	4.62	12.5	100.0
17	17 13C4-PFOS	503.0 > 79.9	6.92e3	6.92e3	1.000	1.000	4.68	12.5	100.0

75-125
↓

ES 3/16/17

✓ AC 3/17/17

(A) Concentration < 10ng/L in second source native mix. ES 3/16/17

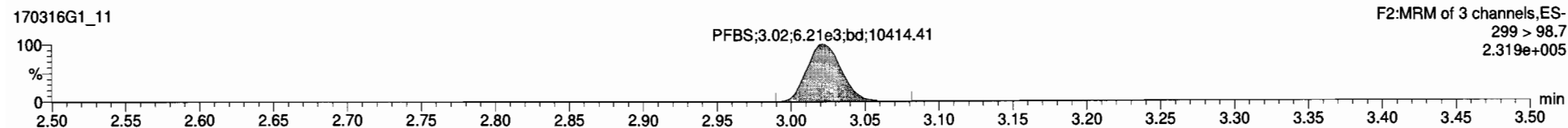
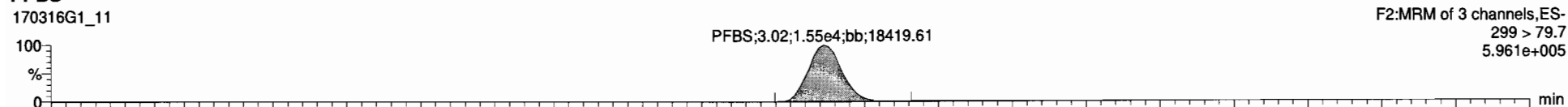
Dataset: Untitled

Last Altered: Thursday, March 16, 2017 14:26:18 Pacific Daylight Time
Printed: Thursday, March 16, 2017 14:26:34 Pacific Daylight Time

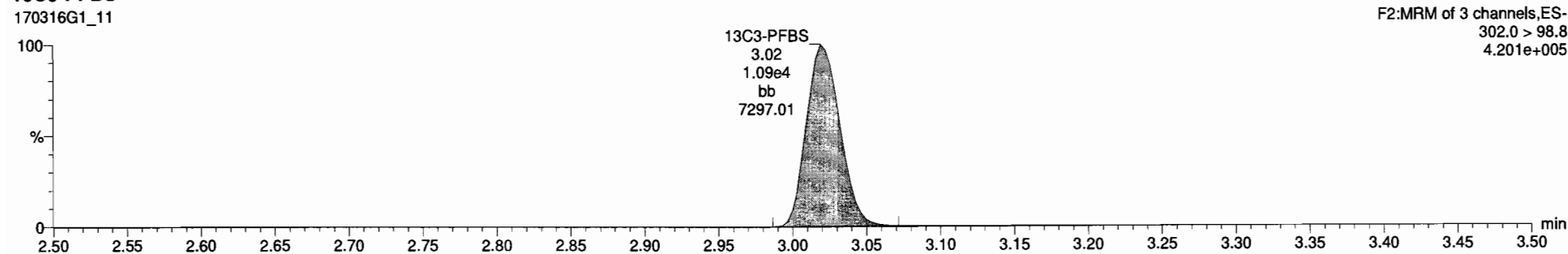
Method: U:\G1.PRO\MethDB\PFAS_6_2trans_LINEAR.mdb 02 Mar 2017 12:26:53
Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_3-16-17_L6_2Trans.cdb 16 Mar 2017 13:24:03

ID: SS170316G1-1 PFC SSS 17C1510, Description: PFC SSS 17C01510 A, Name: 170316G1_11, Date: 16-Mar-2017, Time: 12:23:32, Instrument: , Lab: , User:

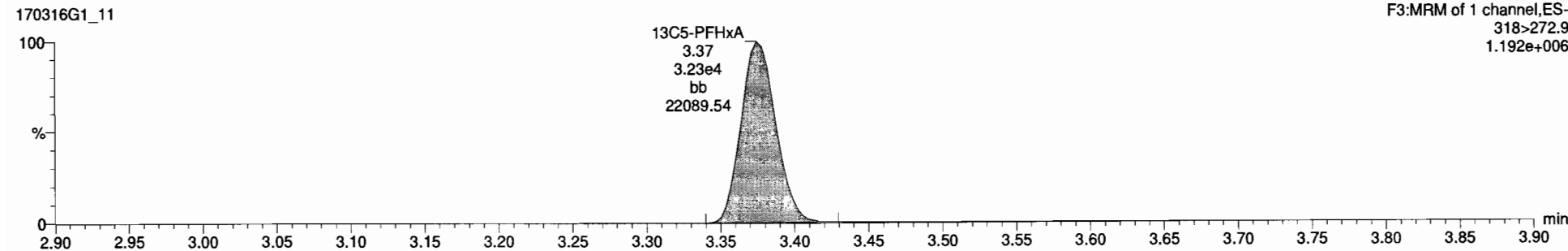
PFBS



13C3-PFBS



13C5-PFHxA



Dataset: Untitled

Last Altered: Thursday, March 16, 2017 14:26:18 Pacific Daylight Time

Printed: Thursday, March 16, 2017 14:26:34 Pacific Daylight Time

ID: SS170316G1-1 PFC SSS 17C1510, Description: PFC SSS 17C01510 A, Name: 170316G1_11, Date: 16-Mar-2017, Time: 12:23:32, Instrument: , Lab: , User:

PFHpA

170316G1_11

PFHpA;3.89;3.41e4;bb;3172.44

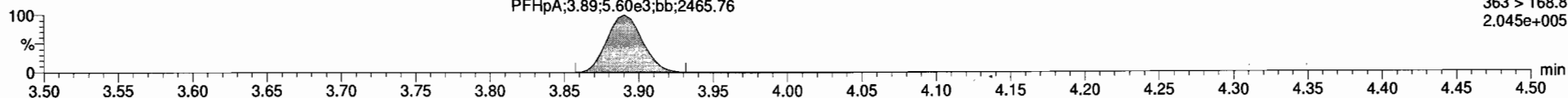
F4:MRM of 7 channels,ES-
363 > 318.9
1.257e+006



170316G1_11

PFHpA;3.89;5.60e3;bb;2465.76

F4:MRM of 7 channels,ES-
363 > 168.8
2.045e+005

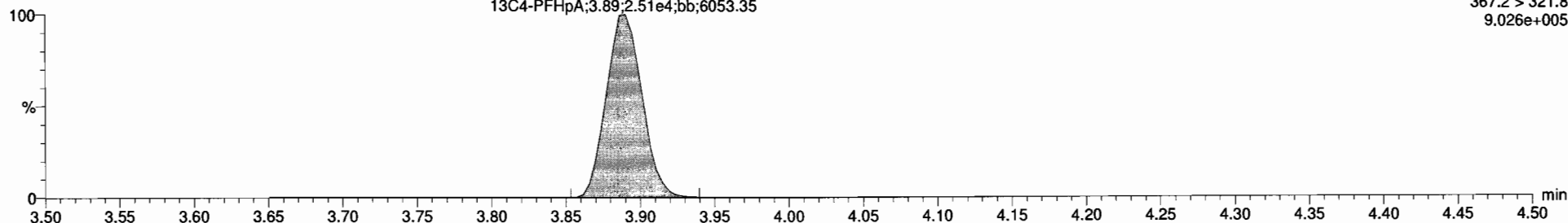


13C4-PFHpA

170316G1_11

13C4-PFHpA;3.89;2.51e4;bb;6053.35

F4:MRM of 7 channels,ES-
367.2 > 321.8
9.026e+005

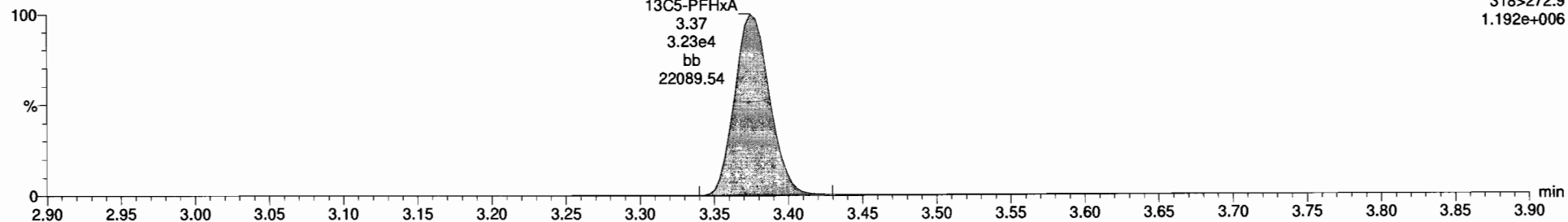


13C5-PFHxA

170316G1_11

13C5-PFHxA
3.37
3.23e4
bb
22089.54

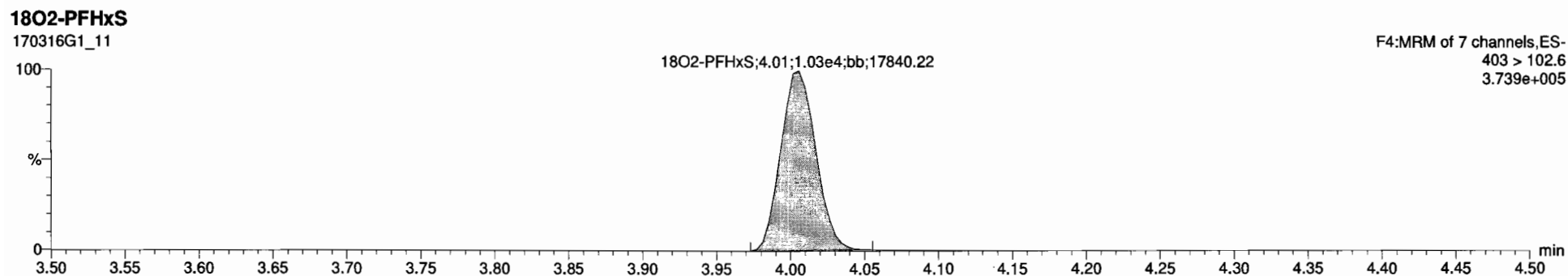
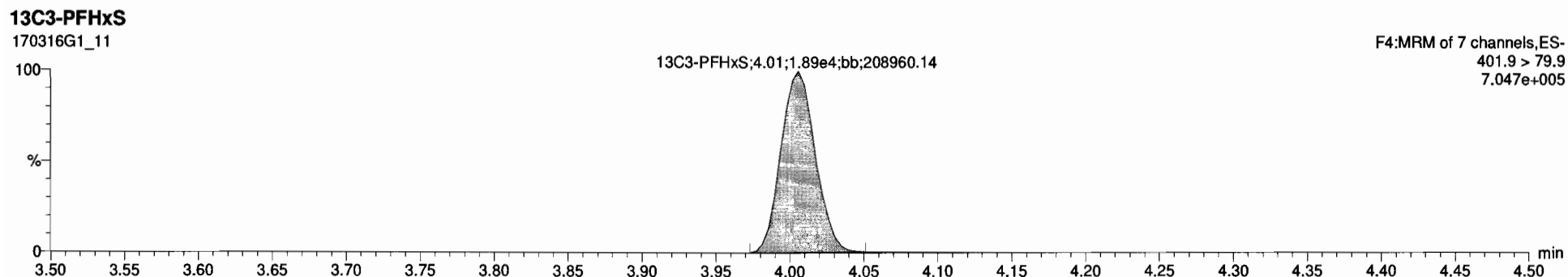
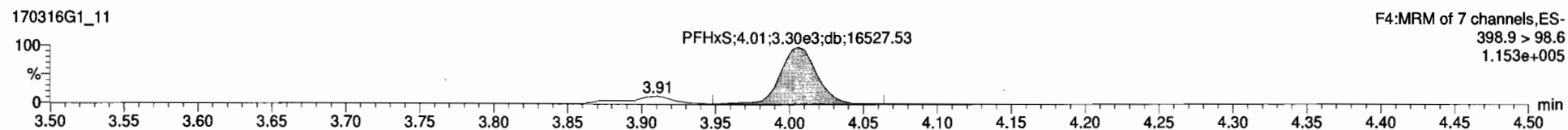
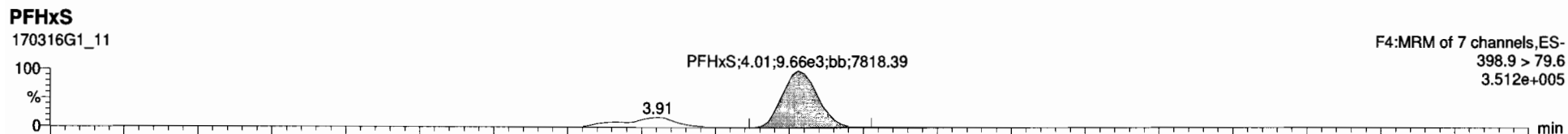
F3:MRM of 1 channel,ES-
318>272.9
1.192e+006

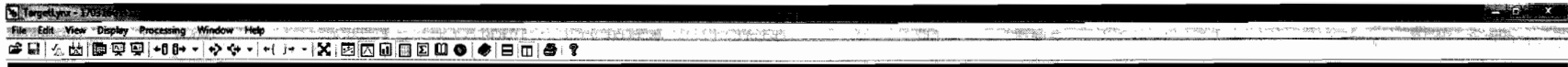


Dataset: Untitled

Last Altered: Thursday, March 16, 2017 14:26:18 Pacific Daylight Time
Printed: Thursday, March 16, 2017 14:26:34 Pacific Daylight Time

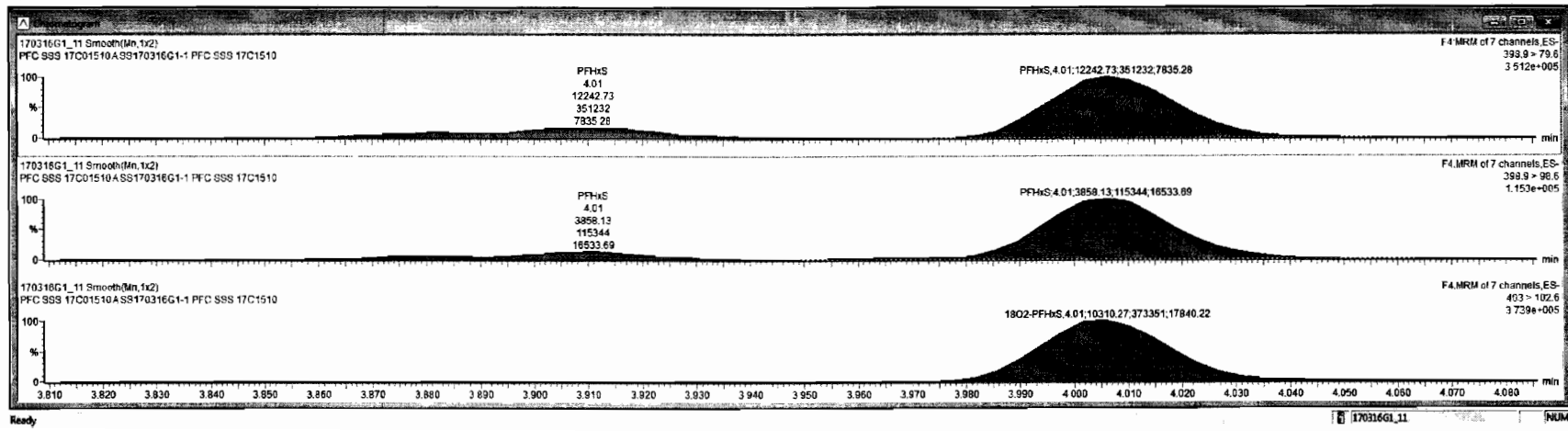
ID: SS170316G1-1 PFC SSS 17C1510, Description: PFC SSS 17C01510 A, Name: 170316G1_11, Date: 16-Mar-2017, Time: 12:23:32, Instrument: , Lab: , User:





170316G1_11_SS170316G1-1 PFC SSS 17C1510 - PFC SSS 17C01510A

#	Name	Conc.	DE	Wt%	EMPC	Abn Resp	RRF	RT	#	SM	RA	VN	DET	Acq Date	Acq Time	1 st Clr/Noise	D	Sample Year	Factor1	SNR	Clr File	>402
1	PFBS	7.7633834	0.0000	77.6		1.5564		3.02	1	7	0.401	YES	1.001	16-Mar-17	12:23:32	22.258	SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
2	PFHpA	9.7477867	0.0000	97.5		3.4874		3.89	2	8			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	YES
3	PFHxS	8.2019477	0.0000	82.2		1.2294		4.01	3	9			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	YES
4	PFDA	9.4536474	0.0000	94.5		2.7944		4.29	4	10			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	YES
5	PFNA	10.010045	0.0000	100.1		2.1504		4.62	5	11			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	YES
6	PFOS	7.7306442	0.150	77.3		2.9043		4.68	6	12			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	YES
7	13C3-PFBS	14.414511	0.00510	115.3		1.0954	0.501	3.02	7	14			0.896	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
8	13C4-PFHpA	13.400660	0.00535	107.2		2.5124	1.237	3.89	6	14			0.971	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
9	1802-PFHxS	13.758580	0.00186	110.1		1.0314	0.495	4.01	9	14			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
10	13C2-PFDA	13.261704	0.00237	106.1		4.1674	3.221	4.29	10	15			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
11	13C5-PFNA	13.294421	0.00682	106.4		1.2284	0.979	4.62	11	16			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
12	13C8-PFOS	14.462514	0.0250	115.7		6.8523	1.000	4.68	12	17			1.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
13	13C5-PFHpA	12.500000	0.00141	100.0		3.2274	1.000	3.37	13	13			0.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
14	13C3-PFHxS	12.500000	0.000150	100.0		1.8944	1.000	4.01	14	14			0.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
15	13C8-PFDA	12.500000	0.00103	100.0		1.2194	1.000	4.29	15	15			0.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
16	13C9-PFNA	12.500000	0.00200	100.0		1.1794	1.000	4.62	16	16			0.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
17	13C4-PFOS	12.500000	0.0425	100.0		6.5253	1.000	4.68	17	17			0.000	16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
18	Total PFBS	7.7633834							18					16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
19	Total PFHpA	9.8760693							19					16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
20	Total PFDA	9.4536474							20					16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO
21	Total PFOS	10.324072	0.150						21					16-Mar-17	12:23:32		SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...	NO



Dataset: Untitled

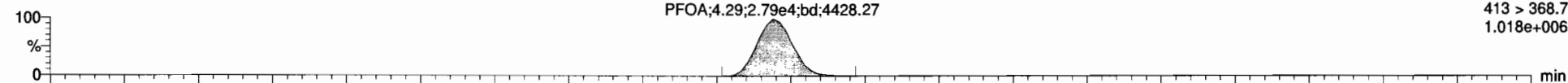
Last Altered: Thursday, March 16, 2017 14:26:18 Pacific Daylight Time

Printed: Thursday, March 16, 2017 14:26:34 Pacific Daylight Time

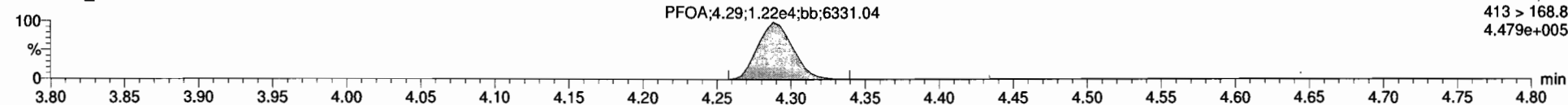
ID: SS170316G1-1 PFC SSS 17C1510, Description: PFC SSS 17C01510 A, Name: 170316G1_11, Date: 16-Mar-2017, Time: 12:23:32, Instrument: , Lab: , User:

PFOA

170316G1_11

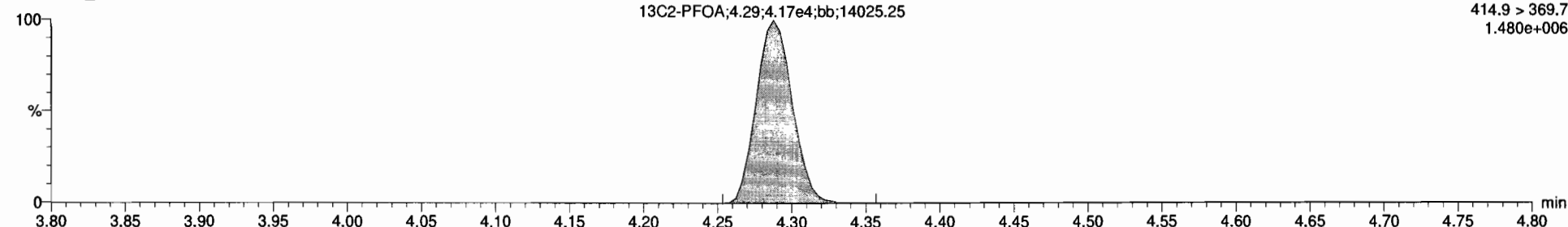


170316G1_11



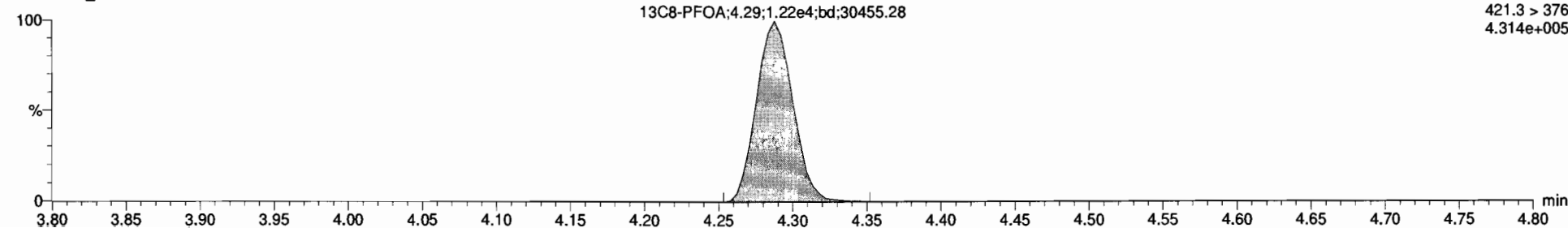
13C2-PFOA

170316G1_11



13C8-PFOA

170316G1_11



Dataset: Untitled

Last Altered: Thursday, March 16, 2017 14:26:18 Pacific Daylight Time
Printed: Thursday, March 16, 2017 14:26:34 Pacific Daylight Time

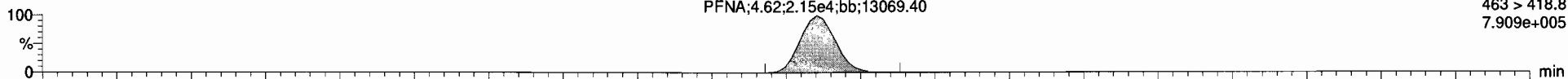
ID: SS170316G1-1 PFC SSS 17C1510, Description: PFC SSS 17C01510 A, Name: 170316G1_11, Date: 16-Mar-2017, Time: 12:23:32, Instrument: , Lab: , User:

PFNA

170316G1_11

PFNA;4.62;2.15e4;bb;13069.40

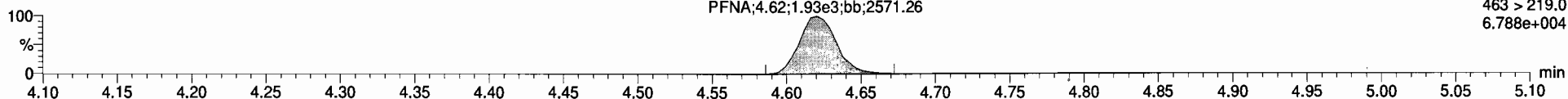
F5:MRM of 12 channels,ES-
463 > 418.8
7.909e+005



170316G1_11

PFNA;4.62;1.93e3;bb;2571.26

F5:MRM of 12 channels,ES-
463 > 219.0
6.788e+004

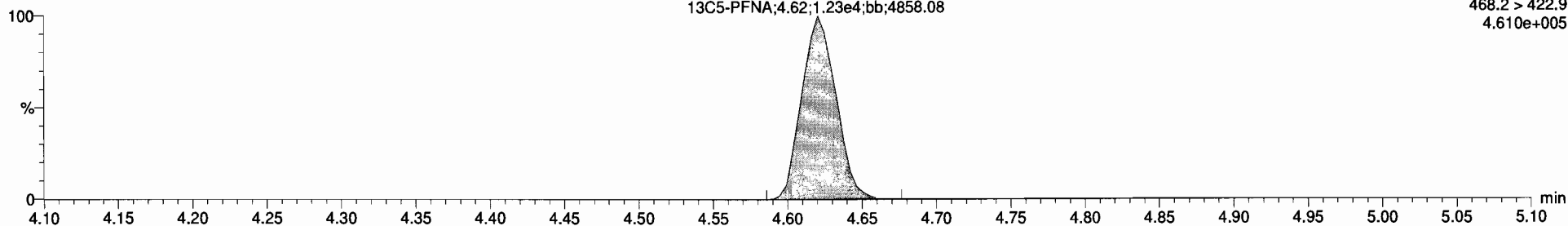


13C5-PFNA

170316G1_11

13C5-PFNA;4.62;1.23e4;bb;4858.08

F5:MRM of 12 channels,ES-
468.2 > 422.9
4.610e+005

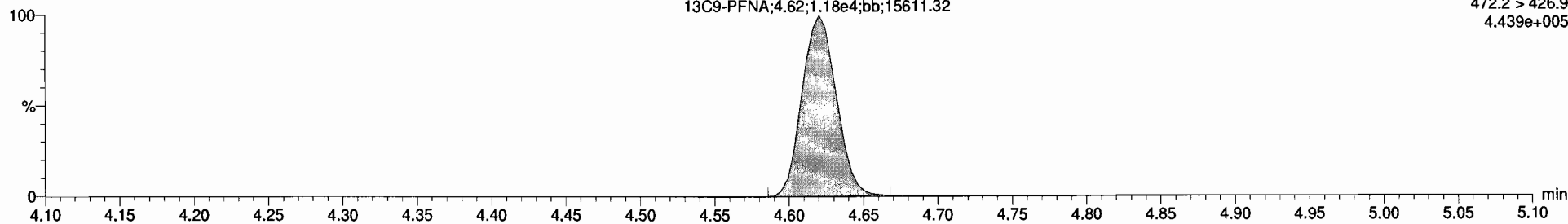


13C9-PFNA

170316G1_11

13C9-PFNA;4.62;1.18e4;bb;15611.32

F5:MRM of 12 channels,ES-
472.2 > 426.9
4.439e+005



Dataset: Untitled

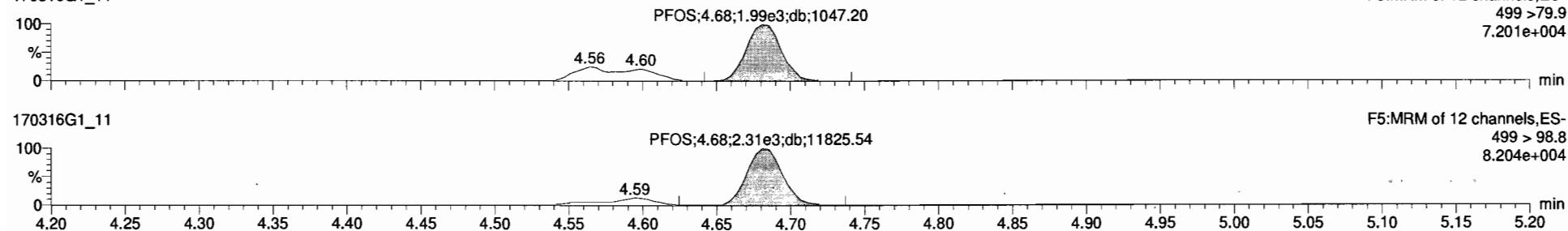
Last Altered: Thursday, March 16, 2017 14:26:18 Pacific Daylight Time
Printed: Thursday, March 16, 2017 14:26:34 Pacific Daylight Time

ID: SS170316G1-1 PFC SSS 17C1510, Description: PFC SSS 17C01510 A, Name: 170316G1_11, Date: 16-Mar-2017, Time: 12:23:32, Instrument: , Lab: , User:

PFOS

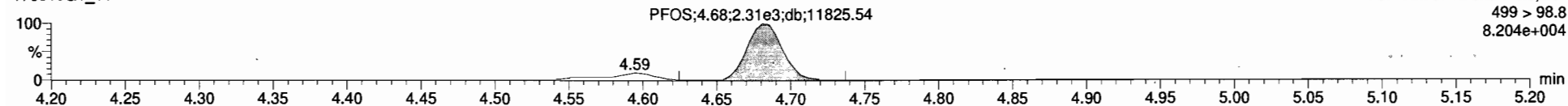
170316G1_11

F5:MRM of 12 channels,ES-
499 >79.9
7.201e+004



170316G1_11

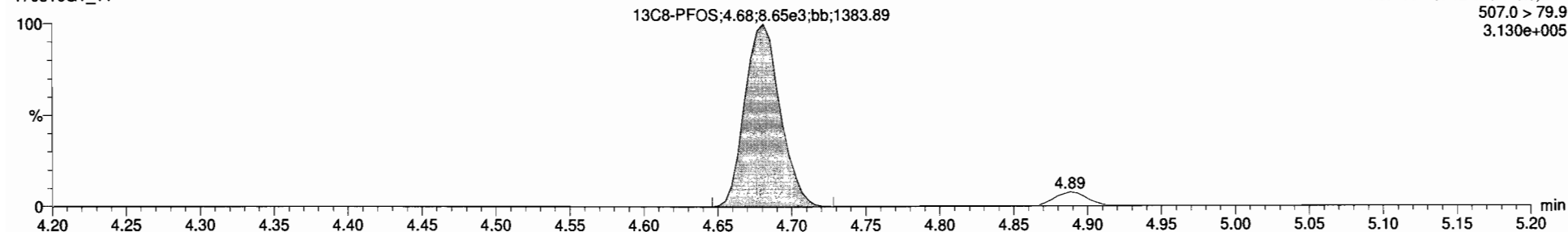
F5:MRM of 12 channels,ES-
499 > 98.8
8.204e+004



13C8-PFOS

170316G1_11

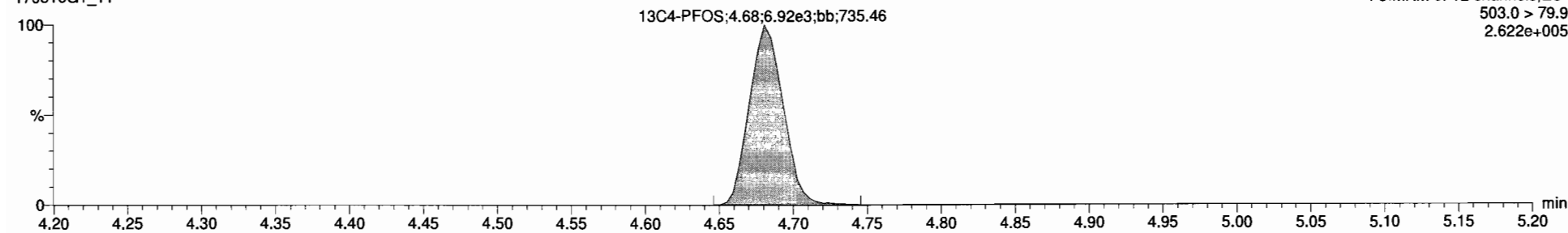
F5:MRM of 12 channels,ES-
507.0 > 79.9
3.130e+005



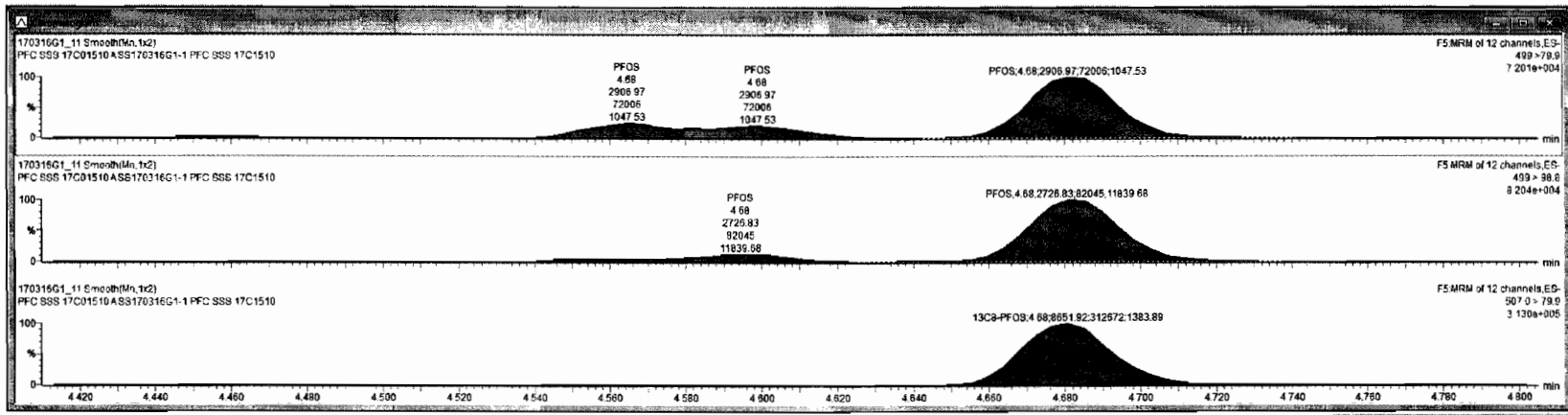
13C4-PFOS

170316G1_11

F5:MRM of 12 channels,ES-
503.0 > 79.9
2.622e+005



#	Name	Conc.	DL	%Rec	EMPC	Abs Resp	RSP	RT	#	RF	RA	Y/N	RR1	Acq Date	Acq Time	Y#	Chr	Noise	ID	Sample	Integ	Factor1	SWR	Cal File	MLC
1	PFBS	7.7633834	0.0000	77.6		1.550e4	3.02	1	7	0.401	YES	1.001	16-Mar-17	12:23:32	22	258	SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
2	PFHpA	9.7477887	0.0000	87.5		3.407e4	3.89	2	8			1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		YES		
3	PFHxS	8.2815747	0.0000	82.8		1.224e4	4.01	3	9			1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		YES		
4	PFOA	9.4536474	0.0000	94.5		2.794e4	4.29	4	10			1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		YES		
5	PFNA	18.810645	0.0000	100.1		2.150e4	4.62	5	11			1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		YES		
6	PFOA	12.708840	0.150	77.3		2.907e3	4.68	6	12			1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		YES		
7	13CB-PFBS	14.414511	0.00510	115.3		1.995e4	0.591	3.02	7	14		0.895	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
8	13CB-PFHpA	13.400860	0.00355	107.2		2.512e4	1.237	3.89	8	14		0.871	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
9	13CB-PFHxS	13.758630	0.00180	118.1		1.031e4	0.495	4.01	9	14		1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
10	13CB-PFOA	13.281704	0.00237	106.1		4.167e4	3.221	4.29	10	15		1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
11	13CB-PFNA	13.294421	0.00682	106.4		1.229e4	0.979	4.62	11	16		1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
12	13CB-PFOS	14.462514	0.0250	115.7		8.652e3	1.080	4.68	12	17		1.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
13	13CB-PFHpA	12.500000	0.00141	100.0		3.227e4	1.600	3.37	13	13		0.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
14	13CB-PFHxS	12.500000	0.000150	100.0		1.894e4	1.000	4.01	14	14		0.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
15	13CB-PFOA	12.500000	0.00103	100.0		1.219e4	1.000	4.29	15	15		0.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
16	13CB-PFNA	12.500000	0.00200	100.0		1.179e4	1.000	4.62	16	16		0.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
17	13CB-PFOS	12.500000	0.0425	100.0		6.925e3	1.000	4.68	17	17		0.000	16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
18	Total PFBS	7.7633834						18					16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
19	Total PFHpA	9.8760953						19					16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
20	Total PFHxS	9.4536474						20					16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		
21	Total PFOA	10.324072	0.150					21					16-Mar-17	12:23:32			SS170316G	PFC SSS 17C01	1.0	1.00	C18_V...		NO		



**DATA VALIDATION SUMMARY REPORT
NALF FENTRESS, VIRGINIA**

Client: CH2M HILL, Inc., Corvallis, Oregon
 SDG: 1700311
 Laboratory: Vista Analytical Laboratory, El Dorado Hills, California
 Site: NALF Fentress, CTO-WE01, Virginia
 Date: July 17, 2017

PFCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	OF-SOW-091A-0317	1700311-01	Water
2	OF-SOW-091D-0317	1700311-02	Water
3	OF-SOW-091DP-0317	1700311-03	Water
4	OF-EB030817	1700311-04	Water
5	OF-SOW-091K-0317	1700311-05	Water
6	OF-SOW-091M-0317	1700311-06	Water
7	OF-FB030817	1700311-07	Water
8	OF-SOW-091L-0317	1700311-08	Water
8MS	OF-SOW-091L-0317MS	1700311-08MS	Water
8MSD	OF-SOW-091L-0317MSD	1700311-08MSD	Water
9	OF14-GW05-0317	1700311-09	Water

A full data validation was performed on the analytical data for seven water samples, one aqueous equipment blank sample and one aqueous field blank sample collected on March 8, 2017 by CH2M HILL at the NALF Fentress site in Chesapeake, Virginia. The samples were analyzed under the EPA Method “Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)”.

Specific method references are as follows:

Analysis
PFCs

Method References
USEPA Method 537 Modified

The data have been validated according to the protocols and quality control (QC) requirements of the analytical method, and the U.S. Department of Defense (DoD) Quality Systems Manual (QSM), Version 5.0 (July 2013) and the USEPA National Functional Guidelines for Organic Data Review as follows:

- The USEPA “Contract Laboratories Program National Functional Guidelines for Superfund Organic Methods Data Review,” August 2014;
- and the reviewer's professional judgment.

The following data quality indicators were reviewed for this report:

Organics

- Date Completeness, Case Narrative & Custody Documentation
- Holding times
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

A full (Level IV) data validation was performed with this review including a recalculation of 10% of the detected results in the samples.

Data Usability Assessment

There were no rejections of data.

Overall the data is acceptable for the intended purposes as qualified for the data quality indicator criteria as detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedences of QC criteria.

Perfluorinated Compounds (PFCs)

Data Completeness, Case Narrative & Custody Documentation

- The case narrative and chain-of-custody documentation were included in the data package as required. All criteria were met.

Holding Times

- All samples were extracted within 14 days for water samples and analyzed within 28 days.

LC/MS Tuning

- All criteria were met.

Initial Calibration

- All relative standard deviation (%RSD) and/or correlation coefficients criteria were met.

Continuing Calibration

- All percent difference (%D) and RRF criteria were met.

Method Blank

- The method blanks were free of contamination.

Field QC Blank

- The field blank samples exhibited the following contamination.

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
OF-EB030817	PFOS	1.54	None	See FB
OF-FB030817	PFOS	1.67	U	1, 8

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria except for the following.

Sample ID	Internal Standard	%R	Qualifier
2	13C3-PFBS	186%	J
	13C4-PFHpA	175%	J
3	13C3-PFBS	192%	J
	13C4-PFHpA	173%	J
	13C8-PFOS	299%	J
6	13C3-PFBS	178%	J
	13C4-PFHpA	163%	J
	13C8-PFOS	165%	J

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- All criteria were met.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

Compound	OF-SOW-091D-0317 ng/L	OF-SOW-091DP-0317 ng/L	RPD	Qualifier
PFBS	91.4	83.1	10%	None
PFHpA	47.5	48.1	1%	
PFHxS	2260	2300	2%	
PFOA	701	740	5%	
PFOS	1940	1650	16%	
PFNA	4.77	7.09	39%	None - <5X LOQ

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:  Dated: 7/17/17
 Nancy Weaver
 Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

Sample ID: OF-SOW-091A-0317

Modified EPA Method 537

Client Data			Sample Data			Laboratory Data			
Name:	CH2M Hill		Matrix:	Aqueous		Lab Sample:	1700311-01	Date Received:	09-Mar-2017 9:23
Project:	Fentress Phase II PFC Investigation		Sample Size:	0.119 L		QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14
Date Collected:	08-Mar-2017 10:05					Date Analyzed:	17-Mar-17 17:53	Column:	BEH C18
Location:									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.88	4.20	8.42		IS 13C3-PFBS	107	60 - 150	
PFHpA	ND	0.622	2.10	8.42		IS 13C4-PFHpA	96.8	60 - 150	
PFHxS	4.10	0.997	2.10	8.42	J	IS 18O2-PFHxS	96.7	60 - 150	
PFOA	3.79	0.685	2.10	8.42	J	IS 13C2-PFOA	108	60 - 150	
PFOS	4.18	0.849	0.945	8.42	FL	IS 13C8-PFOS	111	60 - 150	
PFNA	ND	0.852	2.10	8.42		IS 13C5-PFNA	112	50 - 150	

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

mw 7/12/17

2

Sample ID: OF-SOW-091D-0317				Modified EPA Method 537					
Client Data		Sample Data		Laboratory Data		Laboratory Data			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-02	Date Received:	09-Mar-2017 9:23		
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.123 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14		
Date Collected:	08-Mar-2017 11:10			Date Analyzed:	17-Mar-17 17:15	Column:	BEH C18		
Location:					17-Mar-17 18:06	Column:	BEH C18		
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	91.4	1.81	4.07	8.11	ISH	IS 13C3-PFBS	186	60 - 150	H
PFHpA	47.5	0.599	2.03	8.11	ISH	IS 13C4-PFHpA	175	60 - 150	H
PFHxS	2260	4.80	10.2	40.6	⊘	IS 18O2-PFHxS	97.8	60 - 150	⊘
PFOA	701	0.660	2.03	8.11		IS 13C2-PFOA	102	60 - 150	
PFOS	1940	4.09	4.57	40.6	⊘	IS 13C8-PFOS	108	60 - 150	⊘
PFNA	4.77	0.821	2.03	8.11	J	IS 13C5-PFNA	110	50 - 150	

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

7/17/17

3

Sample ID: OF-SOW-091DP-0317				Modified EPA Method 537						
Client Data		Sample Data		Laboratory Data						
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-03	Date Received:	09-Mar-2017 9:23			
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.124 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14			
Date Collected:	08-Mar-2017 11:15			Date Analyzed:	17-Mar-17 18:18	Column:	BEH C18			
Location:					20-Mar-17 15:22	Column:	BEH C18			
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers	
PFBS	83.1	J	4.03	8.05	ESH	IS	13C3-PFBS	192	60 - 150	H
PFHpA	48.1	J	2.02	8.05	ESH	IS	13C4-PFHpA	173	60 - 150	H
PFHxS	2300		20.2	80.5	Ø	IS	18O2-PFHxS	114	60 - 150	Ø
PFOA	740		2.02	8.05		IS	13C2-PFOA	97.2	60 - 150	
PFOS	1650	J	9.07	80.5	ESH	IS	13C8-PFOS	299	60 - 150	Ø, H
PFNA	7.09		2.02	8.05	J	IS	13C5-PFNA	99.7	50 - 150	

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

File name

4

Sample ID: OF-EB030817				Modified EPA Method 537					
Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-04	Date Received:	09-Mar-2017 9:23		
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.122 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14		
Date Collected:	08-Mar-2017 11:45			Date Analyzed:	17-Mar-17 18:31	Column:	BEH C18		
Location:									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.83	4.10	8.19		IS 13C3-PFBS	118	60-150	
PFHpA	ND	0.605	2.05	8.19		IS 13C4-PFHpA	112	60-150	
PFHxS	ND	0.969	2.05	8.19		IS 18O2-PFHxS	108	60-150	
PFOA	ND	0.666	2.05	8.19		IS 13C2-PFOA	106	60-150	
PFOS	1.54	0.826	0.922	8.19	J	IS 13C8-PFOS	113	60-150	
PFNA	ND	0.829	2.05	8.19		IS 13C5-PFNA	110	50-150	

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

mw 3/17/17

6

Sample ID: OF-SOW-091M-0317				Modified EPA Method 537					
Client Data		Sample Data		Laboratory Data		Date			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-06	Date Received:	09-Mar-2017 9:23		
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.128 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14		
Date Collected:	08-Mar-2017 12:35			Date Analyzed:	17-Mar-17 19:34	Column:	BEH C18		
Location:					20-Mar-17 15:35	Column:	BEH C18		
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	48.2	J	3.91	7.82	JSH	IS 13C3-PFBS	178	60 - 150	W
PFHpA	33.1	J	1.95	7.82	JSH	IS 13C4-PFHpA	163	60 - 150	W
PFHxS	1470		19.5	78.2	D	IS 18O2-PFHxS	113	60 - 150	D
PFOA	956		1.95	7.82		IS 13C2-PFOA	108	60 - 150	
PFOS	2350	J	8.79	78.2	JSH	IS 13C8-PFOS	165	60 - 150	D-W
PFNA	7.13		1.95	7.82	J	IS 13C5-PFNA	123	50 - 150	

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

new 7/17/17

7

Sample ID: OF-FB030817				Modified EPA Method 537					
Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-07	Date Received:	09-Mar-2017 9:23		
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.125 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14		
Date Collected:	08-Mar-2017 13:00			Date Analyzed:	17-Mar-17 19:46	Column:	BEH C18		
Location:									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.79	4.00	7.98		IS 13C3-PFBS	133	60 - 150	
PFHpA	ND	0.589	2.00	7.98		IS 13C4-PFHpA	125	60 - 150	
PFHxS	ND	0.945	2.00	7.98		IS 18O2-PFHxS	120	60 - 150	
PFOA	ND	0.649	2.00	7.98		IS 13C2-PFOA	109	60 - 150	
PFOS	1.67	0.805	0.900	7.98	J	IS 13C8-PFOS	110	60 - 150	
PFNA	ND	0.808	2.00	7.98		IS 13C5-PFNA	111	50 - 150	

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

mw 7/17/17

Sample ID: OF-SOW-091L-0317			Modified EPA Method 537						
Client Data		Sample Data		Laboratory Data					
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-08	Date Received:	09-Mar-2017 9:23		
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.119 L	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017 9:14		
Date Collected:	08-Mar-2017 13:20			Date Analyzed:	17-Mar-17 19:59	Column:	BEH C18		
Location:									
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers
PFBS	ND	1.87	4.20	8.37		IS 13C3-PFBS	115	60 - 150	
PFHpA	ND	0.618	2.10	8.37		IS 13C4-PFHpA	109	60 - 150	
PFHxS	1.28	0.991	2.10	8.37	J	IS 18O2-PFHxS	108	60 - 150	
PFOA	ND	0.681	2.10	8.37		IS 13C2-PFOA	110	60 - 150	
PFOS	2.43	0.844	0.945	8.37	FL-J	IS 13C8-PFOS	106	60 - 150	
PFNA	ND	0.847	2.10	8.37		IS 13C5-PFNA	106	50 - 150	

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

File name

9

Sample ID: OF14-GW05-0317		Modified EPA Method 537											
Client Data				Sample Data			Laboratory Data			Date			
Name:	CH2M Hill	Matrix:	Aqueous	Lab Sample:	1700311-09	Date Received:	09-Mar-2017	9:23	QC Batch:	B7C0050	Date Extracted:	10-Mar-2017	9:14
Project:	Fentress Phase II PFC Investigation	Sample Size:	0.122 L	Date Analyzed:	17-Mar-17 20:11	Column:	BEH C18						
Date Collected:	08-Mar-2017 15:10												
Location:													
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Labeled Standard	%R	LCL-UCL	Qualifiers				
PFBS	ND	1.83	4.10	8.18		IS 13C3-PFBS	120	60 - 150					
PFHpA	ND	0.604	2.05	8.18		IS 13C4-PFHpA	114	60 - 150					
PFHxS	7.76	0.968	2.05	8.18	J	IS 18O2-PFHxS	118	60 - 150					
PFOA	2.55	0.666	2.05	8.18	J	IS 13C2-PFOA	101	60 - 150					
PFOS	ND	0.825	0.922	8.18		IS 13C8-PFOS	100	60 - 150					
PFNA	ND	0.828	2.05	8.18		IS 13C5-PFNA	110	50 - 150					

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

7/17/17

