NAVFAC
Naval Facilities Engineering Command

Groundwater Sample Results, Level 2 Laboratory Report, Level 4 Laboratory Report, Electronic Data Deliverable, Data Validation Report, and the Sample Location Report, SDG B8X5580

Naval Base Guam

July 2020

Maxxam
A Bureau Veritas Group Company

Your P.O. #: 60548946 CTO 17F0104
Your Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your C.O.C. #: 214813

Attention: Brian Nagy

AECOM
1001 Bishop Street
Suite 1600
Honolulu, HI
USA 96813

Report Date: 2019/01/08
Report #: R5550434
Version: 2 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B8X5580
Received: 2018/12/14, 10:32

Sample Matrix: Ground Water
Samples Received: 15

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
PFOS and PFOA in water by SPE/LCMS (1)	9	2018/12/19	2018/12/22	CAM SOP-00894	EPA 537 m
PFOS and PFOA in water by SPE/LCMS (1)	6	2018/12/20	2018/12/22	CAM SOP-00894	EPA 537 m

Sample Matrix: Potable Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
PFAAs in drinking water by SPE and LC/MS	7	2018/12/28	2019/01/03	CAM SOP-00953	EPA 537

Sample Matrix: Surface Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
PFOS and PFOA in water by SPE/LCMS (1)	4	2018/12/20	2018/12/22	CAM SOP-00894	EPA 537 m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing. Maxxam is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Maxxam, results relate to the supplied samples tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

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Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Per- and polyfluoroalkyl substances (PFAS) identified as surrogates on the certificate of analysis represent the extracted internal standard.

Encryption Key

Stephanie Pollen
Project Manager
08 Jan 2019 16:25:58

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Stephanie Pollen, Project Manager
Email: SPollen@maxxam.ca
Phone# (905) 817-5700
==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF231					IOF232	IOF233				
Sampling Date		2018/12/05 11:00					2018/12/05 11:05	2018/12/05 11:05				
COC Number		214813					214813	214813				
	UNITS	GP001	DL	LOD	LOQ	QC Batch	GP002	GP003	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters												
EtFOSAA	ug/L	0.010 U	0.0033	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.033	0.10	0.20	5897102
MeFOSAA	ug/L	0.010 U	0.0029	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.029	0.10	0.20	5897102
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.054	0.15	0.20	5897102
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.015 U	0.0074	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.074	0.15	0.20	5897102
Perfluorohexanoic Acid (PFHxA)	ug/L	0.010 U	0.0035	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.035	0.10	0.20	5897102
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.0056	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.056	0.15	0.20	5897102
Perfluorononanoic Acid (PFNA)	ug/L	0.018 U	0.0087	0.018	0.020	5897102	0.18 U (1)	0.18 U (1)	0.087	0.18	0.20	5897102
Perfluorotetradecanoic Acid	ug/L	0.010 U	0.0027	0.010	0.020	5897102	0.10 U (2)	0.10 U (2)	0.027	0.10	0.20	5914930
Perfluorotridecanoic Acid	ug/L	0.010 U	0.0038	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.038	0.10	0.20	5897102
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.010 U	0.0025	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.025	0.10	0.20	5897102
Perfluorodecanoic Acid (PFDA)	ug/L	0.015 U	0.0061	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.061	0.15	0.20	5897102
Perfluorododecanoic Acid (PFDoA)	ug/L	0.010 U	0.0050	0.010	0.020	5897102	0.10 U (2)	0.10 U (2)	0.050	0.10	0.20	5914930
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.010 U	0.0033	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.033	0.10	0.20	5897102
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.0060	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.060	0.15	0.20	5897102
Surrogate Recovery (%)												
13C2-Perfluorodecanoic acid	%	85				5897102	77	74				5897102
13C2-Perfluorododecanoic acid	%	86				5897102	70	67				5914930
13C2-Perfluorohexanoic acid	%	89				5897102	93	90				5897102
13C2-perfluorotetradecanoic acid	%	83				5897102	52	48 (3)				5914930
13C2-Perfluoroundecanoic acid	%	95				5897102	68	59				5897102

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

(1) Due to the nature of the sample matrix (turbid, suspended particles), a reduced sample volume was extracted and analyzed. Detection limits were adjusted accordingly (10x).

(2) Due to the nature of the sample matrix (turbid, suspended particles), a reduced sample volume was extracted and analyzed. Detection limits were adjusted accordingly (10x).
Analysis was performed past the method defined holding time. Because of their chemical structure, PFAS are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

(3) Extracted internal standard analyte recovery was below the defined lower control limit (LCL). Because quantitation is performed using isotope dilution techniques, any losses of the native compound that may occur during any of the sample preparation, extraction, cleanup or determinative steps will be mirrored by a similar loss of the labeled standard, and as such can be accounted for and corrected. Therefore, the quantification of these target compounds is not affected by the low extracted internal standard analyte recovery.

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF231					IOF232	IOF233				
Sampling Date		2018/12/05 11:00					2018/12/05 11:05	2018/12/05 11:05				
COC Number		214813					214813	214813				
	UNITS	GP001	DL	LOD	LOQ	QC Batch	GP002	GP003	DL	LOD	LOQ	QC Batch
13C4-Perfluoroheptanoic acid	%	91				5897102	91	92				5897102
13C4-Perfluorooctanesulfonate	%	83				5897102	75	75				5897102
13C4-Perfluorooctanoic acid	%	90				5897102	88	83				5897102
13C5-Perfluorononanoic acid	%	91				5897102	84	83				5897102
18O2-Perfluorohexanesulfonate	%	89				5897102	92	88				5897102
D3-MeFOSAA	%	84				5897102	74	69				5897102
D5-EtFOSAA	%	81				5897102	66	64				5897102

DL = Detection Limit
LOD = Limit of Detection
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QC Batch = Quality Control Batch
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RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF234	IOF236	IOF237	IOF238	IOF239				
Sampling Date		2018/12/05 14:45	2018/12/06 09:00	2018/12/06 09:00	2018/12/06 09:05	2018/12/06 09:30				
COC Number		214813	214813	214813	214813	214813				
	UNITS	GP004	GP006	GP007	GP008	GP009	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters										
EtFOSAA	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0033	0.010	0.020	5897102
MeFOSAA	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0029	0.010	0.020	5897102
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0054	0.015	0.020	5897102
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0074	0.015	0.020	5897102
Perfluorohexanoic Acid (PFHxA)	ug/L	0.010 U	0.010 U	0.010 U	0.0036 J	0.010 U	0.0035	0.010	0.020	5897102
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.015 U	0.015 U	0.020	0.015 U	0.0056	0.015	0.020	5897102
Perfluorononanoic Acid (PFNA)	ug/L	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.0087	0.018	0.020	5897102
Perfluorotetradecanoic Acid	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0027	0.010	0.020	5897102
Perfluorotridecanoic Acid	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0038	0.010	0.020	5897102
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0025	0.010	0.020	5897102
Perfluorodecanoic Acid (PFDA)	ug/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0061	0.015	0.020	5897102
Perfluorododecanoic Acid (PFDoA)	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0050	0.010	0.020	5897102
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0033	0.010	0.020	5897102
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.015 U	0.015 U	0.0080 J	0.015 U	0.0060	0.015	0.020	5897102
Surrogate Recovery (%)										
13C2-Perfluorodecanoic acid	%	93	84	88	94	85				5897102
13C2-Perfluorododecanoic acid	%	79	82	80	96	80				5897102
13C2-Perfluorohexanoic acid	%	91	89	90	92	91				5897102
13C2-perfluorotetradecanoic acid	%	74	61	60	90	78				5897102
13C2-Perfluoroundecanoic acid	%	87	85	85	94	84				5897102
13C4-Perfluoroheptanoic acid	%	92	91	90	95	90				5897102
13C4-Perfluorooctanesulfonate	%	92	91	89	96	88				5897102
13C4-Perfluorooctanoic acid	%	91	90	95	96	93				5897102
13C5-Perfluorononanoic acid	%	94	88	96	94	93				5897102
18O2-Perfluorohexanesulfonate	%	94	87	90	84	90				5897102
D3-MeFOSAA	%	80	84	83	94	85				5897102
D5-EtFOSAA	%	75	82	79	93	80				5897102

DL = Detection Limit
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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF251	IOF252				IOF253				
Sampling Date		2018/12/07 11:00	2018/12/07 12:45				2018/12/07 13:00				
COC Number		214813	214813				214813				
	UNITS	GP021	GP022	DL	LOD	LOQ	GP023	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters											
EtFOSAA	ug/L	0.0095 U	0.0095 U	0.0031	0.0095	0.019	0.0085 U	0.0028	0.0085	0.017	5899819
MeFOSAA	ug/L	0.0095 U	0.0095 U	0.0028	0.0095	0.019	0.0085 U	0.0025	0.0085	0.017	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0069 J	0.0051	0.014	0.019	0.013 U	0.0046	0.013	0.017	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.014 U	0.014 U	0.0070	0.014	0.019	0.013 U	0.0063	0.013	0.017	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.012 J	0.0090 J	0.0033	0.0095	0.019	0.0085 U	0.0030	0.0085	0.017	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.010 J	0.027	0.0053	0.014	0.019	0.013 U	0.0048	0.013	0.017	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.017 U	0.017 U	0.0083	0.017	0.019	0.015 U	0.0074	0.015	0.017	5899819
Perfluorotetradecanoic Acid	ug/L	0.0095 U	0.0095 U	0.0026	0.0095	0.019	0.0085 U	0.0023	0.0085	0.017	5899819
Perfluorotridecanoic Acid	ug/L	0.0095 U	0.0095 U	0.0036	0.0095	0.019	0.0085 U	0.0032	0.0085	0.017	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.0095 U	0.0095 U	0.0024	0.0095	0.019	0.0085 U	0.0021	0.0085	0.017	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.014 U	0.014 U	0.0058	0.014	0.019	0.013 U	0.0052	0.013	0.017	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.0095 U	0.0095 U	0.0048	0.0095	0.019	0.0085 U	0.0043	0.0085	0.017	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0048 J	0.0095 U	0.0031	0.0095	0.019	0.0085 U	0.0028	0.0085	0.017	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.048	0.058	0.0057	0.014	0.019	0.013 U	0.0051	0.013	0.017	5899819
Surrogate Recovery (%)											
13C2-Perfluorodecanoic acid	%	81	88				85				5899819
13C2-Perfluorododecanoic acid	%	87	89				88				5899819
13C2-Perfluorohexanoic acid	%	87	90				90				5899819
13C2-perfluorotetradecanoic acid	%	77	78				78				5899819
13C2-Perfluoroundecanoic acid	%	84	87				90				5899819
13C4-Perfluoroheptanoic acid	%	91	90				94				5899819
13C4-Perfluorooctanesulfonate	%	96	100				92				5899819
13C4-Perfluorooctanoic acid	%	89	92				91				5899819
13C5-Perfluorononanoic acid	%	89	91				93				5899819
18O2-Perfluorohexanesulfonate	%	95	94				96				5899819
D3-MeFOSAA	%	88	90				84				5899819
D5-EtFOSAA	%	84	93				81				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF254					IOF255				
Sampling Date		2018/12/07 13:20					2018/12/07 13:20				
COC Number		214813					214813				
	UNITS	GP024	DL	LOD	LOQ	QC Batch	GP025	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters											
EtFOSAA	ug/L	0.010 U	0.0033	0.010	0.020	5897102	0.0090 U	0.0030	0.0090	0.018	5899819
MeFOSAA	ug/L	0.010 U	0.0029	0.010	0.020	5897102	0.0090 U	0.0026	0.0090	0.018	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	0.014 U	0.0049	0.014	0.018	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.015 U	0.0074	0.015	0.020	5897102	0.014 U	0.0067	0.014	0.018	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.0070 J	0.0035	0.010	0.020	5897102	0.0066 J	0.0032	0.0090	0.018	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.011 J	0.0056	0.015	0.020	5897102	0.010 J	0.0050	0.014	0.018	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.018 U	0.0087	0.018	0.020	5897102	0.016 U	0.0078	0.016	0.018	5899819
Perfluorotetradecanoic Acid	ug/L	0.010 U	0.0027	0.010	0.020	5897102	0.0090 U	0.0024	0.0090	0.018	5899819
Perfluorotridecanoic Acid	ug/L	0.010 U	0.0038	0.010	0.020	5897102	0.0090 U	0.0034	0.0090	0.018	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.010 U	0.0025	0.010	0.020	5897102	0.0090 U	0.0023	0.0090	0.018	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.015 U	0.0061	0.015	0.020	5897102	0.014 U	0.0055	0.014	0.018	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.010 U	0.0050	0.010	0.020	5897102	0.0090 U	0.0045	0.0090	0.018	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0043 J	0.0033	0.010	0.020	5897102	0.0090 U	0.0030	0.0090	0.018	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.035	0.0060	0.015	0.020	5897102	0.031	0.0054	0.014	0.018	5899819
Surrogate Recovery (%)											
13C2-Perfluorodecanoic acid	%	88				5897102	89				5899819
13C2-Perfluorododecanoic acid	%	83				5897102	83				5899819
13C2-Perfluorohexanoic acid	%	91				5897102	84				5899819
13C2-perfluorotetradecanoic acid	%	83				5897102	77				5899819
13C2-Perfluoroundecanoic acid	%	89				5897102	82				5899819
13C4-Perfluoroheptanoic acid	%	95				5897102	85				5899819
13C4-Perfluorooctanesulfonate	%	95				5897102	90				5899819
13C4-Perfluorooctanoic acid	%	92				5897102	85				5899819
13C5-Perfluorononanoic acid	%	94				5897102	89				5899819
18O2-Perfluorohexanesulfonate	%	94				5897102	90				5899819
D3-MeFOSAA	%	91				5897102	81				5899819
D5-EtFOSAA	%	91				5897102	83				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF256				IOF257				
Sampling Date		2018/12/07 15:30				2018/12/07 15:45				
COC Number		214813				214813				
	UNITS	GP026	DL	LOD	LOQ	GP027	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters										
EtFOSAA	ug/L	0.0095 U	0.0031	0.0095	0.019	0.010 U	0.0033	0.010	0.020	5899819
MeFOSAA	ug/L	0.0095 U	0.0028	0.0095	0.019	0.010 U	0.0029	0.010	0.020	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0051	0.014	0.019	0.015 U	0.0054	0.015	0.020	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.014 U	0.0070	0.014	0.019	0.015 U	0.0074	0.015	0.020	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.0095 U	0.0033	0.0095	0.019	0.010 U	0.0035	0.010	0.020	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0053	0.014	0.019	0.015 U	0.0056	0.015	0.020	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.017 U	0.0083	0.017	0.019	0.018 U	0.0087	0.018	0.020	5899819
Perfluorotetradecanoic Acid	ug/L	0.0095 U	0.0026	0.0095	0.019	0.010 U	0.0027	0.010	0.020	5899819
Perfluorotridecanoic Acid	ug/L	0.0095 U	0.0036	0.0095	0.019	0.010 U	0.0038	0.010	0.020	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.0095 U	0.0024	0.0095	0.019	0.010 U	0.0025	0.010	0.020	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.014 U	0.0058	0.014	0.019	0.015 U	0.0061	0.015	0.020	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.0095 U	0.0048	0.0095	0.019	0.010 U	0.0050	0.010	0.020	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0095 U	0.0031	0.0095	0.019	0.010 U	0.0033	0.010	0.020	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0057	0.014	0.019	0.015 U	0.0060	0.015	0.020	5899819
Surrogate Recovery (%)										
13C2-Perfluorodecanoic acid	%	82				83				5899819
13C2-Perfluorododecanoic acid	%	81				82				5899819
13C2-Perfluorohexanoic acid	%	82				88				5899819
13C2-perfluorotetradecanoic acid	%	77				79				5899819
13C2-Perfluoroundecanoic acid	%	81				88				5899819
13C4-Perfluoroheptanoic acid	%	82				87				5899819
13C4-Perfluorooctanesulfonate	%	82				92				5899819
13C4-Perfluorooctanoic acid	%	83				90				5899819
13C5-Perfluorononanoic acid	%	81				90				5899819
18O2-Perfluorohexanesulfonate	%	86				90				5899819
D3-MeFOSAA	%	82				78				5899819
D5-EtFOSAA	%	79				79				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF POTABLE WATER

Maxxam ID		IOF240				IOF241				IOF242				
Sampling Date		2018/12/06 09:45				2018/12/06 10:30				2018/12/06 10:50				
COC Number		214813				214813				214813				
	UNITS	GP010	DL	LOD	LOQ	GP011	DL	LOD	LOQ	GP012	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters														
Perfluorobutanesulfonic acid	ng/L	0.36 J	0.32	0.80	2.0	4.5	0.30	0.76	1.9	3.0	0.32	0.80	2.0	5907027
Perfluorohexanoic Acid (PFHxA)	ng/L	0.70 J	0.36	1.0	2.0	4.6	0.34	0.95	1.9	4.5	0.36	1.0	2.0	5907027
Perfluorohexanesulfonic acid	ng/L	2.5	0.27	0.80	2.0	37	0.26	0.76	1.9	23	0.27	0.80	2.0	5907027
Perfluoroheptanoic Acid (PFHpA)	ng/L	1.0 U	0.36	1.0	2.0	1.5 J	0.34	0.95	1.9	1.3 J	0.36	1.0	2.0	5907027
Perfluoro-n-Octanoic Acid (PFOA)	ng/L	0.78 J	0.48	1.0	2.0	2.8	0.46	0.95	1.9	2.0	0.48	1.0	2.0	5907027
Perfluorooctanesulfonic acid	ng/L	1.4 J	0.37	1.0	2.0	59	0.35	0.95	1.9	42	0.37	1.0	2.0	5907027
Perfluorononanoic Acid (PFNA)	ng/L	1.0 U	0.42	1.0	2.0	0.95 U	0.40	0.95	1.9	1.0 U	0.42	1.0	2.0	5907027
Perfluorodecanoic Acid (PFDA)	ng/L	0.60 U	0.22	0.60	2.0	0.57 U	0.21	0.57	1.9	0.60 U	0.22	0.60	2.0	5907027
Perfluoroundecanoic Acid (PFUnA)	ng/L	0.80 U	0.30	0.80	2.0	0.76 U	0.29	0.76	1.9	0.80 U	0.30	0.80	2.0	5907027
Perfluorododecanoic Acid (PFDoA)	ng/L	1.0 U	0.36	1.0	2.0	0.95 U	0.34	0.95	1.9	1.0 U	0.36	1.0	2.0	5907027
Perfluorotridecanoic Acid	ng/L	1.0 U	0.44	1.0	2.0	0.95 U	0.42	0.95	1.9	1.0 U	0.44	1.0	2.0	5907027
Perfluorotetradecanoic Acid	ng/L	0.80 U	0.33	0.80	2.0	0.76 U	0.31	0.76	1.9	0.80 U	0.33	0.80	2.0	5907027
MeFOSAA	ng/L	4.0 U	1.7	4.0	8.0	3.8 U	1.6	3.8	7.6	4.0 U	1.7	4.0	8.0	5907027
EtFOSAA	ng/L	4.0 U	1.3	4.0	8.0	3.8 U	1.2	3.8	7.6	4.0 U	1.3	4.0	8.0	5907027
Surrogate Recovery (%)														
13C2-Perfluorodecanoic acid	%	87				92				90				5907027
13C2-Perfluorohexanoic acid	%	91				94				95				5907027
D5-EtFOSAA	%	97				82				95				5907027

DL = Detection Limit
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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF POTABLE WATER

Maxxam ID		IOF243	IOF244	IOF245	IOF246				
Sampling Date		2018/12/06 10:50	2018/12/06 13:05	2018/12/06 14:05	2018/12/06 14:40				
COC Number		214813	214813	214813	214813				
	UNITS	GP013	GP014	GP015	GP016	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters									
Perfluorobutanesulfonic acid	ng/L	2.7	0.31 J	0.72 U	0.42 J	0.29	0.72	1.8	5907027
Perfluorohexanoic Acid (PFHxA)	ng/L	3.7	1.4 J	0.90 U	0.54 J	0.32	0.90	1.8	5907027
Perfluorohexanesulfonic acid	ng/L	19	1.3 J	0.72 U	1.8 J	0.24	0.72	1.8	5907027
Perfluoroheptanoic Acid (PFHpA)	ng/L	1.4 J	0.37 J	0.90 U	0.38 J	0.32	0.90	1.8	5907027
Perfluoro-n-Octanoic Acid (PFOA)	ng/L	1.8 J	0.72 J	0.90 U	0.78 J	0.43	0.90	1.8	5907027
Perfluorooctanesulfonic acid	ng/L	31	1.9	0.90 U	0.90 U	0.33	0.90	1.8	5907027
Perfluorononanoic Acid (PFNA)	ng/L	0.90 U	0.90 U	0.90 U	0.90 U	0.38	0.90	1.8	5907027
Perfluorodecanoic Acid (PFDA)	ng/L	0.54 U	0.54 U	0.54 U	0.54 U	0.20	0.54	1.8	5907027
Perfluoroundecanoic Acid (PFUnA)	ng/L	0.72 U	0.72 U	0.72 U	0.72 U	0.27	0.72	1.8	5907027
Perfluorododecanoic Acid (PFDoA)	ng/L	0.90 U	0.90 U	0.90 U	0.90 U	0.32	0.90	1.8	5907027
Perfluorotridecanoic Acid	ng/L	0.90 U	0.90 U	0.90 U	0.90 U	0.40	0.90	1.8	5907027
Perfluorotetradecanoic Acid	ng/L	0.72 U	0.72 U	0.72 U	0.72 U	0.30	0.72	1.8	5907027
MeFOSAA	ng/L	3.6 U	3.6 U	3.6 U	3.6 U	1.5	3.6	7.2	5907027
EtFOSAA	ng/L	3.6 U	3.6 U	3.6 U	3.6 U	1.2	3.6	7.2	5907027
Surrogate Recovery (%)									
13C2-Perfluorodecanoic acid	%	85	96	100	109				5907027
13C2-Perfluorohexanoic acid	%	90	104	104	106				5907027
D5-EtFOSAA	%	87	89	83	95				5907027

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF SURFACE WATER

Maxxam ID		IOF247	IOF248				IOF249				
Sampling Date		2018/12/07 09:05	2018/12/07 09:05				2018/12/07 09:20				
COC Number		214813	214813				214813				
	UNITS	GP017	GP018	DL	LOD	LOQ	GP019	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters											
EtFOSAA	ug/L	0.0095 U	0.0095 U	0.0031	0.0095	0.019	0.0090 U	0.0030	0.0090	0.018	5899819
MeFOSAA	ug/L	0.0095 U	0.0095 U	0.0028	0.0095	0.019	0.0090 U	0.0026	0.0090	0.018	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.014 U	0.0051	0.014	0.019	0.014 U	0.0049	0.014	0.018	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.014 U	0.014 U	0.0070	0.014	0.019	0.014 U	0.0067	0.014	0.018	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.0095 U	0.0095 U	0.0033	0.0095	0.019	0.0090 U	0.0032	0.0090	0.018	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.014 U	0.0053	0.014	0.019	0.014 U	0.0050	0.014	0.018	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.017 U	0.017 U	0.0083	0.017	0.019	0.016 U	0.0078	0.016	0.018	5899819
Perfluorotetradecanoic Acid	ug/L	0.0095 U	0.0095 U	0.0026	0.0095	0.019	0.0090 U	0.0024	0.0090	0.018	5899819
Perfluorotridecanoic Acid	ug/L	0.0095 U	0.0095 U	0.0036	0.0095	0.019	0.0090 U	0.0034	0.0090	0.018	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.0095 U	0.0095 U	0.0024	0.0095	0.019	0.0090 U	0.0023	0.0090	0.018	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.014 U	0.014 U	0.0058	0.014	0.019	0.014 U	0.0055	0.014	0.018	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.0095 U	0.0095 U	0.0048	0.0095	0.019	0.0090 U	0.0045	0.0090	0.018	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0095 U	0.0095 U	0.0031	0.0095	0.019	0.0090 U	0.0030	0.0090	0.018	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.014 U	0.0057	0.014	0.019	0.014 U	0.0054	0.014	0.018	5899819
Surrogate Recovery (%)											
13C2-Perfluorodecanoic acid	%	80	86				86				5899819
13C2-Perfluorododecanoic acid	%	79	81				81				5899819
13C2-Perfluorohexanoic acid	%	82	88				89				5899819
13C2-perfluorotetradecanoic acid	%	62	61				64				5899819
13C2-Perfluoroundecanoic acid	%	77	83				89				5899819
13C4-Perfluoroheptanoic acid	%	83	86				91				5899819
13C4-Perfluorooctanesulfonate	%	84	88				89				5899819
13C4-Perfluorooctanoic acid	%	84	83				88				5899819
13C5-Perfluorononanoic acid	%	86	84				86				5899819
18O2-Perfluorohexanesulfonate	%	88	92				90				5899819
D3-MeFOSAA	%	81	80				86				5899819
D5-EtFOSAA	%	76	79				82				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF SURFACE WATER

Maxxam ID		IOF250				
Sampling Date		2018/12/07 09:40				
COC Number		214813				
	UNITS	GP020	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters						
EtFOSAA	ug/L	0.0090 U	0.0030	0.0090	0.018	5899819
MeFOSAA	ug/L	0.0090 U	0.0026	0.0090	0.018	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0049	0.014	0.018	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.014 U	0.0067	0.014	0.018	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.0090 U	0.0032	0.0090	0.018	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0050	0.014	0.018	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.016 U	0.0078	0.016	0.018	5899819
Perfluorotetradecanoic Acid	ug/L	0.0090 U	0.0024	0.0090	0.018	5899819
Perfluorotridecanoic Acid	ug/L	0.0090 U	0.0034	0.0090	0.018	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.0090 U	0.0023	0.0090	0.018	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.014 U	0.0055	0.014	0.018	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.0090 U	0.0045	0.0090	0.018	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0090 U	0.0030	0.0090	0.018	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0054	0.014	0.018	5899819
Surrogate Recovery (%)						
13C2-Perfluorodecanoic acid	%	85				5899819
13C2-Perfluorododecanoic acid	%	82				5899819
13C2-Perfluorohexanoic acid	%	87				5899819
13C2-perfluorotetradecanoic acid	%	62				5899819
13C2-Perfluoroundecanoic acid	%	84				5899819
13C4-Perfluoroheptanoic acid	%	92				5899819
13C4-Perfluorooctanesulfonate	%	93				5899819
13C4-Perfluorooctanoic acid	%	95				5899819
13C5-Perfluorononanoic acid	%	92				5899819
18O2-Perfluorohexanesulfonate	%	95				5899819
D3-MeFOSAA	%	82				5899819
D5-EtFOSAA	%	82				5899819

DL = Detection Limit
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QC Batch = Quality Control Batch
N/A = Not Applicable

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

TEST SUMMARY

Maxxam ID: IOF231 **Collected:** 2018/12/05
Sample ID: GP001 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF232 **Collected:** 2018/12/05
Sample ID: GP002 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF233 **Collected:** 2018/12/05
Sample ID: GP003 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF234 **Collected:** 2018/12/05
Sample ID: GP004 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF236 **Collected:** 2018/12/06
Sample ID: GP006 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF237 **Collected:** 2018/12/06
Sample ID: GP007 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF238 **Collected:** 2018/12/06
Sample ID: GP008 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

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Maxxam Job #: B8X5580
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AECOM
Client Project #: N62742-12-D-1829
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TEST SUMMARY

Maxxam ID: IOF239 **Collected:** 2018/12/06
Sample ID: GP009 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF240 **Collected:** 2018/12/06
Sample ID: GP010 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF241 **Collected:** 2018/12/06
Sample ID: GP011 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF242 **Collected:** 2018/12/06
Sample ID: GP012 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF243 **Collected:** 2018/12/06
Sample ID: GP013 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF244 **Collected:** 2018/12/06
Sample ID: GP014 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF245 **Collected:** 2018/12/06
Sample ID: GP015 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

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Maxxam Job #: B8X5580
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AECOM
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TEST SUMMARY

Maxxam ID: IOF246 **Collected:** 2018/12/06
Sample ID: GP016 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF247 **Collected:** 2018/12/07
Sample ID: GP017 **Shipped:**
Matrix: Surface Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF248 **Collected:** 2018/12/07
Sample ID: GP018 **Shipped:**
Matrix: Surface Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF249 **Collected:** 2018/12/07
Sample ID: GP019 **Shipped:**
Matrix: Surface Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF250 **Collected:** 2018/12/07
Sample ID: GP020 **Shipped:**
Matrix: Surface Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF251 **Collected:** 2018/12/07
Sample ID: GP021 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF252 **Collected:** 2018/12/07
Sample ID: GP022 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

TEST SUMMARY

Maxxam ID: IOF253 **Collected:** 2018/12/07
Sample ID: GP023 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF254 **Collected:** 2018/12/07
Sample ID: GP024 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF255 **Collected:** 2018/12/07
Sample ID: GP025 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF256 **Collected:** 2018/12/07
Sample ID: GP026 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF257 **Collected:** 2018/12/07
Sample ID: GP027 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.8°C
Package 2	2.7°C

Sample IOF240 [GP010] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF241 [GP011] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF242 [GP012] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF243 [GP013] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF244 [GP014] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF245 [GP015] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF246 [GP016] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF232, PFOS and PFOA in water by SPE/LCMS: Test repeated.
Sample IOF233, PFOS and PFOA in water by SPE/LCMS: Test repeated.

Results relate only to the items tested.

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
5897102	M_G	Matrix Spike(IOF254)	13C2-Perfluorodecanoic acid	2018/12/22		84	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/22		78	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/22		90	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/22		78	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/22		91	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/22		91	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/22		87	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/22		92	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/22		92	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/22		90	%	50 - 150
			D3-MeFOSAA	2018/12/22		81	%	50 - 150
			D5-EtFOSAA	2018/12/22		80	%	50 - 150
			EtFOSAA	2018/12/22		103	%	70 - 130
			MeFOSAA	2018/12/22		101	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/22		102	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22		102	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/22		102	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22		102	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/22		99	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/22		107	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/22		105	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22		100	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/22		109	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/22		101	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22		101	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/22		103	%	70 - 130
5897102	M_G	Matrix Spike DUP(IOF254)	13C2-Perfluorodecanoic acid	2018/12/22		89	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/22		86	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/22		90	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/22		80	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/22		87	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/22		91	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/22		94	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/22		92	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/22		96	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/22		92	%	50 - 150
			D3-MeFOSAA	2018/12/22		82	%	50 - 150
			D5-EtFOSAA	2018/12/22		83	%	50 - 150
			EtFOSAA	2018/12/22		99	%	70 - 130
			MeFOSAA	2018/12/22		106	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/22		101	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22		103	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/22		104	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22		103	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/22		98	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/22		107	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/22		109	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22		106	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/22		109	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/22		107	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22		106	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/22		96	%	70 - 130
5897102	M_G	MS/MSD RPD	EtFOSAA	2018/12/22	3.3		%	30

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			MeFOSAA	2018/12/22	4.5		%	30
			Perfluorobutane Sulfonate (PFBS)	2018/12/22	0.48		%	30
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22	0.97		%	30
			Perfluorohexanoic Acid (PFHxA)	2018/12/22	1.6		%	30
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22	1.1		%	30
			Perfluorononanoic Acid (PFNA)	2018/12/22	1.1		%	30
			Perfluorotetradecanoic Acid	2018/12/22	0.38		%	30
			Perfluorotridecanoic Acid	2018/12/22	3.5		%	30
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22	6.4		%	30
			Perfluorodecanoic Acid (PFDA)	2018/12/22	0.17		%	30
			Perfluorododecanoic Acid (PFDoA)	2018/12/22	5.9		%	30
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22	5.4		%	30
			Perfluorooctane Sulfonate (PFOS)	2018/12/22	7.0		%	30
5897102	M_G	Spiked Blank	13C2-Perfluorodecanoic acid	2018/12/22		90	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/22		81	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/22		89	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/22		79	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/22		90	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/22		86	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/22		83	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/22		89	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/22		92	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/22		89	%	50 - 150
			D3-MeFOSAA	2018/12/22		79	%	50 - 150
			D5-EtFOSAA	2018/12/22		75	%	50 - 150
			EtFOSAA	2018/12/22		106	%	70 - 130
			MeFOSAA	2018/12/22		99	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/22		100	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22		107	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/22		103	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22		103	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/22		99	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/22		106	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/22		108	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22		99	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/22		102	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/22		109	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22		104	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/22		109	%	70 - 130
5897102	M_G	Method Blank	13C2-Perfluorodecanoic acid	2018/12/22		75	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/22		72	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/22		78	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/22		68	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/22		77	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/22		81	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/22		81	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/22		83	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/22		79	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/22		84	%	50 - 150
			D3-MeFOSAA	2018/12/22		75	%	50 - 150
			D5-EtFOSAA	2018/12/22		68	%	50 - 150
			EtFOSAA	2018/12/22	0.010 U, LOD=0.010		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			MeFOSAA	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorobutane Sulfonate (PFBS)	2018/12/22	0.015 U, LOD=0.015		ug/L	
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22	0.015 U, LOD=0.015		ug/L	
			Perfluorohexanoic Acid (PFHxA)	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22	0.015 U, LOD=0.015		ug/L	
			Perfluorononanoic Acid (PFNA)	2018/12/22	0.018 U, LOD=0.018		ug/L	
			Perfluorotetradecanoic Acid	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorotridecanoic Acid	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorodecanoic Acid (PFDA)	2018/12/22	0.015 U, LOD=0.015		ug/L	
			Perfluorododecanoic Acid (PFDoA)	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorooctane Sulfonate (PFOS)	2018/12/22	0.015 U, LOD=0.015		ug/L	
5899819	DAD	Matrix Spike(IOF247)	13C2-Perfluorodecanoic acid	2018/12/21		90	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/21		83	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/21		85	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/21		66	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/21		85	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/21		90	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/21		87	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/21		89	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/21		85	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/21		89	%	50 - 150
			D3-MeFOSAA	2018/12/21		83	%	50 - 150
			D5-EtFOSAA	2018/12/21		80	%	50 - 150
			EtFOSAA	2018/12/21		98	%	70 - 130
			MeFOSAA	2018/12/21		90	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/21		99	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21		96	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/21		100	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21		97	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/21		102	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/21		98	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/21		112	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21		97	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/21		93	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/21		97	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21		101	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/21		99	%	70 - 130
5899819	DAD	Matrix Spike DUP(IOF247)	13C2-Perfluorodecanoic acid	2018/12/21		89	%	50 - 150

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			13C2-Perfluorododecanoic acid	2018/12/21		84	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/21		89	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/21		67	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/21		87	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/21		93	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/21		90	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/21		89	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/21		83	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/21		90	%	50 - 150
			D3-MeFOSAA	2018/12/21		82	%	50 - 150
			D5-EtFOSAA	2018/12/21		87	%	50 - 150
			EtFOSAA	2018/12/21		97	%	70 - 130
			MeFOSAA	2018/12/21		98	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/21		95	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21		91	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/21		94	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21		97	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/21		100	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/21		96	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/21		108	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21		91	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/21		91	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/21		95	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21		98	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/21		98	%	70 - 130
5899819	DAD	MS/MSD RPD	EtFOSAA	2018/12/21	1.5		%	30
			MeFOSAA	2018/12/21	9.2		%	30
			Perfluorobutane Sulfonate (PFBS)	2018/12/21	4.2		%	30
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21	5.1		%	30
			Perfluorohexanoic Acid (PFHxA)	2018/12/21	6.7		%	30
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21	0		%	30
			Perfluorononanoic Acid (PFNA)	2018/12/21	2.1		%	30
			Perfluorotetradecanoic Acid	2018/12/21	1.8		%	30
			Perfluorotridecanoic Acid	2018/12/21	4.0		%	30
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21	5.5		%	30
			Perfluorodecanoic Acid (PFDA)	2018/12/21	2.0		%	30
			Perfluorododecanoic Acid (PFDoA)	2018/12/21	1.6		%	30
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21	2.9		%	30
			Perfluorooctane Sulfonate (PFOS)	2018/12/21	1.4		%	30
5899819	DAD	Spiked Blank	13C2-Perfluorodecanoic acid	2018/12/21		94	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/21		86	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/21		94	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/21		83	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/21		93	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/21		93	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/21		101	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/21		95	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/21		92	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/21		93	%	50 - 150
			D3-MeFOSAA	2018/12/21		82	%	50 - 150
			D5-EtFOSAA	2018/12/21		81	%	50 - 150
			EtFOSAA	2018/12/21		97	%	70 - 130
			MeFOSAA	2018/12/21		98	%	70 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			Perfluorobutane Sulfonate (PFBS)	2018/12/21		105	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21		103	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/21		102	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21		102	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/21		103	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/21		101	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/21		105	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21		103	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/21		102	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/21		103	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21		103	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/21		98	%	70 - 130
5899819	DAD	Method Blank	13C2-Perfluorodecanoic acid	2018/12/21		92	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/21		87	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/21		98	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/21		81	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/21		92	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/21		100	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/21		104	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/21		98	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/21		97	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/21		101	%	50 - 150
			D3-MeFOSAA	2018/12/21		88	%	50 - 150
			D5-EtFOSAA	2018/12/21		84	%	50 - 150
			EtFOSAA	2018/12/21	0.010 U, LOD=0.010		ug/L	
			MeFOSAA	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorobutane Sulfonate (PFBS)	2018/12/21	0.015 U, LOD=0.015		ug/L	
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21	0.015 U, LOD=0.015		ug/L	
			Perfluorohexanoic Acid (PFHxA)	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21	0.015 U, LOD=0.015		ug/L	
			Perfluorononanoic Acid (PFNA)	2018/12/21	0.018 U, LOD=0.018		ug/L	
			Perfluorotetradecanoic Acid	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorotridecanoic Acid	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorodecanoic Acid (PFDA)	2018/12/21	0.015 U, LOD=0.015		ug/L	
			Perfluorododecanoic Acid (PFDoA)	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorooctane Sulfonate (PFOS)	2018/12/21	0.015 U, LOD=0.015		ug/L	
5907027	CM5	Spiked Blank	13C2-Perfluorodecanoic acid	2019/01/03		90	%	70 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			13C2-Perfluorohexanoic acid	2019/01/03		97	%	70 - 130
			D5-EtFOSAA	2019/01/03		90	%	70 - 130
			Perfluorobutanesulfonic acid	2019/01/03		81	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2019/01/03		91	%	70 - 130
			Perfluorohexanesulfonic acid	2019/01/03		87	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2019/01/03		89	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2019/01/03		91	%	70 - 130
			Perfluorooctanesulfonic acid	2019/01/03		95	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2019/01/03		112	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2019/01/03		92	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2019/01/03		93	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2019/01/03		89	%	70 - 130
			Perfluorotridecanoic Acid	2019/01/03		93	%	70 - 130
			Perfluorotetradecanoic Acid	2019/01/03		88	%	70 - 130
			MeFOSAA	2019/01/03		79	%	70 - 130
			EtFOSAA	2019/01/03		74	%	70 - 130
5907027	CM5	Spiked Blank DUP	13C2-Perfluorodecanoic acid	2019/01/03		90	%	70 - 130
			13C2-Perfluorohexanoic acid	2019/01/03		102	%	70 - 130
			D5-EtFOSAA	2019/01/03		92	%	70 - 130
			Perfluorobutanesulfonic acid	2019/01/03		84	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2019/01/03		96	%	70 - 130
			Perfluorohexanesulfonic acid	2019/01/03		84	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2019/01/03		90	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2019/01/03		97	%	70 - 130
			Perfluorooctanesulfonic acid	2019/01/03		93	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2019/01/03		113	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2019/01/03		92	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2019/01/03		96	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2019/01/03		96	%	70 - 130
			Perfluorotridecanoic Acid	2019/01/03		87	%	70 - 130
			Perfluorotetradecanoic Acid	2019/01/03		89	%	70 - 130
			MeFOSAA	2019/01/03		81	%	70 - 130
			EtFOSAA	2019/01/03		74	%	70 - 130
5907027	CM5	RPD	Perfluorobutanesulfonic acid	2019/01/03	4.4		%	30
			Perfluorohexanoic Acid (PFHxA)	2019/01/03	5.5		%	30
			Perfluorohexanesulfonic acid	2019/01/03	3.7		%	30
			Perfluoroheptanoic Acid (PFHpA)	2019/01/03	1.8		%	30
			Perfluoro-n-Octanoic Acid (PFOA)	2019/01/03	6.4		%	30
			Perfluorooctanesulfonic acid	2019/01/03	2.3		%	30
			Perfluorononanoic Acid (PFNA)	2019/01/03	0.71		%	30
			Perfluorodecanoic Acid (PFDA)	2019/01/03	0.22		%	30
			Perfluoroundecanoic Acid (PFUnA)	2019/01/03	3.2		%	30
			Perfluorododecanoic Acid (PFDoA)	2019/01/03	7.3		%	30
			Perfluorotridecanoic Acid	2019/01/03	6.4		%	30
			Perfluorotetradecanoic Acid	2019/01/03	1.1		%	30
			MeFOSAA	2019/01/03	1.9		%	30
			EtFOSAA	2019/01/03	0.68		%	30
5907027	CM5	Method Blank	13C2-Perfluorodecanoic acid	2019/01/03		87	%	70 - 130
			13C2-Perfluorohexanoic acid	2019/01/03		91	%	70 - 130
			D5-EtFOSAA	2019/01/03		98	%	70 - 130
			Perfluorobutanesulfonic acid	2019/01/03	0.80 U, LOD=0.80		ng/L	

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			Perfluorohexanoic Acid (PFHxA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorohexanesulfonic acid	2019/01/03	0.80 U, LOD=0.80		ng/L	
			Perfluoroheptanoic Acid (PFHpA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluoro-n-Octanoic Acid (PFOA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorooctanesulfonic acid	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorononanoic Acid (PFNA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorodecanoic Acid (PFDA)	2019/01/03	0.60 U, LOD=0.60		ng/L	
			Perfluoroundecanoic Acid (PFUnA)	2019/01/03	0.80 U, LOD=0.80		ng/L	
			Perfluorododecanoic Acid (PFDoA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorotridecanoic Acid	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorotetradecanoic Acid	2019/01/03	0.80 U, LOD=0.80		ng/L	
			MeFOSAA	2019/01/03	4.0 U, LOD=4.0		ng/L	
			EtFOSAA	2019/01/03	4.0 U, LOD=4.0		ng/L	
5914930	AKH	Spiked Blank	13C2-Perfluorododecanoic acid	2019/01/05		89	%	50 - 150
			13C2-perfluorotetradecanoic acid	2019/01/05		90	%	50 - 150
			Perfluorotetradecanoic Acid	2019/01/05		96	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2019/01/05		96	%	70 - 130
5914930	AKH	Spiked Blank DUP	13C2-Perfluorododecanoic acid	2019/01/05		85	%	50 - 150
			13C2-perfluorotetradecanoic acid	2019/01/05		81	%	50 - 150
			Perfluorotetradecanoic Acid	2019/01/05		100	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2019/01/05		101	%	70 - 130
5914930	AKH	RPD	Perfluorotetradecanoic Acid	2019/01/05	3.8		%	30
			Perfluorododecanoic Acid (PFDoA)	2019/01/05	4.7		%	30
5914930	AKH	Method Blank	13C2-Perfluorododecanoic acid	2019/01/05		83	%	50 - 150
			13C2-perfluorotetradecanoic acid	2019/01/05		81	%	50 - 150
			Perfluorotetradecanoic Acid	2019/01/05	0.010 U, LOD=0.010		ug/L	
			Perfluorododecanoic Acid (PFDoA)	2019/01/05	0.010 U, LOD=0.010		ug/L	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Adam Robinson, Supervisor, LC/MS/MS

Colm McNamara, Senior Analyst, Liquid Chromatography

Sin Chii Chia, Scientific Services

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Prepared for: Earth Toxics Inc

Project: N62742-12-D-1829
NBG PFAS

Analytical Data Package
(Level IV)

Analysis: PFOS and PFOA in water (Method 537 mod.)
PFAS is drinking water (Method 537)

Maxxam Job #: B8X5580

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I hereby certify that to the best of my knowledge all analytical data presented in this report:

- Has been checked for completeness.
- Is accurate, legible and error free.
- Has been conducted in accordance with approved SOP's and that all deviations are clearly listed in the Case Narrative.
- This report has been generated in .pdf format.

Review Performed By:

Stephanie Pollen
2019.02.14
16:52:56 -05'00'

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Glossary of Terms

- ***Detection Limit (DL)*** this can also be called ***Method Detection Limit (MDL***): The lowest concentration or amount of the target analyte that can be identified, measured, and reported with confidence that the analyte concentration is not a false positive value. (Clarification): The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence. At the DL, the false positive rate (Type I error) is 1%.

- ***Limit of Detection (LOD*)**: An estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. (Clarification): The smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

- ***Limits of Quantitation (LOQ)*** this can also be called ***Reporting Detection Limit (RDL)***: The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. (Clarification): The lowest concentration that produces a quantitative result within specified limits of precision and bias. For DoD projects, the LOQ shall be set at or above the concentration of the lowest initial calibration standard.

- ***Acceptance Criteria*** are values used by the laboratory to determine that a process is in control.

- ***Accuracy*** is the degree of agreement of a measured value with the true or expected value.

- ***Calibration Standards*** are a set of solutions containing the analytes of interest at a specified concentration.

- ***Calibration Verification Standard*** consists of a calibration standard solution of intermediate concentration (mid-point initial calibration level) used to access whether the initial calibration is still valid

- ***Certified Reference Material*** is a stable homogenous material that is certified by repetitive analysis from a supplier who is certified to generate said materials.

- ***Internal Standard*** a deuterated or ^{13}C-labelled analyte that is added to a sample extract prior to instrumental analysis to compensate for injection variability.

- ***Isomer*** is a member of a group of compounds that differ from each other only in the locations of a specific number of common substituent atoms or groups of atoms on the parent compound.

- ***Method Blank*** is a laboratory control sample using reagents that are known to be free of contamination.

- ***Precision*** is the degree of agreement between the data generated from repetitive measurements under specific conditions.

- ***Quality Assurance*** is a system of activities whose purpose is to provide the producer or user of a product with the assurance that the product meets a defined standard of quality.

- ***Quality Control*** is the overall system of activities whose purpose is to control the quality of a product so that it meets the needs of the end user.

- ***RSD*** is the relative standard deviation.

- ***Blank Spike*** is a laboratory control sample that has been fortified with native analytes of interest.

- ***Window Defining Mixture*** is a solution containing only the earliest and latest eluting congeners within each homologous group of target analytes on a specified GC column.

- ***RPD*** or Relative Percent Difference. A measure used to compare duplicate sample analysis.

- ***EMPC/NDR –*** Peak detected does not meet ratio criteria and has resulted in a higher detection limit.

1.0 Project Narrative

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Maxxam Job: B8X5580 – EPA537 Analysis

Sample Analysis

Samples were initially analyzed on QC batch 5898852 (2018/12/21). Due to failure of QC acceptance criteria in the Spike (LCS) and low surrogate recovery in the batch, all samples were re-extracted and re-analyzed on QC batch 5907027 (2019/01/03), past the method defined hold time. Because of their chemical structures, per- and polyfluorinated alkyl substances (PFAS) are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest the hold time exceedance would not have a significant impact on the data quality.

QC Samples

Matrix Spike and Matrix Spike Duplicate (MS/MSD) was initially performed on sample IOF242 *(GP012)* on QC batch 5898852 (2018/12/21). Due to insufficient sample volume, MS/MSD was not repeated on this sample for the re-analysis on QC batch 5907027 (2019/01/03).

Manual Integrations

Due to poor initial integration, manual integration was performed for Perfluorooctanoic acid (PFOA) in the following sample on QC batch 5907027 (2019/01/03):

IOF243 *GP013*

Internal Standards

Peak area counts observed for internal standards were above the defined upper control limit (UCL) for the following samples on QC batch 5907027 (2019/01/03):

Spike *(LCS)*
Spike Dup *(LCS Dup)*
IOF240 *GP010*
IOF241 *GP011*
IOF242 *GP012*
IOF244 *GT014*

Re-extraction and re-analysis was not possible due to insufficient sample volume.

Data Qualifiers

U – Analyte was not detected and is reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.

J – The reported result is an estimated value (e.g., matrix interference was observed, or the analyte was detected at a concentration outside the calibration range).

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Maxxam Job: B8X5580 – EPA537m Analysis

Sample Analysis

Samples were initially analyzed on QC batches 5897102 (2018/12/21) and 5899819 (2018/12/21-22).
Reduced sample volumes were extracted for the following samples:

IOF232 *GP002*
IOF233 *GP003*

This was due to the presence of particulates in the sample matrix, which would likely have resulted in clogging of the solid phase extraction (SPE) cartridge if the full sample volume had been extracted. Detection limits were adjusted accordingly.

Extracted Internal Standard Analytes

The extracted internal standard analytes $^{13}C_2$-Perfluorododecanoic acid ($^{13}C_2$-PFDoA) and $^{13}C_2$-Perfluorotetradecanoic acid ($^{13}C_2$-PFTeDA) are used to quantify native Perfluorododecanoic acid (PFDoA) and Perfluorotridecanoic acid (PFTrDA) & Perfluorotetradecanoic acid (PFTeDA) respectively. The recoveries observed for these extracted internal standard analytes were below the defined lower control limit (LCL) for the following samples on QC batch 5897102 (2018/12/21):

IOF232 *GP002*
IOF233 *GP003*

These samples were re-extracted and re-analyzed for the associated native analytes on QC batch 5914930 (2019/01/05), past the method defined hold time. Because of their chemical structures, per- and polyfluorinated alkyl substances (PFAS) are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest the hold time exceedance would not have a significant impact on the data quality. Low of $^{13}C_2$-Perfluorotetradecanoic acid ($^{13}C_2$-PFTeDA) recovery was confirmed in sample IOF233 (*GP003)*. Acceptable recoveries were obtained for all other extracted internal standard analytes on re-analysis.

QC Samples

Matrix Spike and Matrix Spike Duplicate (MS/MSD) on QC batches 5897102 (2018/12/21) and 5899819 (2019/12/21-22) were inadvertently fortified at half the required concentrations. Acceptable MS/MSD recoveries were obtained based on the adjusted target analyte concentrations.

Data Qualifiers

U – Analyte was not detected and is reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.

J – The reported result is an estimated value (e.g., matrix interference was observed, or the analyte was detected at a concentration outside the calibration range).

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PROJECT NARRATIVE

Maxxam Analytics
Client Project #: N62742-12-D-1829

Client: AECOM
Client Project: N62742-12-D-1829

I. SAMPLE RECEIPT/ANALYSIS

a) Sample Listing

Maxxam ID	Client Sample ID	Date Sampled	Date Received	Date Prepped	Date Run	Initial Calibration
PFAAs in drinking water by SPE and LC/MS						
IOF240	GP010	2018/12/06	2018/12/14	2018/12/28	2019/01/03	2019/01/03
IOF241	GP011	2018/12/06	2018/12/14	2018/12/28	2019/01/03	2019/01/03
IOF242	GP012	2018/12/06	2018/12/14	2018/12/28	2019/01/03	2019/01/03
IOF243	GP013	2018/12/06	2018/12/14	2018/12/28	2019/01/03	2019/01/03
IOF244	GP014	2018/12/06	2018/12/14	2018/12/28	2019/01/03	2019/01/03
IOF245	GP015	2018/12/06	2018/12/14	2018/12/28	2019/01/03	2019/01/03
IOF246	GP016	2018/12/06	2018/12/14	2018/12/28	2019/01/03	2019/01/03
PFOS and PFOA in water by SPE/LCMS						
IOF231	GP001	2018/12/05	2018/12/14	2018/12/19	2018/12/22	2018/12/21
IOF232	GP002	2018/12/05	2018/12/14	2018/12/19	2018/12/22	2018/12/21 & 2019/01/05
IOF233	GP003	2018/12/05	2018/12/14	2018/12/19	2018/12/22	2018/12/21 & 2019/01/05
IOF234	GP004	2018/12/05	2018/12/14	2018/12/19	2018/12/22	2018/12/21
IOF236	GP006	2018/12/06	2018/12/14	2018/12/19	2018/12/22	2018/12/21
IOF237	GP007	2018/12/06	2018/12/14	2018/12/19	2018/12/22	2018/12/21
IOF238	GP008	2018/12/06	2018/12/14	2018/12/19	2018/12/22	2018/12/21
IOF239	GP009	2018/12/06	2018/12/14	2018/12/19	2018/12/22	2018/12/21
IOF247	GP017	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF248	GP018	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF249	GP019	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF250	GP020	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF251	GP021	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF252	GP022	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF253	GP023	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF254	GP024	2018/12/07	2018/12/14	2018/12/19	2018/12/22	2018/12/21
IOF255	GP025	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF256	GP026	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22
IOF257	GP027	2018/12/07	2018/12/14	2018/12/20	2018/12/22	2018/12/21-22

Run Date is defined as the date of injection of the last calibration standard (12 hours or less) prior to the samples analyzed within that run sequence. Therefore the time of calibration injection that defines the run date is always within 12 hours of the time of sample injection.

b) Shipping Problems: none encountered

c) Documentation Problems: Sample GP005 placed on HOLD as per client request. Level IV report revised to include CAS number table (pg. 12) and PFAS conversion tables (pg. 13-19) as per client request.

II. SAMPLE PREP:

No problems encountered

III. SAMPLE ANALYSIS:

See also comments within the appropriate Certificate of Analysis

a) Hold Times: Due to rework requirements, the following samples were analyzed past hold time: GP010, GP011, GP012, GP013, GP014, GP015 and GP016. Samples GP002 and GP003 were analyzed for PFDoA and PFTeDA past hold time.

b) Instrument Calibration: all within control limits

c) Quality Control: All applicable QC meets control criteria, except where otherwise noted.

d) All analytes requiring manual intergration(s) are noted on the sample chromatograms

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for other than the conditions detailed above.

In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. Release of the data contained in this data package has been authorized by the cognizant laboratory official or his/her designee, as verified by this signature.

Steph Fallen

Project Manager- Site Assessment and Remediation/ Ultra Trace

2019/02/14

Date

CAS Numbers:

Parameters	CAS
EtFOSAA	2991-50-6
MeFOSAA	2355-31-9
Perfluorobutane Sulfonate (PFBS)	45187-15-3
Perfluoroheptanoic Acid (PFHpA)	375-85-9
Perfluorohexanoic Acid (PFHxA)	307-24-4
Perfluorohexane Sulfonate (PFHxS)	108427-53-8
Perfluorononanoic Acid (PFNA)	375-95-1
Perfluorotetradecanoic Acid	376-06-7
Perfluorotridecanoic Acid	72629-94-8
Perfluoroundecanoic Acid (PFUnA)	2058-94-8
Perfluorodecanoic Acid (PFDA)	335-76-2
Perfluorododecanoic Acid (PFDoA)	307-55-1
Perfluoro-n-Octanoic Acid (PFOA)	335-67-1
Perfluorooctane Sulfonate (PFOS)	45298-90-6
Perfluorobutanesulfonic acid	375-73-5
Perfluorohexanesulfonic acid	355-46-4
Perfluorooctanesulfonic acid	1763-23-1

IOF231 (GP001)

Sulfonate	UNITS	GP001	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.0056	0.015	0.020	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.015 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.0060	0.015	0.020	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.015 U

IOF232 (GP002)

Sulfonate	UNITS	GP002	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.15 U (1)	0.054	0.15	0.20	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.15 U (1)
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.15 U (1)	0.056	0.15	0.20	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.15 U (1)
Perfluorooctane Sulfonate (PFOS)	ug/L	0.15 U (1)	0.060	0.15	0.20	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.15 U (1)

(1) Due to the nature of the sample matrix (turbid, suspended particles), a reduced sample volume was extracted and analyzed. Detection limits were adjusted accordingly (10x).

IOF233 (GP003)

Sulfonate	UNITS	GP003	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.15 U (1)	0.054	0.15	0.20	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U (1)
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.15 U (1)	0.056	0.15	0.20	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.015 U (1)
Perfluorooctane Sulfonate (PFOS)	ug/L	0.15 U (1)	0.060	0.15	0.20	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.015 U (1)

(1) Due to the nature of the sample matrix (turbid, suspended particles), a reduced sample volume was extracted and analyzed. Detection limits were adjusted accordingly (10x).

IOF234 (GP004)

Sulfonate	UNITS	GP004	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.0056	0.015	0.020	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.015 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.0060	0.015	0.020	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.015 U

IOF236 (GP006)

Sulfonate	UNITS	GP006	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.0056	0.015	0.020	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.015 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.0060	0.015	0.020	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.015 U

IOF237 (GP007)

Sulfonate	UNITS	GP007	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.0056	0.015	0.020	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.015 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.0060	0.015	0.020	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.015 U

IOF238 (GP008)

Sulfonate Form	UNITS	GP008	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid Form	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.020	0.0056	0.015	0.020	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.020
Perfluorooctane Sulfonate (PFOS)	ug/L	0.0080 J	0.0060	0.015	0.020	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.0080 J

IOF239 (GP009)

Sulfonate	UNITS	GP009	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.0056	0.015	0.020	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.015 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.0060	0.015	0.020	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.015 U

IOF251 (GP021)

Sulfonate	UNITS	GP021	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0051	0.014	0.019	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.014 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.010 J	0.0053	0.014	0.019	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.010 J
Perfluorooctane Sulfonate (PFOS)	ug/L	0.048	0.0057	0.014	0.019	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.048

IOF252 (GP022)

Sulfonate	UNITS	GP022	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.0069 J	0.0051	0.014	0.019	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.0069 J
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.027	0.0053	0.014	0.019	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.027
Perfluorooctane Sulfonate (PFOS)	ug/L	0.058	0.0057	0.014	0.019	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.058

IOF253 (GP023)

Sulfonate	UNITS	GP023	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.013 U	0.0046	0.013	0.017	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.013 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.013 U	0.0048	0.013	0.017	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.013 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.013 U	0.0051	0.013	0.017	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.013 U

IOF254 (GP024)

Sulfonate	UNITS	GP024	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.011 J	0.0056	0.015	0.020	5897102	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.011 J
Perfluorooctane Sulfonate (PFOS)	ug/L	0.035	0.0060	0.015	0.020	5897102	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.035

IOF255 (GP025)

Sulfonate	UNITS	GP025	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0049	0.014	0.018	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.014 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.010 J	0.0050	0.014	0.018	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.010 J
Perfluorooctane Sulfonate (PFOS)	ug/L	0.031	0.0054	0.014	0.018	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.031

IOF256 (GP026)

Sulfonate	UNITS	GP026	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0051	0.014	0.019	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.014 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0053	0.014	0.019	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.014 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0057	0.014	0.019	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.014 U

IOF257 (GP027)

Sulfonate	UNITS	GP027	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.015 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.0056	0.015	0.020	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.015 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.0060	0.015	0.020	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.015 U

IOF247 (GP017)

Sulfonate	UNITS	GP017	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0051	0.014	0.019	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.014 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0053	0.014	0.019	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.014 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0057	0.014	0.019	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.014 U

IOF248 (GP018)

Sulfonate	UNITS	GP018	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0051	0.014	0.019	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.014 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0053	0.014	0.019	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.014 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0057	0.014	0.019	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.014 U

IOF249 (GP019)

Sulfonate	UNITS	GP019	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0049	0.014	0.018	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.014 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0050	0.014	0.018	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.014 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0054	0.014	0.018	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.014 U

IOF250 (GP020)

Sulfonate	UNITS	GP020	DL	LOD	LOQ	QC Batch	Conversion Factor	Acid	Result
Miscellaneous Parameters									
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0049	0.014	0.018	5899819	1.0033	Perfluorobutanesulfonic Acid (PFBS)	0.014 U
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0050	0.014	0.018	5899819	1.0025	Perfluorohexanesulfonic Acid (PFHxS)	0.014 U
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0054	0.014	0.018	5899819	1.0020	Perfluorooctanesulfonic Acid (PFOS)	0.014 U

2. Sample Management Records

Maxxam Analytics International
6740 Campobello Rd
Mississauga, Ontario, Canada
L5N 2L8
1-800-668-0639
www.maxxamanalytics.com

2.1 Sample Custody

Maxxam Analytics International
6740 Campobello Rd
Mississauga, Ontario, Canada
L5N 2L8
1-800-668-0639
www.maxxamanalytics.com

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916.373.5600 Fax:

Chain of Custody Record 214813

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact		Project Manager:		Site Contact:	Date: 12/10/2018	COC No: 1
Company Name:	AECOM	Tel/Fax:		Lab Contact:	Carrier: FedEx	1 of 3 COCs
Address:	1001 Bishop Street Suite 1600	Analysis Turnaround Time				Sampler:
City/State/Zip:	Honolulu HI, 96813	☒ CALENDAR DAYS ☐ WORKING DAYS				For Lab Use Only:
Phone:	Attn. Brian Nagy	TAT if different from Below				Walk-in Client:
Fax:	(808) 356-5349	☒ 2 weeks				Lab Sampling:
Project Name:	N62742-12-D-1929	☐ 1 week				
Site:	NBG PFAS	☐ 2 days				Job / SDG No.:
PO#	6054348946 CTO 17F0104	☐ 1 day				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	QSM 5.1 Table B-15 Method 537 Rev 1.1																Sample Specific Notes:
GP001		1100	G	GW	2	N	N	X																Fedex Waybill 8116 1482 4939
GP002	12/5/18	1105	G	GW	2	N	N	X																
GP003	12/5/18	1105	G	GW	2	N	N	X																
GP004	12/5/18	1445	G	GW	2	N	N	X																
GP005	12/5/18	1530	G	GW	2	N	N	X																
GP006	12/6/18	0900	G	GW	2	N	N	X																
GP007		0900	G	GW	2	N	N	X																
GP008		0905	G	GW	2	N	N	X																
GP009		0930	G	GW	2	N	N	X																
GP010		0945	G	DW	2	N	N	X																
GP011		1030	G	DW	2	N	N	X																
GP012		1050	G	DW	4	N	N	X																

14-Dec-18 10:32
Stephanie Pollen
B8X5580
THP ENV-1336

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1.2SG Tris Buffer pH7.0

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☒ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 1.0 Corr'd: 1.0 | Therm ID No.: AK2

	Company	Date/Time		Company	Date/Time
Relinquished by:	AECOM	12/10/18 0900	Received by:	TASac	12/11/18 1000
Relinquished by:	TASac	12/11/18 1630	Received by:		2018/12/14 1037
Relinquished by:			Received in Laboratory by:		

2.3/2.9/3.2 2.7/2.4/3.1 custody seal intact

TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916.373.5600 Fax:

Chain of Custody Record 214809

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact		Project Manager:	Site Contact:	Date: 12/10/2018	COC No: 2
Company Name:	AECOM	Tel/Fax:	Lab Contact:	Carrier: Fedex	2 of 3 COCs
Address:	1001 Bishop Street Suite 1600	Analysis Turnaround Time			Sampler:
City/State/Zip:	Honolulu HI, 96813	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone:	Attn. Brian Nagy	TAT if different from Below			Walk-in Client:
Fax:	(808) 356-5349	☒ 2 weeks			Lab Sampling:
Project Name:	N62742-12-D-1829	☐ 1 week			
Site:	NBG PFAS	☐ 2 days			Job / SDG No.:
P O #	60548946 CTO 17F0104	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	QSM 5.1 Table B-15	Method 537 Rev1.1	Sample Specific Notes: Fedex Waybill 811614824939
GP013	12/6/18	1050	G	DW	2	N	N		X	
GP014	12/6/18	1305	G	DW	2	N	N		X	
GP015	12/6/18	1405	G	DW	2	N	N		X	
GP016	12/6/18	1440	G	DW	2	N	N		X	
GP017	12/7/18	0905	G	SW	4	N	Y	X		
GP018	12/7/18	0905	G	SW	2	N	N	X		
GP019	12/7/18	0920	G	SW	2	N	N	X		
GP020	12/7/18	0940	G	SW	2	N	N	X		
~~GP021~~										
~~GP022~~										
~~GP023~~										
~~GP024~~										

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1.25G Tris Buffer pH 7.0 | | X

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☒ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 0.8 Corr'd: 0.6 | Therm ID No.: AK2

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	AECOM	12/10/18/0935	[signature]	TASac	12/11/18 1000
Relinquished by: [signature]	Company: TASac	Date/Time: 12/11/18 1630	Received by: [signature]	Company:	Date/Time: 12/12/14 10:32
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

2.3/2.9/3.2 2.7/2.4/3.1 [illegible]

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605
Phone: 916.373.5600 Fax:

Chain of Custody Record 214810

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact
Company Name: AECOM
Address: 1001 Bishop Street Suite 1600
City/State/Zip: Honolulu HI, 96813
Attn. Brian Nagy
Phone: (808) 356-5349
Fax:
Project Name: 60274?-12-D-1829
Site: NBG PFAS
P O #: 60548946 CTO 17F0104

Project Manager:
Tel/Fax:
Site Contact:
Lab Contact:
Date: 12/10/2018
Carrier: FedEx
COC No: 3
3 of 3 COCs
Sampler:

Analysis Turnaround Time
☒ CALENDAR DAYS ☐ WORKING DAYS
TAT if different from Below
☒ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	QSM 5.1 Table B-15	Sample Specific Notes: Fedex 8116 1482 4939
GP021	12/7/18	1100	G	GW	2	N	N	X	
GP022	12/7/18	1245	G	GW	2	N	N	X	
GP023	12/7/18	1300	G	GW	2	N	N	X	
GP024	12/7/18	1320	G	GW	4	N	Y	X	
GP025	12/7/18	1320	G	GW	2	N	N	X	
GP026	12/7/18	1530	G	GW	2	N	N	X	
GP027	12/7/18	1545	G	GW	2	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1.25G Tris Buffer pH 7.0

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☒ Archive for ______ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☒ Yes ☐ No
Custody Seal No.:
Cooler Temp. (°C): Obs'd: 1.7 Corr'd: 1.7 Therm ID No.: AK-2

Relinquished by: [signature]	Company: AECOM	Date/Time: 12/10/18/1005	Received by: [signature]	Company: TA Sac	Date/Time: 12/11/18 1000
Relinquished by: [signature]	Company: TA Sac	Date/Time: 12/11/18 1630	Received by: [signature]	Company:	Date/Time: 2018.12.14 10:32
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

2.3/2.9/3.2 2.7/2.4/3.1 w/ ?

Page 3 of 3

3. Analytical Results

Maxxam Analytics International
6740 Campobello Rd
Mississauga, Ontario, Canada
L5N 2L8
1-800-668-0639
www.maxxamanalytics.com

3.1 Summary Report

Maxxam Analytics International
6740 Campobello Rd
Mississauga, Ontario, Canada
L5N 2L8
1-800-668-0639
www.maxxamanalytics.com

Maxxam
A Bureau Veritas Group Company

Your P.O. #: 60548946 CTO 17F0104
Your Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your C.O.C. #: 214813

Attention: Brian Nagy

AECOM
1001 Bishop Street
Suite 1600
Honolulu, HI
USA 96813

Report Date: 2019/01/08
Report #: R5550434
Version: 2 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B8X5580
Received: 2018/12/14, 10:32

Sample Matrix: Ground Water
Samples Received: 15

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
PFOS and PFOA in water by SPE/LCMS (1)	9	2018/12/19	2018/12/22	CAM SOP-00894	EPA 537 m
PFOS and PFOA in water by SPE/LCMS (1)	6	2018/12/20	2018/12/22	CAM SOP-00894	EPA 537 m

Sample Matrix: Potable Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
PFAAs in drinking water by SPE and LC/MS	7	2018/12/28	2019/01/03	CAM SOP-00953	EPA 537

Sample Matrix: Surface Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
PFOS and PFOA in water by SPE/LCMS (1)	4	2018/12/20	2018/12/22	CAM SOP-00894	EPA 537 m

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing. Maxxam is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Maxxam, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Maxxam
A Bureau Veritas Group Company

Your P.O. #: 60548946 CTO 17F0104
Your Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your C.O.C. #: 214813

Attention: Brian Nagy

AECOM
1001 Bishop Street
Suite 1600
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Received: 2018/12/14, 10:32

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Per- and polyfluoroalkyl substances (PFAS) identified as surrogates on the certificate of analysis represent the extracted internal standard.

Encryption Key

Stephanie Pollen
Project Manager
08 Jan 2019 16:25:58

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Stephanie Pollen, Project Manager
Email: SPollen@maxxam.ca
Phone# (905) 817-5700
==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF231					IOF232	IOF233				
Sampling Date		2018/12/05 11:00					2018/12/05 11:05	2018/12/05 11:05				
COC Number		214813					214813	214813				
	UNITS	GP001	DL	LOD	LOQ	QC Batch	GP002	GP003	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters												
EtFOSAA	ug/L	0.010 U	0.0033	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.033	0.10	0.20	5897102
MeFOSAA	ug/L	0.010 U	0.0029	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.029	0.10	0.20	5897102
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.054	0.15	0.20	5897102
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.015 U	0.0074	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.074	0.15	0.20	5897102
Perfluorohexanoic Acid (PFHxA)	ug/L	0.010 U	0.0035	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.035	0.10	0.20	5897102
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.0056	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.056	0.15	0.20	5897102
Perfluorononanoic Acid (PFNA)	ug/L	0.018 U	0.0087	0.018	0.020	5897102	0.18 U (1)	0.18 U (1)	0.087	0.18	0.20	5897102
Perfluorotetradecanoic Acid	ug/L	0.010 U	0.0027	0.010	0.020	5897102	0.10 U (2)	0.10 U (2)	0.027	0.10	0.20	5914930
Perfluorotridecanoic Acid	ug/L	0.010 U	0.0038	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.038	0.10	0.20	5897102
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.010 U	0.0025	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.025	0.10	0.20	5897102
Perfluorodecanoic Acid (PFDA)	ug/L	0.015 U	0.0061	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.061	0.15	0.20	5897102
Perfluorododecanoic Acid (PFDoA)	ug/L	0.010 U	0.0050	0.010	0.020	5897102	0.10 U (2)	0.10 U (2)	0.050	0.10	0.20	5914930
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.010 U	0.0033	0.010	0.020	5897102	0.10 U (1)	0.10 U (1)	0.033	0.10	0.20	5897102
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.0060	0.015	0.020	5897102	0.15 U (1)	0.15 U (1)	0.060	0.15	0.20	5897102
Surrogate Recovery (%)												
13C2-Perfluorodecanoic acid	%	85				5897102	77	74				5897102
13C2-Perfluorododecanoic acid	%	86				5897102	70	67				5914930
13C2-Perfluorohexanoic acid	%	89				5897102	93	90				5897102
13C2-perfluorotetradecanoic acid	%	83				5897102	52	48 (3)				5914930
13C2-Perfluoroundecanoic acid	%	95				5897102	68	59				5897102

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Due to the nature of the sample matrix (turbid, suspended particles), a reduced sample volume was extracted and analyzed. Detection limits were adjusted accordingly (10x).
(2) Due to the nature of the sample matrix (turbid, suspended particles), a reduced sample volume was extracted and analyzed. Detection limits were adjusted accordingly (10x).
Analysis was performed past the method defined holding time. Because of their chemical structure, PFAS are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.
(3) Extracted internal standard analyte recovery was below the defined lower control limit (LCL). Because quantitation is performed using isotope dilution techniques, any losses of the native compound that may occur during any of the sample preparation, extraction, cleanup or determinative steps will be mirrored by a similar loss of the labeled standard, and as such can be accounted for and corrected. Therefore, the quantification of these target compounds is not affected by the low extracted internal standard analyte recovery.

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF231					IOF232	IOF233				
Sampling Date		2018/12/05 11:00					2018/12/05 11:05	2018/12/05 11:05				
COC Number		214813					214813	214813				
	UNITS	GP001	DL	LOD	LOQ	QC Batch	GP002	GP003	DL	LOD	LOQ	QC Batch
13C4-Perfluoroheptanoic acid	%	91				5897102	91	92				5897102
13C4-Perfluorooctanesulfonate	%	83				5897102	75	75				5897102
13C4-Perfluorooctanoic acid	%	90				5897102	88	83				5897102
13C5-Perfluorononanoic acid	%	91				5897102	84	83				5897102
18O2-Perfluorohexanesulfonate	%	89				5897102	92	88				5897102
D3-MeFOSAA	%	84				5897102	74	69				5897102
D5-EtFOSAA	%	81				5897102	66	64				5897102

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF234	IOF236	IOF237	IOF238	IOF239				
Sampling Date		2018/12/05 14:45	2018/12/06 09:00	2018/12/06 09:00	2018/12/06 09:05	2018/12/06 09:30				
COC Number		214813	214813	214813	214813	214813				
	UNITS	GP004	GP006	GP007	GP008	GP009	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters										
EtFOSAA	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0033	0.010	0.020	5897102
MeFOSAA	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0029	0.010	0.020	5897102
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0054	0.015	0.020	5897102
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0074	0.015	0.020	5897102
Perfluorohexanoic Acid (PFHxA)	ug/L	0.010 U	0.010 U	0.010 U	0.0036 J	0.010 U	0.0035	0.010	0.020	5897102
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.015 U	0.015 U	0.015 U	0.020	0.015 U	0.0056	0.015	0.020	5897102
Perfluorononanoic Acid (PFNA)	ug/L	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.0087	0.018	0.020	5897102
Perfluorotetradecanoic Acid	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0027	0.010	0.020	5897102
Perfluorotridecanoic Acid	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0038	0.010	0.020	5897102
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0025	0.010	0.020	5897102
Perfluorodecanoic Acid (PFDA)	ug/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.0061	0.015	0.020	5897102
Perfluorododecanoic Acid (PFDoA)	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0050	0.010	0.020	5897102
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0033	0.010	0.020	5897102
Perfluorooctane Sulfonate (PFOS)	ug/L	0.015 U	0.015 U	0.015 U	0.0080 J	0.015 U	0.0060	0.015	0.020	5897102
Surrogate Recovery (%)										
13C2-Perfluorodecanoic acid	%	93	84	88	94	85				5897102
13C2-Perfluorododecanoic acid	%	79	82	80	96	80				5897102
13C2-Perfluorohexanoic acid	%	91	89	90	92	91				5897102
13C2-perfluorotetradecanoic acid	%	74	61	60	90	78				5897102
13C2-Perfluoroundecanoic acid	%	87	85	85	94	84				5897102
13C4-Perfluoroheptanoic acid	%	92	91	90	95	90				5897102
13C4-Perfluorooctanesulfonate	%	92	91	89	96	88				5897102
13C4-Perfluorooctanoic acid	%	91	90	95	96	93				5897102
13C5-Perfluorononanoic acid	%	94	88	96	94	93				5897102
18O2-Perfluorohexanesulfonate	%	94	87	90	84	90				5897102
D3-MeFOSAA	%	80	84	83	94	85				5897102
D5-EtFOSAA	%	75	82	79	93	80				5897102

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF251	IOF252				IOF253				
Sampling Date		2018/12/07 11:00	2018/12/07 12:45				2018/12/07 13:00				
COC Number		214813	214813				214813				
	UNITS	GP021	GP022	DL	LOD	LOQ	GP023	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters											
EtFOSAA	ug/L	0.0095 U	0.0095 U	0.0031	0.0095	0.019	0.0085 U	0.0028	0.0085	0.017	5899819
MeFOSAA	ug/L	0.0095 U	0.0095 U	0.0028	0.0095	0.019	0.0085 U	0.0025	0.0085	0.017	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0069 J	0.0051	0.014	0.019	0.013 U	0.0046	0.013	0.017	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.014 U	0.014 U	0.0070	0.014	0.019	0.013 U	0.0063	0.013	0.017	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.012 J	0.0090 J	0.0033	0.0095	0.019	0.0085 U	0.0030	0.0085	0.017	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.010 J	0.027	0.0053	0.014	0.019	0.013 U	0.0048	0.013	0.017	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.017 U	0.017 U	0.0083	0.017	0.019	0.015 U	0.0074	0.015	0.017	5899819
Perfluorotetradecanoic Acid	ug/L	0.0095 U	0.0095 U	0.0026	0.0095	0.019	0.0085 U	0.0023	0.0085	0.017	5899819
Perfluorotridecanoic Acid	ug/L	0.0095 U	0.0095 U	0.0036	0.0095	0.019	0.0085 U	0.0032	0.0085	0.017	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.0095 U	0.0095 U	0.0024	0.0095	0.019	0.0085 U	0.0021	0.0085	0.017	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.014 U	0.014 U	0.0058	0.014	0.019	0.013 U	0.0052	0.013	0.017	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.0095 U	0.0095 U	0.0048	0.0095	0.019	0.0085 U	0.0043	0.0085	0.017	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0048 J	0.0095 U	0.0031	0.0095	0.019	0.0085 U	0.0028	0.0085	0.017	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.048	0.058	0.0057	0.014	0.019	0.013 U	0.0051	0.013	0.017	5899819
Surrogate Recovery (%)											
13C2-Perfluorodecanoic acid	%	81	88				85				5899819
13C2-Perfluorododecanoic acid	%	87	89				88				5899819
13C2-Perfluorohexanoic acid	%	87	90				90				5899819
13C2-perfluorotetradecanoic acid	%	77	78				78				5899819
13C2-Perfluoroundecanoic acid	%	84	87				90				5899819
13C4-Perfluoroheptanoic acid	%	91	90				94				5899819
13C4-Perfluorooctanesulfonate	%	96	100				92				5899819
13C4-Perfluorooctanoic acid	%	89	92				91				5899819
13C5-Perfluorononanoic acid	%	89	91				93				5899819
18O2-Perfluorohexanesulfonate	%	95	94				96				5899819
D3-MeFOSAA	%	88	90				84				5899819
D5-EtFOSAA	%	84	93				81				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF254					IOF255				
Sampling Date		2018/12/07 13:20					2018/12/07 13:20				
COC Number		214813					214813				
	UNITS	GP024	DL	LOD	LOQ	QC Batch	GP025	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters											
EtFOSAA	ug/L	0.010 U	0.0033	0.010	0.020	5897102	0.0090 U	0.0030	0.0090	0.018	5899819
MeFOSAA	ug/L	0.010 U	0.0029	0.010	0.020	5897102	0.0090 U	0.0026	0.0090	0.018	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.015 U	0.0054	0.015	0.020	5897102	0.014 U	0.0049	0.014	0.018	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.015 U	0.0074	0.015	0.020	5897102	0.014 U	0.0067	0.014	0.018	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.0070 J	0.0035	0.010	0.020	5897102	0.0066 J	0.0032	0.0090	0.018	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.011 J	0.0056	0.015	0.020	5897102	0.010 J	0.0050	0.014	0.018	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.018 U	0.0087	0.018	0.020	5897102	0.016 U	0.0078	0.016	0.018	5899819
Perfluorotetradecanoic Acid	ug/L	0.010 U	0.0027	0.010	0.020	5897102	0.0090 U	0.0024	0.0090	0.018	5899819
Perfluorotridecanoic Acid	ug/L	0.010 U	0.0038	0.010	0.020	5897102	0.0090 U	0.0034	0.0090	0.018	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.010 U	0.0025	0.010	0.020	5897102	0.0090 U	0.0023	0.0090	0.018	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.015 U	0.0061	0.015	0.020	5897102	0.014 U	0.0055	0.014	0.018	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.010 U	0.0050	0.010	0.020	5897102	0.0090 U	0.0045	0.0090	0.018	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0043 J	0.0033	0.010	0.020	5897102	0.0090 U	0.0030	0.0090	0.018	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.035	0.0060	0.015	0.020	5897102	0.031	0.0054	0.014	0.018	5899819
Surrogate Recovery (%)											
13C2-Perfluorodecanoic acid	%	88				5897102	89				5899819
13C2-Perfluorododecanoic acid	%	83				5897102	83				5899819
13C2-Perfluorohexanoic acid	%	91				5897102	84				5899819
13C2-perfluorotetradecanoic acid	%	83				5897102	77				5899819
13C2-Perfluoroundecanoic acid	%	89				5897102	82				5899819
13C4-Perfluoroheptanoic acid	%	95				5897102	85				5899819
13C4-Perfluorooctanesulfonate	%	95				5897102	90				5899819
13C4-Perfluorooctanoic acid	%	92				5897102	85				5899819
13C5-Perfluorononanoic acid	%	94				5897102	89				5899819
18O2-Perfluorohexanesulfonate	%	94				5897102	90				5899819
D3-MeFOSAA	%	91				5897102	81				5899819
D5-EtFOSAA	%	91				5897102	83				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF GROUND WATER

Maxxam ID		IOF256				IOF257				
Sampling Date		2018/12/07 15:30				2018/12/07 15:45				
COC Number		214813				214813				
	UNITS	GP026	DL	LOD	LOQ	GP027	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters										
EtFOSAA	ug/L	0.0095 U	0.0031	0.0095	0.019	0.010 U	0.0033	0.010	0.020	5899819
MeFOSAA	ug/L	0.0095 U	0.0028	0.0095	0.019	0.010 U	0.0029	0.010	0.020	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0051	0.014	0.019	0.015 U	0.0054	0.015	0.020	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.014 U	0.0070	0.014	0.019	0.015 U	0.0074	0.015	0.020	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.0095 U	0.0033	0.0095	0.019	0.010 U	0.0035	0.010	0.020	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0053	0.014	0.019	0.015 U	0.0056	0.015	0.020	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.017 U	0.0083	0.017	0.019	0.018 U	0.0087	0.018	0.020	5899819
Perfluorotetradecanoic Acid	ug/L	0.0095 U	0.0026	0.0095	0.019	0.010 U	0.0027	0.010	0.020	5899819
Perfluorotridecanoic Acid	ug/L	0.0095 U	0.0036	0.0095	0.019	0.010 U	0.0038	0.010	0.020	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.0095 U	0.0024	0.0095	0.019	0.010 U	0.0025	0.010	0.020	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.014 U	0.0058	0.014	0.019	0.015 U	0.0061	0.015	0.020	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.0095 U	0.0048	0.0095	0.019	0.010 U	0.0050	0.010	0.020	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0095 U	0.0031	0.0095	0.019	0.010 U	0.0033	0.010	0.020	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0057	0.014	0.019	0.015 U	0.0060	0.015	0.020	5899819
Surrogate Recovery (%)										
13C2-Perfluorodecanoic acid	%	82				83				5899819
13C2-Perfluorododecanoic acid	%	81				82				5899819
13C2-Perfluorohexanoic acid	%	82				88				5899819
13C2-perfluorotetradecanoic acid	%	77				79				5899819
13C2-Perfluoroundecanoic acid	%	81				88				5899819
13C4-Perfluoroheptanoic acid	%	82				87				5899819
13C4-Perfluorooctanesulfonate	%	82				92				5899819
13C4-Perfluorooctanoic acid	%	83				90				5899819
13C5-Perfluorononanoic acid	%	81				90				5899819
18O2-Perfluorohexanesulfonate	%	86				90				5899819
D3-MeFOSAA	%	82				78				5899819
D5-EtFOSAA	%	79				79				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF POTABLE WATER

Maxxam ID		IOF240				IOF241				IOF242				
Sampling Date		2018/12/06 09:45				2018/12/06 10:30				2018/12/06 10:50				
COC Number		214813				214813				214813				
	UNITS	GP010	DL	LOD	LOQ	GP011	DL	LOD	LOQ	GP012	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters														
Perfluorobutanesulfonic acid	ng/L	0.36 J	0.32	0.80	2.0	4.5	0.30	0.76	1.9	3.0	0.32	0.80	2.0	5907027
Perfluorohexanoic Acid (PFHxA)	ng/L	0.70 J	0.36	1.0	2.0	4.6	0.34	0.95	1.9	4.5	0.36	1.0	2.0	5907027
Perfluorohexanesulfonic acid	ng/L	2.5	0.27	0.80	2.0	37	0.26	0.76	1.9	23	0.27	0.80	2.0	5907027
Perfluoroheptanoic Acid (PFHpA)	ng/L	1.0 U	0.36	1.0	2.0	1.5 J	0.34	0.95	1.9	1.3 J	0.36	1.0	2.0	5907027
Perfluoro-n-Octanoic Acid (PFOA)	ng/L	0.78 J	0.48	1.0	2.0	2.8	0.46	0.95	1.9	2.0	0.48	1.0	2.0	5907027
Perfluorooctanesulfonic acid	ng/L	1.4 J	0.37	1.0	2.0	59	0.35	0.95	1.9	42	0.37	1.0	2.0	5907027
Perfluorononanoic Acid (PFNA)	ng/L	1.0 U	0.42	1.0	2.0	0.95 U	0.40	0.95	1.9	1.0 U	0.42	1.0	2.0	5907027
Perfluorodecanoic Acid (PFDA)	ng/L	0.60 U	0.22	0.60	2.0	0.57 U	0.21	0.57	1.9	0.60 U	0.22	0.60	2.0	5907027
Perfluoroundecanoic Acid (PFUnA)	ng/L	0.80 U	0.30	0.80	2.0	0.76 U	0.29	0.76	1.9	0.80 U	0.30	0.80	2.0	5907027
Perfluorododecanoic Acid (PFDoA)	ng/L	1.0 U	0.36	1.0	2.0	0.95 U	0.34	0.95	1.9	1.0 U	0.36	1.0	2.0	5907027
Perfluorotridecanoic Acid	ng/L	1.0 U	0.44	1.0	2.0	0.95 U	0.42	0.95	1.9	1.0 U	0.44	1.0	2.0	5907027
Perfluorotetradecanoic Acid	ng/L	0.80 U	0.33	0.80	2.0	0.76 U	0.31	0.76	1.9	0.80 U	0.33	0.80	2.0	5907027
MeFOSAA	ng/L	4.0 U	1.7	4.0	8.0	3.8 U	1.6	3.8	7.6	4.0 U	1.7	4.0	8.0	5907027
EtFOSAA	ng/L	4.0 U	1.3	4.0	8.0	3.8 U	1.2	3.8	7.6	4.0 U	1.3	4.0	8.0	5907027
Surrogate Recovery (%)														
13C2-Perfluorodecanoic acid	%	87				92				90				5907027
13C2-Perfluorohexanoic acid	%	91				94				95				5907027
D5-EtFOSAA	%	97				82				95				5907027

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF POTABLE WATER

Maxxam ID		IOF243	IOF244	IOF245	IOF246				
Sampling Date		2018/12/06 10:50	2018/12/06 13:05	2018/12/06 14:05	2018/12/06 14:40				
COC Number		214813	214813	214813	214813				
	UNITS	GP013	GP014	GP015	GP016	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters									
Perfluorobutanesulfonic acid	ng/L	2.7	0.31 J	0.72 U	0.42 J	0.29	0.72	1.8	5907027
Perfluorohexanoic Acid (PFHxA)	ng/L	3.7	1.4 J	0.90 U	0.54 J	0.32	0.90	1.8	5907027
Perfluorohexanesulfonic acid	ng/L	19	1.3 J	0.72 U	1.8 J	0.24	0.72	1.8	5907027
Perfluoroheptanoic Acid (PFHpA)	ng/L	1.4 J	0.37 J	0.90 U	0.38 J	0.32	0.90	1.8	5907027
Perfluoro-n-Octanoic Acid (PFOA)	ng/L	1.8 J	0.72 J	0.90 U	0.78 J	0.43	0.90	1.8	5907027
Perfluorooctanesulfonic acid	ng/L	31	1.9	0.90 U	0.90 U	0.33	0.90	1.8	5907027
Perfluorononanoic Acid (PFNA)	ng/L	0.90 U	0.90 U	0.90 U	0.90 U	0.38	0.90	1.8	5907027
Perfluorodecanoic Acid (PFDA)	ng/L	0.54 U	0.54 U	0.54 U	0.54 U	0.20	0.54	1.8	5907027
Perfluoroundecanoic Acid (PFUnA)	ng/L	0.72 U	0.72 U	0.72 U	0.72 U	0.27	0.72	1.8	5907027
Perfluorododecanoic Acid (PFDoA)	ng/L	0.90 U	0.90 U	0.90 U	0.90 U	0.32	0.90	1.8	5907027
Perfluorotridecanoic Acid	ng/L	0.90 U	0.90 U	0.90 U	0.90 U	0.40	0.90	1.8	5907027
Perfluorotetradecanoic Acid	ng/L	0.72 U	0.72 U	0.72 U	0.72 U	0.30	0.72	1.8	5907027
MeFOSAA	ng/L	3.6 U	3.6 U	3.6 U	3.6 U	1.5	3.6	7.2	5907027
EtFOSAA	ng/L	3.6 U	3.6 U	3.6 U	3.6 U	1.2	3.6	7.2	5907027
Surrogate Recovery (%)									
13C2-Perfluorodecanoic acid	%	85	96	100	109				5907027
13C2-Perfluorohexanoic acid	%	90	104	104	106				5907027
D5-EtFOSAA	%	87	89	83	95				5907027

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF SURFACE WATER

Maxxam ID		IOF247	IOF248				IOF249				
Sampling Date		2018/12/07 09:05	2018/12/07 09:05				2018/12/07 09:20				
COC Number		214813	214813				214813				
	UNITS	GP017	GP018	DL	LOD	LOQ	GP019	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters											
EtFOSAA	ug/L	0.0095 U	0.0095 U	0.0031	0.0095	0.019	0.0090 U	0.0030	0.0090	0.018	5899819
MeFOSAA	ug/L	0.0095 U	0.0095 U	0.0028	0.0095	0.019	0.0090 U	0.0026	0.0090	0.018	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.014 U	0.0051	0.014	0.019	0.014 U	0.0049	0.014	0.018	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.014 U	0.014 U	0.0070	0.014	0.019	0.014 U	0.0067	0.014	0.018	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.0095 U	0.0095 U	0.0033	0.0095	0.019	0.0090 U	0.0032	0.0090	0.018	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.014 U	0.0053	0.014	0.019	0.014 U	0.0050	0.014	0.018	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.017 U	0.017 U	0.0083	0.017	0.019	0.016 U	0.0078	0.016	0.018	5899819
Perfluorotetradecanoic Acid	ug/L	0.0095 U	0.0095 U	0.0026	0.0095	0.019	0.0090 U	0.0024	0.0090	0.018	5899819
Perfluorotridecanoic Acid	ug/L	0.0095 U	0.0095 U	0.0036	0.0095	0.019	0.0090 U	0.0034	0.0090	0.018	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.0095 U	0.0095 U	0.0024	0.0095	0.019	0.0090 U	0.0023	0.0090	0.018	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.014 U	0.014 U	0.0058	0.014	0.019	0.014 U	0.0055	0.014	0.018	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.0095 U	0.0095 U	0.0048	0.0095	0.019	0.0090 U	0.0045	0.0090	0.018	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0095 U	0.0095 U	0.0031	0.0095	0.019	0.0090 U	0.0030	0.0090	0.018	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.014 U	0.0057	0.014	0.019	0.014 U	0.0054	0.014	0.018	5899819
Surrogate Recovery (%)											
13C2-Perfluorodecanoic acid	%	80	86				86				5899819
13C2-Perfluorododecanoic acid	%	79	81				81				5899819
13C2-Perfluorohexanoic acid	%	82	88				89				5899819
13C2-perfluorotetradecanoic acid	%	62	61				64				5899819
13C2-Perfluoroundecanoic acid	%	77	83				89				5899819
13C4-Perfluoroheptanoic acid	%	83	86				91				5899819
13C4-Perfluorooctanesulfonate	%	84	88				89				5899819
13C4-Perfluorooctanoic acid	%	84	83				88				5899819
13C5-Perfluorononanoic acid	%	86	84				86				5899819
18O2-Perfluorohexanesulfonate	%	88	92				90				5899819
D3-MeFOSAA	%	81	80				86				5899819
D5-EtFOSAA	%	76	79				82				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

RESULTS OF ANALYSES OF SURFACE WATER

Maxxam ID		IOF250				
Sampling Date		2018/12/07 09:40				
COC Number		214813				
	UNITS	GP020	DL	LOD	LOQ	QC Batch
Miscellaneous Parameters						
EtFOSAA	ug/L	0.0090 U	0.0030	0.0090	0.018	5899819
MeFOSAA	ug/L	0.0090 U	0.0026	0.0090	0.018	5899819
Perfluorobutane Sulfonate (PFBS)	ug/L	0.014 U	0.0049	0.014	0.018	5899819
Perfluoroheptanoic Acid (PFHpA)	ug/L	0.014 U	0.0067	0.014	0.018	5899819
Perfluorohexanoic Acid (PFHxA)	ug/L	0.0090 U	0.0032	0.0090	0.018	5899819
Perfluorohexane Sulfonate (PFHxS)	ug/L	0.014 U	0.0050	0.014	0.018	5899819
Perfluorononanoic Acid (PFNA)	ug/L	0.016 U	0.0078	0.016	0.018	5899819
Perfluorotetradecanoic Acid	ug/L	0.0090 U	0.0024	0.0090	0.018	5899819
Perfluorotridecanoic Acid	ug/L	0.0090 U	0.0034	0.0090	0.018	5899819
Perfluoroundecanoic Acid (PFUnA)	ug/L	0.0090 U	0.0023	0.0090	0.018	5899819
Perfluorodecanoic Acid (PFDA)	ug/L	0.014 U	0.0055	0.014	0.018	5899819
Perfluorododecanoic Acid (PFDoA)	ug/L	0.0090 U	0.0045	0.0090	0.018	5899819
Perfluoro-n-Octanoic Acid (PFOA)	ug/L	0.0090 U	0.0030	0.0090	0.018	5899819
Perfluorooctane Sulfonate (PFOS)	ug/L	0.014 U	0.0054	0.014	0.018	5899819
Surrogate Recovery (%)						
13C2-Perfluorodecanoic acid	%	85				5899819
13C2-Perfluorododecanoic acid	%	82				5899819
13C2-Perfluorohexanoic acid	%	87				5899819
13C2-perfluorotetradecanoic acid	%	62				5899819
13C2-Perfluoroundecanoic acid	%	84				5899819
13C4-Perfluoroheptanoic acid	%	92				5899819
13C4-Perfluorooctanesulfonate	%	93				5899819
13C4-Perfluorooctanoic acid	%	95				5899819
13C5-Perfluorononanoic acid	%	92				5899819
18O2-Perfluorohexanesulfonate	%	95				5899819
D3-MeFOSAA	%	82				5899819
D5-EtFOSAA	%	82				5899819

DL = Detection Limit
LOD = Limit of Detection
LOQ = Limit of Quantitation
QC Batch = Quality Control Batch
N/A = Not Applicable

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

TEST SUMMARY

Maxxam ID: IOF231 **Collected:** 2018/12/05
Sample ID: GP001 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF232 **Collected:** 2018/12/05
Sample ID: GP002 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF233 **Collected:** 2018/12/05
Sample ID: GP003 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF234 **Collected:** 2018/12/05
Sample ID: GP004 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF236 **Collected:** 2018/12/06
Sample ID: GP006 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF237 **Collected:** 2018/12/06
Sample ID: GP007 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF238 **Collected:** 2018/12/06
Sample ID: GP008 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

TEST SUMMARY

Maxxam ID: IOF239 **Collected:** 2018/12/06
Sample ID: GP009 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF240 **Collected:** 2018/12/06
Sample ID: GP010 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF241 **Collected:** 2018/12/06
Sample ID: GP011 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF242 **Collected:** 2018/12/06
Sample ID: GP012 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF243 **Collected:** 2018/12/06
Sample ID: GP013 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF244 **Collected:** 2018/12/06
Sample ID: GP014 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF245 **Collected:** 2018/12/06
Sample ID: GP015 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

TEST SUMMARY

Maxxam ID: IOF246 **Collected:** 2018/12/06
Sample ID: GP016 **Shipped:**
Matrix: Potable Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFAAs in drinking water by SPE and LC/MS	LCMS	5907027	2018/12/28	2019/01/03	Colm McNamara

Maxxam ID: IOF247 **Collected:** 2018/12/07
Sample ID: GP017 **Shipped:**
Matrix: Surface Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF248 **Collected:** 2018/12/07
Sample ID: GP018 **Shipped:**
Matrix: Surface Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF249 **Collected:** 2018/12/07
Sample ID: GP019 **Shipped:**
Matrix: Surface Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF250 **Collected:** 2018/12/07
Sample ID: GP020 **Shipped:**
Matrix: Surface Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF251 **Collected:** 2018/12/07
Sample ID: GP021 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF252 **Collected:** 2018/12/07
Sample ID: GP022 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

TEST SUMMARY

Maxxam ID: IOF253 **Collected:** 2018/12/07
Sample ID: GP023 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF254 **Collected:** 2018/12/07
Sample ID: GP024 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5897102	2018/12/19	2018/12/22	Marian Godax

Maxxam ID: IOF255 **Collected:** 2018/12/07
Sample ID: GP025 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF256 **Collected:** 2018/12/07
Sample ID: GP026 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam ID: IOF257 **Collected:** 2018/12/07
Sample ID: GP027 **Shipped:**
Matrix: Ground Water **Received:** 2018/12/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PFOS and PFOA in water by SPE/LCMS	LCMS	5899819	2018/12/20	2018/12/22	Peyman Dadvar

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.8°C
Package 2	2.7°C

Sample IOF240 [GP010] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF241 [GP011] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF242 [GP012] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF243 [GP013] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF244 [GP014] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF245 [GP015] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF246 [GP016] : PFAAs in Drinking Water (EPA537): Analysis was performed past the method defined holding time. Because of their chemical structure, PFCs are chemically and biologically stable in the environment and resist typical environmental degradation processes. This would suggest a hold time exceedance would not have a significant impact on the data.

Sample IOF232, PFOS and PFOA in water by SPE/LCMS: Test repeated.
Sample IOF233, PFOS and PFOA in water by SPE/LCMS: Test repeated.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
5897102	M_G	Matrix Spike(IOF254)	13C2-Perfluorodecanoic acid	2018/12/22		84	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/22		78	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/22		90	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/22		78	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/22		91	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/22		91	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/22		87	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/22		92	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/22		92	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/22		90	%	50 - 150
			D3-MeFOSAA	2018/12/22		81	%	50 - 150
			D5-EtFOSAA	2018/12/22		80	%	50 - 150
			EtFOSAA	2018/12/22		103	%	70 - 130
			MeFOSAA	2018/12/22		101	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/22		102	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22		102	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/22		102	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22		102	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/22		99	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/22		107	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/22		105	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22		100	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/22		109	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/22		101	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22		101	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/22		103	%	70 - 130
5897102	M_G	Matrix Spike DUP(IOF254)	13C2-Perfluorodecanoic acid	2018/12/22		89	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/22		86	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/22		90	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/22		80	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/22		87	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/22		91	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/22		94	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/22		92	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/22		96	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/22		92	%	50 - 150
			D3-MeFOSAA	2018/12/22		82	%	50 - 150
			D5-EtFOSAA	2018/12/22		83	%	50 - 150
			EtFOSAA	2018/12/22		99	%	70 - 130
			MeFOSAA	2018/12/22		106	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/22		101	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22		103	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/22		104	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22		103	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/22		98	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/22		107	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/22		109	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22		106	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/22		109	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/22		107	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22		106	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/22		96	%	70 - 130
5897102	M_G	MS/MSD RPD	EtFOSAA	2018/12/22	3.3		%	30

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			MeFOSAA	2018/12/22	4.5		%	30
			Perfluorobutane Sulfonate (PFBS)	2018/12/22	0.48		%	30
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22	0.97		%	30
			Perfluorohexanoic Acid (PFHxA)	2018/12/22	1.6		%	30
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22	1.1		%	30
			Perfluorononanoic Acid (PFNA)	2018/12/22	1.1		%	30
			Perfluorotetradecanoic Acid	2018/12/22	0.38		%	30
			Perfluorotridecanoic Acid	2018/12/22	3.5		%	30
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22	6.4		%	30
			Perfluorodecanoic Acid (PFDA)	2018/12/22	0.17		%	30
			Perfluorododecanoic Acid (PFDoA)	2018/12/22	5.9		%	30
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22	5.4		%	30
			Perfluorooctane Sulfonate (PFOS)	2018/12/22	7.0		%	30
5897102	M_G	Spiked Blank	13C2-Perfluorodecanoic acid	2018/12/22		90	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/22		81	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/22		89	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/22		79	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/22		90	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/22		86	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/22		83	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/22		89	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/22		92	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/22		89	%	50 - 150
			D3-MeFOSAA	2018/12/22		79	%	50 - 150
			D5-EtFOSAA	2018/12/22		75	%	50 - 150
			EtFOSAA	2018/12/22		106	%	70 - 130
			MeFOSAA	2018/12/22		99	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/22		100	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22		107	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/22		103	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22		103	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/22		99	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/22		106	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/22		108	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22		99	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/22		102	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/22		109	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22		104	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/22		109	%	70 - 130
5897102	M_G	Method Blank	13C2-Perfluorodecanoic acid	2018/12/22		75	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/22		72	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/22		78	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/22		68	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/22		77	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/22		81	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/22		81	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/22		83	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/22		79	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/22		84	%	50 - 150
			D3-MeFOSAA	2018/12/22		75	%	50 - 150
			D5-EtFOSAA	2018/12/22		68	%	50 - 150
			EtFOSAA	2018/12/22	0.010 U, LOD=0.010		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			MeFOSAA	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorobutane Sulfonate (PFBS)	2018/12/22	0.015 U, LOD=0.015		ug/L	
			Perfluoroheptanoic Acid (PFHpA)	2018/12/22	0.015 U, LOD=0.015		ug/L	
			Perfluorohexanoic Acid (PFHxA)	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorohexane Sulfonate (PFHxS)	2018/12/22	0.015 U, LOD=0.015		ug/L	
			Perfluorononanoic Acid (PFNA)	2018/12/22	0.018 U, LOD=0.018		ug/L	
			Perfluorotetradecanoic Acid	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorotridecanoic Acid	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluoroundecanoic Acid (PFUnA)	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorodecanoic Acid (PFDA)	2018/12/22	0.015 U, LOD=0.015		ug/L	
			Perfluorododecanoic Acid (PFDoA)	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/22	0.010 U, LOD=0.010		ug/L	
			Perfluorooctane Sulfonate (PFOS)	2018/12/22	0.015 U, LOD=0.015		ug/L	
5899819	DAD	Matrix Spike(IOF247)	13C2-Perfluorodecanoic acid	2018/12/21		90	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/21		83	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/21		85	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/21		66	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/21		85	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/21		90	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/21		87	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/21		89	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/21		85	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/21		89	%	50 - 150
			D3-MeFOSAA	2018/12/21		83	%	50 - 150
			D5-EtFOSAA	2018/12/21		80	%	50 - 150
			EtFOSAA	2018/12/21		98	%	70 - 130
			MeFOSAA	2018/12/21		90	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/21		99	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21		96	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/21		100	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21		97	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/21		102	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/21		98	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/21		112	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21		97	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/21		93	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/21		97	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21		101	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/21		99	%	70 - 130
5899819	DAD	Matrix Spike DUP(IOF247)	13C2-Perfluorodecanoic acid	2018/12/21		89	%	50 - 150

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			13C2-Perfluorododecanoic acid	2018/12/21		84	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/21		89	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/21		67	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/21		87	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/21		93	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/21		90	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/21		89	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/21		83	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/21		90	%	50 - 150
			D3-MeFOSAA	2018/12/21		82	%	50 - 150
			D5-EtFOSAA	2018/12/21		87	%	50 - 150
			EtFOSAA	2018/12/21		97	%	70 - 130
			MeFOSAA	2018/12/21		98	%	70 - 130
			Perfluorobutane Sulfonate (PFBS)	2018/12/21		95	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21		91	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/21		94	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21		97	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/21		100	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/21		96	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/21		108	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21		91	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/21		91	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/21		95	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21		98	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/21		98	%	70 - 130
5899819	DAD	MS/MSD RPD	EtFOSAA	2018/12/21	1.5		%	30
			MeFOSAA	2018/12/21	9.2		%	30
			Perfluorobutane Sulfonate (PFBS)	2018/12/21	4.2		%	30
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21	5.1		%	30
			Perfluorohexanoic Acid (PFHxA)	2018/12/21	6.7		%	30
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21	0		%	30
			Perfluorononanoic Acid (PFNA)	2018/12/21	2.1		%	30
			Perfluorotetradecanoic Acid	2018/12/21	1.8		%	30
			Perfluorotridecanoic Acid	2018/12/21	4.0		%	30
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21	5.5		%	30
			Perfluorodecanoic Acid (PFDA)	2018/12/21	2.0		%	30
			Perfluorododecanoic Acid (PFDoA)	2018/12/21	1.6		%	30
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21	2.9		%	30
			Perfluorooctane Sulfonate (PFOS)	2018/12/21	1.4		%	30
5899819	DAD	Spiked Blank	13C2-Perfluorodecanoic acid	2018/12/21		94	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/21		86	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/21		94	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/21		83	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/21		93	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/21		93	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/21		101	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/21		95	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/21		92	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/21		93	%	50 - 150
			D3-MeFOSAA	2018/12/21		82	%	50 - 150
			D5-EtFOSAA	2018/12/21		81	%	50 - 150
			EtFOSAA	2018/12/21		97	%	70 - 130
			MeFOSAA	2018/12/21		98	%	70 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			Perfluorobutane Sulfonate (PFBS)	2018/12/21		105	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21		103	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2018/12/21		102	%	70 - 130
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21		102	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2018/12/21		103	%	70 - 130
			Perfluorotetradecanoic Acid	2018/12/21		101	%	70 - 130
			Perfluorotridecanoic Acid	2018/12/21		105	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21		103	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2018/12/21		102	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2018/12/21		103	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21		103	%	70 - 130
			Perfluorooctane Sulfonate (PFOS)	2018/12/21		98	%	70 - 130
5899819	DAD	Method Blank	13C2-Perfluorodecanoic acid	2018/12/21		92	%	50 - 150
			13C2-Perfluorododecanoic acid	2018/12/21		87	%	50 - 150
			13C2-Perfluorohexanoic acid	2018/12/21		98	%	50 - 150
			13C2-perfluorotetradecanoic acid	2018/12/21		81	%	50 - 150
			13C2-Perfluoroundecanoic acid	2018/12/21		92	%	50 - 150
			13C4-Perfluoroheptanoic acid	2018/12/21		100	%	50 - 150
			13C4-Perfluorooctanesulfonate	2018/12/21		104	%	50 - 150
			13C4-Perfluorooctanoic acid	2018/12/21		98	%	50 - 150
			13C5-Perfluorononanoic acid	2018/12/21		97	%	50 - 150
			18O2-Perfluorohexanesulfonate	2018/12/21		101	%	50 - 150
			D3-MeFOSAA	2018/12/21		88	%	50 - 150
			D5-EtFOSAA	2018/12/21		84	%	50 - 150
			EtFOSAA	2018/12/21	0.010 U, LOD=0.010		ug/L	
			MeFOSAA	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorobutane Sulfonate (PFBS)	2018/12/21	0.015 U, LOD=0.015		ug/L	
			Perfluoroheptanoic Acid (PFHpA)	2018/12/21	0.015 U, LOD=0.015		ug/L	
			Perfluorohexanoic Acid (PFHxA)	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorohexane Sulfonate (PFHxS)	2018/12/21	0.015 U, LOD=0.015		ug/L	
			Perfluorononanoic Acid (PFNA)	2018/12/21	0.018 U, LOD=0.018		ug/L	
			Perfluorotetradecanoic Acid	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorotridecanoic Acid	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluoroundecanoic Acid (PFUnA)	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorodecanoic Acid (PFDA)	2018/12/21	0.015 U, LOD=0.015		ug/L	
			Perfluorododecanoic Acid (PFDoA)	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluoro-n-Octanoic Acid (PFOA)	2018/12/21	0.010 U, LOD=0.010		ug/L	
			Perfluorooctane Sulfonate (PFOS)	2018/12/21	0.015 U, LOD=0.015		ug/L	
5907027	CM5	Spiked Blank	13C2-Perfluorodecanoic acid	2019/01/03		90	%	70 - 130

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			13C2-Perfluorohexanoic acid	2019/01/03		97	%	70 - 130
			D5-EtFOSAA	2019/01/03		90	%	70 - 130
			Perfluorobutanesulfonic acid	2019/01/03		81	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2019/01/03		91	%	70 - 130
			Perfluorohexanesulfonic acid	2019/01/03		87	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2019/01/03		89	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2019/01/03		91	%	70 - 130
			Perfluorooctanesulfonic acid	2019/01/03		95	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2019/01/03		112	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2019/01/03		92	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2019/01/03		93	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2019/01/03		89	%	70 - 130
			Perfluorotridecanoic Acid	2019/01/03		93	%	70 - 130
			Perfluorotetradecanoic Acid	2019/01/03		88	%	70 - 130
			MeFOSAA	2019/01/03		79	%	70 - 130
			EtFOSAA	2019/01/03		74	%	70 - 130
5907027	CM5	Spiked Blank DUP	13C2-Perfluorodecanoic acid	2019/01/03		90	%	70 - 130
			13C2-Perfluorohexanoic acid	2019/01/03		102	%	70 - 130
			D5-EtFOSAA	2019/01/03		92	%	70 - 130
			Perfluorobutanesulfonic acid	2019/01/03		84	%	70 - 130
			Perfluorohexanoic Acid (PFHxA)	2019/01/03		96	%	70 - 130
			Perfluorohexanesulfonic acid	2019/01/03		84	%	70 - 130
			Perfluoroheptanoic Acid (PFHpA)	2019/01/03		90	%	70 - 130
			Perfluoro-n-Octanoic Acid (PFOA)	2019/01/03		97	%	70 - 130
			Perfluorooctanesulfonic acid	2019/01/03		93	%	70 - 130
			Perfluorononanoic Acid (PFNA)	2019/01/03		113	%	70 - 130
			Perfluorodecanoic Acid (PFDA)	2019/01/03		92	%	70 - 130
			Perfluoroundecanoic Acid (PFUnA)	2019/01/03		96	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2019/01/03		96	%	70 - 130
			Perfluorotridecanoic Acid	2019/01/03		87	%	70 - 130
			Perfluorotetradecanoic Acid	2019/01/03		89	%	70 - 130
			MeFOSAA	2019/01/03		81	%	70 - 130
			EtFOSAA	2019/01/03		74	%	70 - 130
5907027	CM5	RPD	Perfluorobutanesulfonic acid	2019/01/03	4.4		%	30
			Perfluorohexanoic Acid (PFHxA)	2019/01/03	5.5		%	30
			Perfluorohexanesulfonic acid	2019/01/03	3.7		%	30
			Perfluoroheptanoic Acid (PFHpA)	2019/01/03	1.8		%	30
			Perfluoro-n-Octanoic Acid (PFOA)	2019/01/03	6.4		%	30
			Perfluorooctanesulfonic acid	2019/01/03	2.3		%	30
			Perfluorononanoic Acid (PFNA)	2019/01/03	0.71		%	30
			Perfluorodecanoic Acid (PFDA)	2019/01/03	0.22		%	30
			Perfluoroundecanoic Acid (PFUnA)	2019/01/03	3.2		%	30
			Perfluorododecanoic Acid (PFDoA)	2019/01/03	7.3		%	30
			Perfluorotridecanoic Acid	2019/01/03	6.4		%	30
			Perfluorotetradecanoic Acid	2019/01/03	1.1		%	30
			MeFOSAA	2019/01/03	1.9		%	30
			EtFOSAA	2019/01/03	0.68		%	30
5907027	CM5	Method Blank	13C2-Perfluorodecanoic acid	2019/01/03		87	%	70 - 130
			13C2-Perfluorohexanoic acid	2019/01/03		91	%	70 - 130
			D5-EtFOSAA	2019/01/03		98	%	70 - 130
			Perfluorobutanesulfonic acid	2019/01/03	0.80 U, LOD=0.80		ng/L	

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Maxxam Job #: B8X5580
Report Date: 2019/01/08

AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	% Recovery	UNITS	QC Limits
			Perfluorohexanoic Acid (PFHxA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorohexanesulfonic acid	2019/01/03	0.80 U, LOD=0.80		ng/L	
			Perfluoroheptanoic Acid (PFHpA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluoro-n-Octanoic Acid (PFOA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorooctanesulfonic acid	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorononanoic Acid (PFNA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorodecanoic Acid (PFDA)	2019/01/03	0.60 U, LOD=0.60		ng/L	
			Perfluoroundecanoic Acid (PFUnA)	2019/01/03	0.80 U, LOD=0.80		ng/L	
			Perfluorododecanoic Acid (PFDoA)	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorotridecanoic Acid	2019/01/03	1.0 U, LOD=1.0		ng/L	
			Perfluorotetradecanoic Acid	2019/01/03	0.80 U, LOD=0.80		ng/L	
			MeFOSAA	2019/01/03	4.0 U, LOD=4.0		ng/L	
			EtFOSAA	2019/01/03	4.0 U, LOD=4.0		ng/L	
5914930	AKH	Spiked Blank	13C2-Perfluorododecanoic acid	2019/01/05		89	%	50 - 150
			13C2-perfluorotetradecanoic acid	2019/01/05		90	%	50 - 150
			Perfluorotetradecanoic Acid	2019/01/05		96	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2019/01/05		96	%	70 - 130
5914930	AKH	Spiked Blank DUP	13C2-Perfluorododecanoic acid	2019/01/05		85	%	50 - 150
			13C2-perfluorotetradecanoic acid	2019/01/05		81	%	50 - 150
			Perfluorotetradecanoic Acid	2019/01/05		100	%	70 - 130
			Perfluorododecanoic Acid (PFDoA)	2019/01/05		101	%	70 - 130
5914930	AKH	RPD	Perfluorotetradecanoic Acid	2019/01/05	3.8		%	30
			Perfluorododecanoic Acid (PFDoA)	2019/01/05	4.7		%	30
5914930	AKH	Method Blank	13C2-Perfluorododecanoic acid	2019/01/05		83	%	50 - 150
			13C2-perfluorotetradecanoic acid	2019/01/05		81	%	50 - 150
			Perfluorotetradecanoic Acid	2019/01/05	0.010 U, LOD=0.010		ug/L	
			Perfluorododecanoic Acid (PFDoA)	2019/01/05	0.010 U, LOD=0.010		ug/L	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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Maxxam Job #: B8X5580
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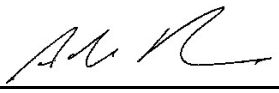
AECOM
Client Project #: N62742-12-D-1829
Site Location: NBG PFAS
Your P.O. #: 60548946 CTO 17F0104

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Adam Robinson, Supervisor, LC/MS/MS

Colm McNamara, Senior Analyst, Liquid Chromatography

Sin Chii Chia, Scientific Services

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

METHOD 537 Modified

DETERMINATION OF SELECTED PERFLUORINATED ALKYL ACIDS IN DRINKING WATER BY SOLID PHASE EXTRACTION AND LIQUID CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY (LC/MS/MS)

Maxxam Analytics International
6740 Campobello Rd
Mississauga, Ontario, Canada
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www.maxxamanalytics.com

METHOD 537

DETERMINATION OF SELECTED PERFLUORINATED ALKYL ACIDS IN DRINKING WATER BY SOLID PHASE EXTRACTION AND LIQUID CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY (LC/MS/MS)

Maxxam Analytics International
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3.2 Sample Chromatograms

Maxxam Analytics International
6740 Campobello Rd
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L5N 2L8
1-800-668-0639
www.maxxamanalytics.com

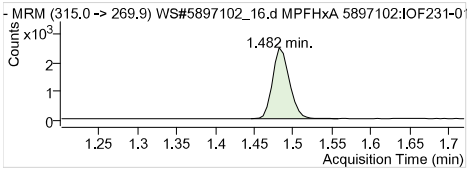
Quantitation Results

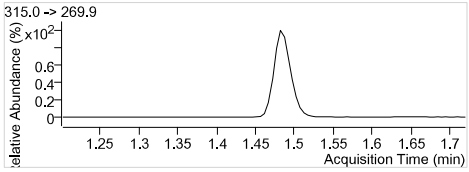
Agilent Technologies

Batch Path	T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics		
Sample Name	**5897102:IOF231-01**	**Instrument**	LCMS04
Data File	WS#5897102_16.d	**Operator**	
Sample Type	Sample	**Dilution**	0.022
Acq. Method	PFC_Water_Low.m	**Position**	P2-B5
Acq. Date	2018/12/21 8:35:40 PM	**Injection Volume**	Per Method
Sample Annotation	-		

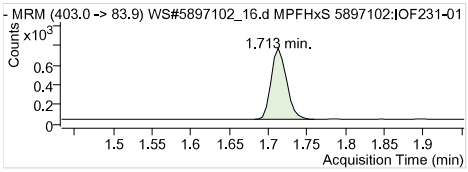
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3688	1.48	1 µg/L		
MPFHxS	980	1.71	1 µg/L		
MPFHpA	5587	1.73	1 µg/L		
MPFOA	5059	1.91	1 µg/L		
MPFOS	1013	2.00	1 µg/L		
MPFNA	4687	2.05	1 µg/L		
MPFDA	3115	2.16	1 µg/L		
MPFUnA	4032	2.26	1 µg/L		
MPFDoA	4717	2.35	1 µg/L		
MPFTeDA	6533	2.48	1 µg/L		
13C6-PFHxA IS	15422	1.48	1 µg/L		
13C9-PFDA IS	17901	2.16	1 µg/L		

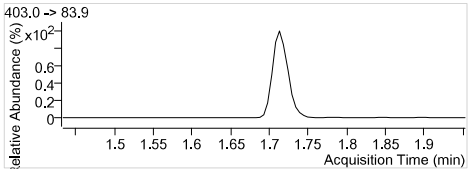
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3688	1.48	-	89.09 µg/L	-
18O2-PFHxS	980	1.71	-	88.89 µg/L	-
13C4-PFHpA	5587	1.73	-	91.49 µg/L	-
13C4-PFOA	5059	1.91	-	90.23 µg/L	-
13C4-PFOS	1013	2.00	-	83.05 µg/L	-
13C5-PFNA	4687	2.05	-	90.54 µg/L	-
13C2-PFDA	3115	2.16	-	85.37 µg/L	-
13C2-PFUnA	4032	2.26	-	94.75 µg/L	-
13C2-PFDoA	4717	2.35	-	85.80 µg/L	-
13C2-PFTeDA	6533	2.48	-	82.73 µg/L	-
13C6-PFHxA	15422	1.48	-	2.31 µg/L	-
13C9-PFDA	17901	2.16	-	2.28 µg/L	-



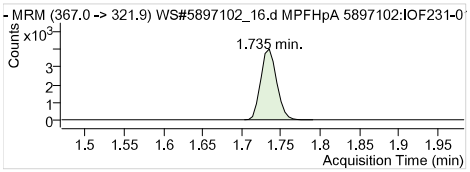


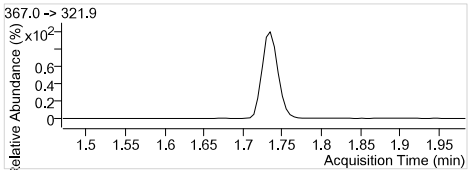
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



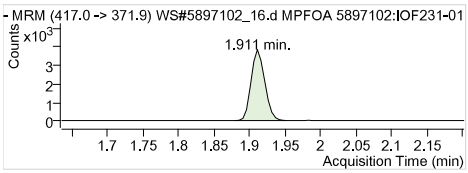


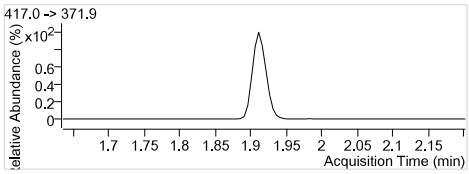
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



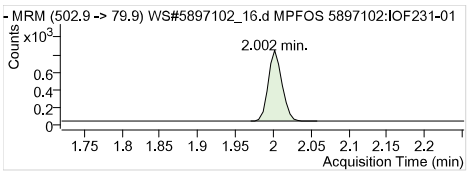


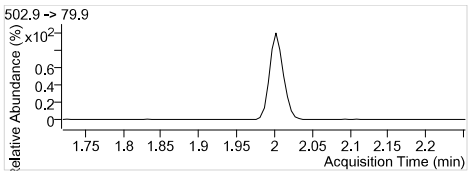
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



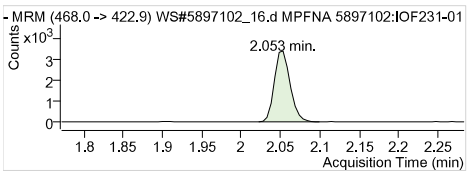


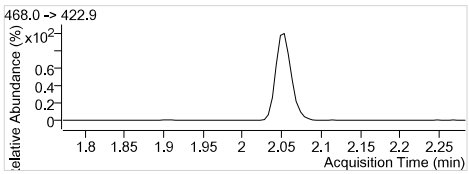
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



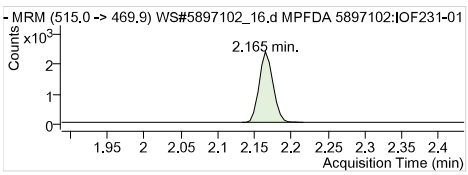


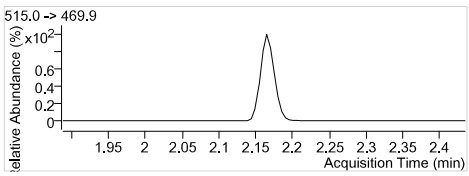
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



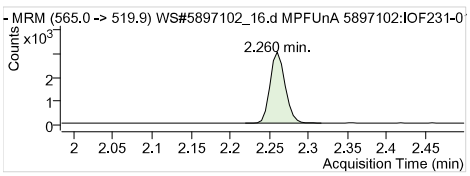


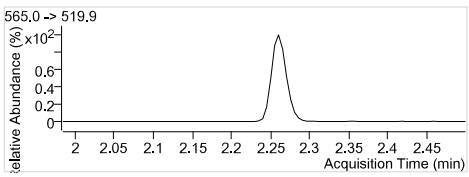
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



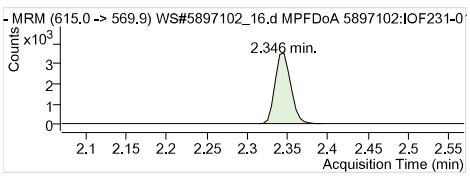


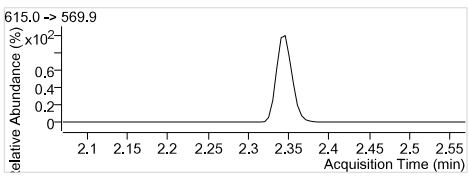
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



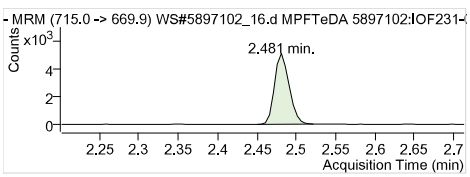


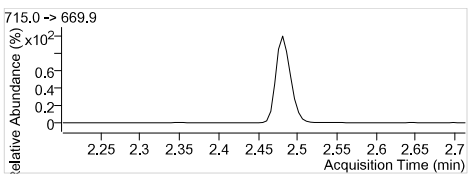
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



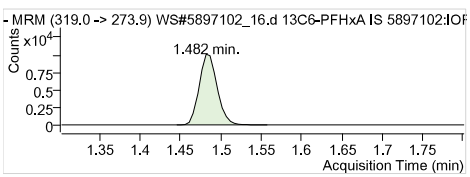


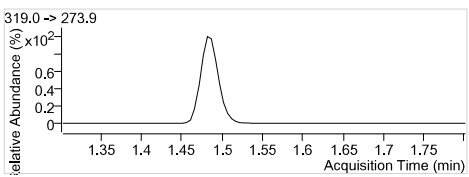
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



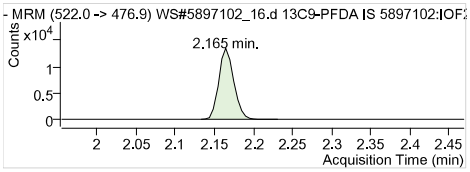


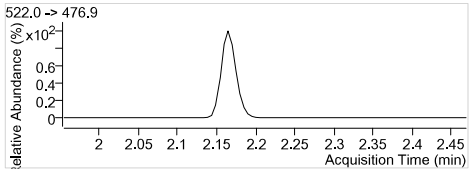
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



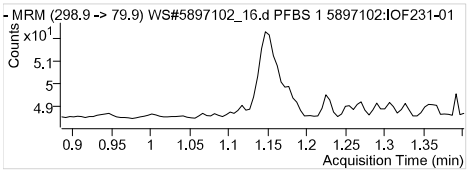


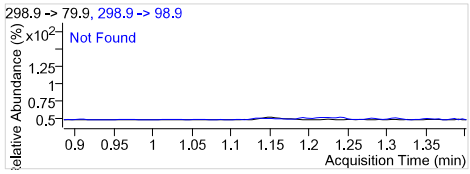
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



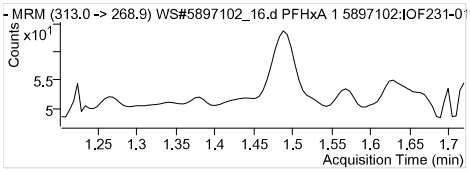


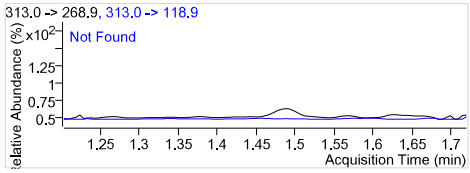
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



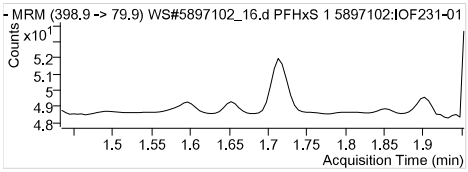


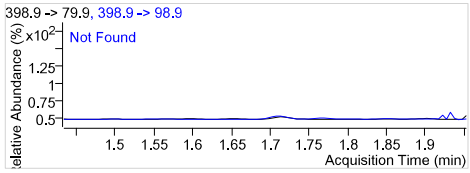
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



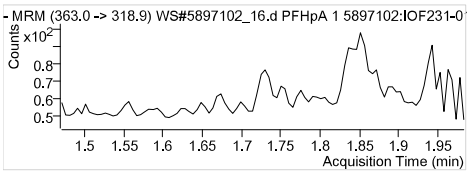


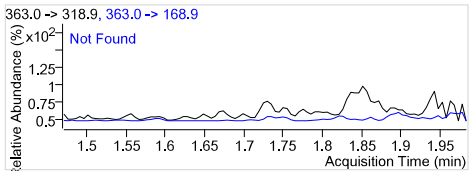
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



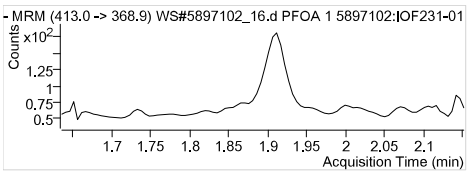


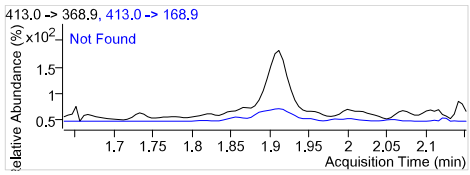
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



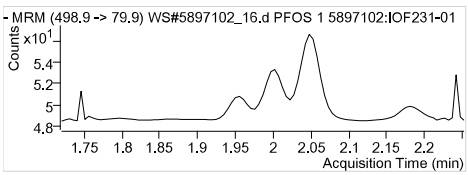


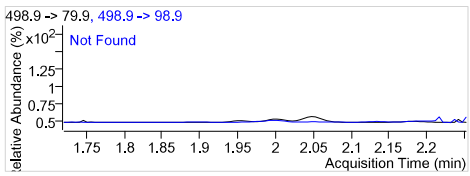
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



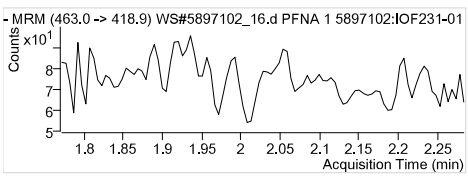


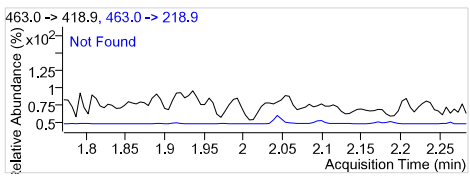
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



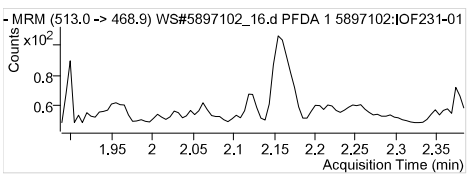


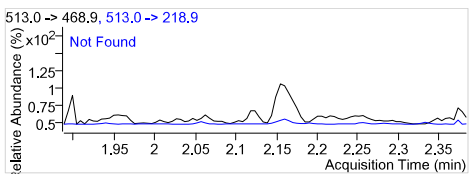
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



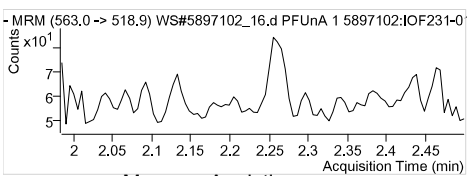


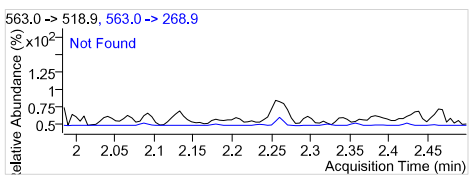
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



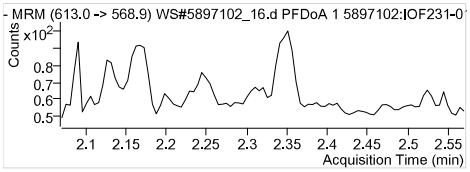


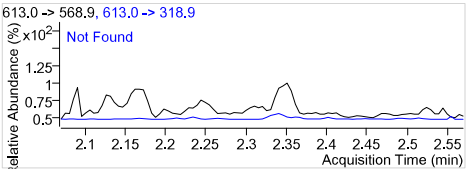
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



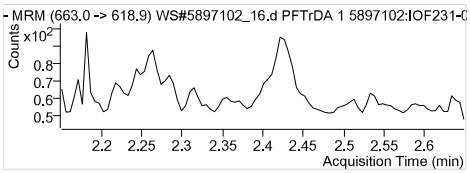


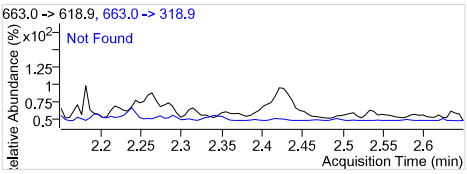
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



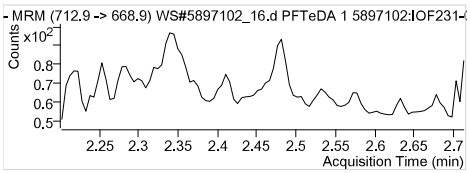


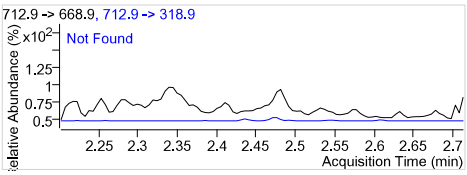
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



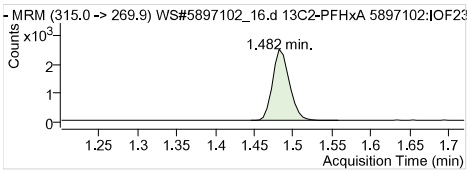


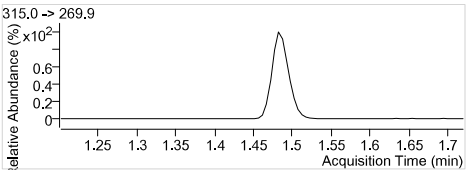
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



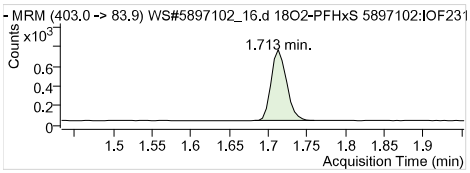


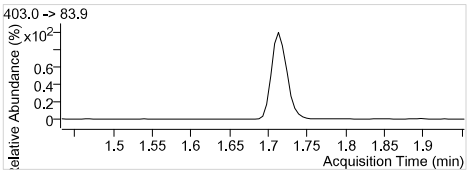
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



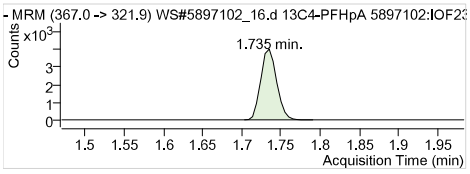


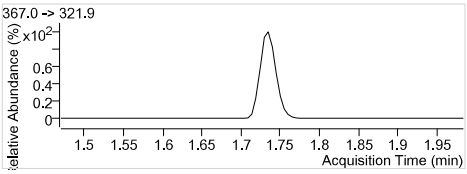
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	89.09 µg/L
Area ratio:	0.23914
Sample type:	Sample



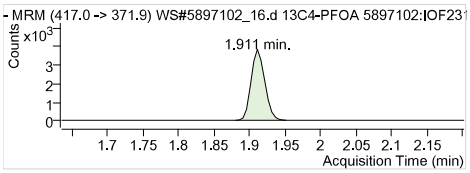


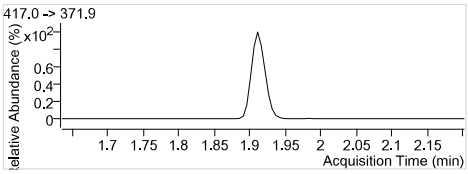
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	88.89 µg/L
Area ratio:	0.06355
Sample type:	Sample



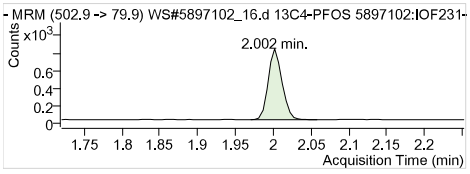


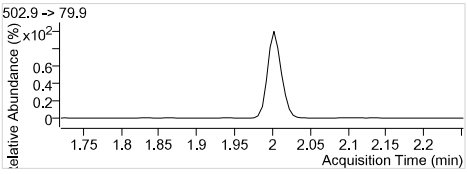
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	91.49 µg/L
Area ratio:	0.36227
Sample type:	Sample



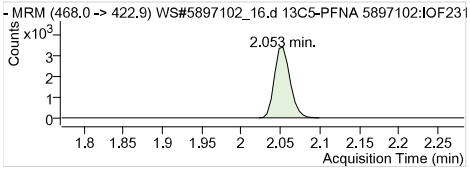


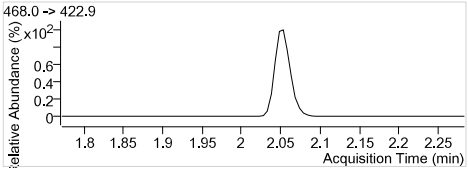
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	90.23 µg/L
Area ratio:	0.32804
Sample type:	Sample



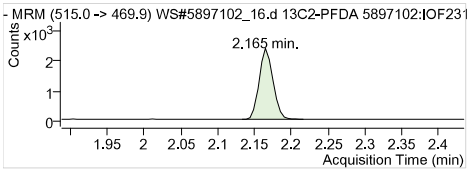


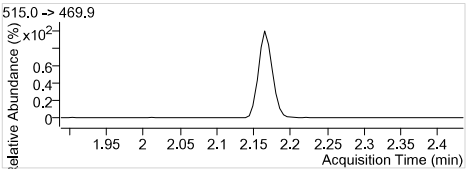
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	83.05 µg/L
Area ratio:	0.06569
Sample type:	Sample



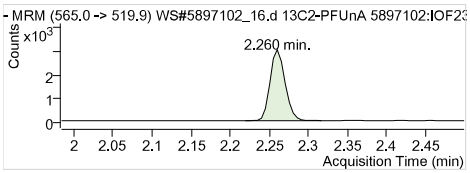


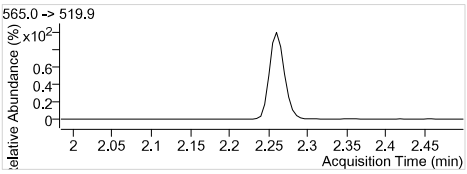
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	90.54 µg/L
Area ratio:	0.30392
Sample type:	Sample



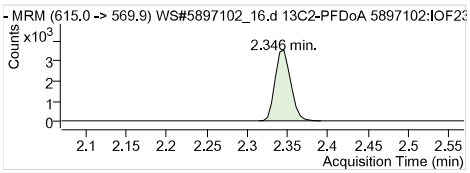


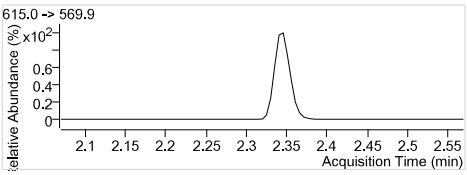
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	85.37 µg/L
Area ratio:	0.17401
Sample type:	Sample



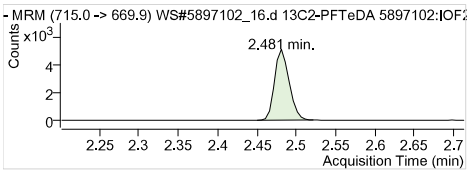


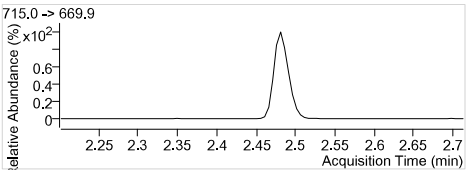
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	94.75 µg/L
Area ratio:	0.22524
Sample type:	Sample



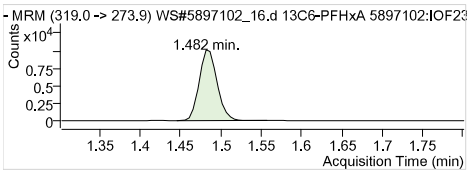


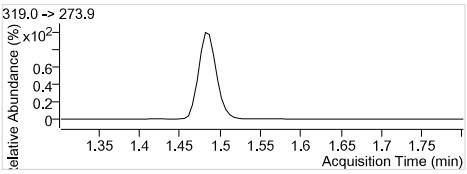
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	85.80 µg/L
Area ratio:	0.26350
Sample type:	Sample



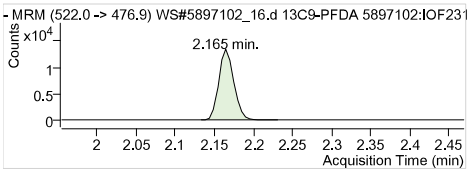


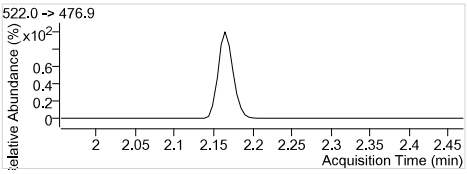
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	82.73 µg/L
Area ratio:	0.36495
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.31 µg/L
Area ratio:	0
Sample type:	Sample





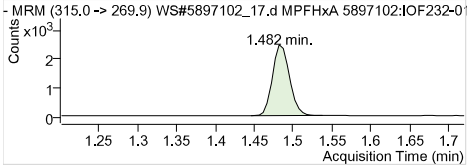
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.28 µg/L
Area ratio:	0
Sample type:	Sample

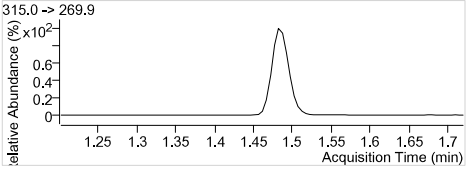
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics

Sample Name	**5897102:IOF232-01:10x**	**Instrument**	LCMS04
Data File	WS#5897102_17.d	**Operator**	
Sample Type	Sample	**Dilution**	0.24
Acq. Method	PFC_Water_Low.m	**Position**	P2-B6
Acq. Date	2018/12/21 8:40:34 PM	**Injection Volume**	Per Method
Sample Annotation	-		

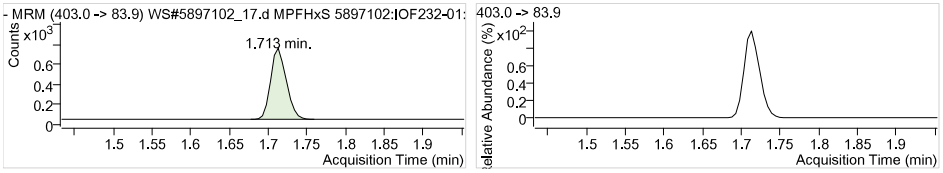
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3704	1.48	1 µg/L		
MPFHxS	980	1.71	1 µg/L		
MPFHpA	5338	1.73	1 µg/L		
MPFOA	4735	1.91	1 µg/L		
MPFOS	886	2.00	1 µg/L		
MPFNA	4185	2.05	1 µg/L		
MPFDA	2811	2.16	1 µg/L		
MPFUnA	2875	2.26	1 µg/L		
MPFDoA	2548	2.35	1 µg/L		
MPFTeDA	2144	2.48	1 µg/L		
13C6-PFHxA IS	14841	1.48	1 µg/L		
13C9-PFDA IS	17819	2.16	1 µg/L		

Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3704	1.48	-	92.98 µg/L	-
18O2-PFHxS	980	1.71	-	92.37 µg/L	-
13C4-PFHpA	5338	1.73	-	90.83 µg/L	-
13C4-PFOA	4735	1.91	-	87.76 µg/L	-
13C4-PFOS	886	2.00	-	75.49 µg/L	-
13C5-PFNA	4185	2.05	-	84.01 µg/L	-
13C2-PFDA	2811	2.16	-	77.40 µg/L	-
13C2-PFUnA	2875	2.26	-	67.87 µg/L	-
13C2-PFDoA	2548	2.35	-	46.56 µg/L	-
13C2-PFTeDA	2144	2.48	-	27.28 µg/L	-
13C6-PFHxA	14841	1.48	-	24.26 µg/L	-
13C9-PFDA	17819	2.16	-	24.74 µg/L	-

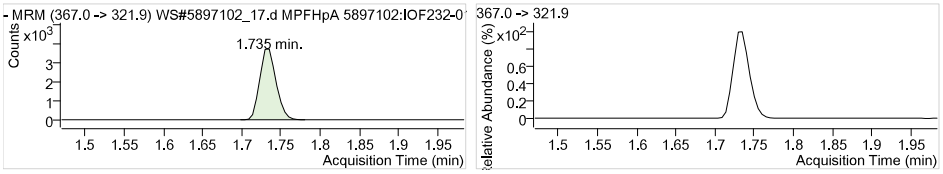




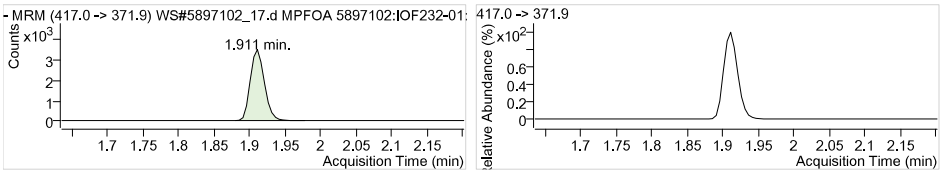
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



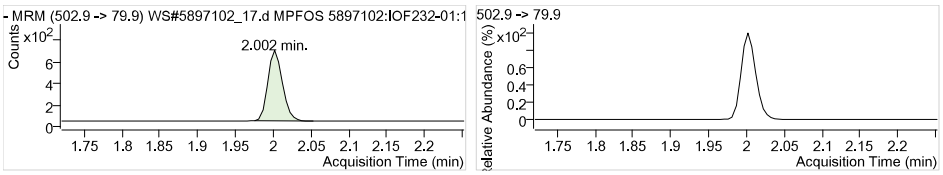
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



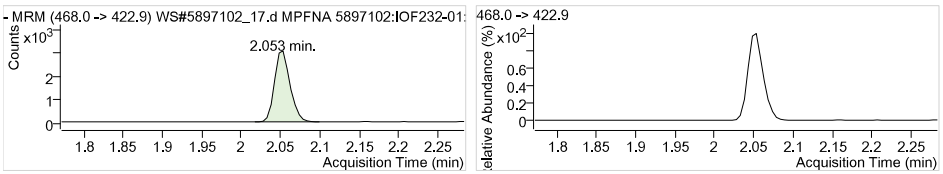
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



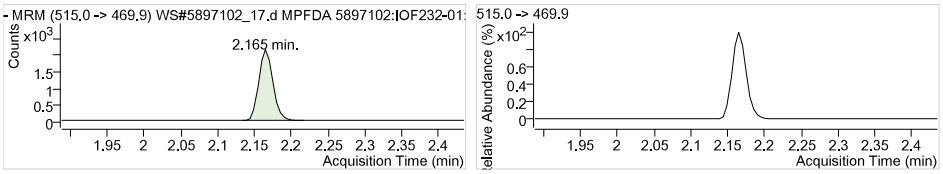
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



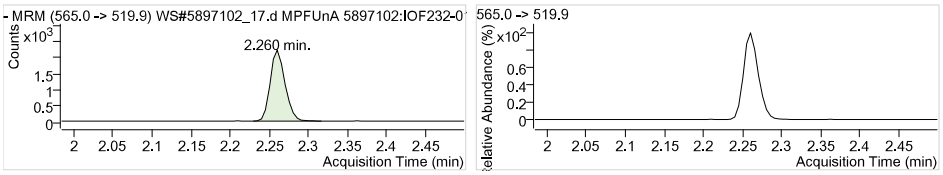
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



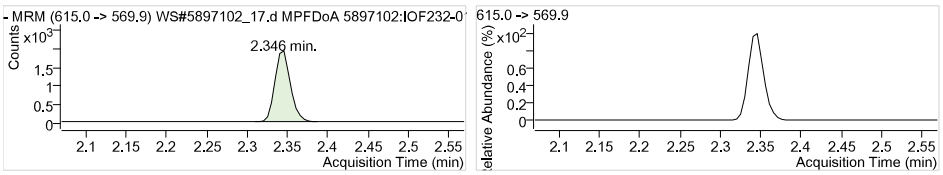
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



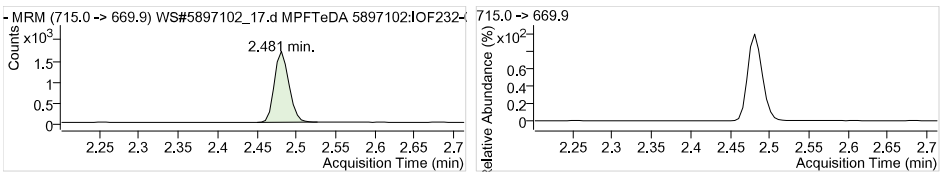
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



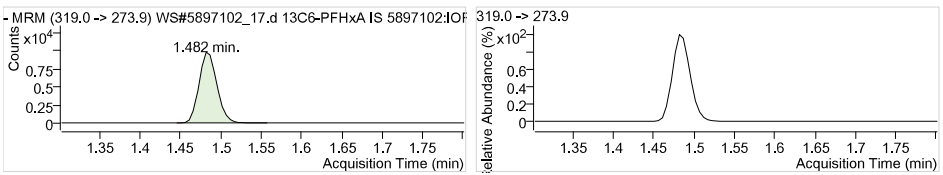
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



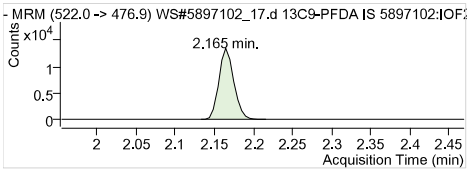
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample

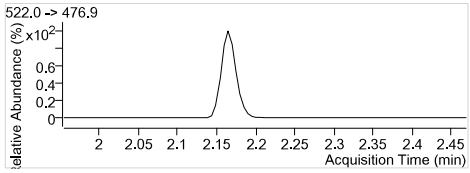


MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample

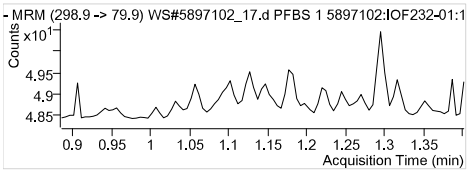


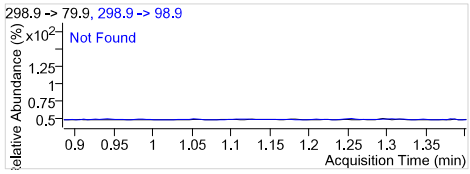
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



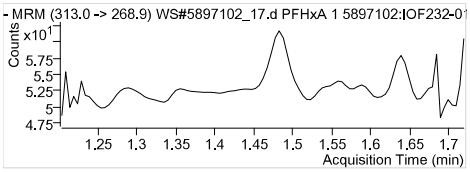


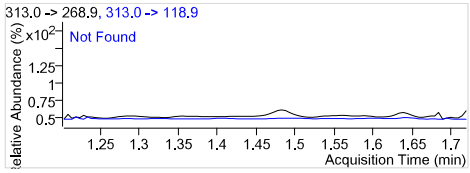
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



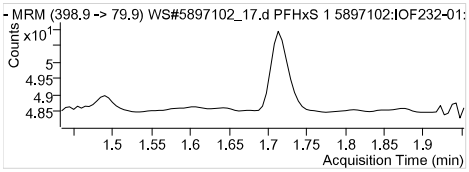


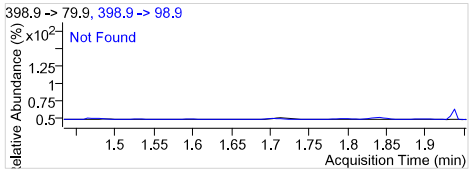
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



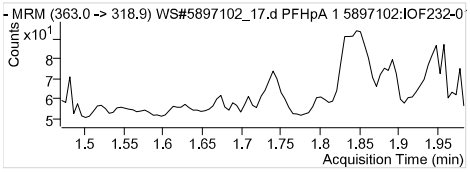


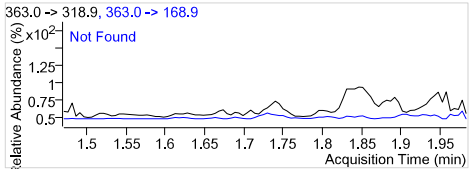
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



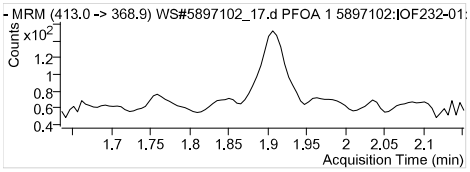


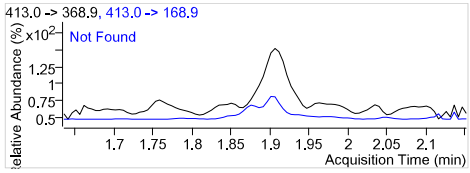
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



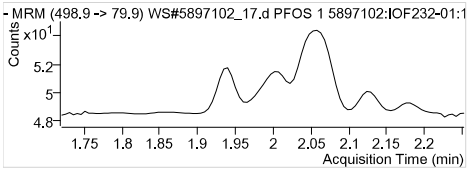


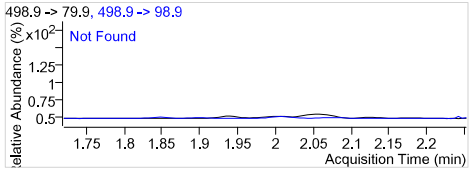
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



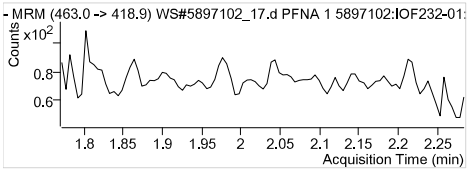


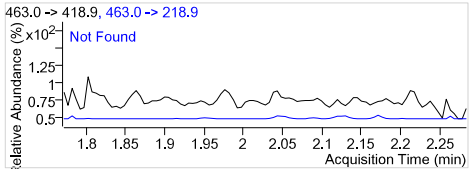
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



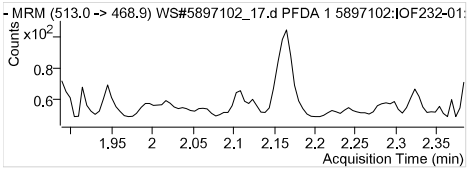


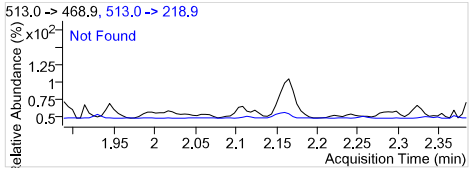
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



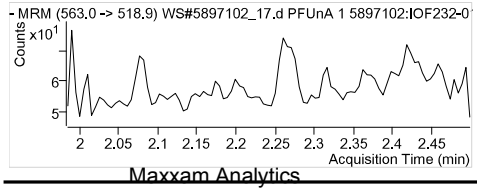


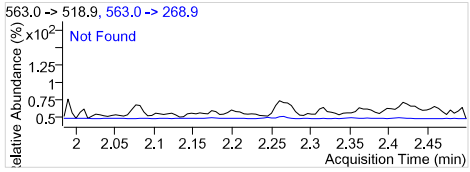
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



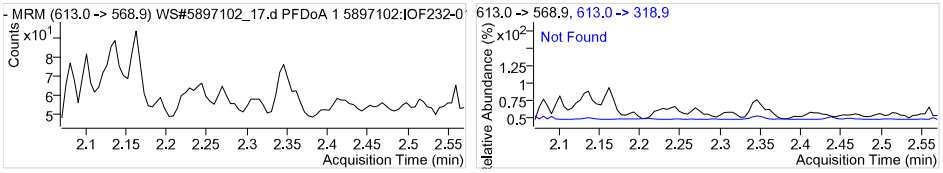


PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample

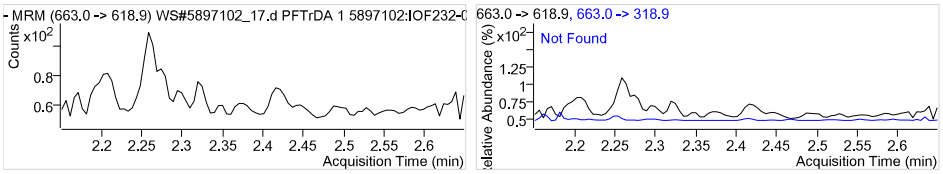




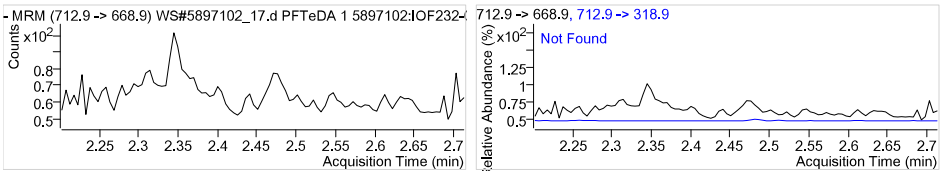
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



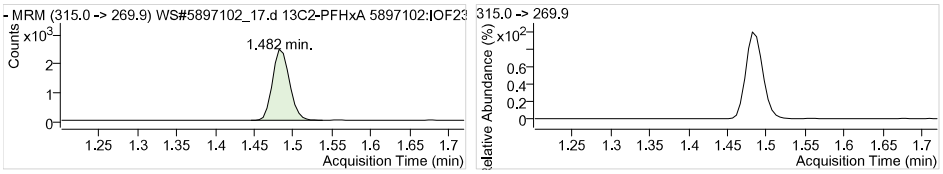
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



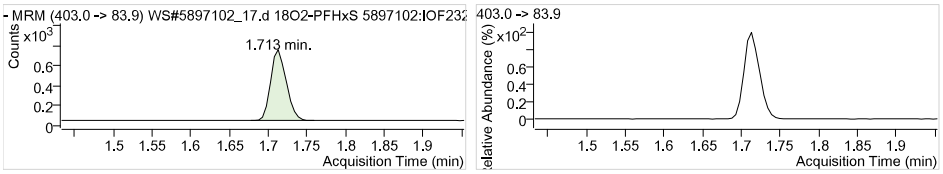
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



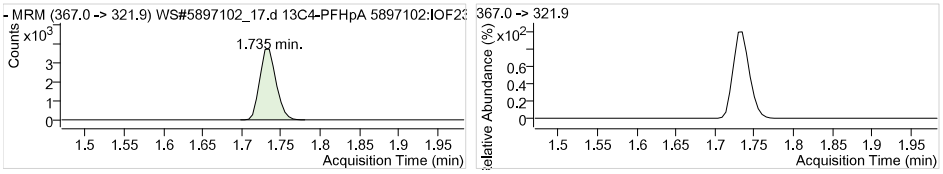
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



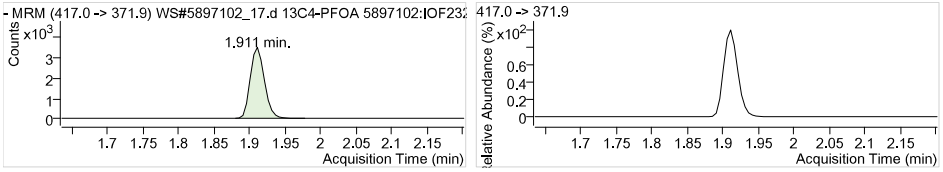
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	92.98 µg/L
Area ratio:	0.24958
Sample type:	Sample



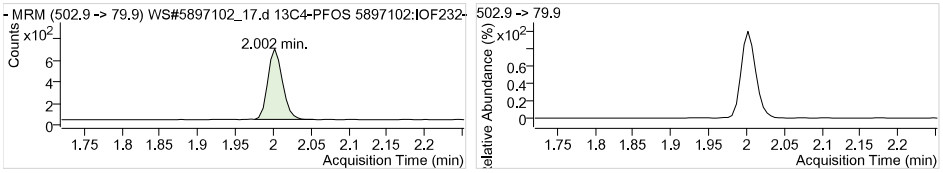
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	92.37 µg/L
Area ratio:	0.06603
Sample type:	Sample



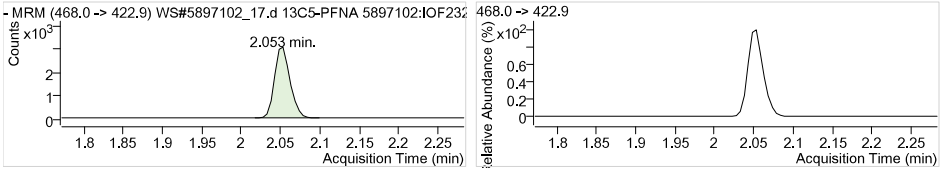
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	90.83 µg/L
Area ratio:	0.35968
Sample type:	Sample



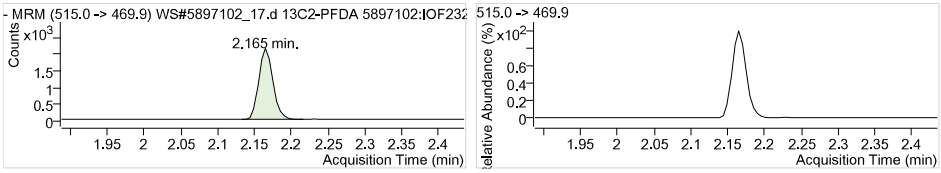
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	87.76 µg/L
Area ratio:	0.31905
Sample type:	Sample



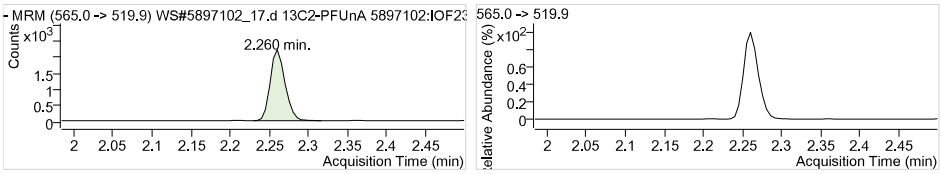
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	75.49 µg/L
Area ratio:	0.05970
Sample type:	Sample



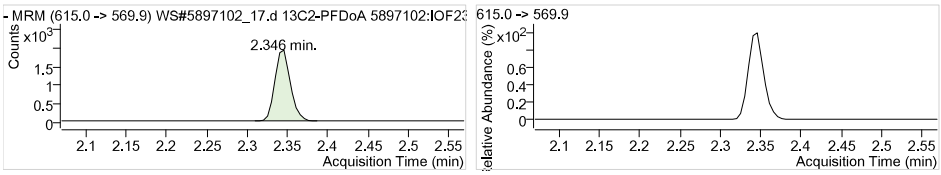
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	84.01 µg/L
Area ratio:	0.28199
Sample type:	Sample



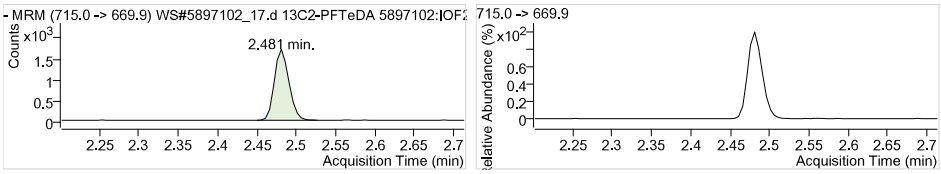
13C2-PFDA 515.0 -> 469.9
RT (Exp. RT): 2.165 (2.165)
Calc. conc. 77.40 µg/L
Area ratio: 0.15775
Sample type: Sample



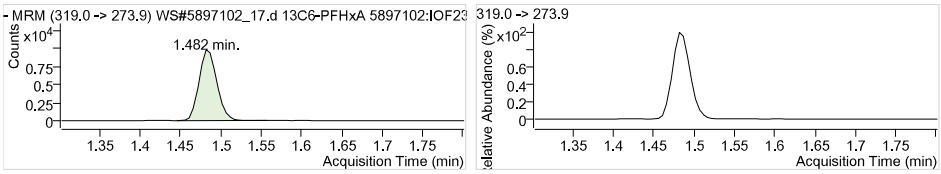
13C2-PFUnA 565.0 -> 519.9
RT (Exp. RT): 2.260 (2.260)
Calc. conc. 67.87 µg/L
Area ratio: 0.16134
Sample type: Sample



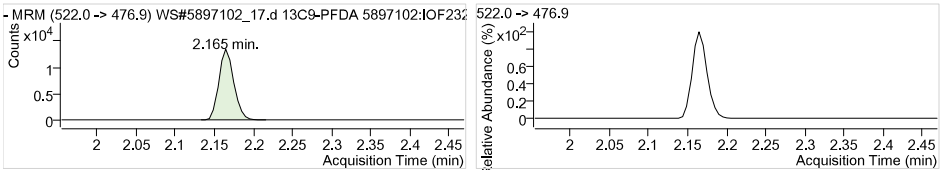
13C2-PFDoA 615.0 -> 569.9
RT (Exp. RT): 2.346 (2.346)
Calc. conc. 46.56 µg/L
Area ratio: 0.14299
Sample type: Sample



13C2-PFTeDA 715.0 -> 669.9
RT (Exp. RT): 2.481 (2.481)
Calc. conc. 27.28 µg/L
Area ratio: 0.12032
Sample type: Sample



13C6-PFHxA 319.0 -> 273.9
RT (Exp. RT): 1.482 (1.487)
Calc. conc. 24.26 µg/L
Area ratio: 0
Sample type: Sample



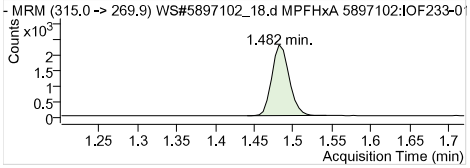
13C9-PFDA 522.0 -> 476.9
RT (Exp. RT): 2.165 (2.165)
Calc. conc. 24.74 µg/L
Area ratio: 0
Sample type: Sample

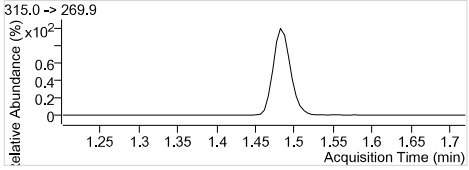
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics

Sample Name	**5897102:IOF233-01:10x**	**Instrument**	LCMS04
Data File	WS#5897102_18.d	**Operator**	
Sample Type	Sample	**Dilution**	0.24
Acq. Method	PFC_Water_Low.m	**Position**	P2-B7
Acq. Date	2018/12/21 8:45:29 PM	**Injection Volume**	Per Method
Sample Annotation	-		

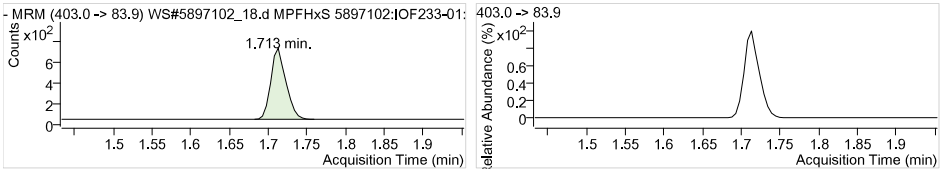
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3497	1.48	1 µg/L		
MPFHxS	919	1.71	1 µg/L		
MPFHpA	5269	1.73	1 µg/L		
MPFOA	4398	1.91	1 µg/L		
MPFOS	860	2.00	1 µg/L		
MPFNA	4042	2.05	1 µg/L		
MPFDA	2547	2.16	1 µg/L		
MPFUnA	2397	2.26	1 µg/L		
MPFDoA	2323	2.35	1 µg/L		
MPFTeDA	1951	2.48	1 µg/L		
13C6-PFHxA IS	14540	1.48	1 µg/L		
13C9-PFDA IS	16972	2.16	1 µg/L		

Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3497	1.48	-	89.60 µg/L	-
18O2-PFHxS	919	1.71	-	88.42 µg/L	-
13C4-PFHpA	5269	1.73	-	91.51 µg/L	-
13C4-PFOA	4398	1.91	-	83.20 µg/L	-
13C4-PFOS	860	2.00	-	74.79 µg/L	-
13C5-PFNA	4042	2.05	-	82.82 µg/L	-
13C2-PFDA	2547	2.16	-	73.63 µg/L	-
13C2-PFUnA	2397	2.26	-	59.41 µg/L	-
13C2-PFDoA	2323	2.35	-	44.56 µg/L	-
13C2-PFTeDA	1951	2.48	-	26.06 µg/L	-
13C6-PFHxA	14540	1.48	-	23.77 µg/L	-
13C9-PFDA	16972	2.16	-	23.57 µg/L	-

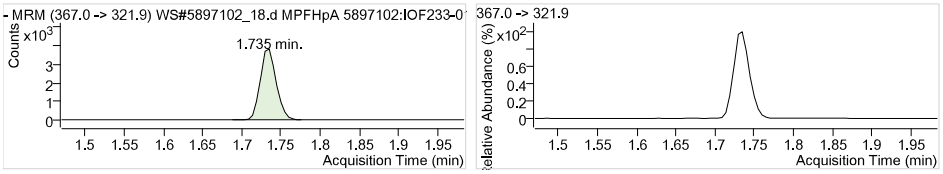




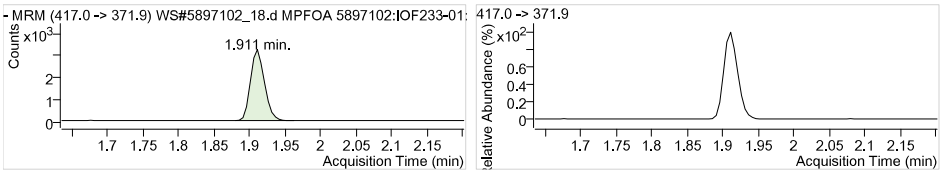
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



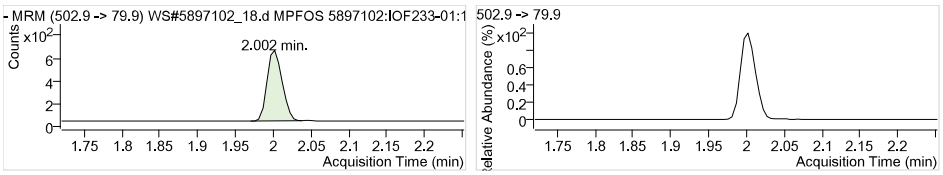
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



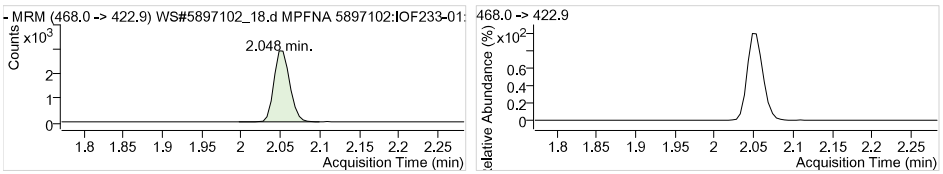
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



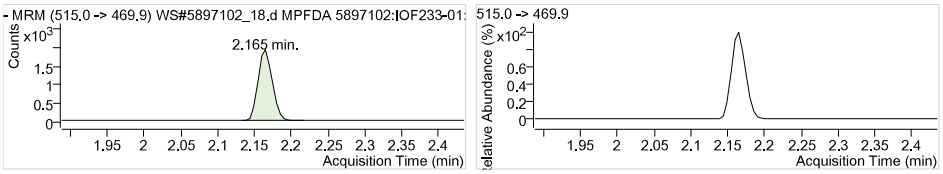
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



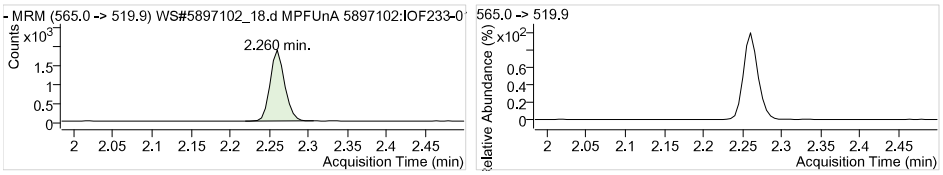
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



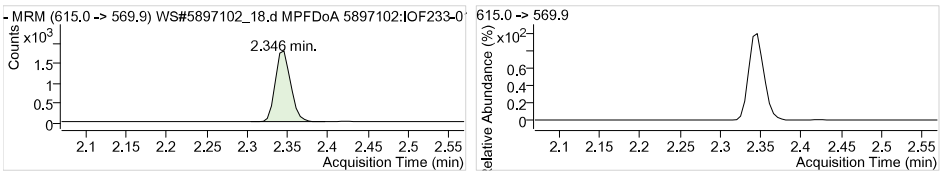
MPFNA Internal Standard
RT (Exp. RT): 2.048 (2.053)
Concentration: 1 µg/L
Sample type: Sample



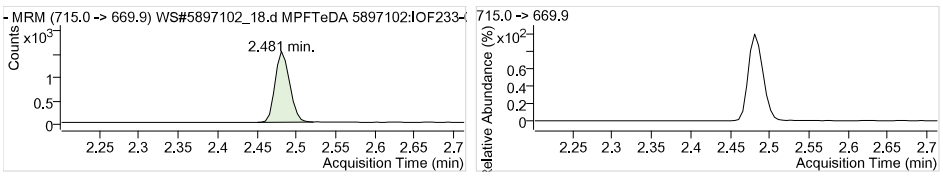
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



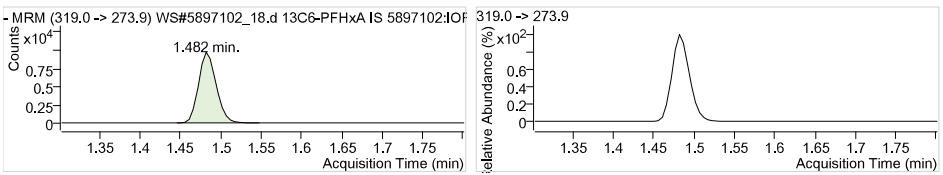
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



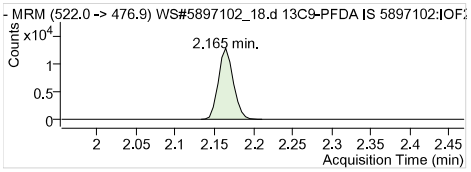
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample

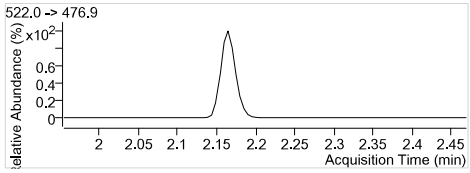


MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample

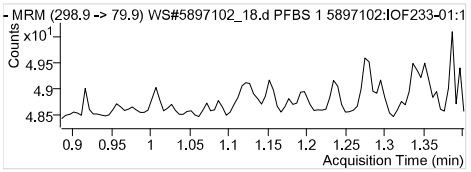


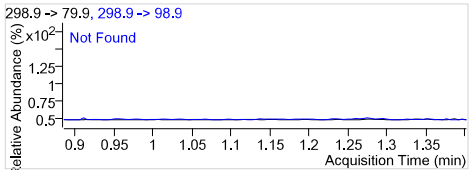
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



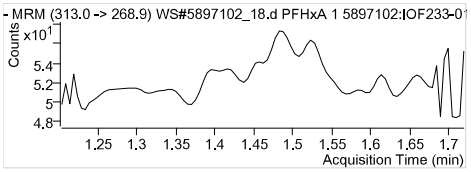


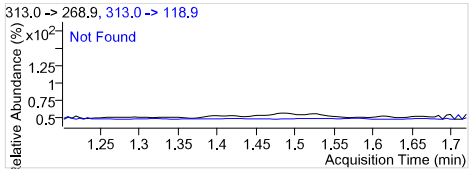
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



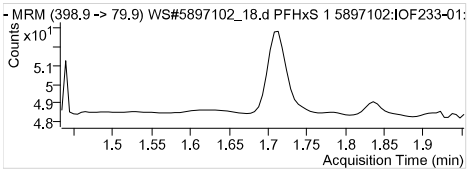


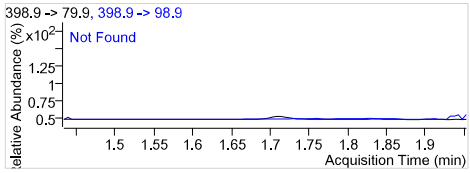
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



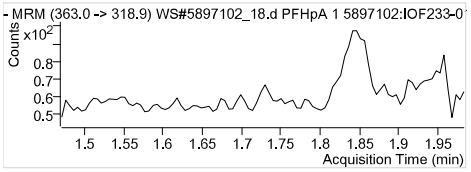


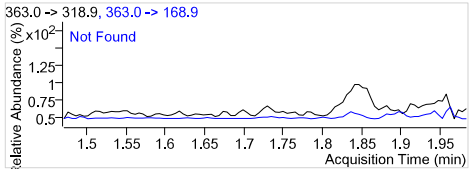
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



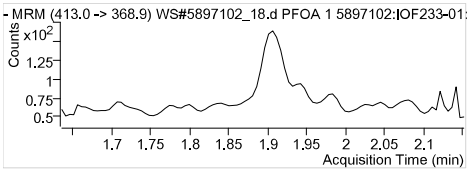


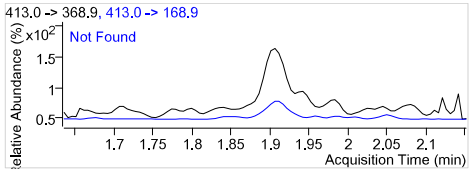
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



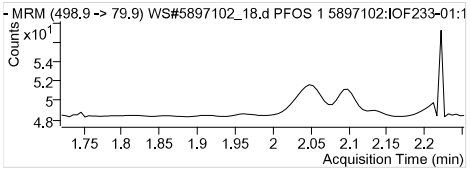


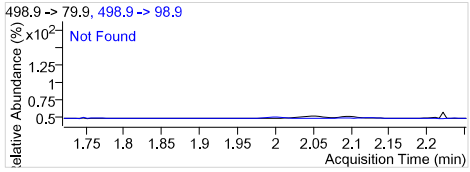
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



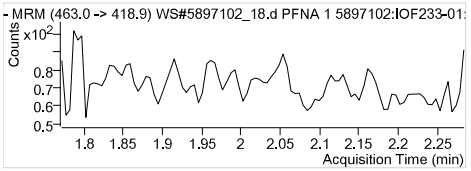


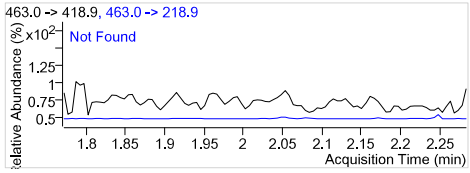
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



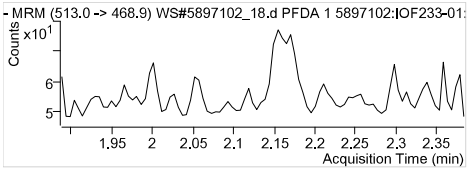


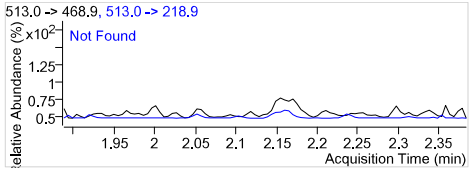
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



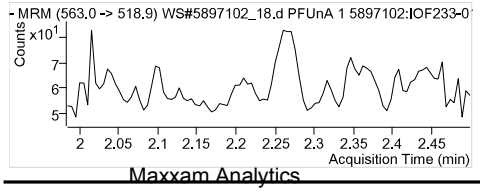


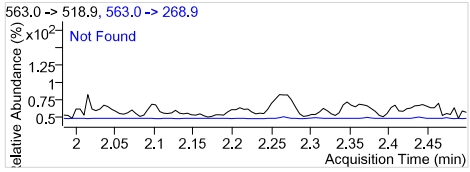
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



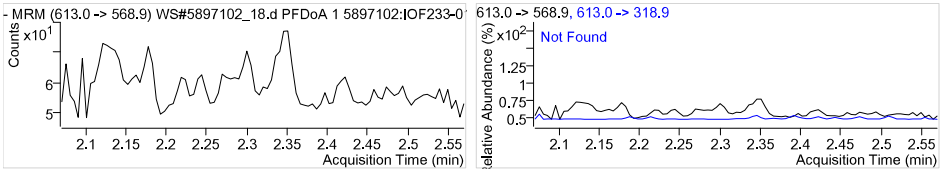


PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample

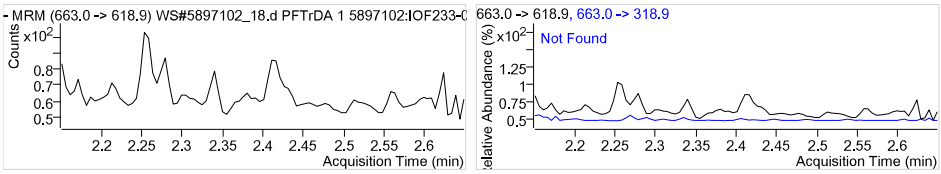




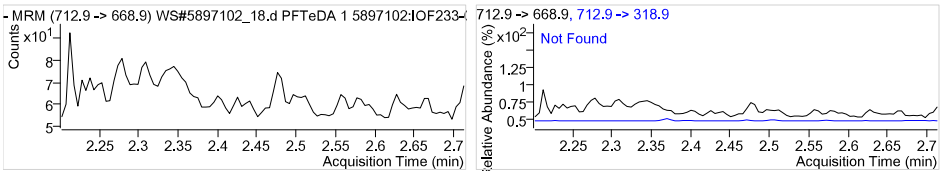
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



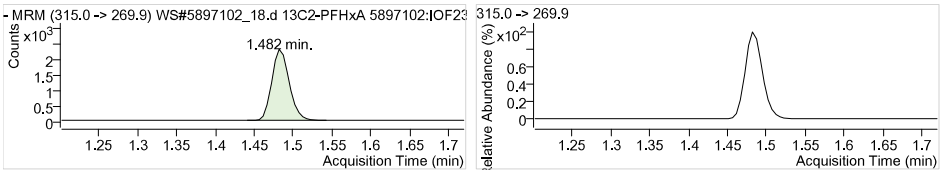
PFDoA 1 613.0 -> 568.9
RT (Exp. RT): 0.000 (2.346)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



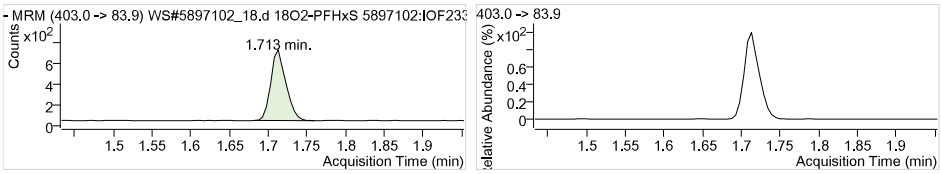
PFTrDA 1 663.0 -> 618.9
RT (Exp. RT): 0.000 (2.416)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



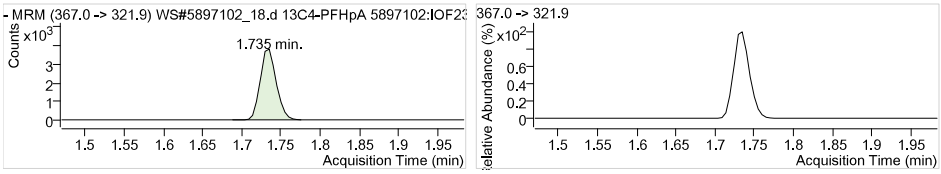
PFTeDA 1 712.9 -> 668.9
RT (Exp. RT): 0.000 (2.481)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



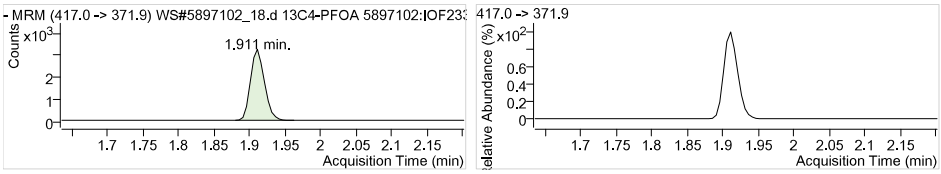
13C2-PFHxA 315.0 -> 269.9
RT (Exp. RT): 1.482 (1.487)
Calc. conc. 89.60 µg/L
Area ratio: 0.24051
Sample type: Sample



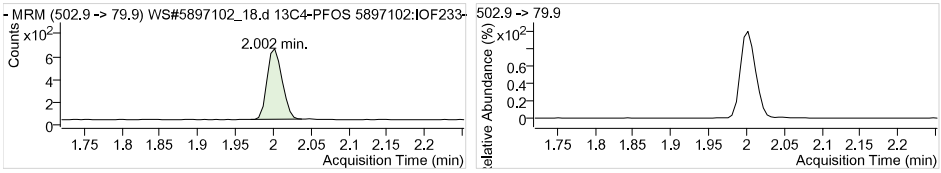
18O2-PFHxS 403.0 -> 83.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 88.42 µg/L
Area ratio: 0.06320
Sample type: Sample



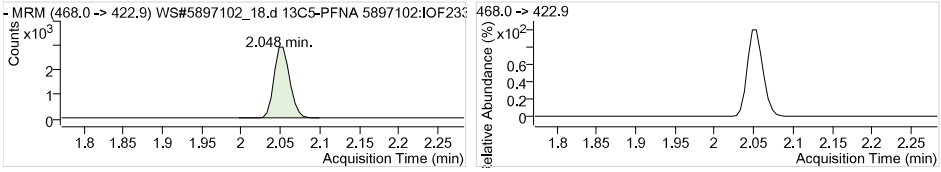
13C4-PFHpA 367.0 -> 321.9
RT (Exp. RT): 1.735 (1.735)
Calc. conc. 91.51 µg/L
Area ratio: 0.36238
Sample type: Sample



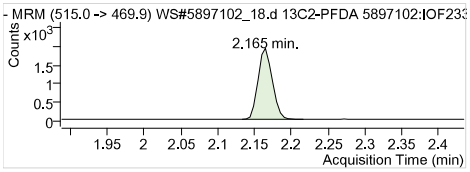
13C4-PFOA 417.0 -> 371.9
RT (Exp. RT): 1.911 (1.911)
Calc. conc. 83.20 µg/L
Area ratio: 0.30248
Sample type: Sample

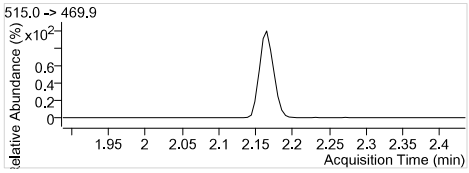


13C4-PFOS 502.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 74.79 µg/L
Area ratio: 0.05915
Sample type: Sample

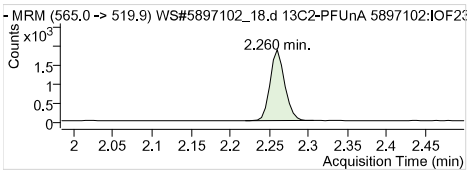


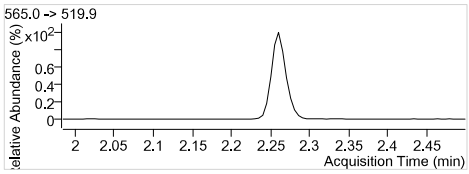
13C5-PFNA 468.0 -> 422.9
RT (Exp. RT): 2.048 (2.053)
Calc. conc. 82.82 µg/L
Area ratio: 0.27799
Sample type: Sample



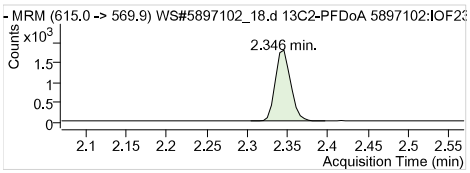


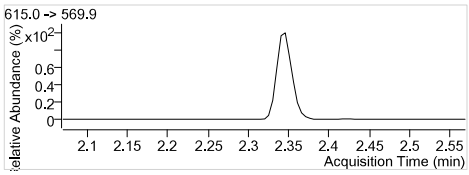
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	73.63 µg/L
Area ratio:	0.15007
Sample type:	Sample



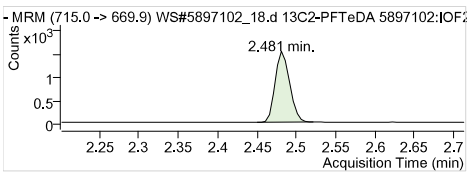


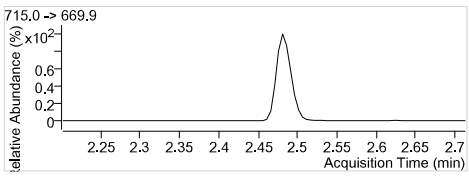
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	59.41 µg/L
Area ratio:	0.14123
Sample type:	Sample



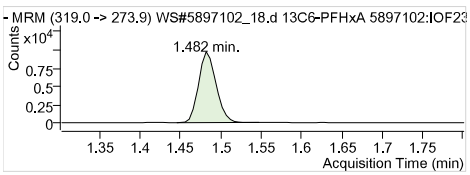


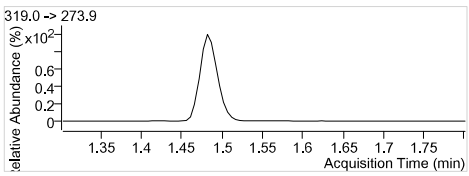
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	44.56 µg/L
Area ratio:	0.13687
Sample type:	Sample



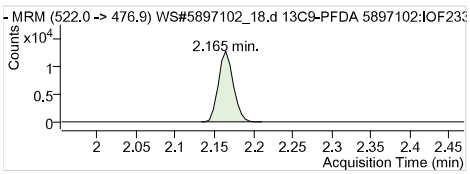


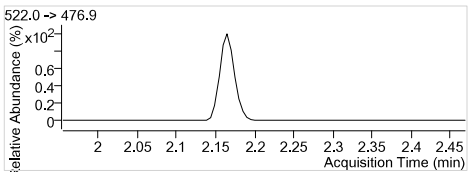
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	26.06 µg/L
Area ratio:	0.11495
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	23.77 µg/L
Area ratio:	0
Sample type:	Sample





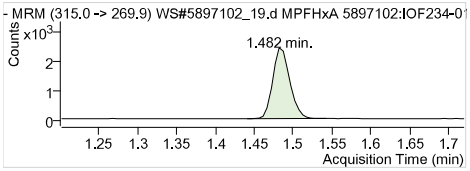
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	23.57 µg/L
Area ratio:	0
Sample type:	Sample

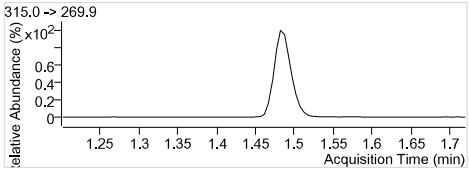
Batch Path T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics

Sample Name	**5897102:IOF234-01**	**Instrument**	LCMS04
Data File	WS#5897102_19.d	**Operator**	
Sample Type	Sample	**Dilution**	0.022
Acq. Method	PFC_Water_Low.m	**Position**	P2-B8
Acq. Date	2018/12/21 8:50:24 PM	**Injection Volume**	Per Method
Sample Annotation	-		

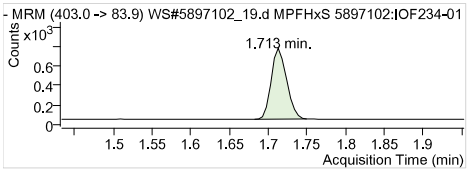
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3685	1.48	1 µg/L		
MPFHxS	1004	1.71	1 µg/L		
MPFHpA	5466	1.73	1 µg/L		
MPFOA	4946	1.91	1 µg/L		
MPFOS	1086	2.00	1 µg/L		
MPFNA	4752	2.05	1 µg/L		
MPFDA	3370	2.16	1 µg/L		
MPFUnA	3671	2.26	1 µg/L		
MPFDoA	4309	2.35	1 µg/L		
MPFTeDA	5801	2.48	1 µg/L		
13C6-PFHxA IS	15005	1.48	1 µg/L		
13C9-PFDA IS	17792	2.16	1 µg/L		

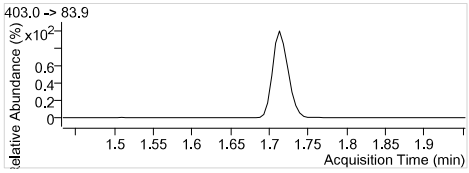
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3685	1.48	-	91.49 µg/L	-
18O2-PFHxS	1004	1.71	-	93.60 µg/L	-
13C4-PFHpA	5466	1.73	-	91.99 µg/L	-
13C4-PFOA	4946	1.91	-	90.67 µg/L	-
13C4-PFOS	1086	2.00	-	91.51 µg/L	-
13C5-PFNA	4752	2.05	-	94.35 µg/L	-
13C2-PFDA	3370	2.16	-	92.93 µg/L	-
13C2-PFUnA	3671	2.26	-	86.79 µg/L	-
13C2-PFDoA	4309	2.35	-	78.85 µg/L	-
13C2-PFTeDA	5801	2.48	-	73.91 µg/L	-
13C6-PFHxA	15005	1.48	-	2.25 µg/L	-
13C9-PFDA	17792	2.16	-	2.26 µg/L	-



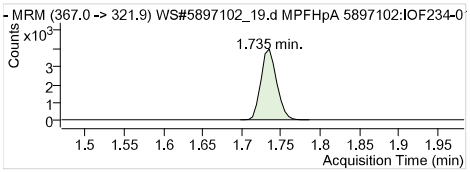


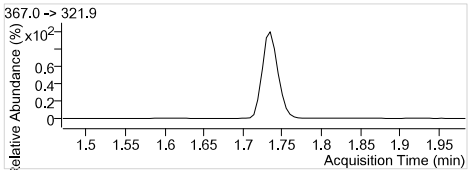
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



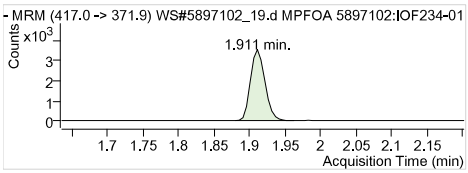


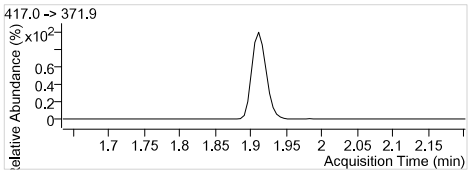
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



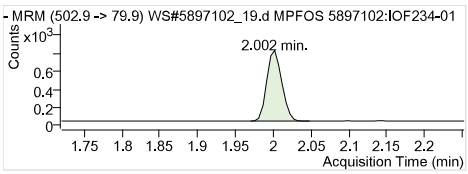


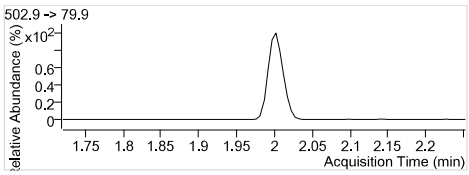
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



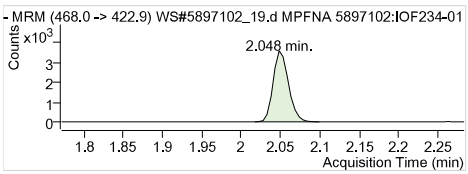


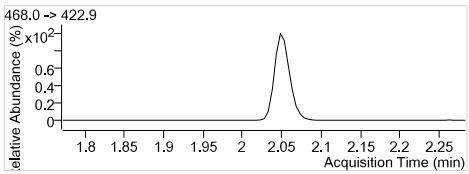
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



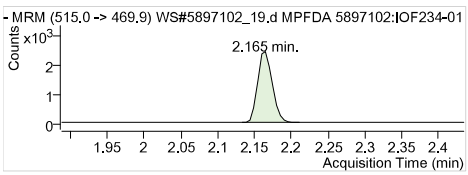


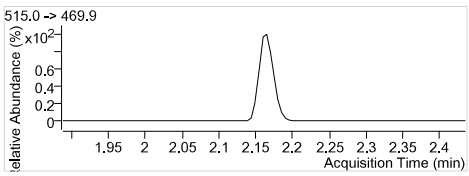
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



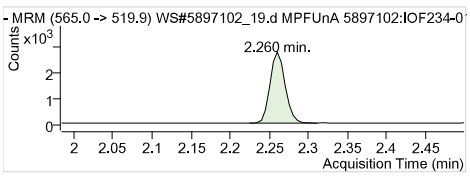


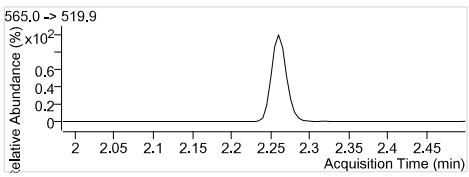
MPFNA Internal Standard
RT (Exp. RT): 2.048 (2.053)
Concentration: 1 µg/L
Sample type: Sample



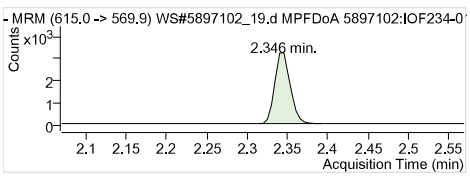


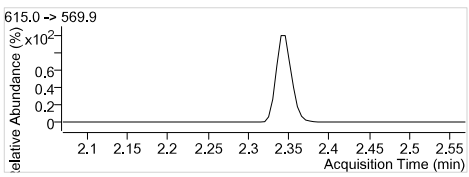
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



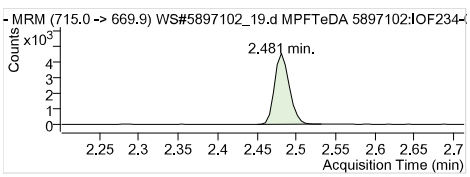


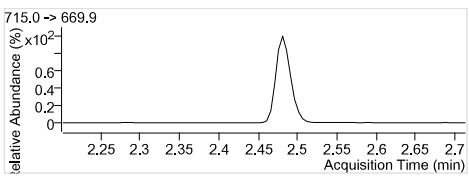
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



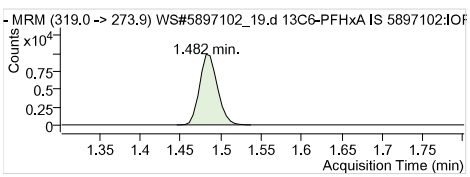


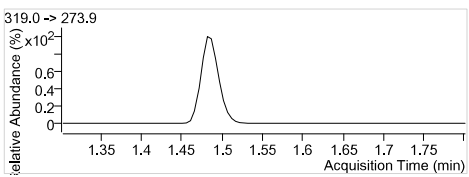
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



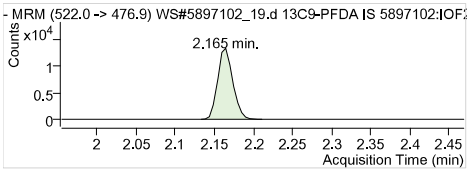


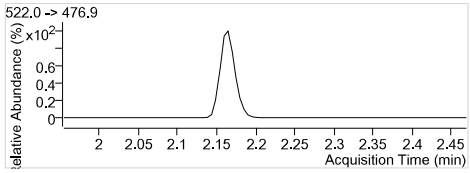
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



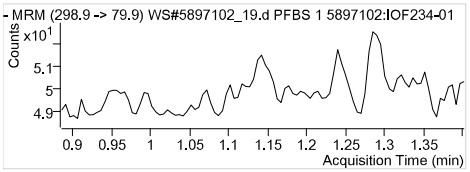


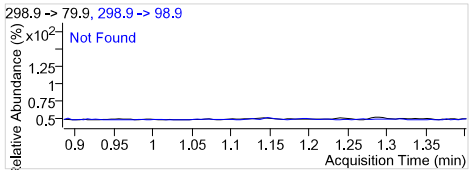
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



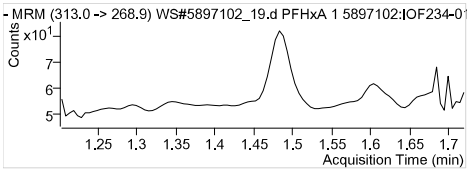


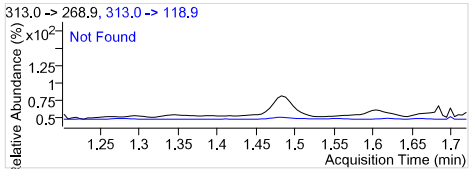
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



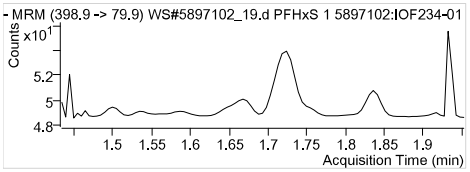


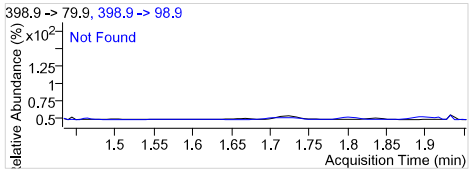
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



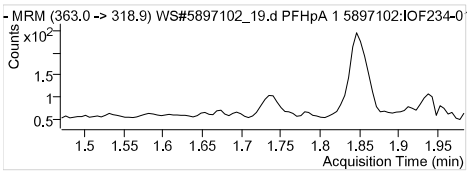


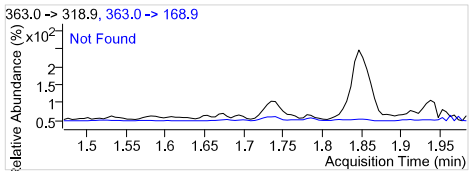
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



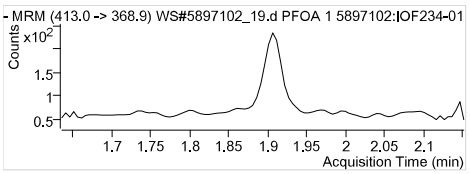


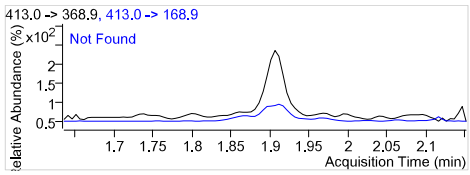
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



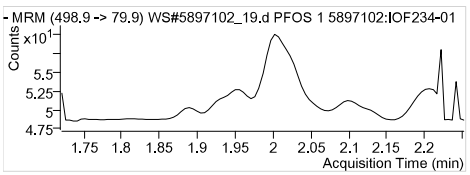


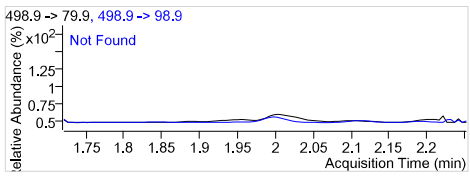
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



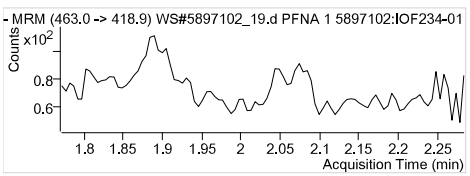


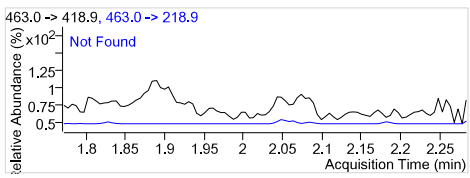
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



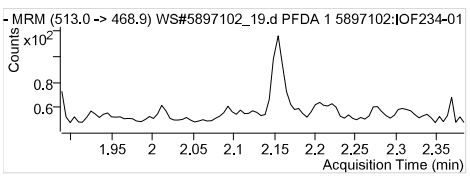


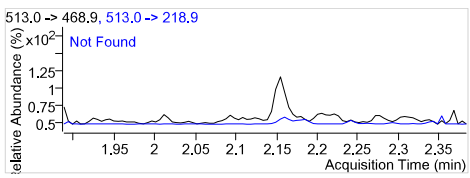
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



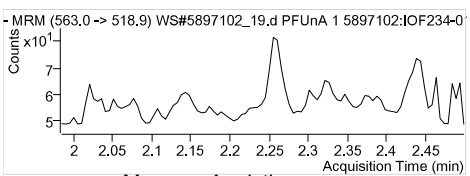


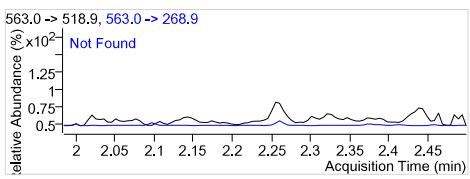
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



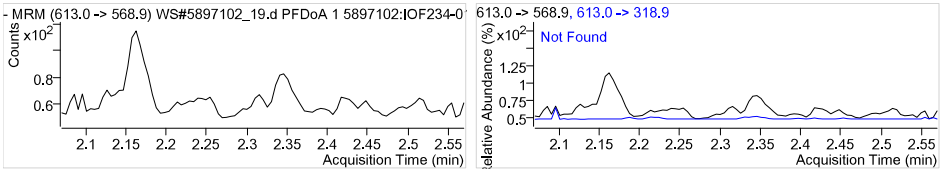


PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample

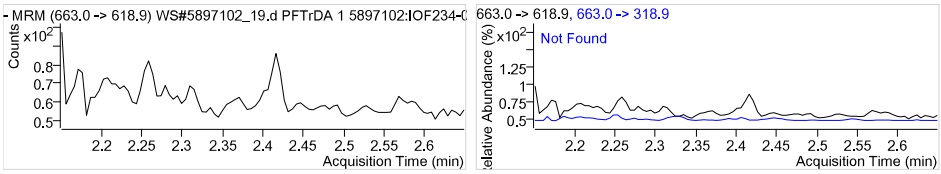




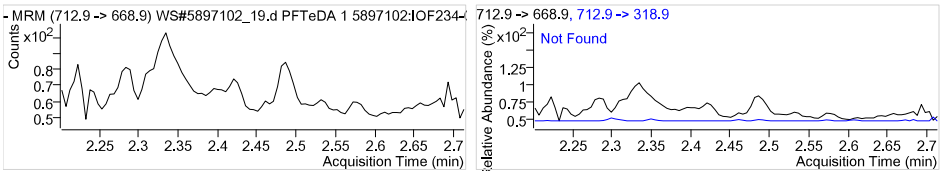
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



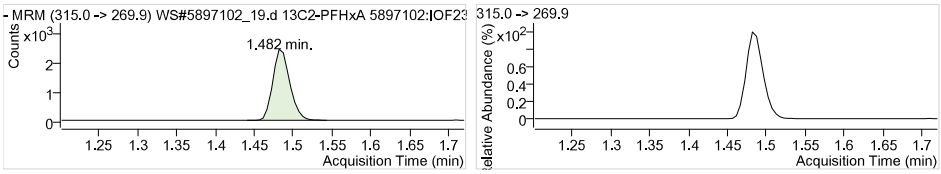
PFDoA 1 613.0 -> 568.9
RT (Exp. RT): 0.000 (2.346)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



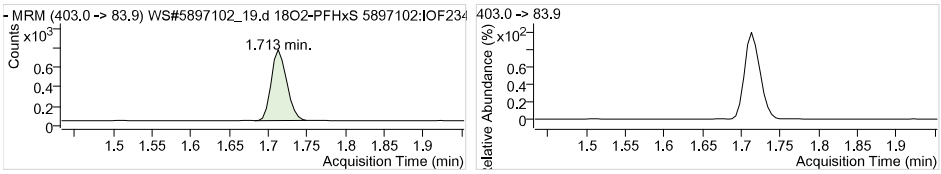
PFTrDA 1 663.0 -> 618.9
RT (Exp. RT): 0.000 (2.416)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



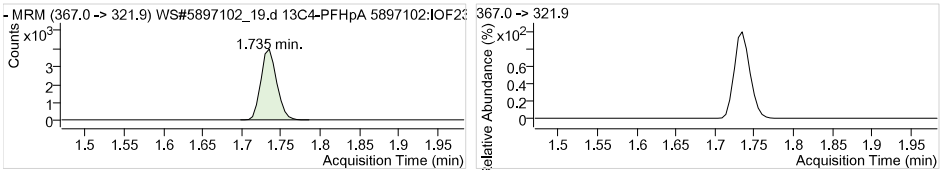
PFTeDA 1 712.9 -> 668.9
RT (Exp. RT): 0.000 (2.481)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



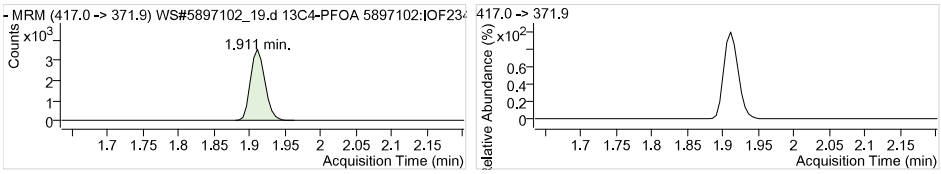
13C2-PFHxA 315.0 -> 269.9
RT (Exp. RT): 1.482 (1.487)
Calc. conc. 91.49 µg/L
Area ratio: 0.24558
Sample type: Sample



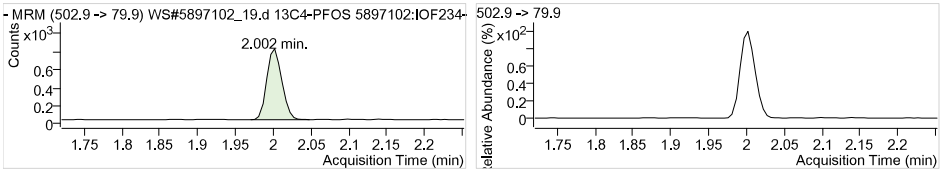
18O2-PFHxS 403.0 -> 83.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 93.60 µg/L
Area ratio: 0.06691
Sample type: Sample



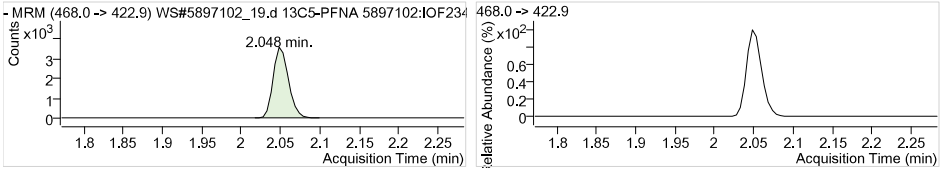
13C4-PFHpA 367.0 -> 321.9
RT (Exp. RT): 1.735 (1.735)
Calc. conc. 91.99 µg/L
Area ratio: 0.36428
Sample type: Sample



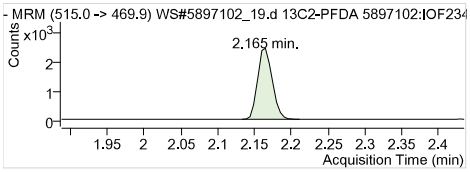
13C4-PFOA 417.0 -> 371.9
RT (Exp. RT): 1.911 (1.911)
Calc. conc. 90.67 µg/L
Area ratio: 0.32962
Sample type: Sample

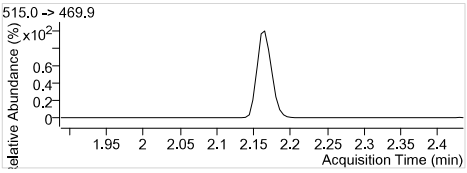


13C4-PFOS 502.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 91.51 µg/L
Area ratio: 0.07238
Sample type: Sample

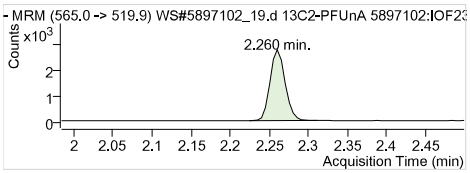


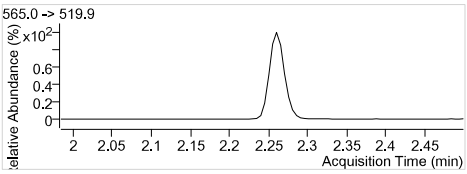
13C5-PFNA 468.0 -> 422.9
RT (Exp. RT): 2.048 (2.053)
Calc. conc. 94.35 µg/L
Area ratio: 0.31669
Sample type: Sample



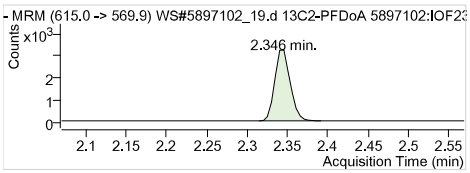


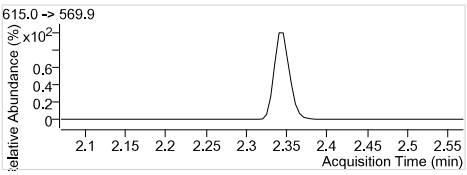
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	92.93 µg/L
Area ratio:	0.18941
Sample type:	Sample



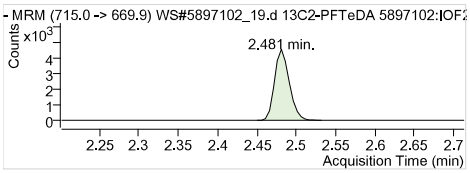


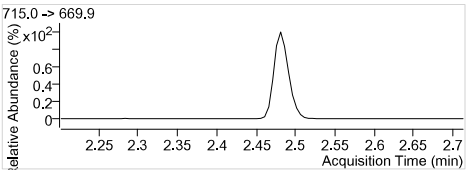
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	86.79 µg/L
Area ratio:	0.20633
Sample type:	Sample



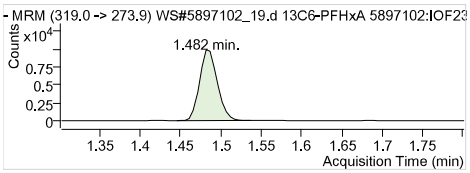


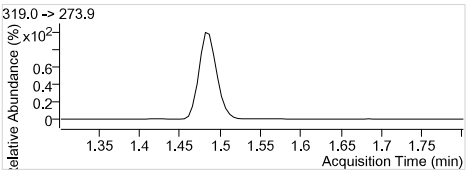
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	78.85 µg/L
Area ratio:	0.24219
Sample type:	Sample



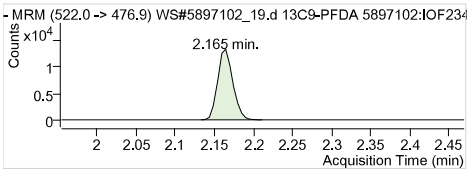


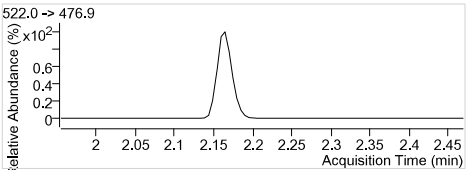
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	73.91 µg/L
Area ratio:	0.32605
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.25 µg/L
Area ratio:	0
Sample type:	Sample





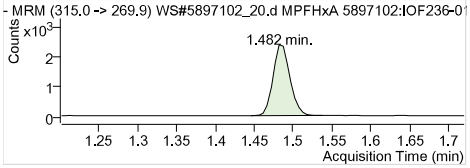
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.26 µg/L
Area ratio:	0
Sample type:	Sample

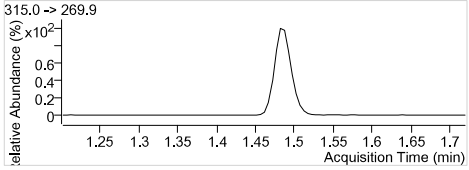
Batch Path T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics

Sample Name	**5897102:IOF236-01**	**Instrument**	LCMS04
Data File	WS#5897102_20.d	**Operator**	
Sample Type	Sample	**Dilution**	0.023
Acq. Method	PFC_Water_Low.m	**Position**	P2-B9
Acq. Date	2018/12/21 8:55:20 PM	**Injection Volume**	Per Method
Sample Annotation	-		

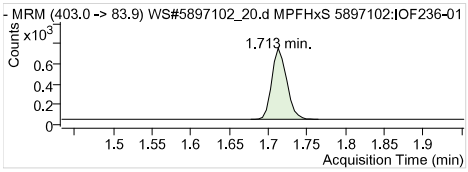
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3551	1.48	1 µg/L		
MPFHxS	926	1.71	1 µg/L		
MPFHpA	5358	1.73	1 µg/L		
MPFOA	4843	1.91	1 µg/L		
MPFOS	1064	2.00	1 µg/L		
MPFNA	4366	2.05	1 µg/L		
MPFDA	3113	2.16	1 µg/L		
MPFUnA	3675	2.26	1 µg/L		
MPFDoA	4552	2.34	1 µg/L		
MPFTeDA	4867	2.48	1 µg/L		
13C6-PFHxA IS	14814	1.49	1 µg/L		
13C9-PFDA IS	18144	2.16	1 µg/L		

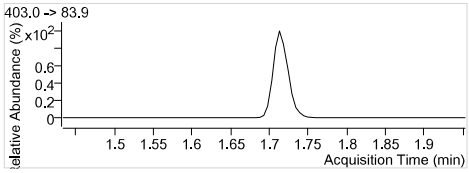
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3551	1.48	-	89.30 µg/L	-
18O2-PFHxS	926	1.71	-	87.44 µg/L	-
13C4-PFHpA	5358	1.73	-	91.34 µg/L	-
13C4-PFOA	4843	1.91	-	89.93 µg/L	-
13C4-PFOS	1064	2.00	-	90.82 µg/L	-
13C5-PFNA	4366	2.05	-	87.80 µg/L	-
13C2-PFDA	3113	2.16	-	84.18 µg/L	-
13C2-PFUnA	3675	2.26	-	85.20 µg/L	-
13C2-PFDoA	4552	2.34	-	81.69 µg/L	-
13C2-PFTeDA	4867	2.48	-	60.81 µg/L	-
13C6-PFHxA	14814	1.49	-	2.32 µg/L	-
13C9-PFDA	18144	2.16	-	2.41 µg/L	-



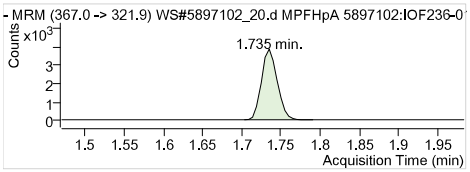


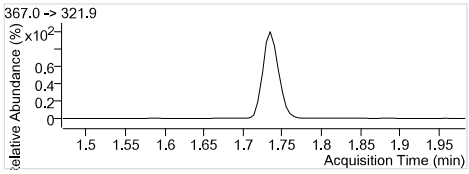
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



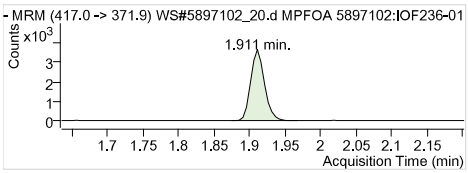


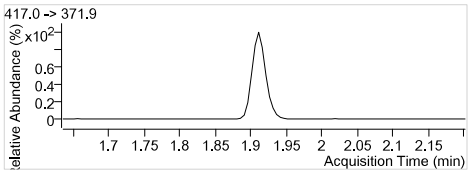
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



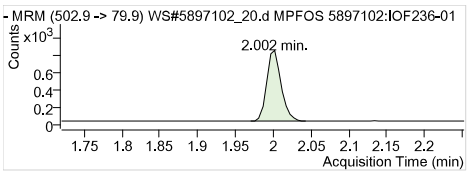


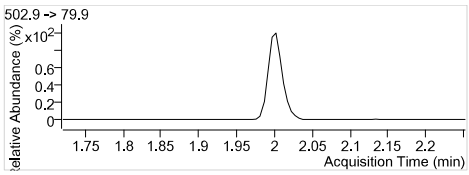
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



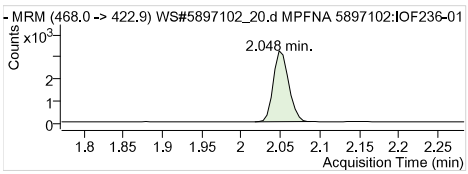


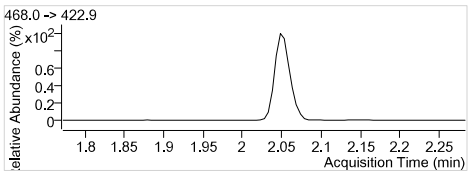
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



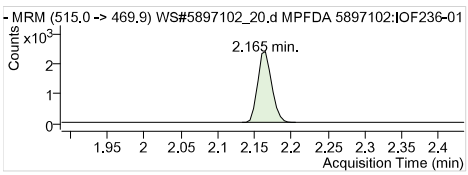


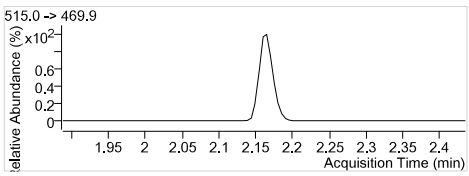
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



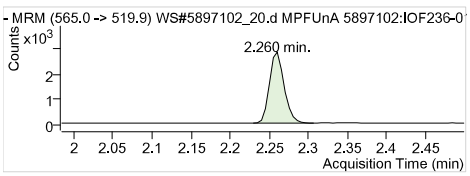


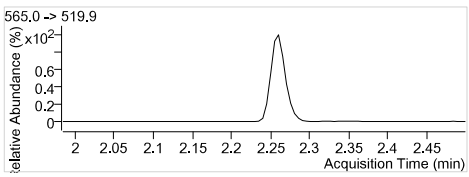
MPFNA Internal Standard
RT (Exp. RT): 2.048 (2.053)
Concentration: 1 µg/L
Sample type: Sample



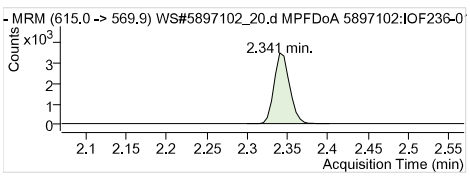


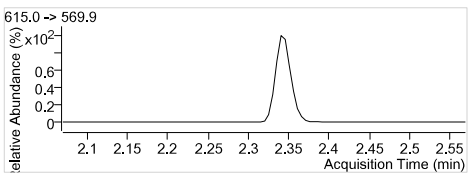
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



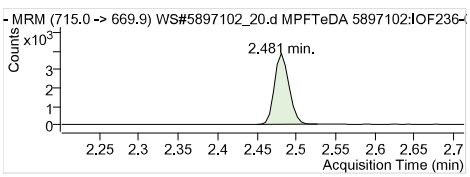


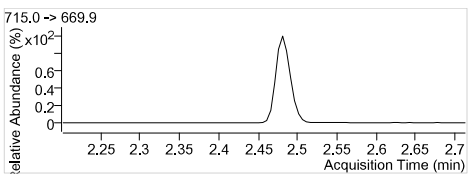
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



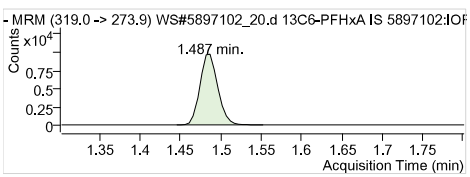


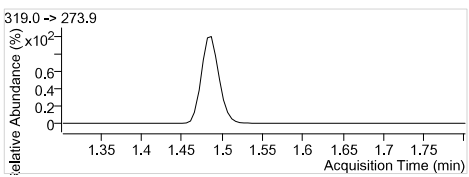
MPFDoA Internal Standard
RT (Exp. RT): 2.341 (2.346)
Concentration: 1 µg/L
Sample type: Sample



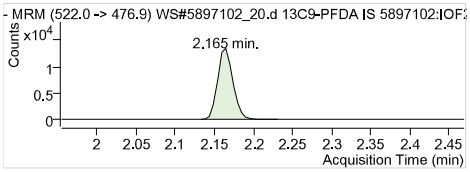


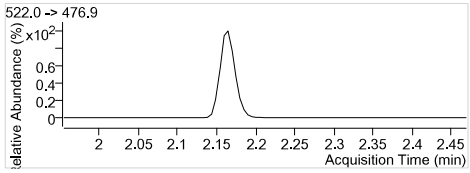
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



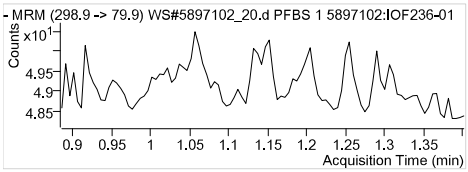


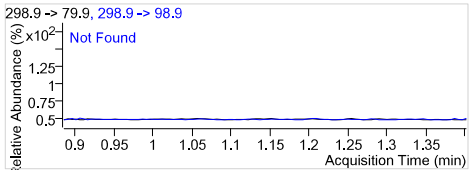
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.487 (1.487)
Concentration: 1 µg/L
Sample type: Sample



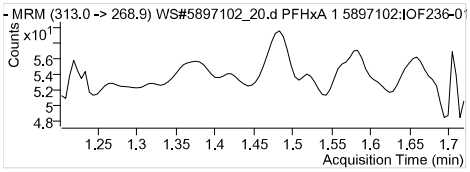


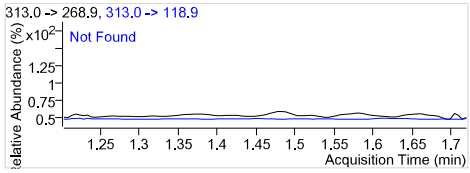
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



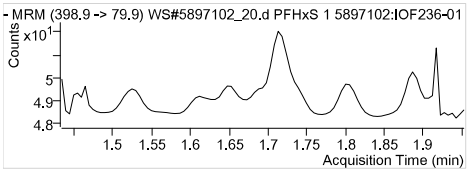


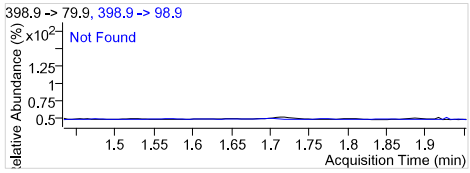
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



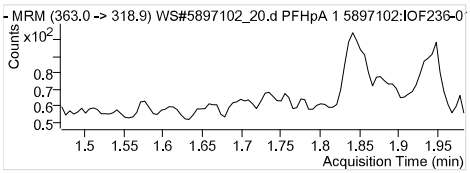


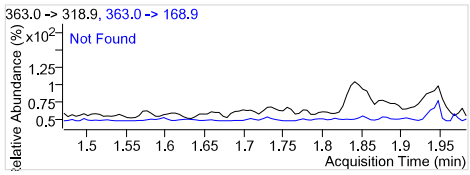
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



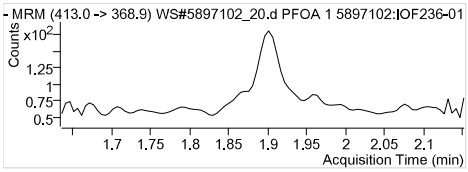


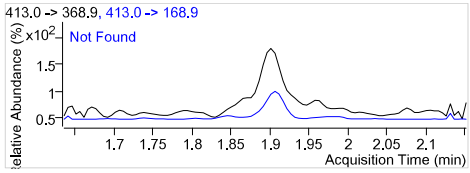
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



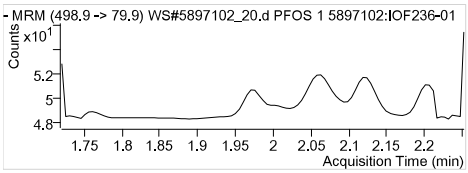


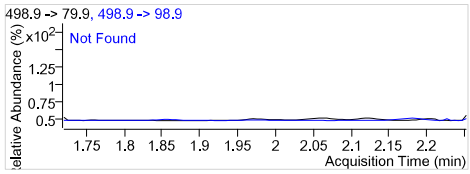
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



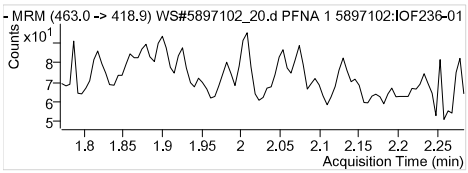


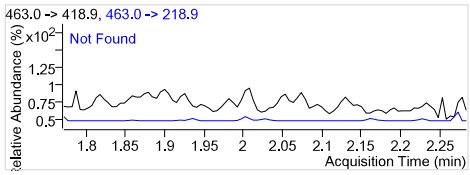
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



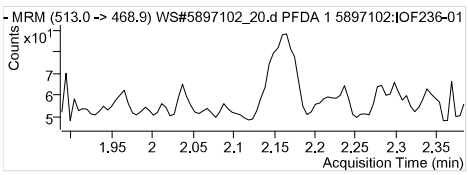


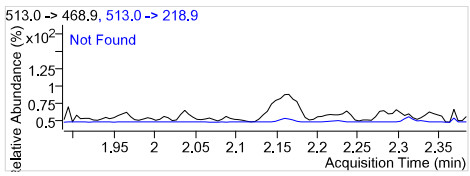
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



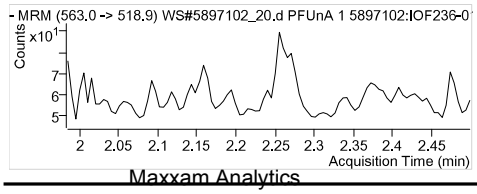


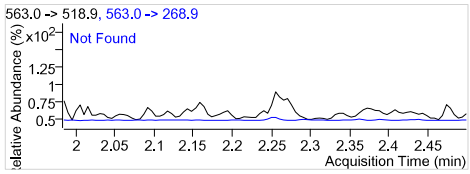
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



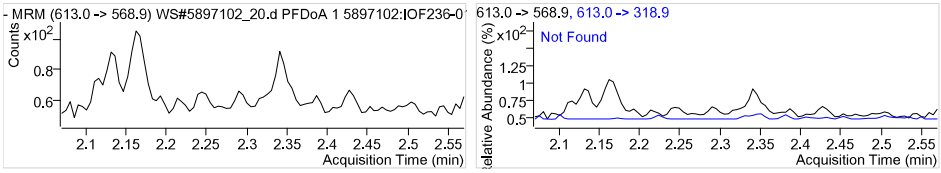


PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample

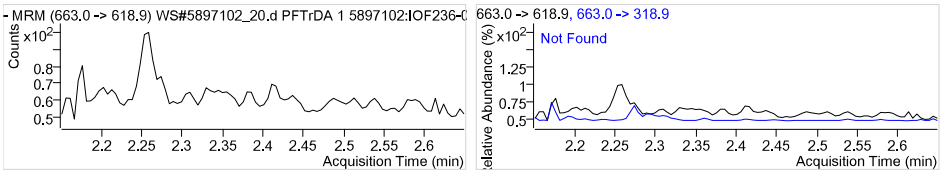




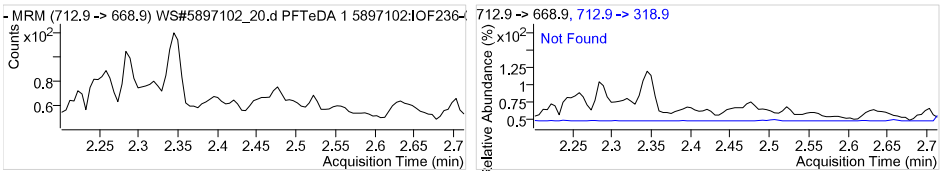
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



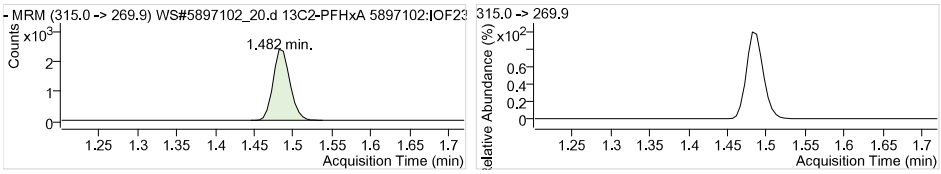
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



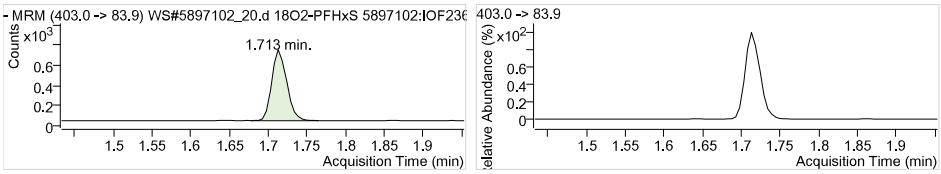
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



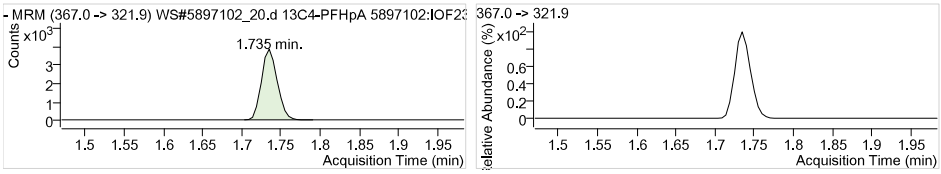
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



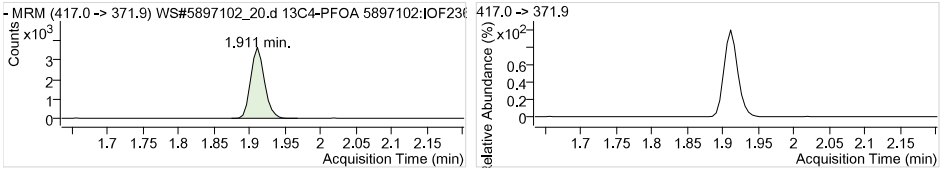
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	89.30 µg/L
Area ratio:	0.23971
Sample type:	Sample



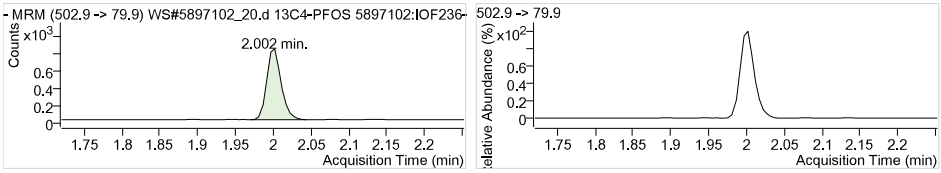
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	87.44 µg/L
Area ratio:	0.06251
Sample type:	Sample



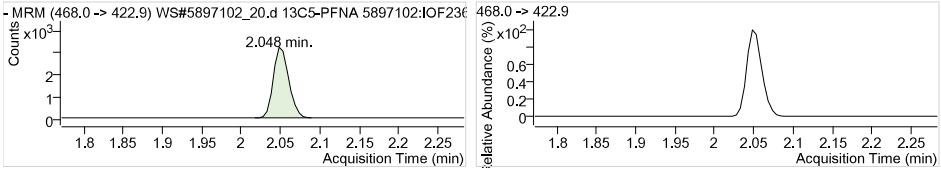
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	91.34 µg/L
Area ratio:	0.36168
Sample type:	Sample



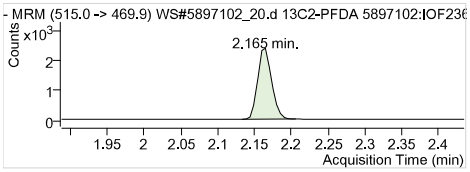
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	89.93 µg/L
Area ratio:	0.32692
Sample type:	Sample

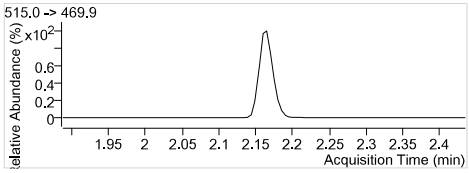


13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	90.82 µg/L
Area ratio:	0.07182
Sample type:	Sample

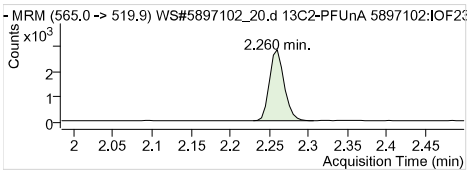


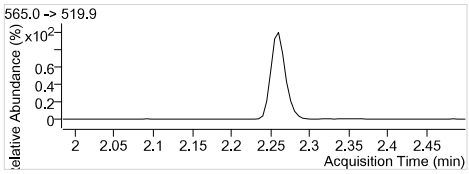
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.048 (2.053)
Calc. conc.	87.80 µg/L
Area ratio:	0.29472
Sample type:	Sample



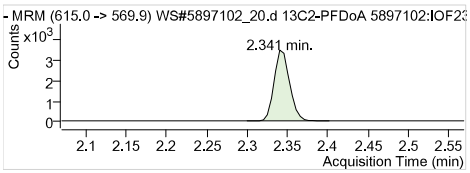


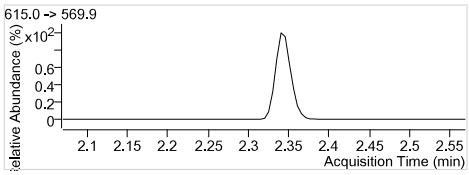
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	84.18 µg/L
Area ratio:	0.17157
Sample type:	Sample



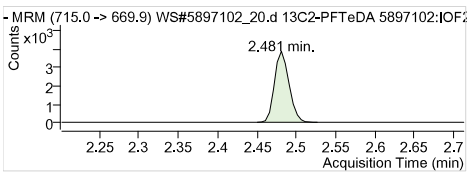


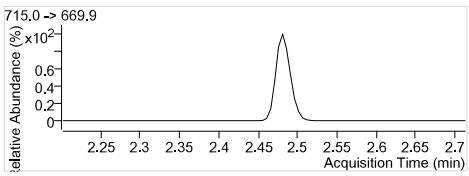
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	85.20 µg/L
Area ratio:	0.20255
Sample type:	Sample



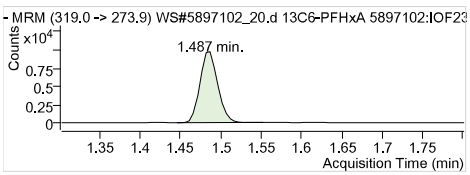


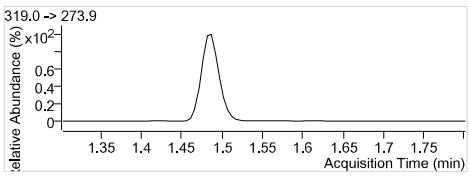
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.341 (2.346)
Calc. conc.	81.69 µg/L
Area ratio:	0.25088
Sample type:	Sample



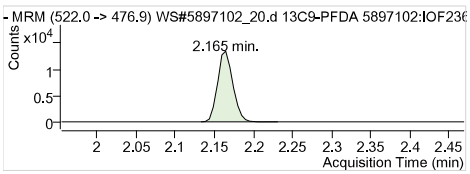


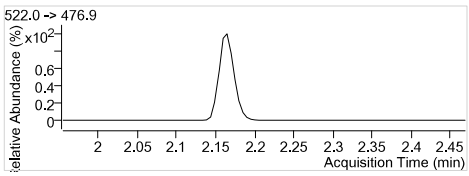
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	60.81 µg/L
Area ratio:	0.26824
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.487 (1.487)
Calc. conc.	2.32 µg/L
Area ratio:	0
Sample type:	Sample





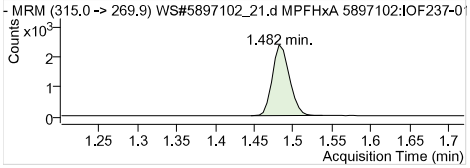
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.41 µg/L
Area ratio:	0
Sample type:	Sample

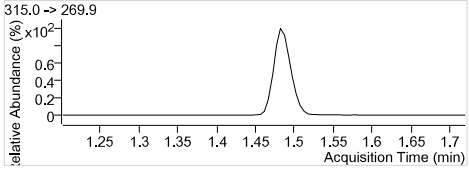
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics

Sample Name	**5897102:IOF237-01**	**Instrument**	LCMS04
Data File	WS#5897102_21.d	**Operator**	
Sample Type	Sample	**Dilution**	0.022
Acq. Method	PFC_Water_Low.m	**Position**	P2-C1
Acq. Date	2018/12/21 9:00:13 PM	**Injection Volume**	Per Method
Sample Annotation	-		

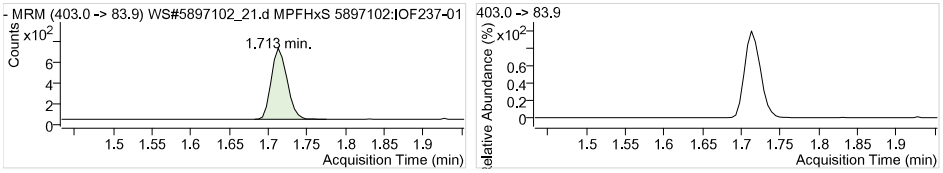
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3579	1.48	1 µg/L		
MPFHxS	949	1.71	1 µg/L		
MPFHpA	5265	1.73	1 µg/L		
MPFOA	5103	1.91	1 µg/L		
MPFOS	1038	2.00	1 µg/L		
MPFNA	4757	2.05	1 µg/L		
MPFDA	3098	2.16	1 µg/L		
MPFUnA	3473	2.26	1 µg/L		
MPFDoA	4222	2.34	1 µg/L		
MPFTeDA	4578	2.48	1 µg/L		
13C6-PFHxA IS	14756	1.48	1 µg/L		
13C9-PFDA IS	17265	2.16	1 µg/L		

Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3579	1.48	-	90.36 µg/L	-
18O2-PFHxS	949	1.71	-	89.97 µg/L	-
13C4-PFHpA	5265	1.73	-	90.11 µg/L	-
13C4-PFOA	5103	1.91	-	95.13 µg/L	-
13C4-PFOS	1038	2.00	-	88.94 µg/L	-
13C5-PFNA	4757	2.05	-	96.04 µg/L	-
13C2-PFDA	3098	2.16	-	88.03 µg/L	-
13C2-PFUnA	3473	2.26	-	84.62 µg/L	-
13C2-PFDoA	4222	2.34	-	79.62 µg/L	-
13C2-PFTeDA	4578	2.48	-	60.11 µg/L	-
13C6-PFHxA	14756	1.48	-	2.21 µg/L	-
13C9-PFDA	17265	2.16	-	2.20 µg/L	-

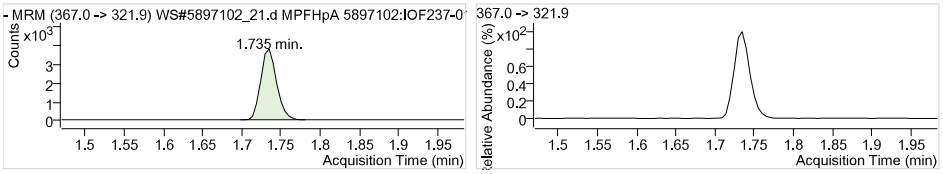




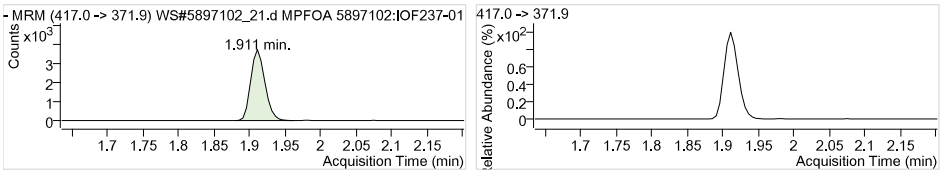
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



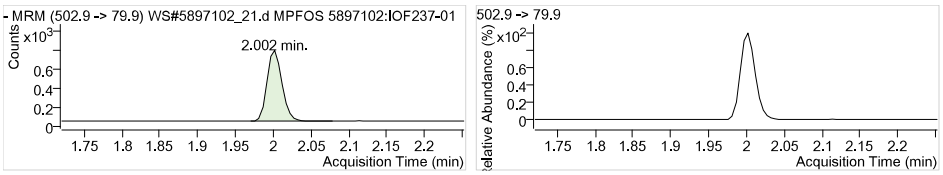
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



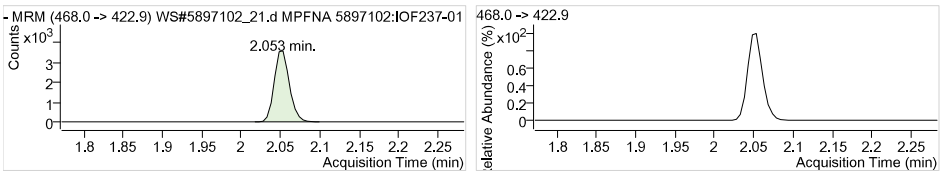
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



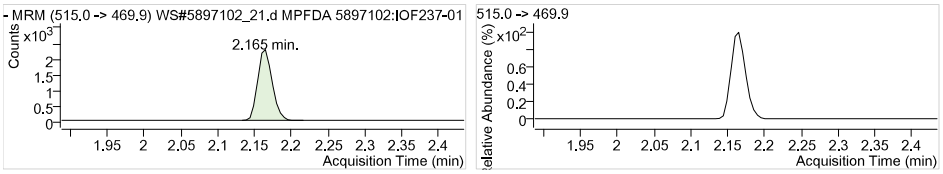
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



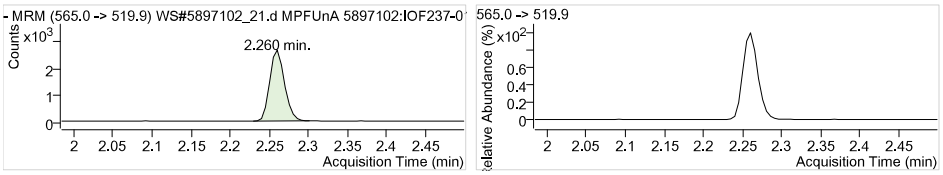
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



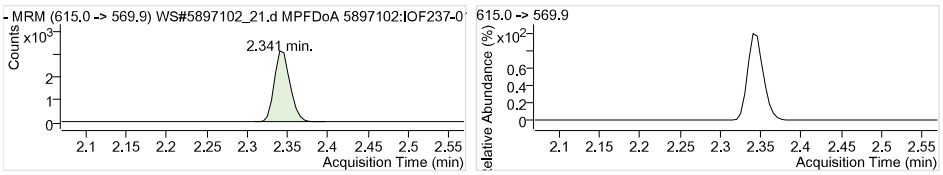
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



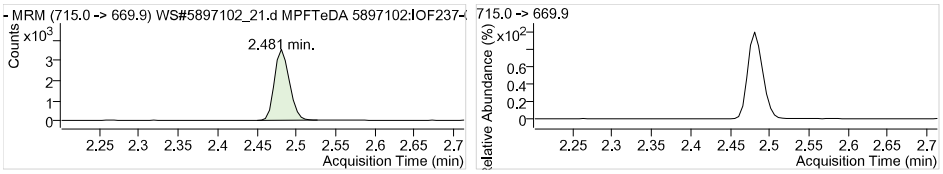
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



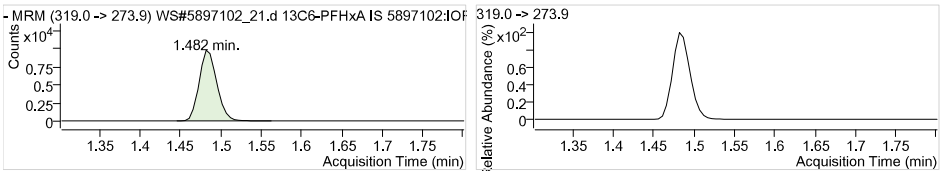
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



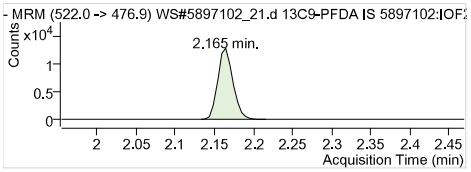
MPFDoA Internal Standard
RT (Exp. RT): 2.341 (2.346)
Concentration: 1 µg/L
Sample type: Sample

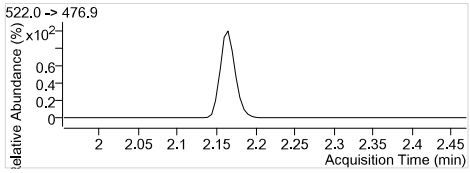


MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample

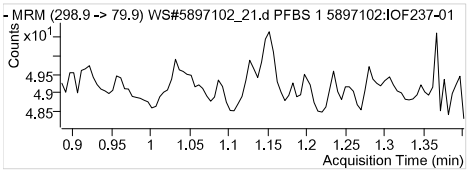


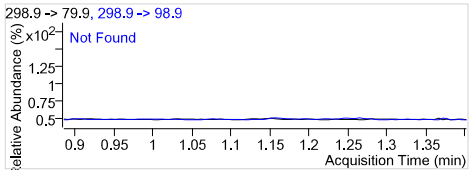
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



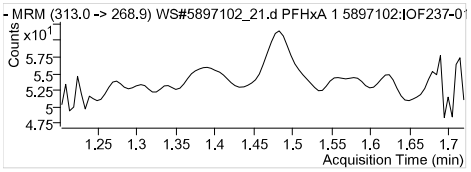


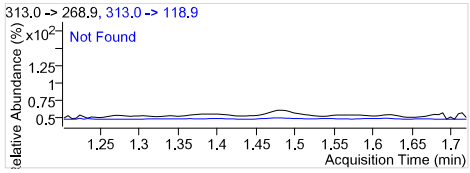
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



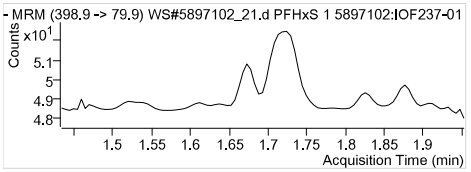


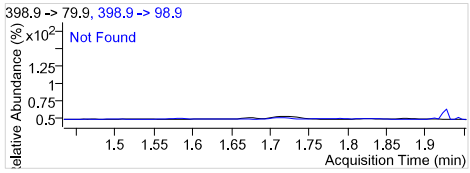
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



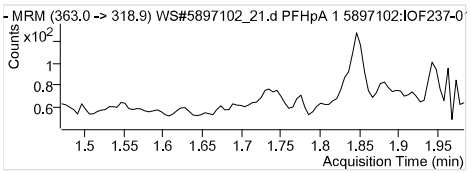


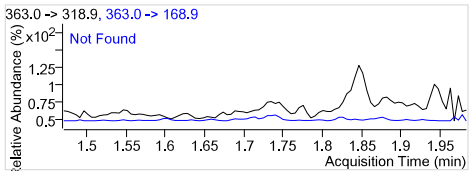
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



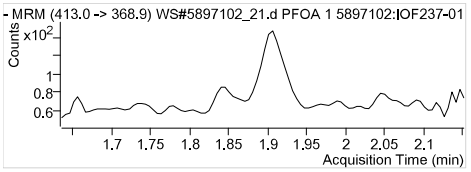


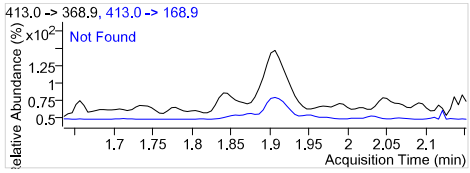
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



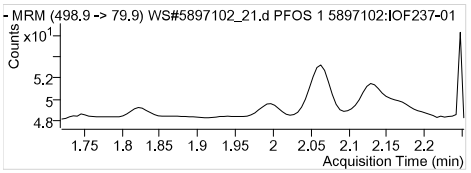


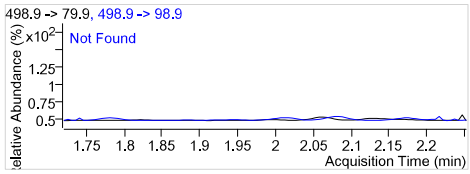
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



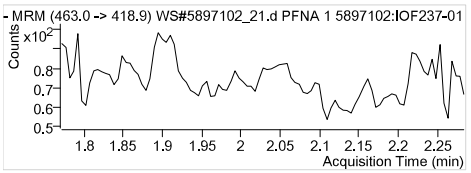


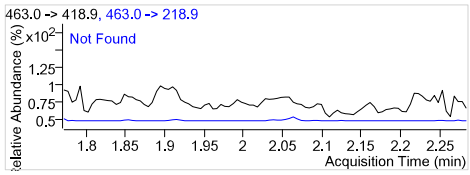
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



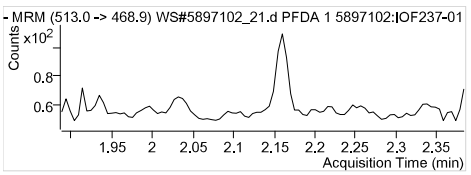


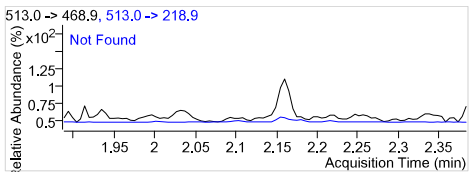
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



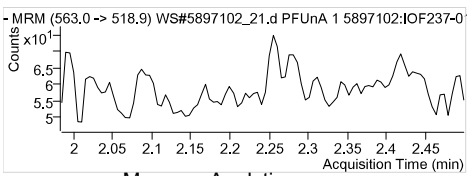


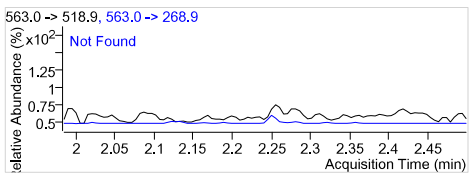
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



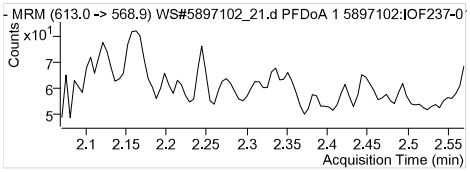


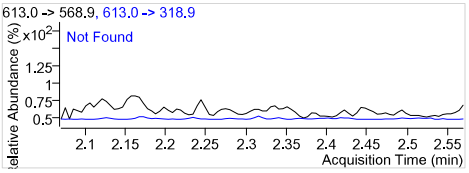
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



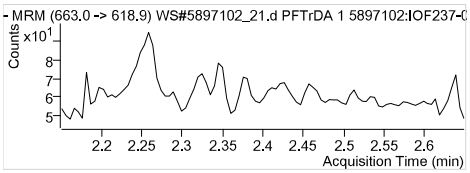


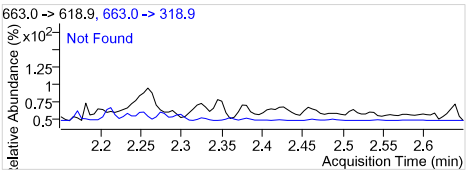
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



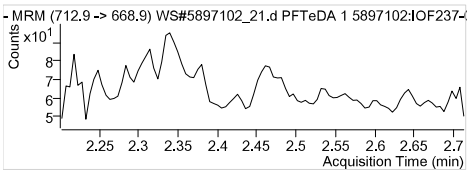


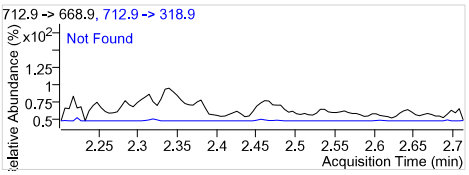
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



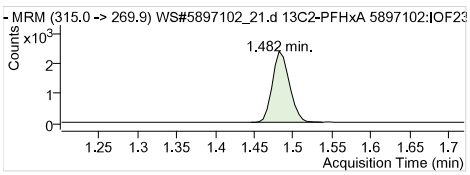


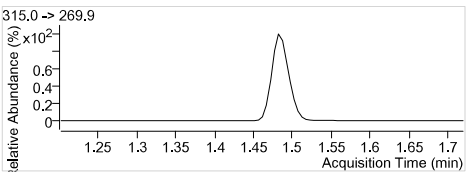
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



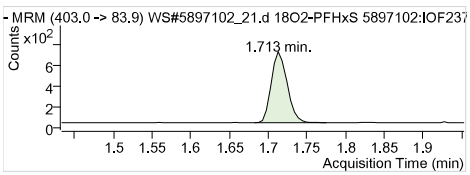


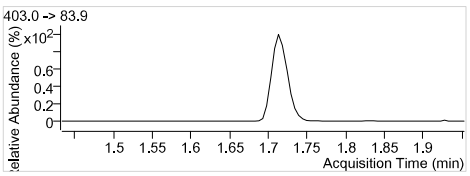
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



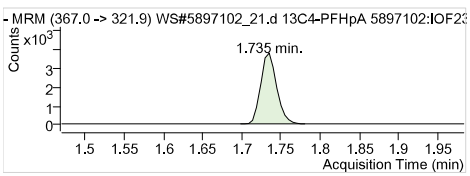


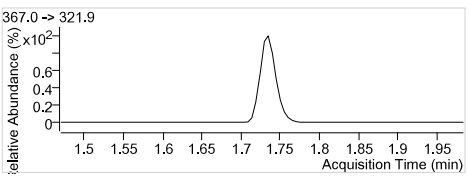
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	90.36 µg/L
Area ratio:	0.24255
Sample type:	Sample



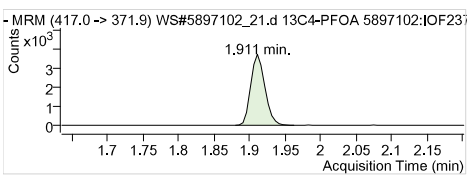


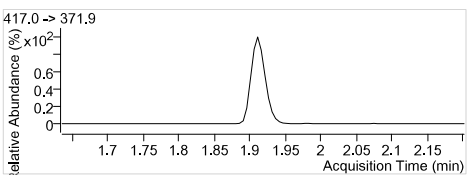
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	89.97 µg/L
Area ratio:	0.06431
Sample type:	Sample



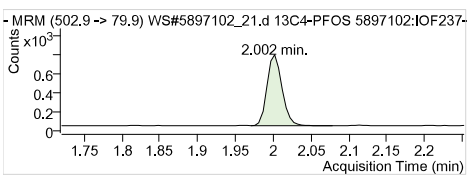


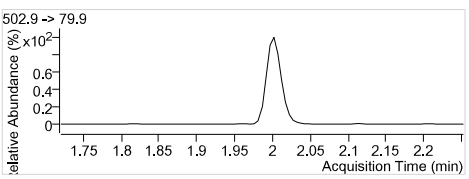
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	90.11 µg/L
Area ratio:	0.35680
Sample type:	Sample



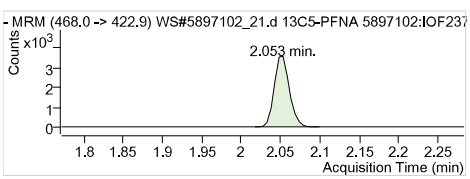


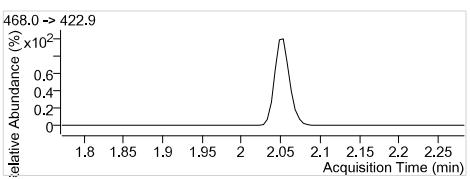
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	95.13 µg/L
Area ratio:	0.34583
Sample type:	Sample



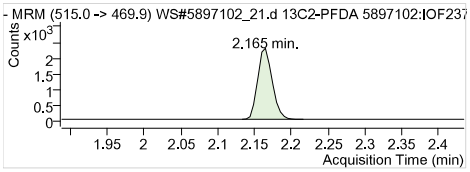


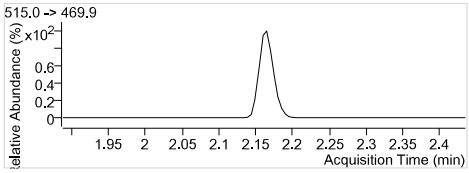
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	88.94 µg/L
Area ratio:	0.07034
Sample type:	Sample



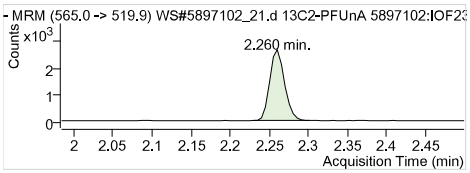


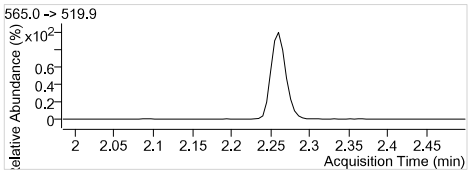
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	96.04 µg/L
Area ratio:	0.32238
Sample type:	Sample



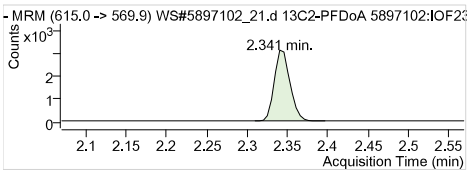


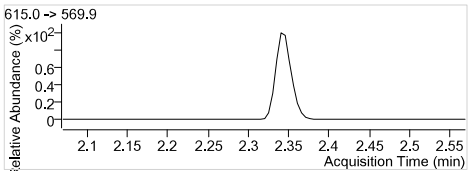
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	88.03 µg/L
Area ratio:	0.17944
Sample type:	Sample



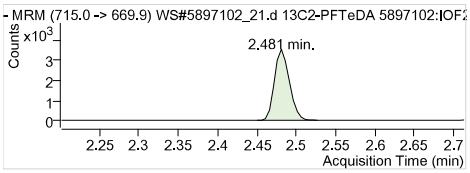


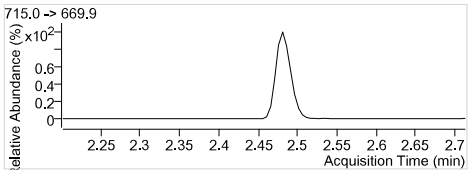
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	84.62 µg/L
Area ratio:	0.20116
Sample type:	Sample



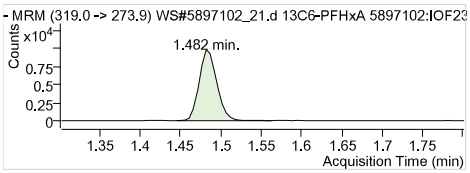


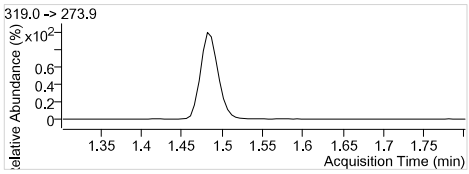
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.341 (2.346)
Calc. conc.	79.62 µg/L
Area ratio:	0.24454
Sample type:	Sample



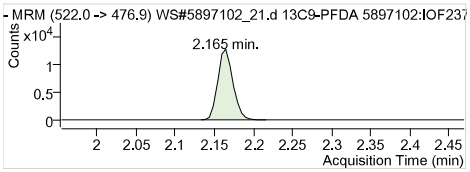


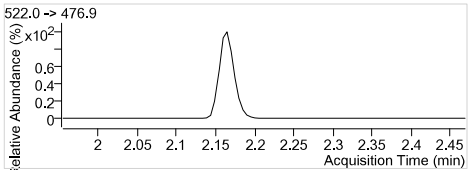
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	60.11 µg/L
Area ratio:	0.26516
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.21 µg/L
Area ratio:	0
Sample type:	Sample





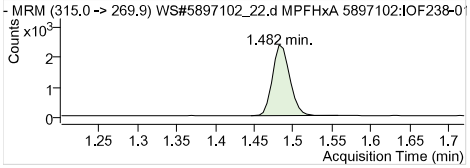
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.20 µg/L
Area ratio:	0
Sample type:	Sample

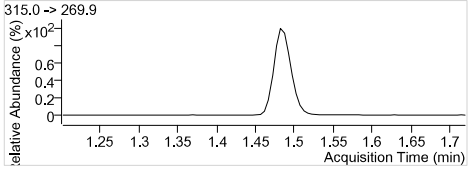
Batch Path T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics

Sample Name	**5897102:IOF238-01**	**Instrument**	LCMS04
Data File	WS#5897102_22.d	**Operator**	
Sample Type	Sample	**Dilution**	0.022
Acq. Method	PFC_Water_Low.m	**Position**	P2-C2
Acq. Date	2018/12/21 9:05:08 PM	**Injection Volume**	Per Method
Sample Annotation	-		

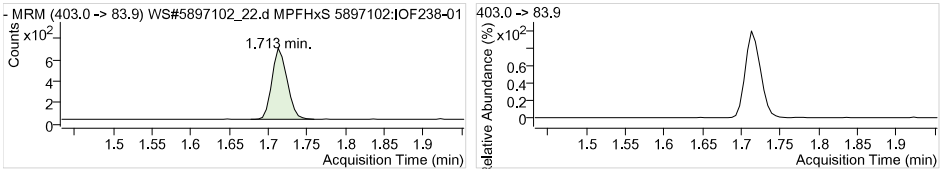
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3648	1.48	1 µg/L		
MPFHxS	881	1.71	1 µg/L		
MPFHpA	5561	1.73	1 µg/L		
MPFOA	5121	1.91	1 µg/L		
MPFOS	1122	2.00	1 µg/L		
MPFNA	4621	2.05	1 µg/L		
MPFDA	3249	2.16	1 µg/L		
MPFUnA	3788	2.26	1 µg/L		
MPFDoA	5033	2.35	1 µg/L		
MPFTeDA	6766	2.48	1 µg/L		
13C6-PFHxA IS	14723	1.48	1 µg/L		
13C9-PFDA IS	17016	2.16	1 µg/L		

Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1	242	1.48	-	0.00 µg/L	-
PFHxS 1	348	1.71	-	0.02 µg/L	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1	167	2.00	-	0.01 µg/L	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3648	1.48	-	92.31 µg/L	-
18O2-PFHxS	881	1.71	-	83.71 µg/L	-
13C4-PFHpA	5561	1.73	-	95.39 µg/L	-
13C4-PFOA	5121	1.91	-	95.68 µg/L	-
13C4-PFOS	1122	2.00	-	96.36 µg/L	-
13C5-PFNA	4621	2.05	-	93.51 µg/L	-
13C2-PFDA	3249	2.16	-	93.68 µg/L	-
13C2-PFUnA	3788	2.26	-	93.64 µg/L	-
13C2-PFDoA	5033	2.35	-	96.30 µg/L	-
13C2-PFTeDA	6766	2.48	-	90.14 µg/L	-
13C6-PFHxA	14723	1.48	-	2.21 µg/L	-
13C9-PFDA	17016	2.16	-	2.17 µg/L	-

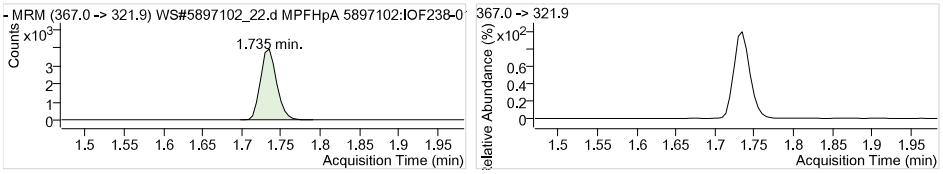




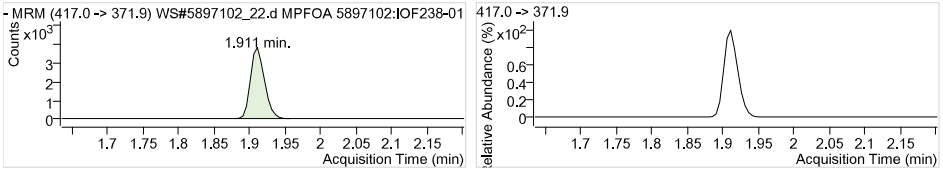
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



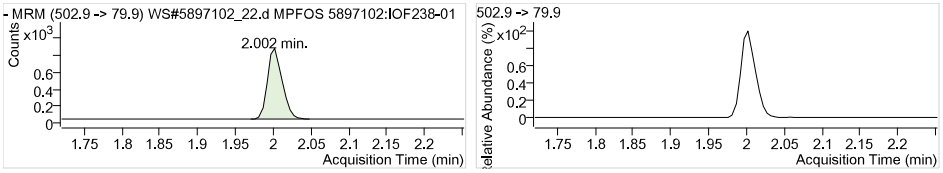
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



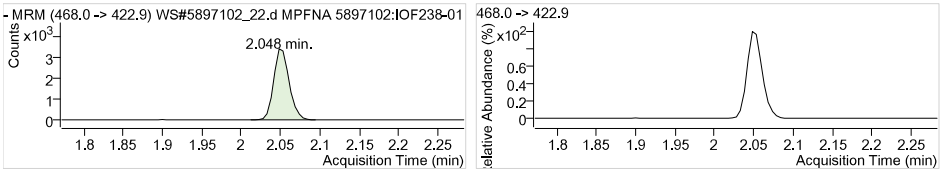
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



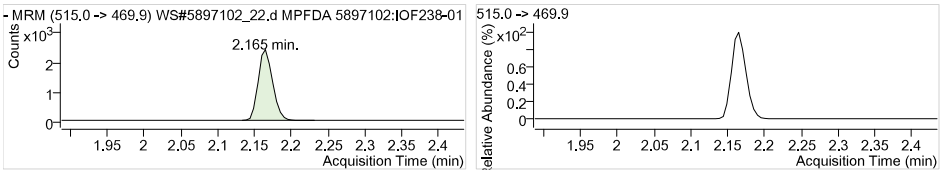
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



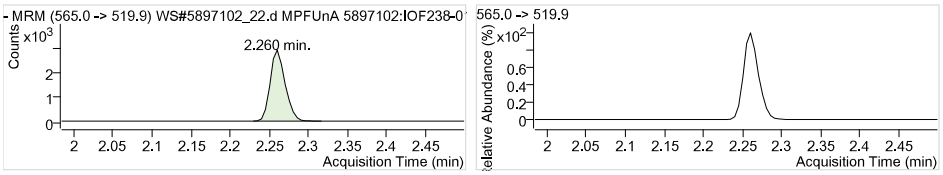
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



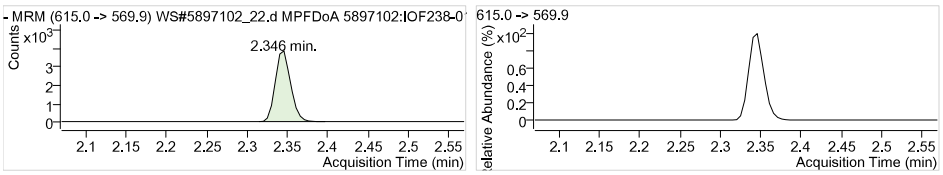
MPFNA Internal Standard
RT (Exp. RT): 2.048 (2.053)
Concentration: 1 µg/L
Sample type: Sample



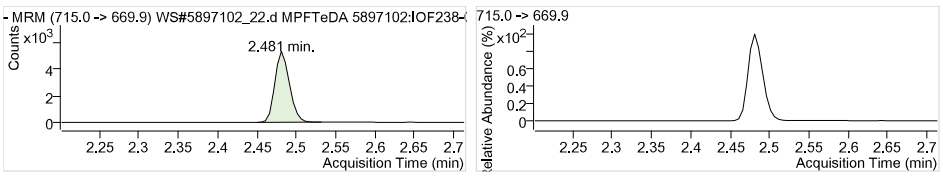
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



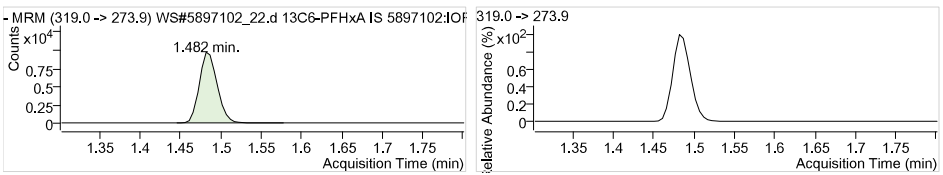
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



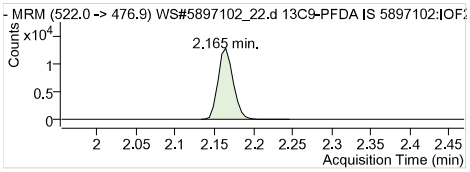
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample

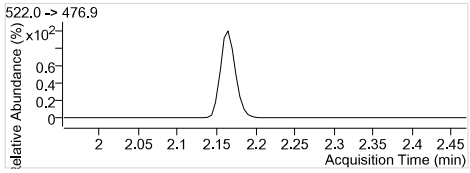


MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample

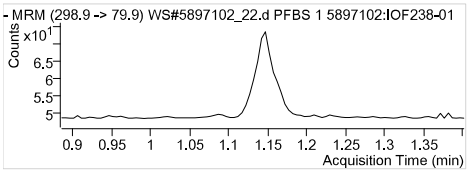


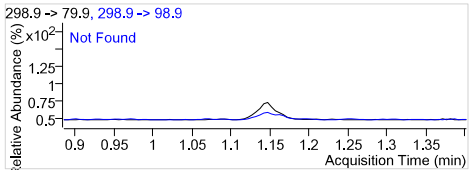
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



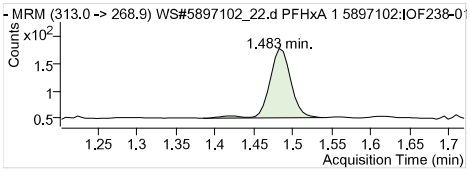


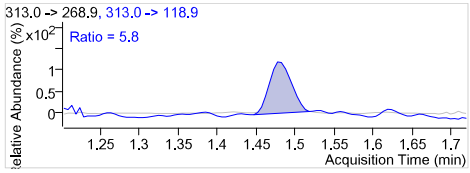
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



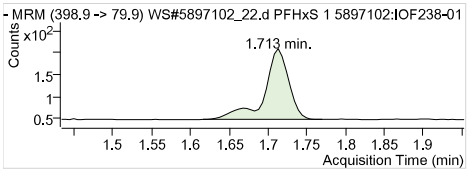


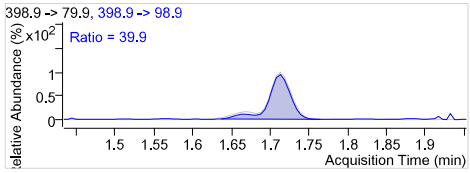
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



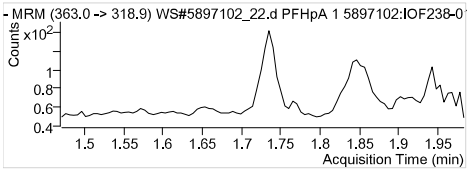


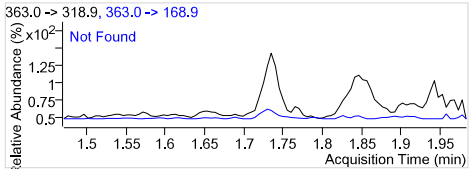
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 1.483 (1.488)
Calc. conc. 0.00 µg/L
Area ratio: 0.06634
Sample type: Sample



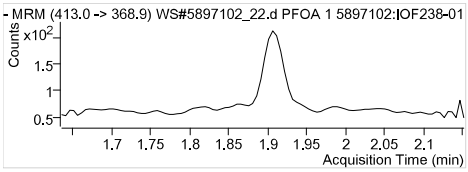


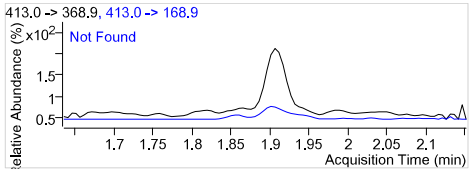
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 0.02 µg/L
Area ratio: 0.39501
Sample type: Sample



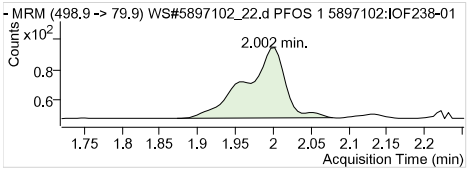


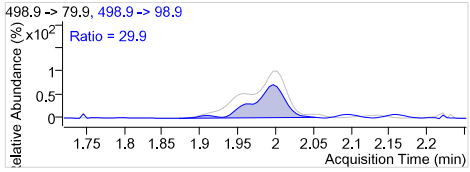
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



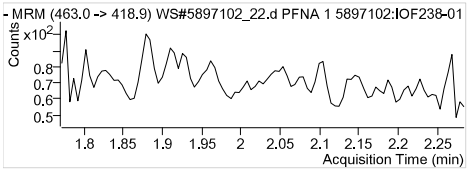


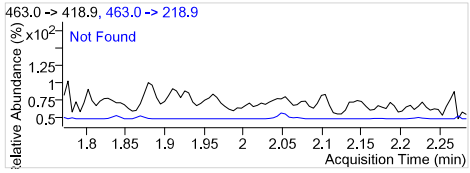
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



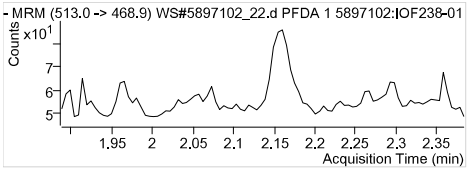


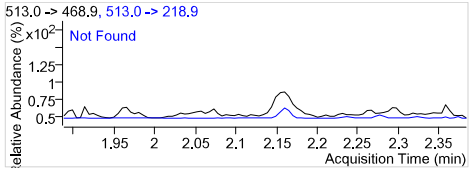
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 0.01 µg/L
Area ratio: 0.14884
Sample type: Sample



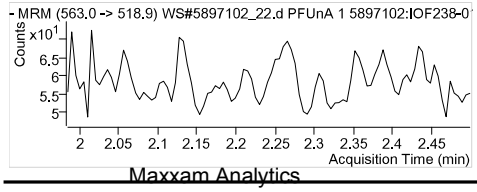


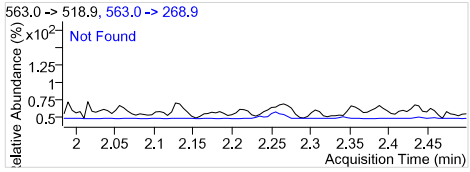
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



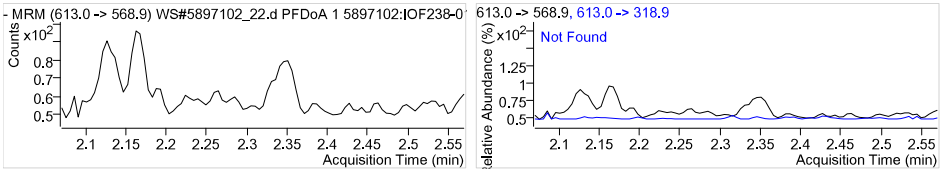


PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample

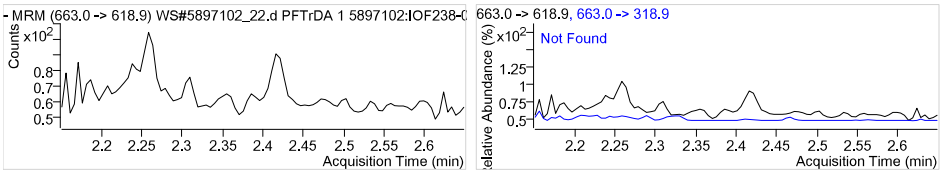




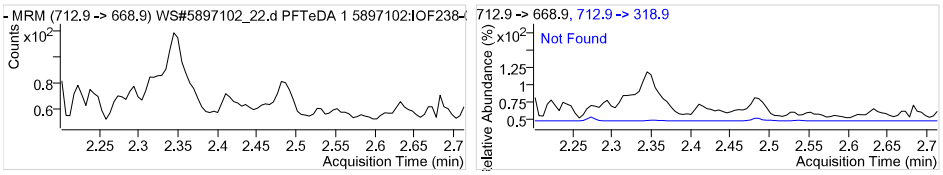
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



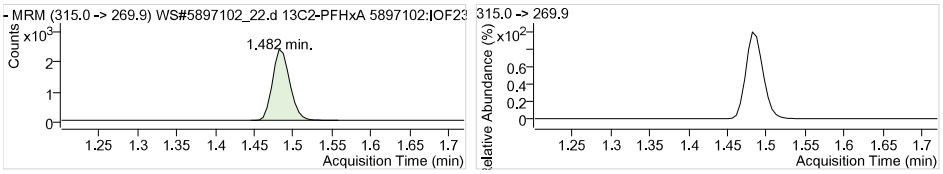
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



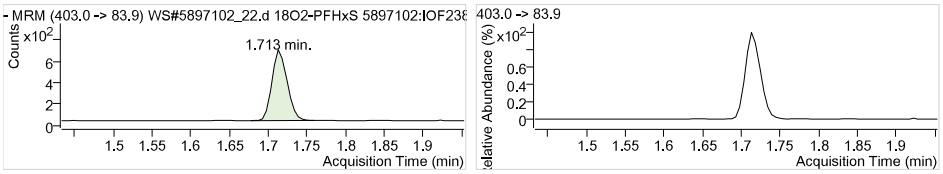
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



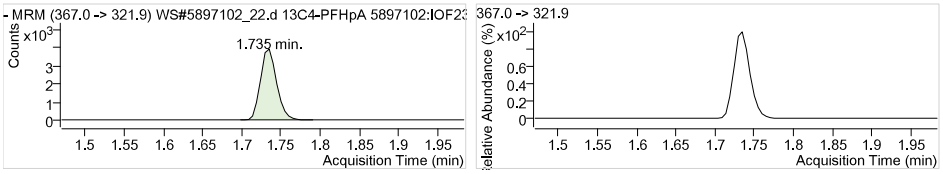
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



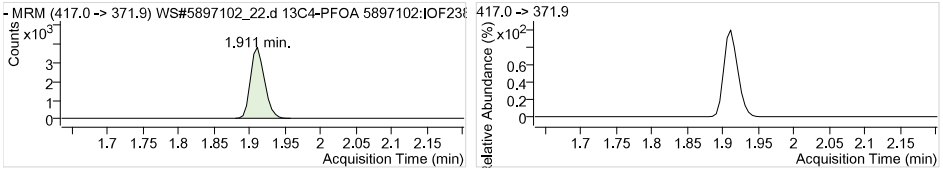
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	92.31 µg/L
Area ratio:	0.24778
Sample type:	Sample



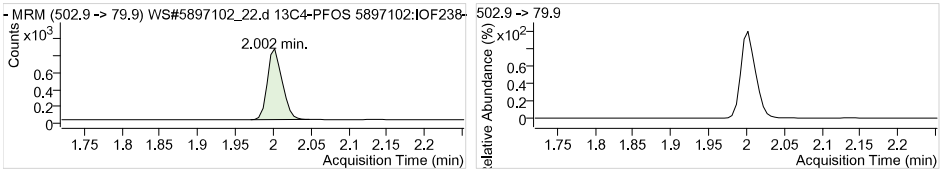
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	83.71 µg/L
Area ratio:	0.05984
Sample type:	Sample



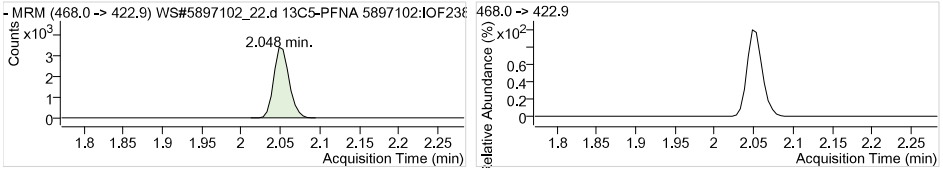
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	95.39 µg/L
Area ratio:	0.37771
Sample type:	Sample



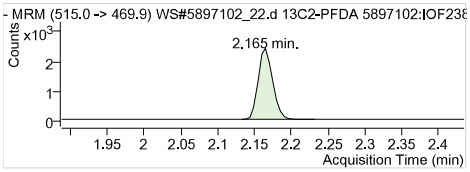
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	95.68 µg/L
Area ratio:	0.34782
Sample type:	Sample

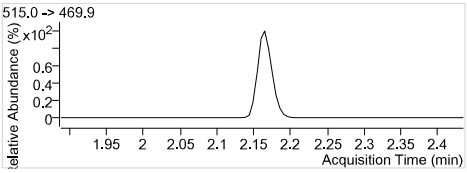


13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	96.36 µg/L
Area ratio:	0.07621
Sample type:	Sample

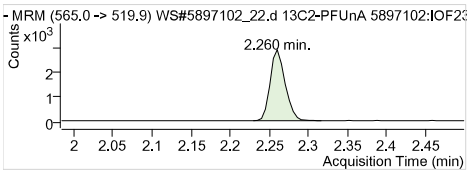


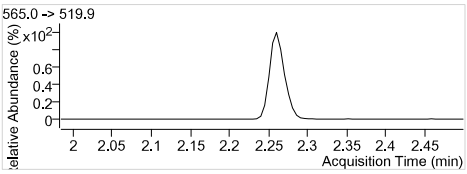
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.048 (2.053)
Calc. conc.	93.51 µg/L
Area ratio:	0.31386
Sample type:	Sample



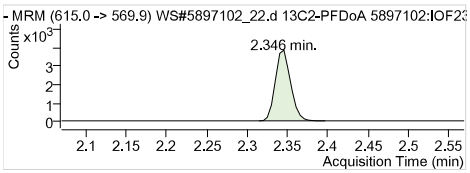


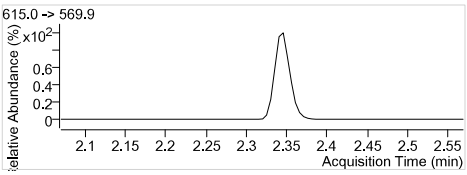
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	93.68 µg/L
Area ratio:	0.19094
Sample type:	Sample



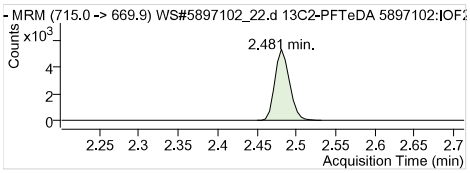


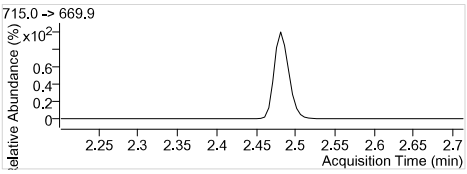
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	93.64 µg/L
Area ratio:	0.22261
Sample type:	Sample



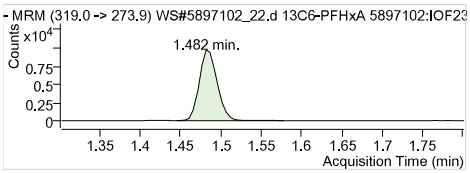


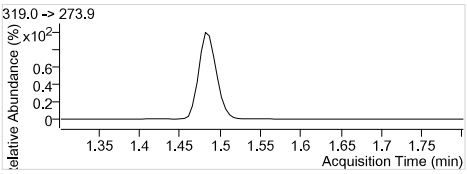
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	96.30 µg/L
Area ratio:	0.29578
Sample type:	Sample



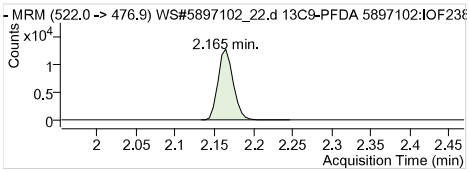


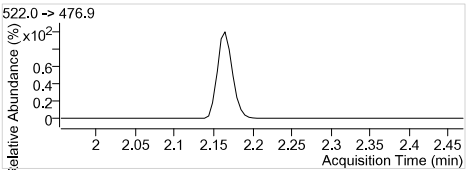
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	90.14 µg/L
Area ratio:	0.39763
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.21 µg/L
Area ratio:	0
Sample type:	Sample





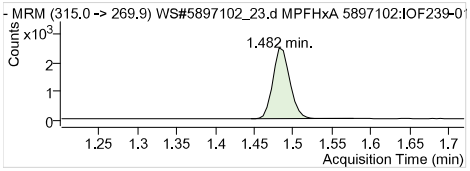
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.17 µg/L
Area ratio:	0
Sample type:	Sample

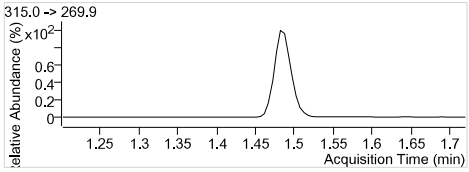
Batch Path T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics

Sample Name	**5897102:IOF239-01**	**Instrument**	LCMS04
Data File	WS#5897102_23.d	**Operator**	
Sample Type	Sample	**Dilution**	0.024
Acq. Method	PFC_Water_Low.m	**Position**	P2-C3
Acq. Date	2018/12/21 9:10:03 PM	**Injection Volume**	Per Method
Sample Annotation	-		

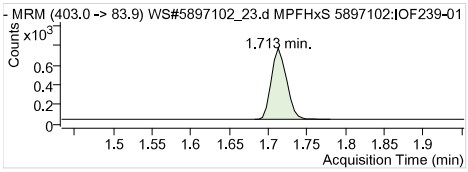
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3721	1.48	1 µg/L		
MPFHxS	975	1.71	1 µg/L		
MPFHpA	5438	1.73	1 µg/L		
MPFOA	5156	1.91	1 µg/L		
MPFOS	1059	2.00	1 µg/L		
MPFNA	4765	2.05	1 µg/L		
MPFDA	3228	2.16	1 µg/L		
MPFUnA	3701	2.26	1 µg/L		
MPFDoA	4579	2.35	1 µg/L		
MPFTeDA	6386	2.48	1 µg/L		
13C6-PFHxA IS	15192	1.48	1 µg/L		
13C9-PFDA IS	18627	2.16	1 µg/L		

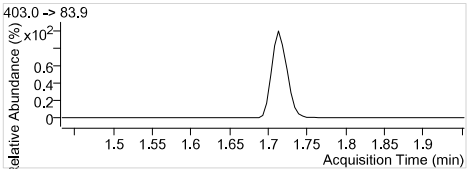
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3721	1.48	-	91.25 µg/L	-
18O2-PFHxS	975	1.71	-	89.78 µg/L	-
13C4-PFHpA	5438	1.73	-	90.40 µg/L	-
13C4-PFOA	5156	1.91	-	93.36 µg/L	-
13C4-PFOS	1059	2.00	-	88.14 µg/L	-
13C5-PFNA	4765	2.05	-	93.44 µg/L	-
13C2-PFDA	3228	2.16	-	85.02 µg/L	-
13C2-PFUnA	3701	2.26	-	83.58 µg/L	-
13C2-PFDoA	4579	2.35	-	80.04 µg/L	-
13C2-PFTeDA	6386	2.48	-	77.72 µg/L	-
13C6-PFHxA	15192	1.48	-	2.48 µg/L	-
13C9-PFDA	18627	2.16	-	2.59 µg/L	-



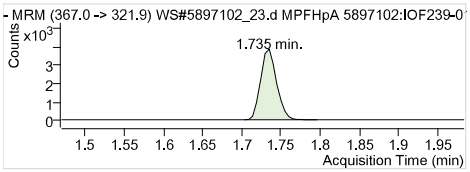


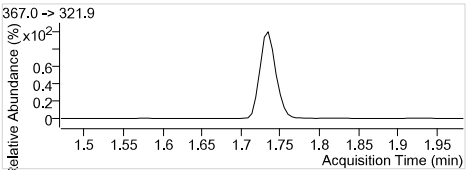
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



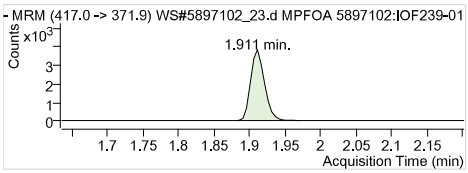


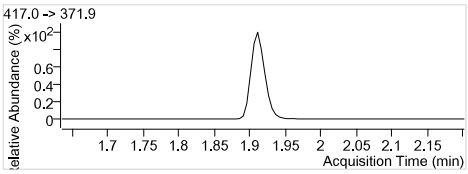
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



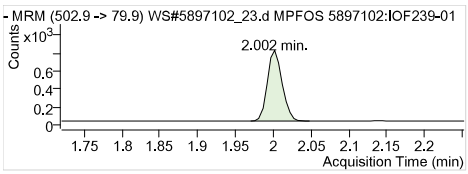


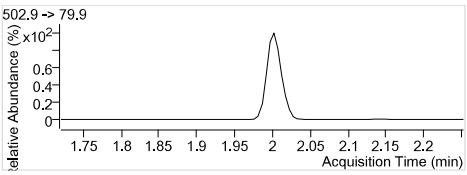
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



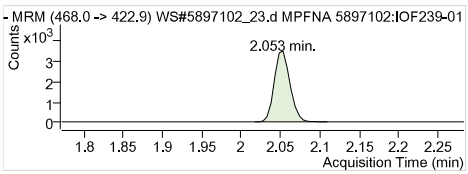


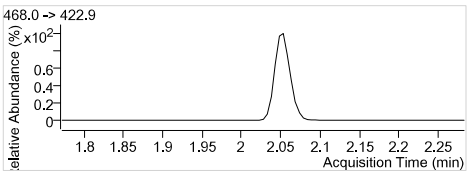
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



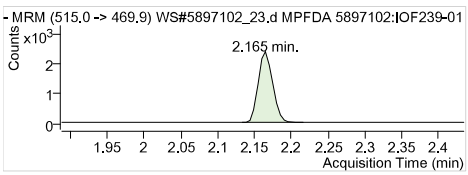


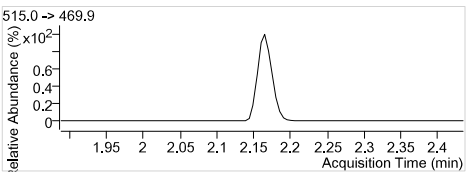
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



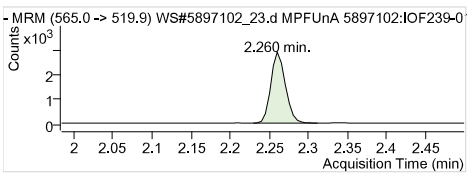


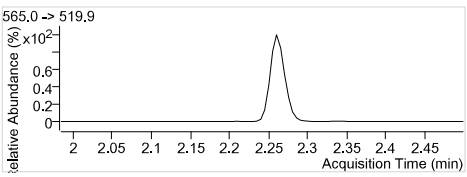
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



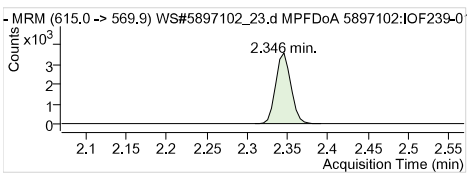


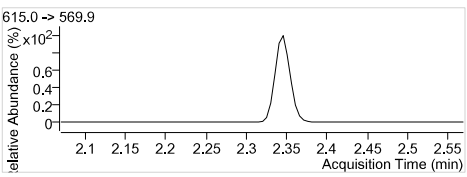
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



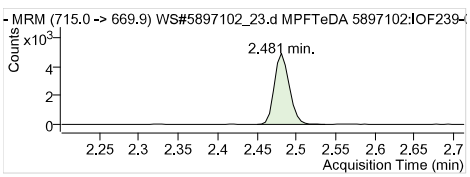


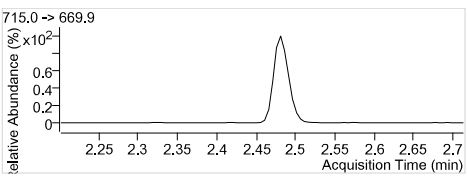
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



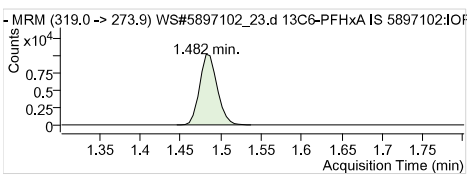


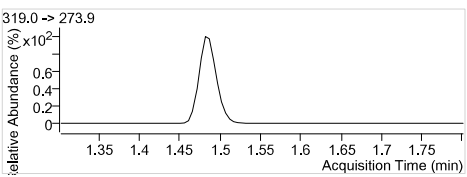
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



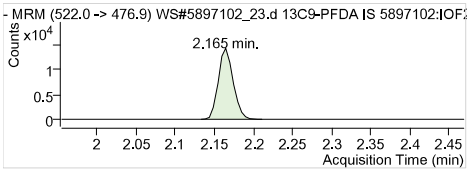


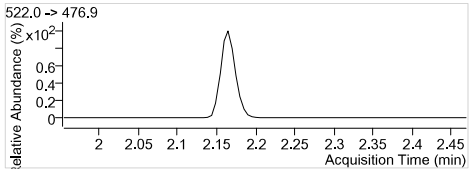
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



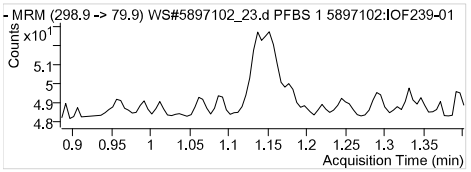


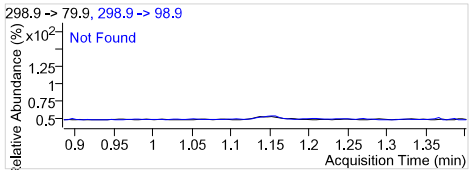
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



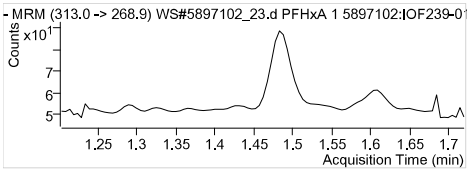


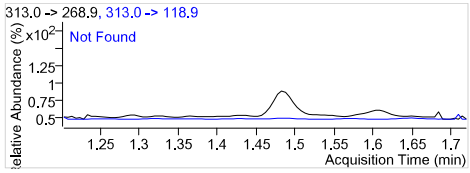
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



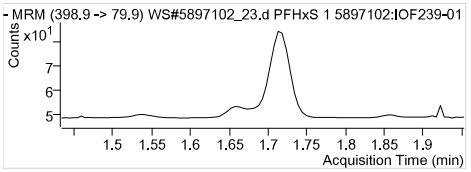


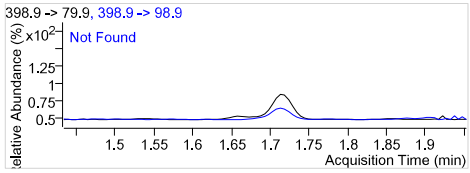
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



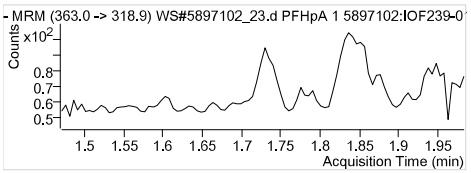


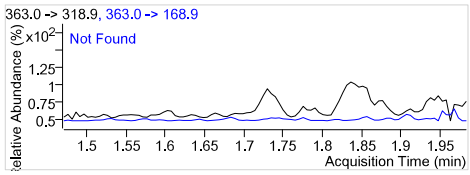
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



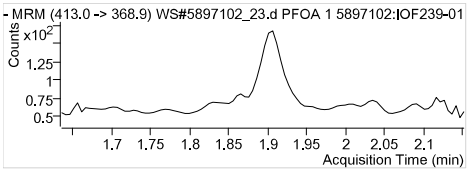


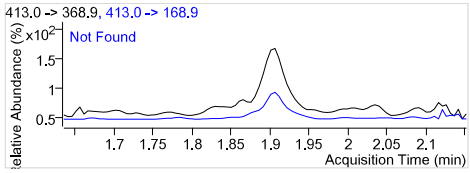
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



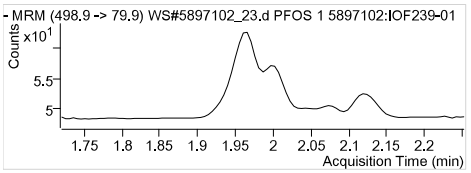


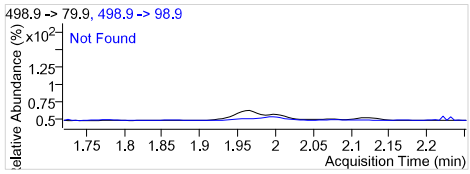
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



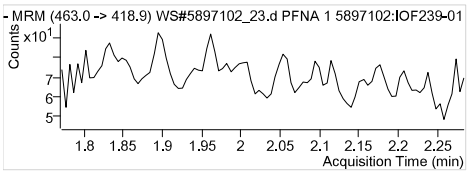


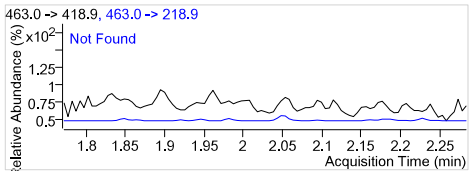
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



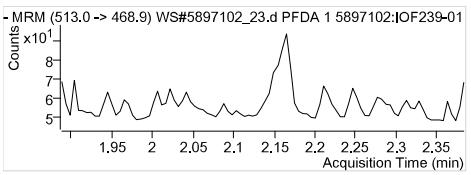


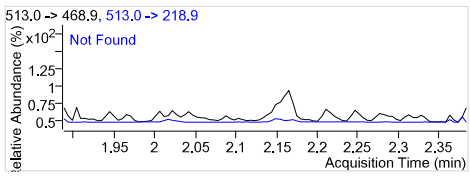
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



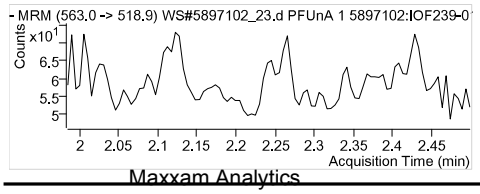


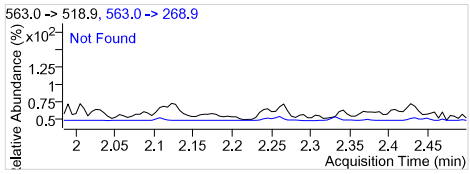
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



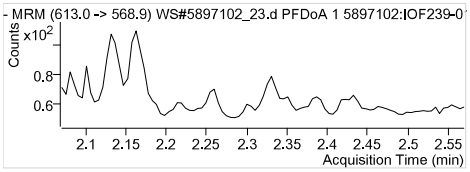


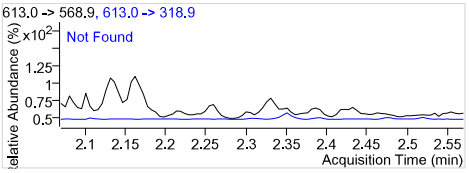
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



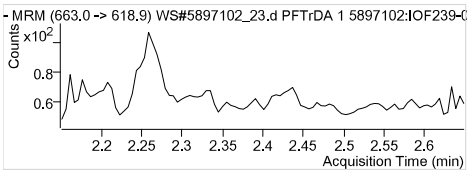


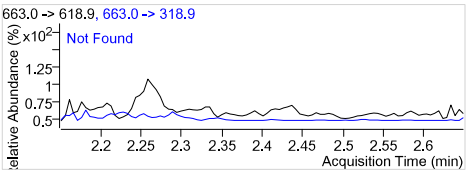
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



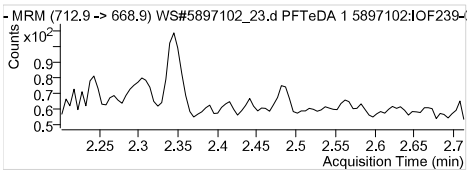


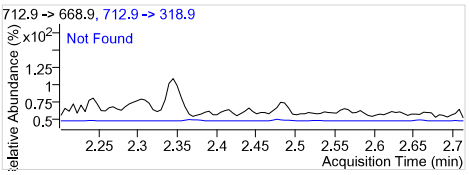
PFDoA 1 613.0 -> 568.9
RT (Exp. RT): 0.000 (2.346)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



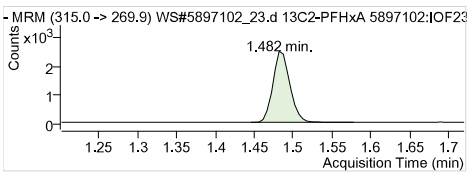


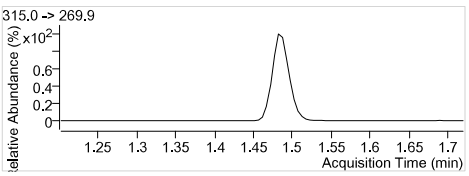
PFTrDA 1 663.0 -> 618.9
RT (Exp. RT): 0.000 (2.416)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



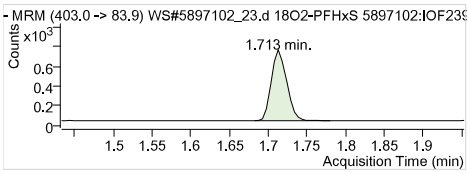


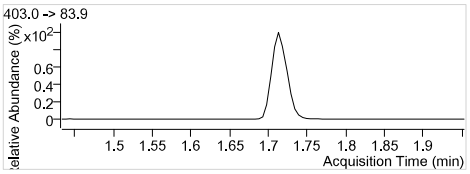
PFTeDA 1 712.9 -> 668.9
RT (Exp. RT): 0.000 (2.481)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



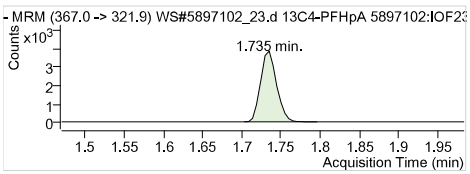


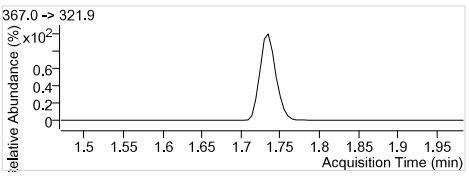
13C2-PFHxA 315.0 -> 269.9
RT (Exp. RT): 1.482 (1.487)
Calc. conc. 91.25 µg/L
Area ratio: 0.24493
Sample type: Sample



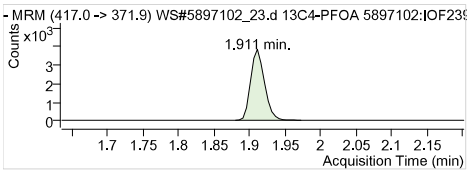


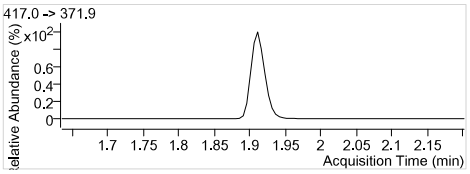
18O2-PFHxS 403.0 -> 83.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 89.78 µg/L
Area ratio: 0.06418
Sample type: Sample



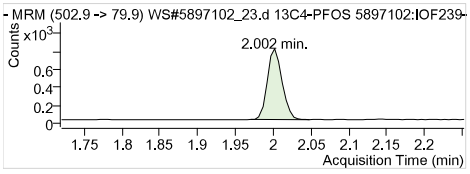


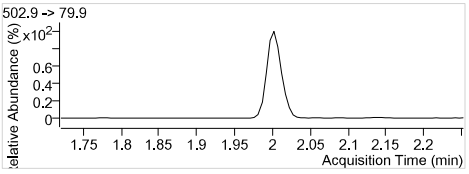
13C4-PFHpA 367.0 -> 321.9
RT (Exp. RT): 1.735 (1.735)
Calc. conc. 90.40 µg/L
Area ratio: 0.35795
Sample type: Sample



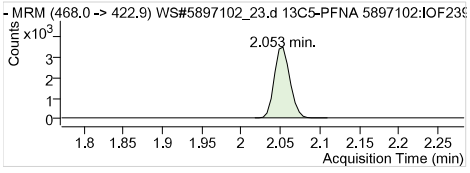


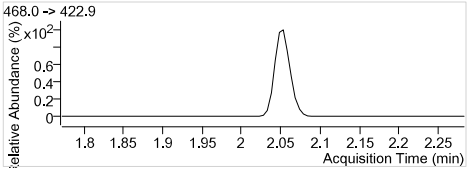
13C4-PFOA 417.0 -> 371.9
RT (Exp. RT): 1.911 (1.911)
Calc. conc. 93.36 µg/L
Area ratio: 0.33939
Sample type: Sample



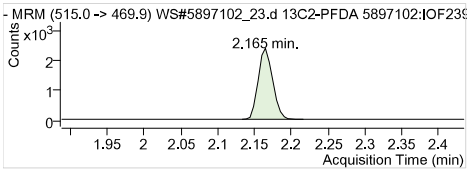


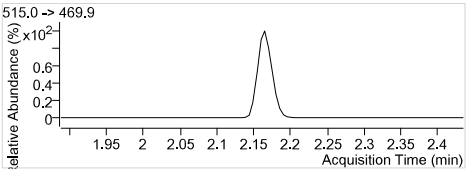
13C4-PFOS 502.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 88.14 µg/L
Area ratio: 0.06971
Sample type: Sample



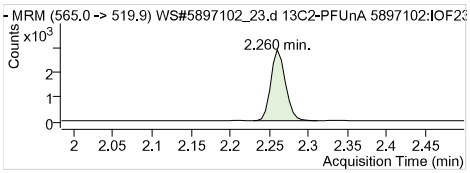


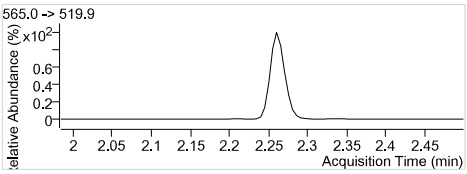
13C5-PFNA 468.0 -> 422.9
RT (Exp. RT): 2.053 (2.053)
Calc. conc. 93.44 µg/L
Area ratio: 0.31365
Sample type: Sample



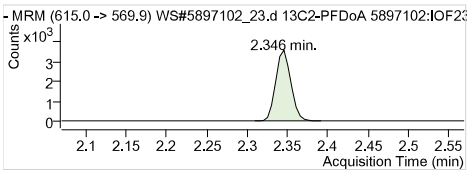


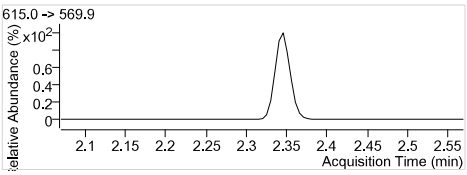
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	85.02 µg/L
Area ratio:	0.17330
Sample type:	Sample



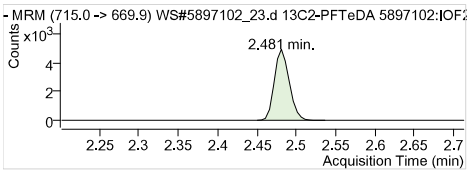


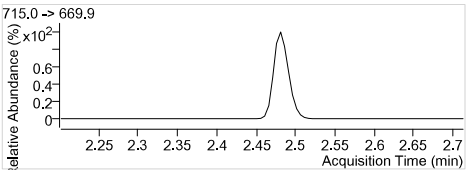
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	83.58 µg/L
Area ratio:	0.19869
Sample type:	Sample



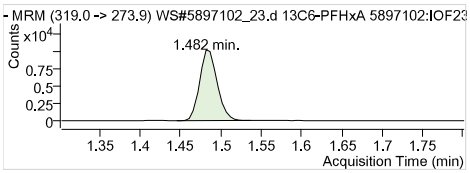


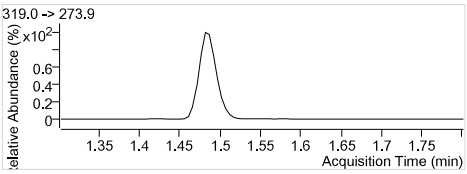
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	80.04 µg/L
Area ratio:	0.24583
Sample type:	Sample



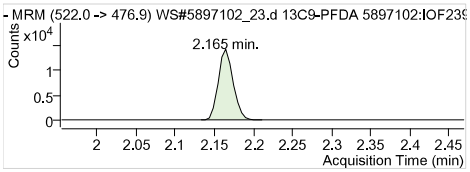


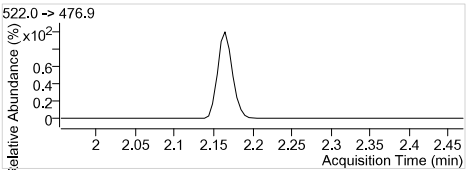
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	77.72 µg/L
Area ratio:	0.34284
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.48 µg/L
Area ratio:	0
Sample type:	Sample





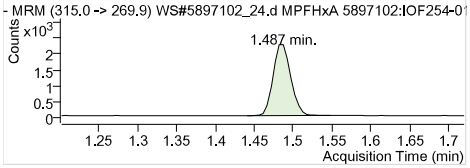
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.59 µg/L
Area ratio:	0
Sample type:	Sample

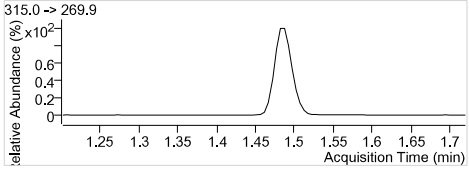
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102\QuantResults\PFC_Water_Low_20181221_WS#5897102_EToxics

Sample Name	**5897102:IOF254-01**	**Instrument**	LCMS04
Data File	WS#5897102_24.d	**Operator**	
Sample Type	Sample	**Dilution**	0.024
Acq. Method	PFC_Water_Low.m	**Position**	P2-C4
Acq. Date	2018/12/21 9:14:58 PM	**Injection Volume**	Per Method
Sample Annotation	-		

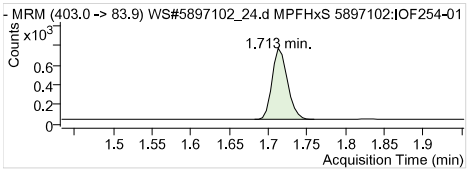
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3551	1.49	1 µg/L		
MPFHxS	975	1.71	1 µg/L		
MPFHpA	5467	1.73	1 µg/L		
MPFOA	4868	1.91	1 µg/L		
MPFOS	1087	2.00	1 µg/L		
MPFNA	4605	2.05	1 µg/L		
MPFDA	3151	2.16	1 µg/L		
MPFUnA	3738	2.26	1 µg/L		
MPFDoA	4520	2.35	1 µg/L		
MPFTeDA	6430	2.48	1 µg/L		
13C6-PFHxA IS	14538	1.49	1 µg/L		
13C9-PFDA IS	17629	2.16	1 µg/L		

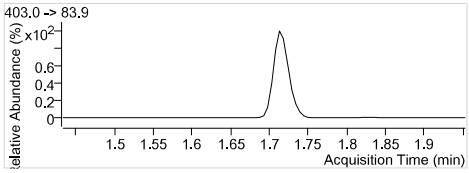
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1	437	1.49	-	0.01 µg/L	-
PFHxS 1	177	1.71	-	0.01 µg/L	-
PFHpA 1	251	1.74	-	0.01 µg/L	-
PFOA 1	381	1.91	-	0.00 µg/L	-
PFOS 1	646	2.00	-	0.03 µg/L	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3551	1.49	-	91.00 µg/L	-
18O2-PFHxS	975	1.71	-	93.82 µg/L	-
13C4-PFHpA	5467	1.73	-	94.97 µg/L	-
13C4-PFOA	4868	1.91	-	92.11 µg/L	-
13C4-PFOS	1087	2.00	-	94.54 µg/L	-
13C5-PFNA	4605	2.05	-	94.37 µg/L	-
13C2-PFDA	3151	2.16	-	87.69 µg/L	-
13C2-PFUnA	3738	2.26	-	89.19 µg/L	-
13C2-PFDoA	4520	2.35	-	83.48 µg/L	-
13C2-PFTeDA	6430	2.48	-	82.68 µg/L	-
13C6-PFHxA	14538	1.49	-	2.38 µg/L	-
13C9-PFDA	17629	2.16	-	2.45 µg/L	-



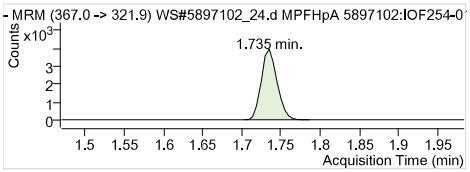


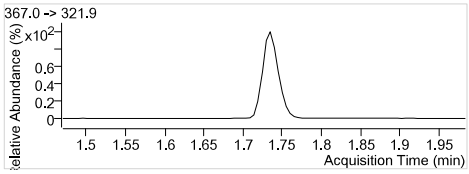
MPFHxA	Internal Standard
RT (Exp. RT):	1.487 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



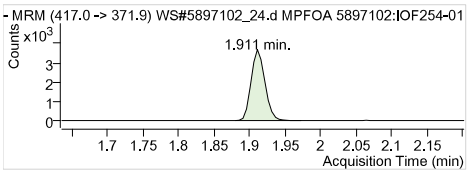


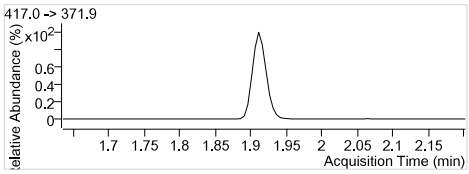
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



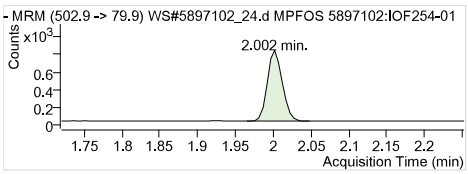


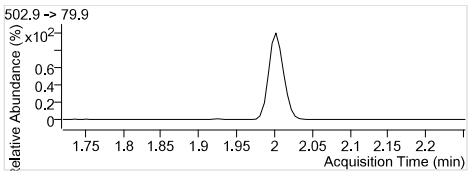
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



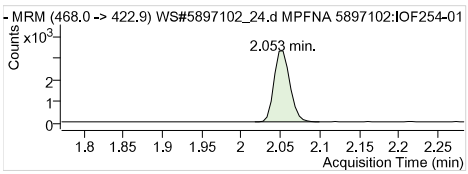


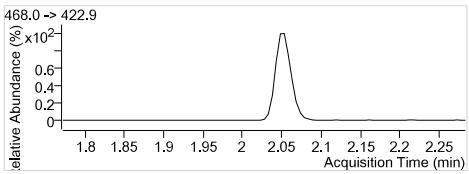
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



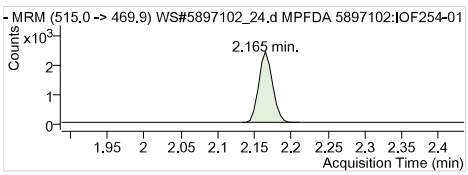


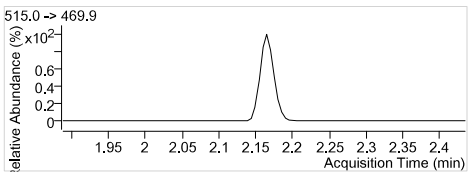
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



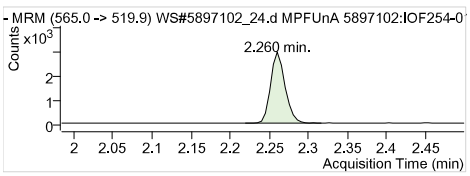


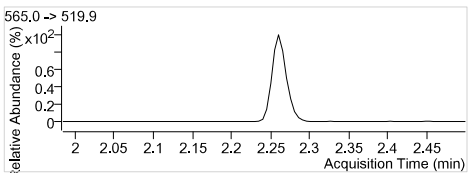
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



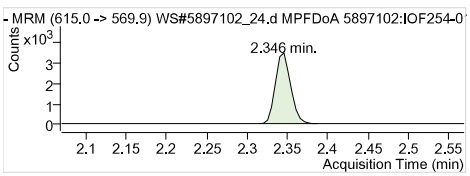


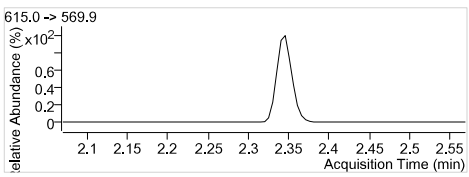
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



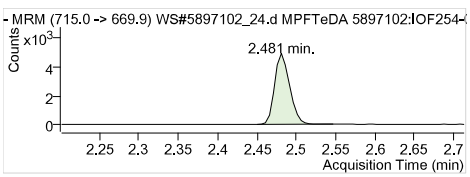


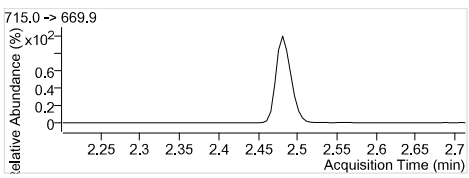
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



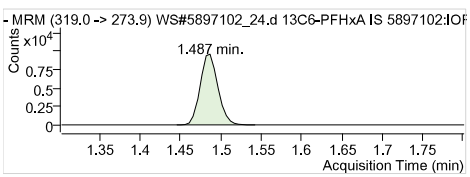


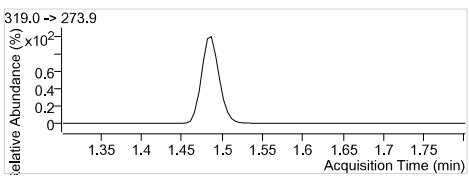
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



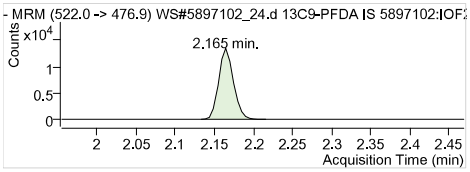


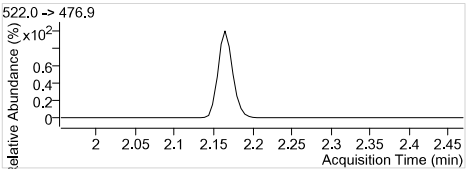
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



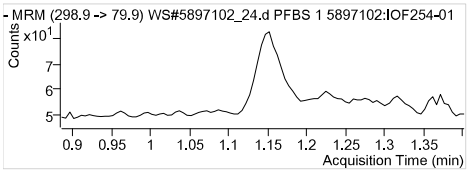


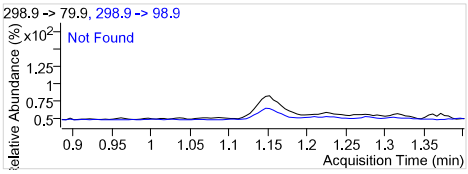
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.487 (1.487)
Concentration: 1 µg/L
Sample type: Sample



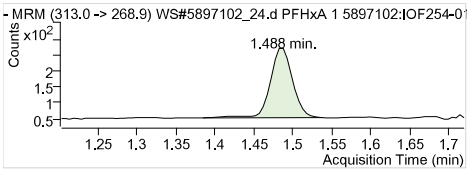


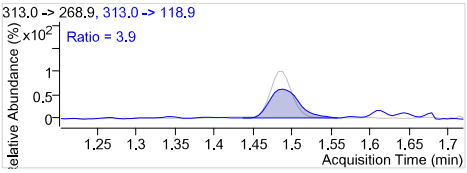
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



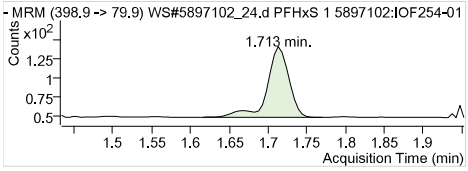


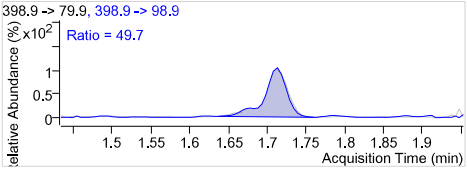
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



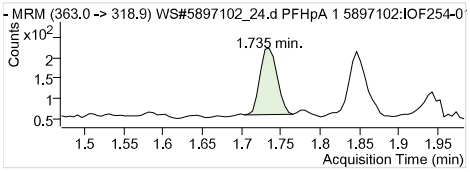


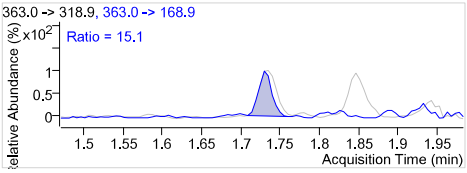
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 1.488 (1.488)
Calc. conc. 0.01 µg/L
Area ratio: 0.12306
Sample type: Sample



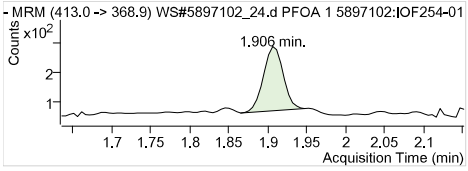


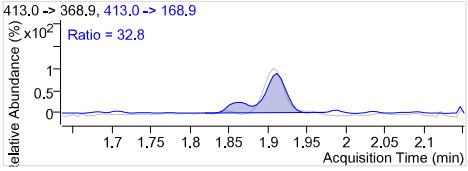
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 0.01 µg/L
Area ratio: 0.18154
Sample type: Sample



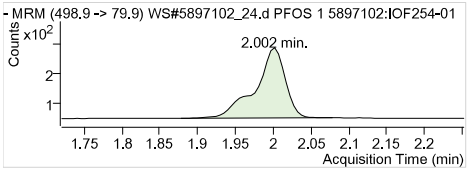


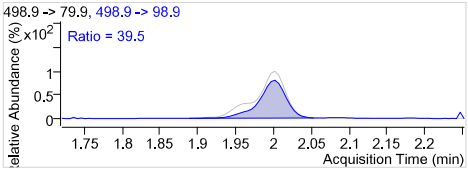
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 1.735 (1.735)
Calc. conc. 0.01 µg/L
Area ratio: 0.04591
Sample type: Sample



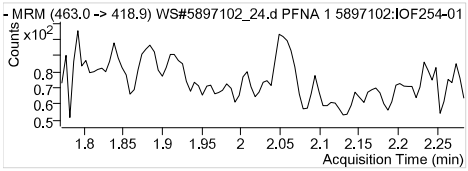


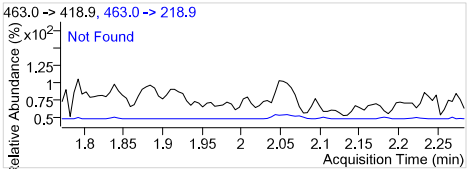
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 1.906 (1.912)
Calc. conc. 0.00 µg/L
Area ratio: 0.07827
Sample type: Sample



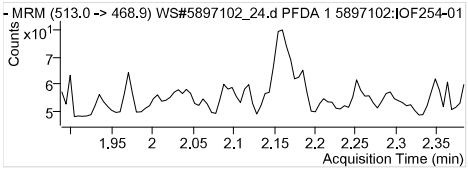


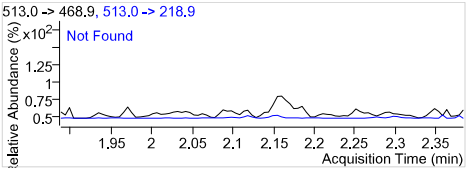
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 0.03 µg/L
Area ratio: 0.59430
Sample type: Sample



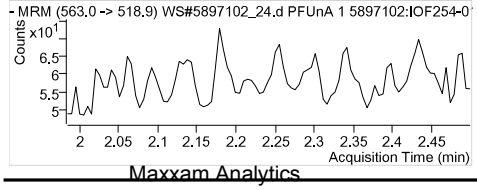


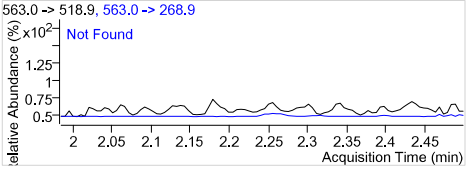
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



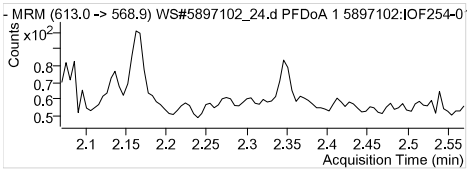


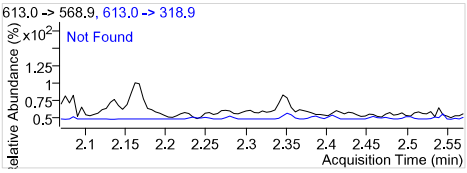
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



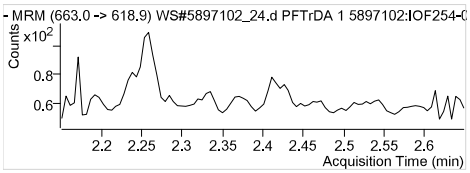


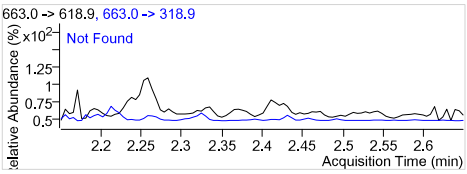
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



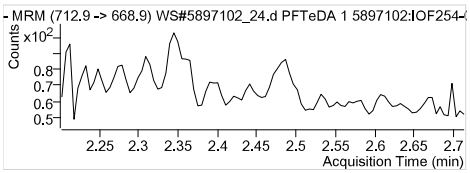


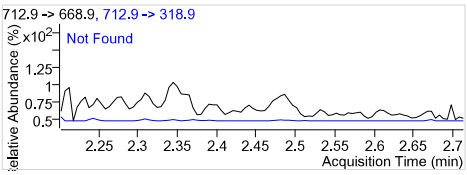
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



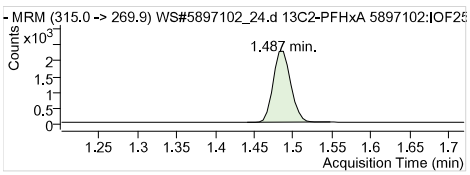


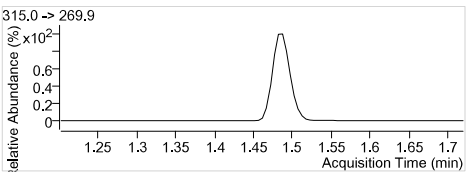
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



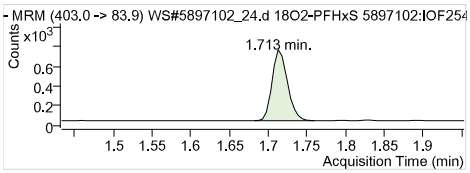


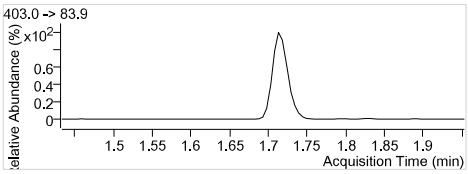
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



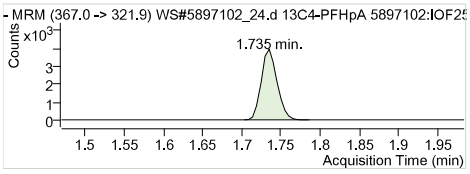


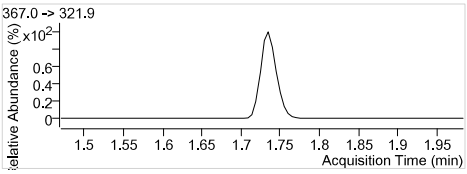
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.487 (1.487)
Calc. conc.	91.00 µg/L
Area ratio:	0.24426
Sample type:	Sample



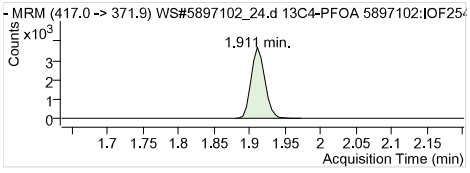


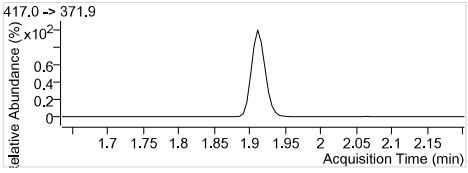
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	93.82 µg/L
Area ratio:	0.06707
Sample type:	Sample



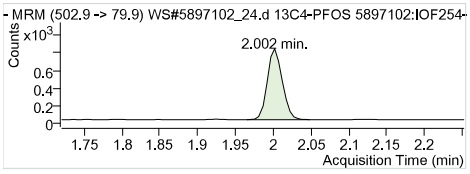


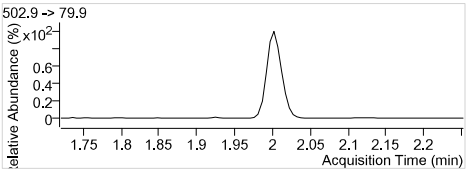
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	94.97 µg/L
Area ratio:	0.37605
Sample type:	Sample



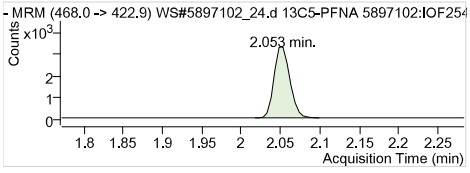


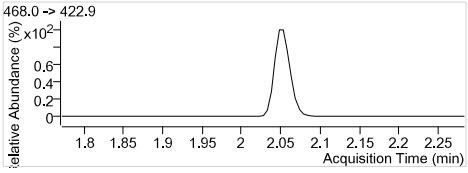
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	92.11 µg/L
Area ratio:	0.33485
Sample type:	Sample



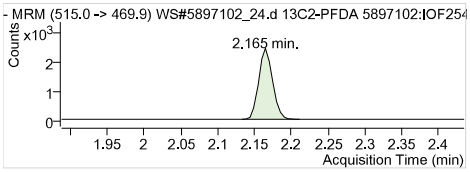


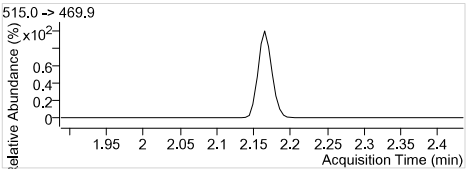
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	94.54 µg/L
Area ratio:	0.07477
Sample type:	Sample



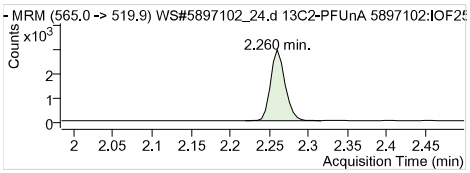


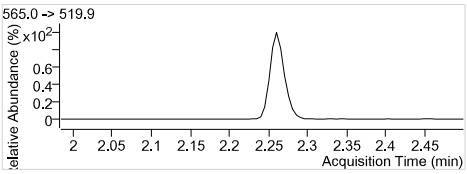
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	94.37 µg/L
Area ratio:	0.31676
Sample type:	Sample



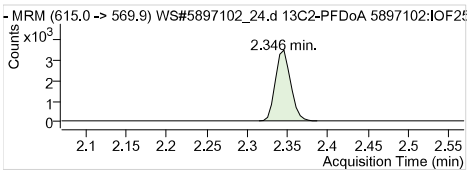


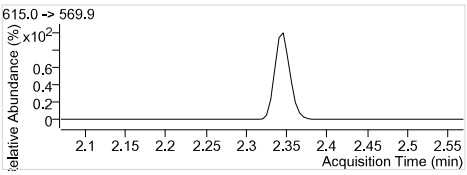
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	87.69 µg/L
Area ratio:	0.17874
Sample type:	Sample



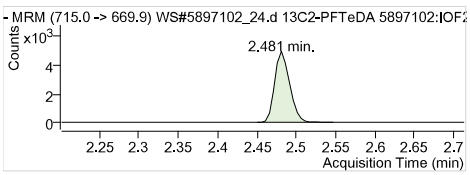


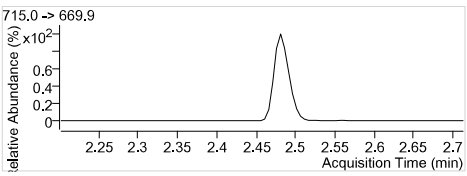
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	89.19 µg/L
Area ratio:	0.21204
Sample type:	Sample



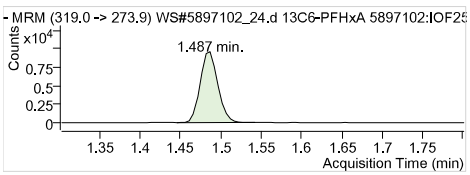


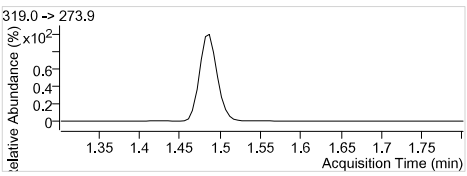
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	83.48 µg/L
Area ratio:	0.25640
Sample type:	Sample



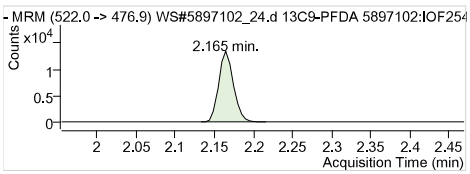


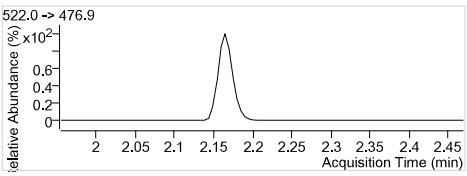
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	82.68 µg/L
Area ratio:	0.36474
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.487 (1.487)
Calc. conc.	2.38 µg/L
Area ratio:	0
Sample type:	Sample





13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.45 µg/L
Area ratio:	0
Sample type:	Sample

Quantitation Results

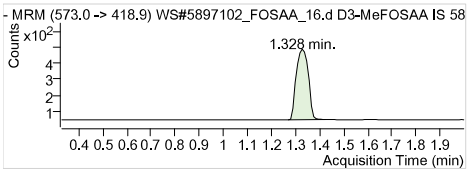
Agilent Technologies

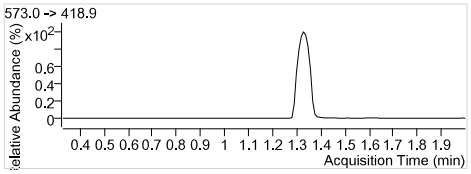
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_ETOxics

Sample Name	**5897102:IOF231-01**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_16.d	**Operator**	
Sample Type	Sample	**Dilution**	0.022
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-B5
Acq. Date	2018/12/22 1:05:04 AM	**Injection Volume**	Per Method
Sample Annotation	-		

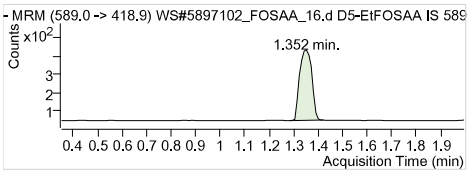
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1527	1.33	1 µg/L		
D5-EtFOSAA IS	1326	1.35	1 µg/L		
13C9-PFDA IS	18866	0.96	1 µg/L		

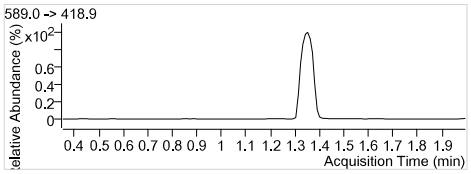
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1534	1.33	-	84.24 µg/L	-
D5-EtFOSAA	1331	1.35	-	80.51 µg/L	-
13C9-PFDA	18922	0.96	-	2.22 µg/L	-



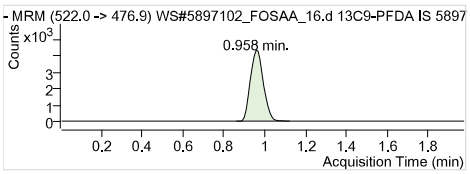


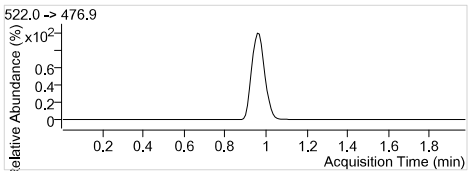
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



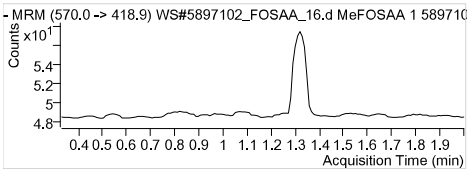


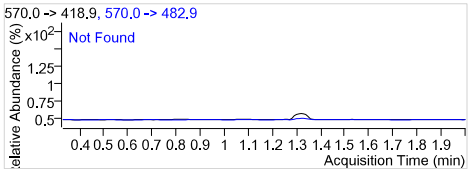
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



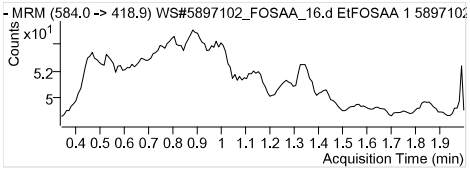


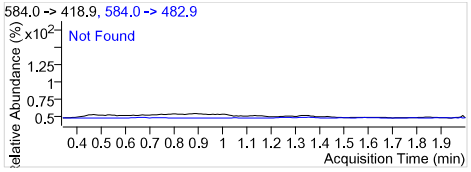
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.958 (0.977)
Concentration: 1 µg/L
Sample type: Sample



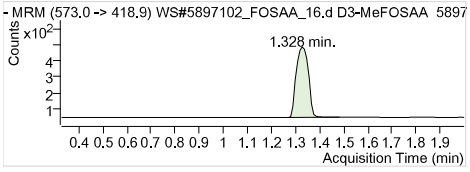


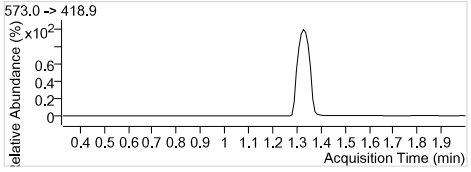
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



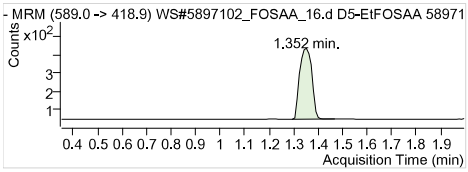


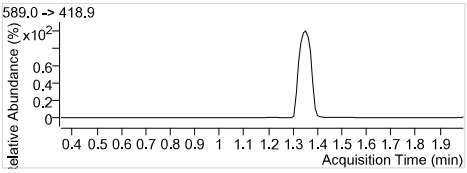
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



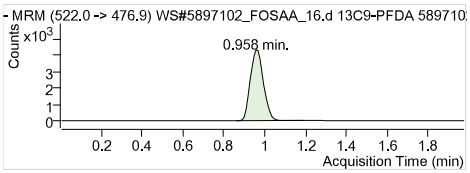


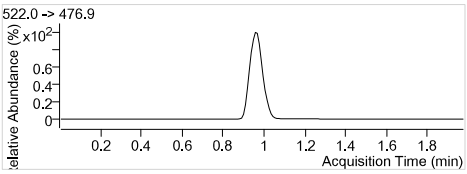
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 84.24 µg/L
Area ratio: 0.08131
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	80.51 µg/L
Area ratio:	0.07055
Sample type:	Sample





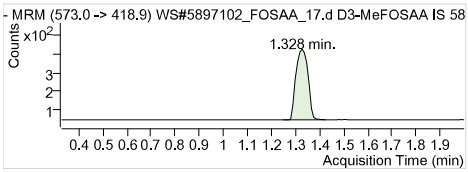
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.958 (0.977)
Calc. conc.	2.22 µg/L
Area ratio:	0
Sample type:	Sample

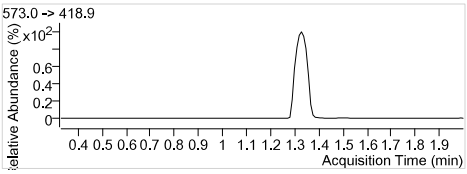
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_EToxics

Sample Name	**5897102:IOF232-01:10x**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_17.d	**Operator**	
Sample Type	Sample	**Dilution**	0.24
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-B6
Acq. Date	2018/12/22 1:07:27 AM	**Injection Volume**	Per Method
Sample Annotation	-		

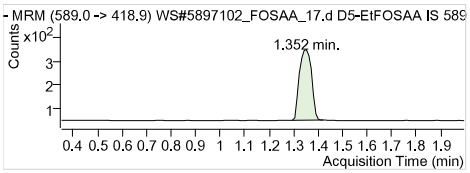
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1306	1.33	1 µg/L		
D5-EtFOSAA IS	1040	1.35	1 µg/L		
13C9-PFDA IS	18271	0.93	1 µg/L		

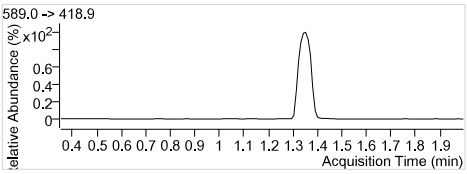
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1308	1.33	-	74.17 µg/L	-
D5-EtFOSAA	1051	1.35	-	65.64 µg/L	-
13C9-PFDA	18293	0.93	-	23.45 µg/L	-



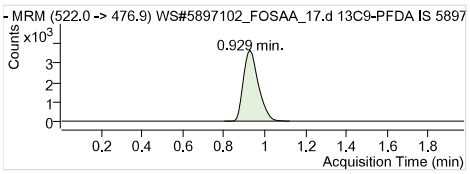


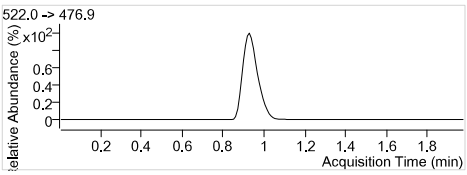
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



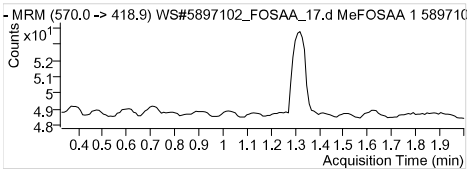


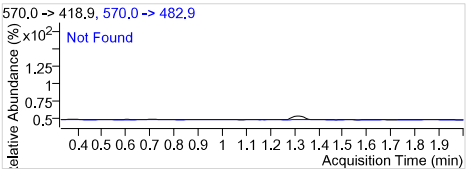
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



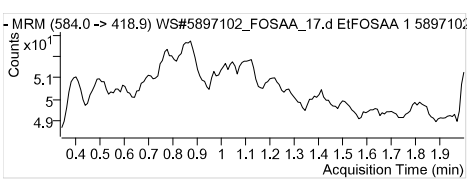


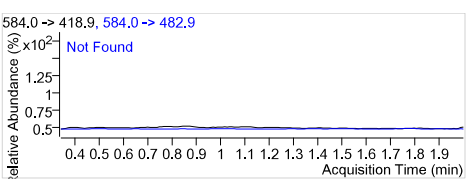
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.929 (0.977)
Concentration: 1 µg/L
Sample type: Sample



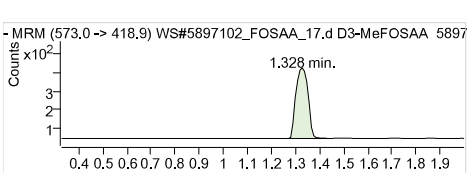


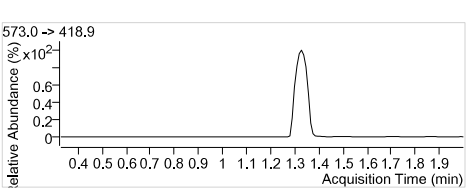
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



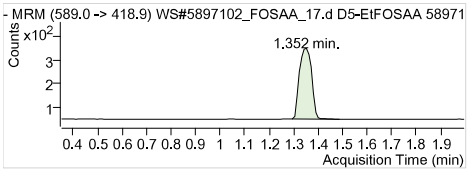


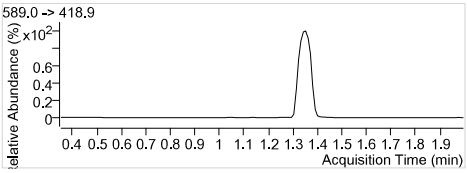
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



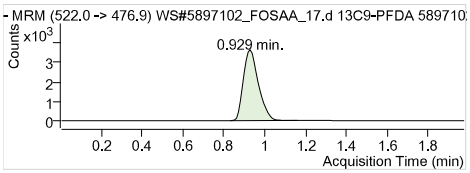


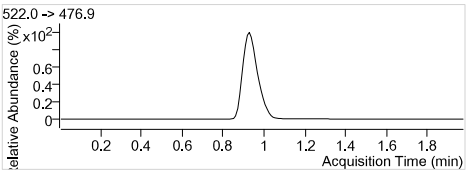
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 74.17 µg/L
Area ratio: 0.07159
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	65.64 µg/L
Area ratio:	0.05752
Sample type:	Sample





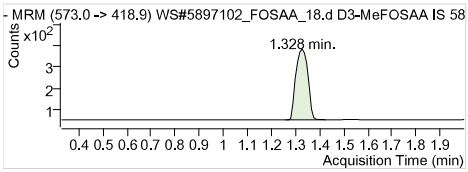
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.929 (0.977)
Calc. conc.	23.45 µg/L
Area ratio:	0
Sample type:	Sample

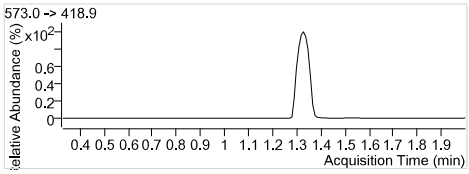
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_ETOxics

Sample Name	**5897102:IOF233-01:10x**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_18.d	**Operator**	
Sample Type	Sample	**Dilution**	0.24
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-B7
Acq. Date	2018/12/22 1:09:50 AM	**Injection Volume**	Per Method
Sample Annotation	-		

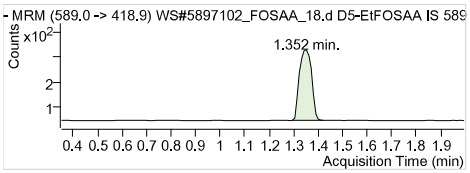
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1168	1.33	1 µg/L		
D5-EtFOSAA IS	978	1.35	1 µg/L		
13C9-PFDA IS	17623	0.92	1 µg/L		

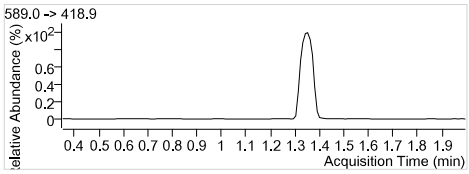
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1172	1.33	-	68.90 µg/L	-
D5-EtFOSAA	981	1.35	-	63.52 µg/L	-
13C9-PFDA	17733	0.92	-	22.74 µg/L	-



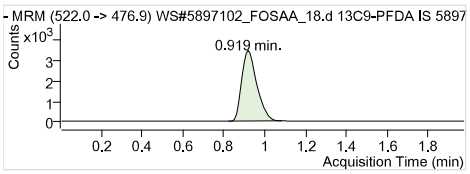


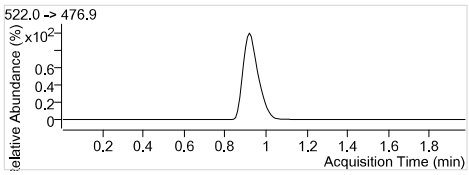
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



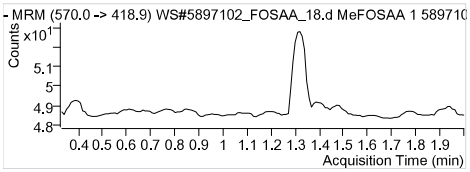


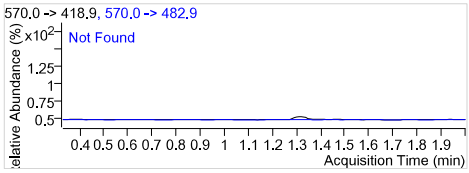
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



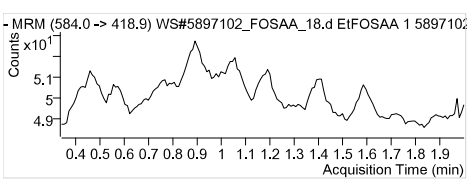


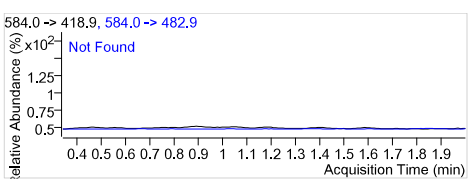
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.919 (0.977)
Concentration: 1 µg/L
Sample type: Sample



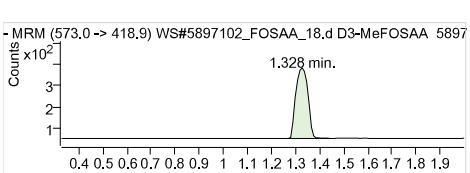


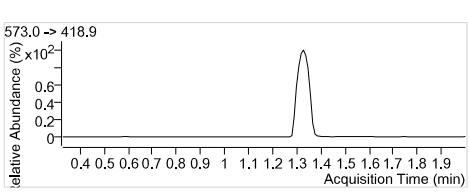
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



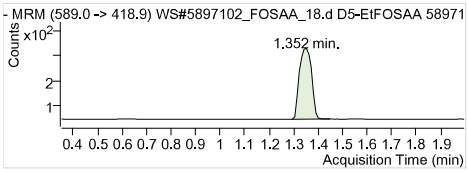


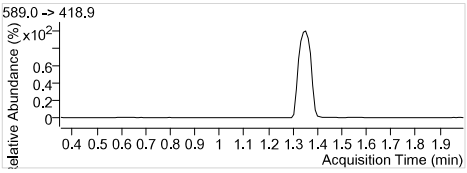
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



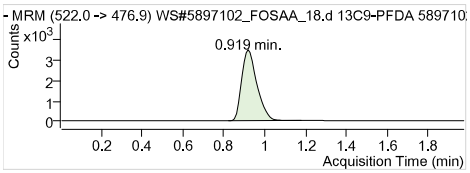


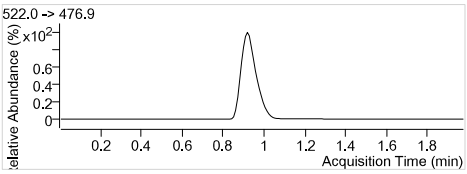
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 68.90 µg/L
Area ratio: 0.06650
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	63.52 µg/L
Area ratio:	0.05567
Sample type:	Sample





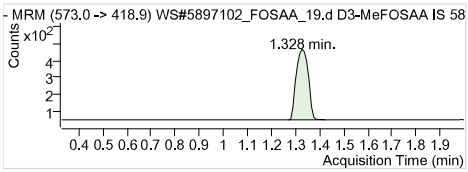
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.919 (0.977)
Calc. conc.	22.74 µg/L
Area ratio:	0
Sample type:	Sample

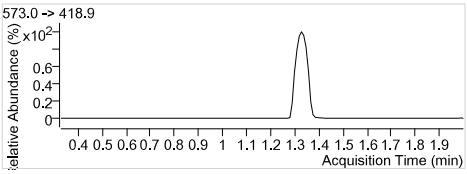
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_EToxics

Sample Name	**5897102:IOF234-01**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_19.d	**Operator**	
Sample Type	Sample	**Dilution**	0.022
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-B8
Acq. Date	2018/12/22 1:12:13 AM	**Injection Volume**	Per Method
Sample Annotation	-		

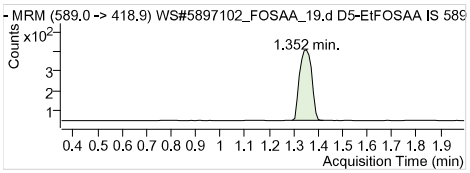
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1461	1.33	1 µg/L		
D5-EtFOSAA IS	1245	1.35	1 µg/L		
13C9-PFDA IS	18978	0.97	1 µg/L		

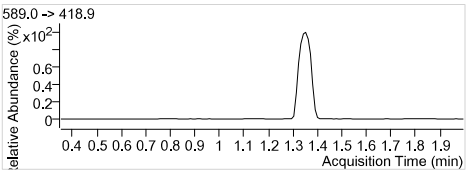
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1467	1.33	-	80.08 µg/L	-
D5-EtFOSAA	1248	1.35	-	75.04 µg/L	-
13C9-PFDA	19039	0.97	-	2.24 µg/L	-



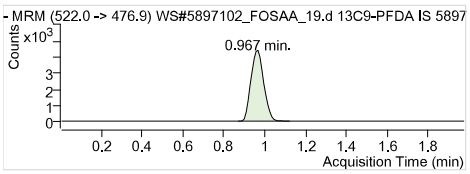


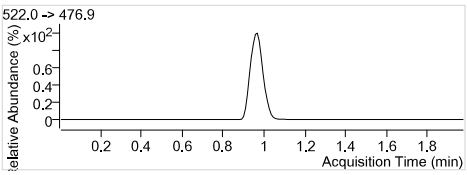
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



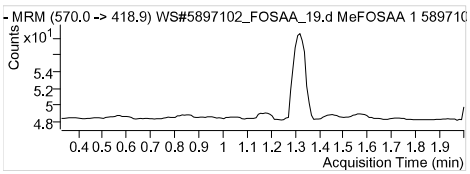


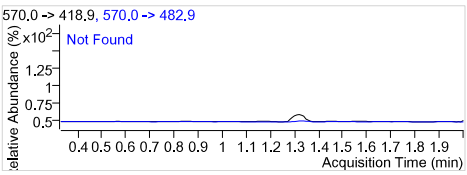
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



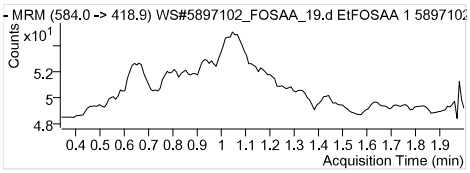


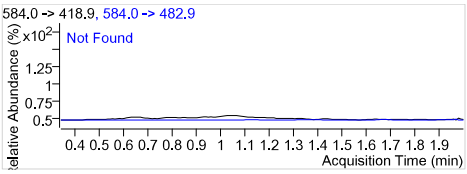
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.967 (0.977)
Concentration: 1 µg/L
Sample type: Sample



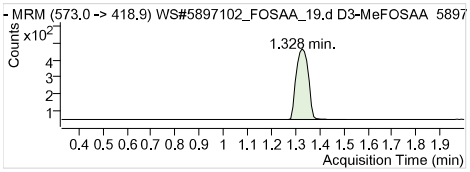


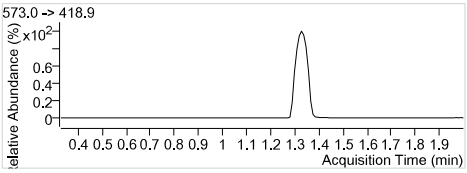
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



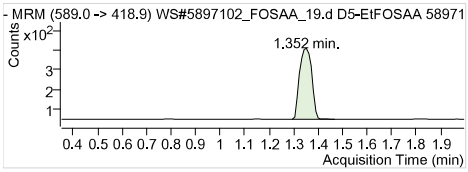


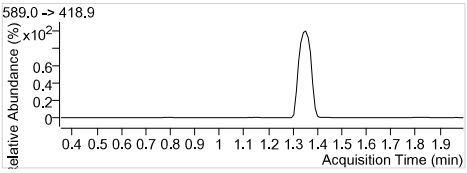
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



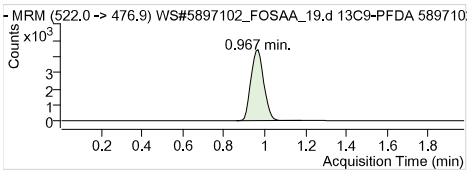


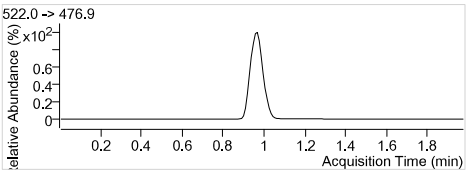
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 80.08 µg/L
Area ratio: 0.07730
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	75.04 µg/L
Area ratio:	0.06576
Sample type:	Sample





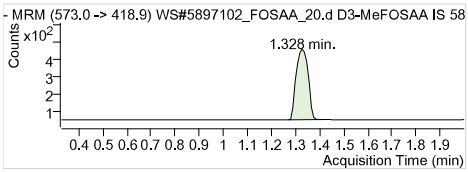
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.967 (0.977)
Calc. conc.	2.24 µg/L
Area ratio:	0
Sample type:	Sample

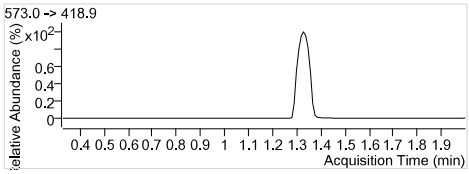
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_EToxics

Sample Name	**5897102:IOF236-01**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_20.d	**Operator**	
Sample Type	Sample	**Dilution**	0.023
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-B9
Acq. Date	2018/12/22 1:14:36 AM	**Injection Volume**	Per Method
Sample Annotation	-		

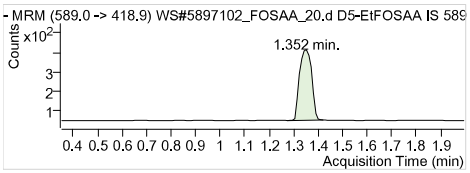
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1423	1.33	1 µg/L		
D5-EtFOSAA IS	1260	1.35	1 µg/L		
13C9-PFDA IS	17727	0.96	1 µg/L		

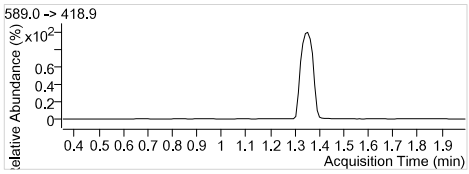
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1431	1.33	-	83.63 µg/L	-
D5-EtFOSAA	1269	1.35	-	81.69 µg/L	-
13C9-PFDA	17843	0.96	-	2.19 µg/L	-



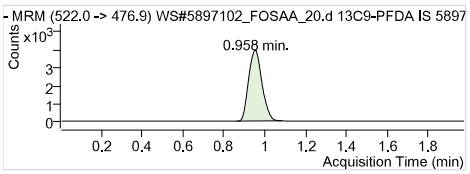


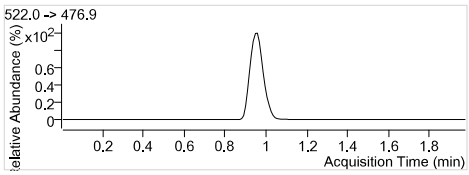
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



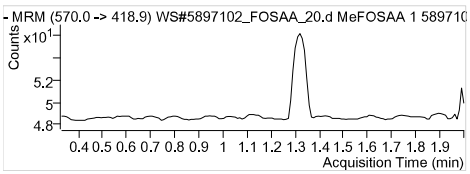


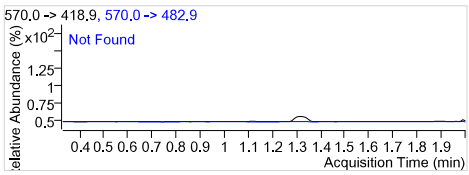
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



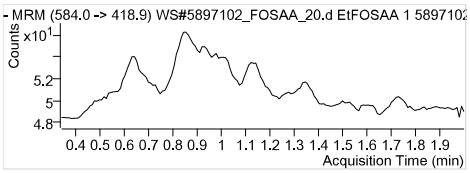


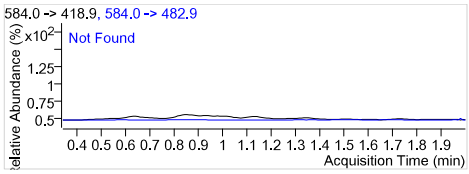
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.958 (0.977)
Concentration: 1 µg/L
Sample type: Sample



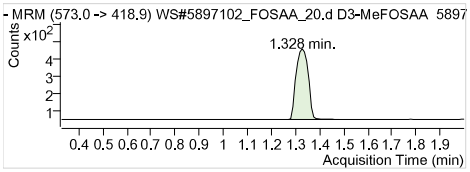


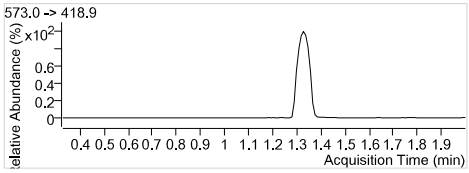
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



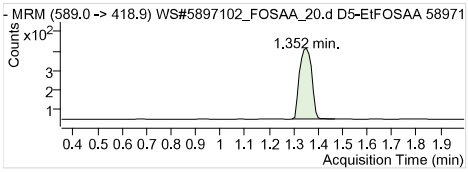


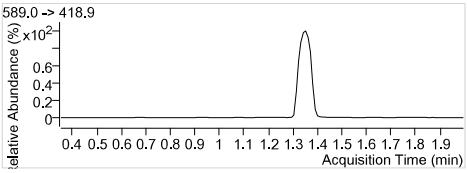
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



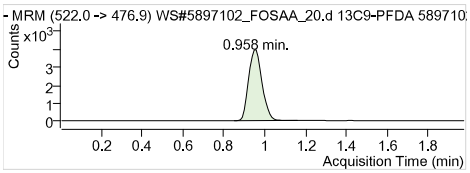


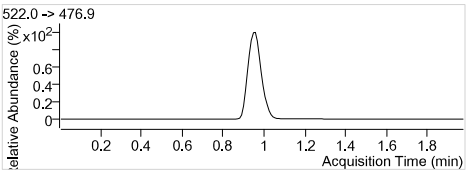
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 83.63 µg/L
Area ratio: 0.08072
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	81.69 µg/L
Area ratio:	0.07159
Sample type:	Sample





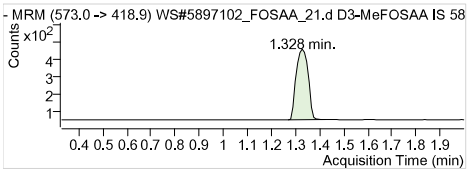
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.958 (0.977)
Calc. conc.	2.19 µg/L
Area ratio:	0
Sample type:	Sample

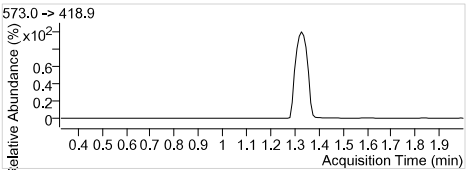
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_ETOxics

Sample Name	**5897102:IOF237-01**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_21.d	**Operator**	
Sample Type	Sample	**Dilution**	0.022
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-C1
Acq. Date	2018/12/22 1:16:59 AM	**Injection Volume**	Per Method
Sample Annotation	-		

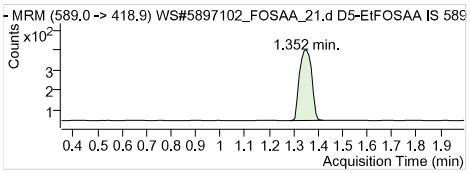
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1412	1.33	1 µg/L		
D5-EtFOSAA IS	1224	1.35	1 µg/L		
13C9-PFDA IS	17760	0.96	1 µg/L		

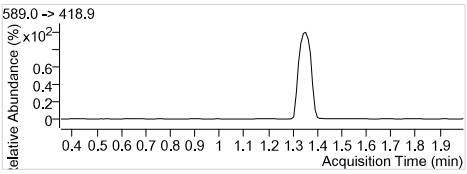
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1426	1.33	-	83.19 µg/L	-
D5-EtFOSAA	1230	1.35	-	79.03 µg/L	-
13C9-PFDA	17868	0.96	-	2.10 µg/L	-



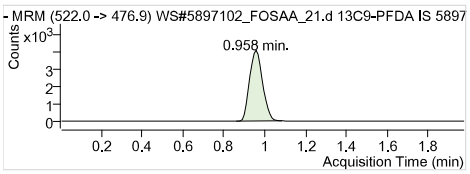


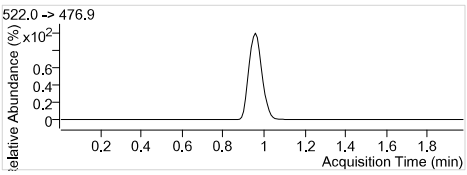
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



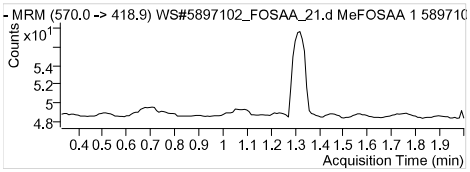


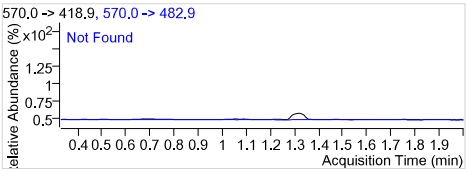
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



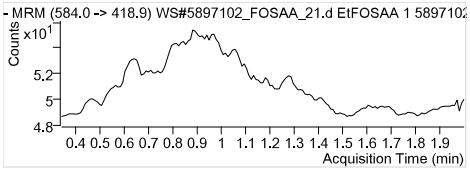


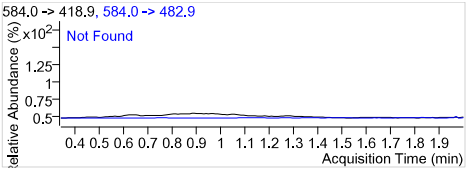
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.958 (0.977)
Concentration: 1 µg/L
Sample type: Sample



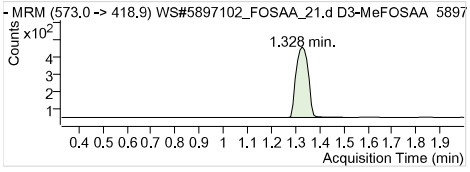


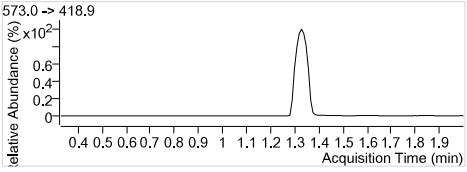
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



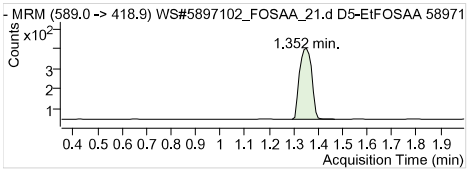


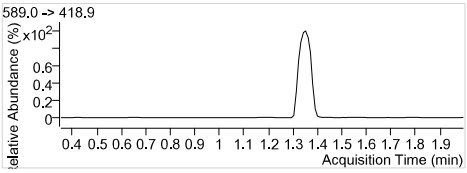
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



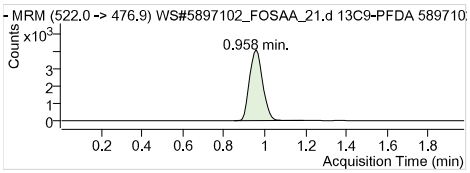


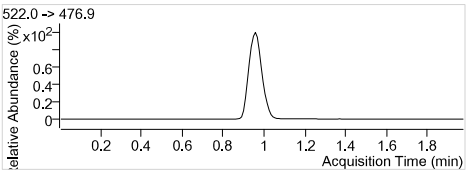
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 83.19 µg/L
Area ratio: 0.08029
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	79.03 µg/L
Area ratio:	0.06926
Sample type:	Sample





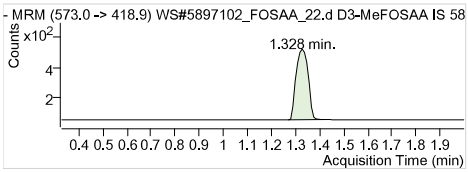
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.958 (0.977)
Calc. conc.	2.10 µg/L
Area ratio:	0
Sample type:	Sample

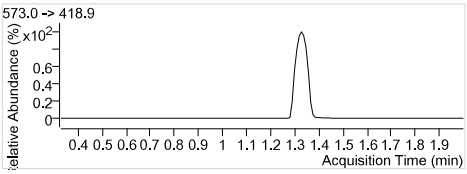
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_EToxics

Sample Name	**5897102:IOF238-01**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_22.d	**Operator**	
Sample Type	Sample	**Dilution**	0.022
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-C2
Acq. Date	2018/12/22 1:19:22 AM	**Injection Volume**	Per Method
Sample Annotation	-		

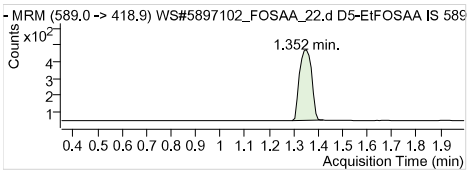
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1645	1.33	1 µg/L		
D5-EtFOSAA IS	1468	1.35	1 µg/L		
13C9-PFDA IS	18145	0.96	1 µg/L		

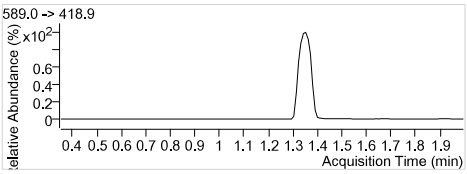
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1651	1.33	-	94.27 µg/L	-
D5-EtFOSAA	1476	1.35	-	92.83 µg/L	-
13C9-PFDA	18259	0.96	-	2.15 µg/L	-



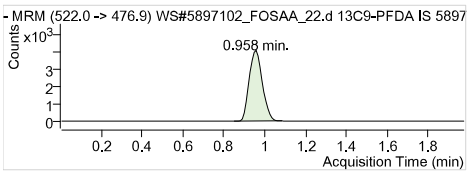


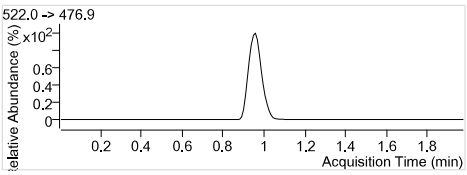
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



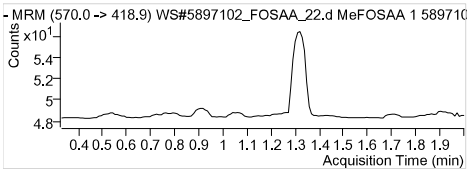


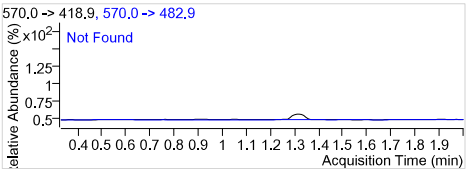
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



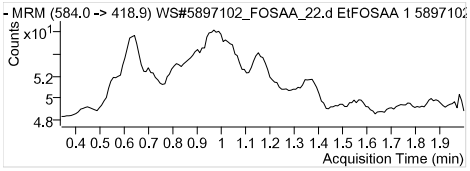


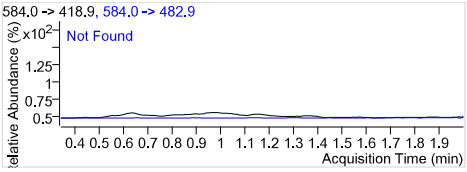
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.958 (0.977)
Concentration: 1 µg/L
Sample type: Sample



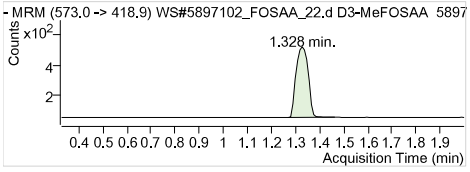


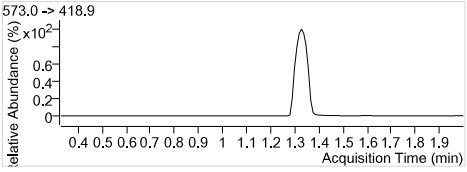
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



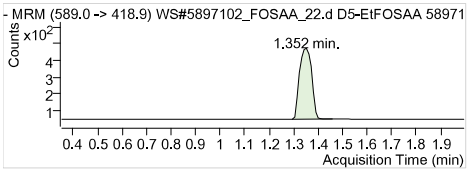


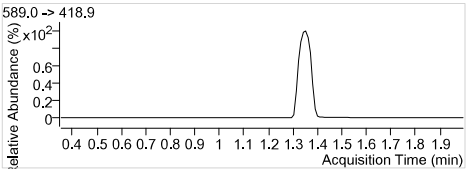
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



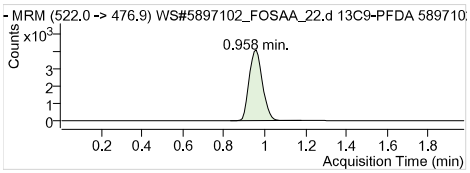


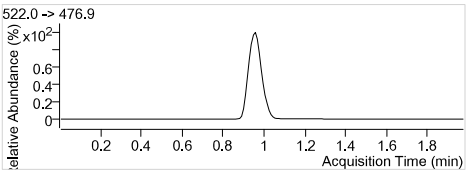
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 94.27 µg/L
Area ratio: 0.09099
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	92.83 µg/L
Area ratio:	0.08134
Sample type:	Sample





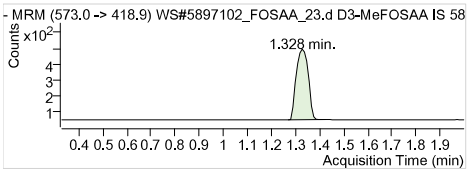
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.958 (0.977)
Calc. conc.	2.15 µg/L
Area ratio:	0
Sample type:	Sample

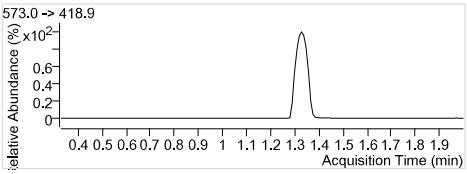
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_ETOxics

Sample Name	**5897102:IOF239-01**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_23.d	**Operator**	
Sample Type	Sample	**Dilution**	0.024
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-C3
Acq. Date	2018/12/22 1:21:45 AM	**Injection Volume**	Per Method
Sample Annotation	-		

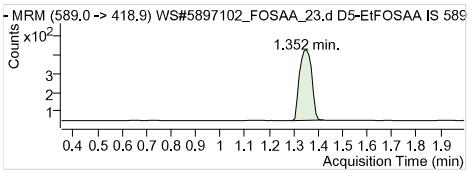
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1546	1.33	1 µg/L		
D5-EtFOSAA IS	1317	1.35	1 µg/L		
13C9-PFDA IS	18991	0.97	1 µg/L		

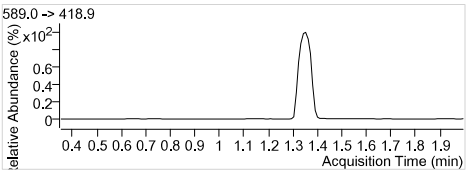
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1555	1.33	-	84.83 µg/L	-
D5-EtFOSAA	1325	1.35	-	79.62 µg/L	-
13C9-PFDA	19042	0.97	-	2.44 µg/L	-



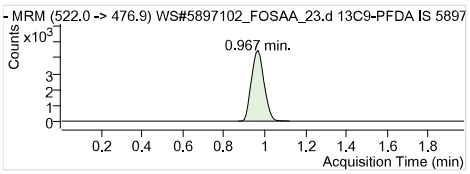


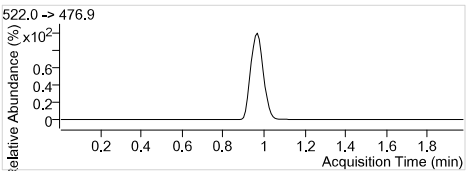
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



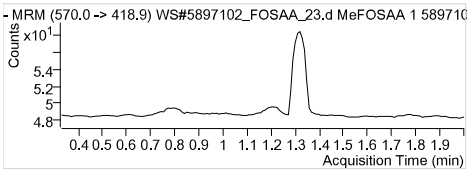


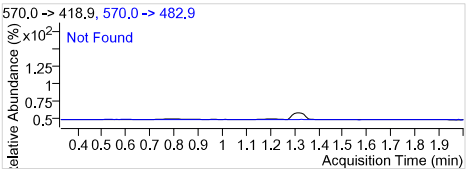
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



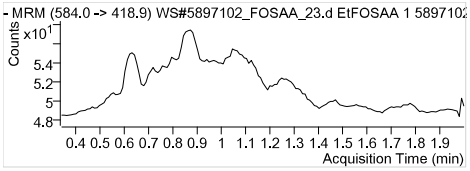


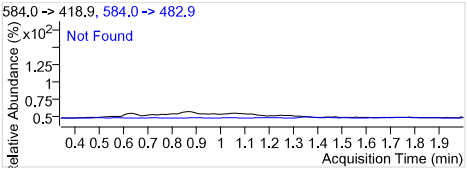
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.967 (0.977)
Concentration: 1 µg/L
Sample type: Sample



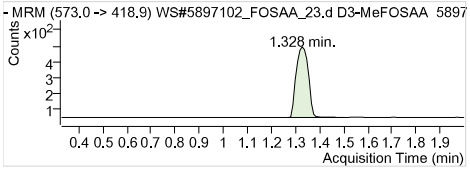


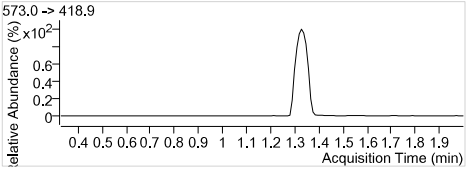
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



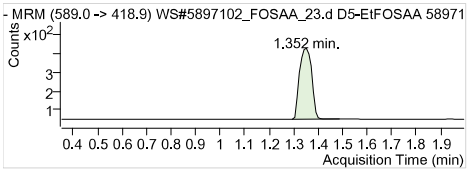


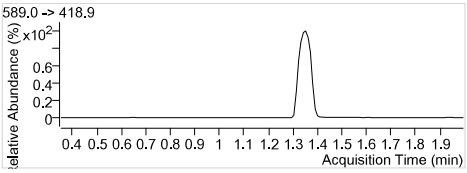
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



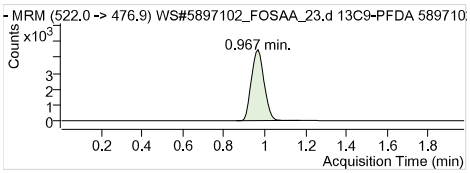


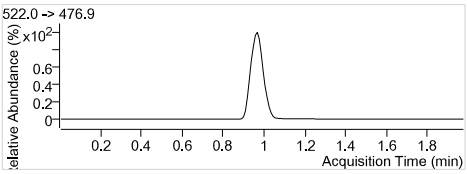
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 84.83 µg/L
Area ratio: 0.08188
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	79.62 µg/L
Area ratio:	0.06977
Sample type:	Sample





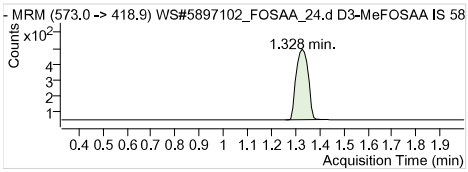
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.967 (0.977)
Calc. conc.	2.44 µg/L
Area ratio:	0
Sample type:	Sample

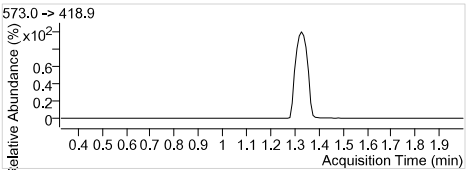
Batch Path	T:\LCMS04\PFC\20181221\WS#5897102_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5897102_FOSAA_ETOxics

Sample Name	**5897102:IOF254-01**	**Instrument**	LCMS04
Data File	WS#5897102_FOSAA_24.d	**Operator**	
Sample Type	Sample	**Dilution**	0.024
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P2-C4
Acq. Date	2018/12/22 1:24:08 AM	**Injection Volume**	Per Method
Sample Annotation	-		

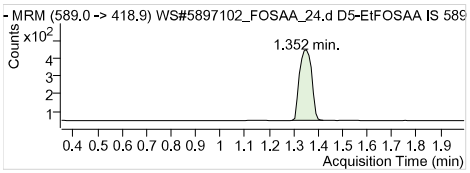
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1544	1.33	1 µg/L		
D5-EtFOSAA IS	1389	1.35	1 µg/L		
13C9-PFDA IS	17618	0.96	1 µg/L		

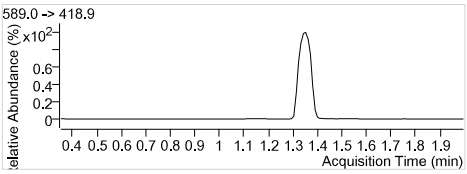
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1549	1.33	-	91.09 µg/L	-
D5-EtFOSAA	1398	1.35	-	90.55 µg/L	-
13C9-PFDA	17714	0.96	-	2.27 µg/L	-



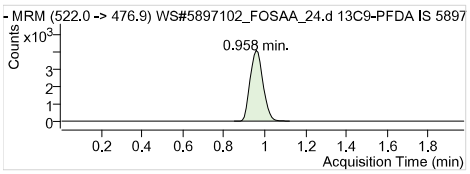


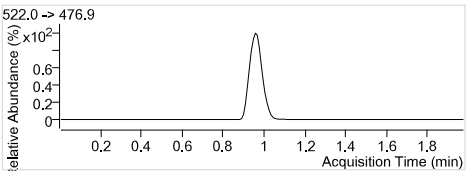
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



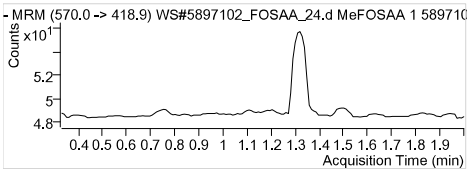


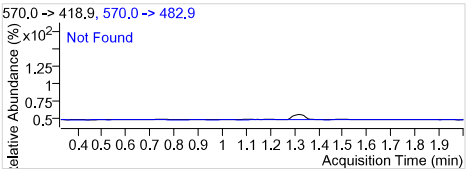
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



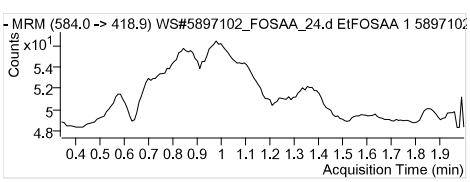


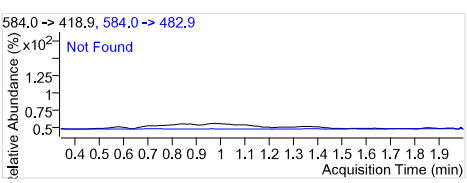
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.958 (0.977)
Concentration: 1 µg/L
Sample type: Sample



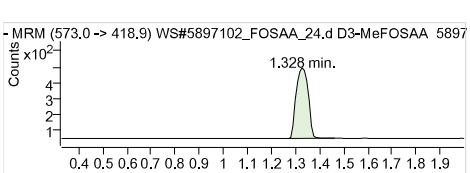


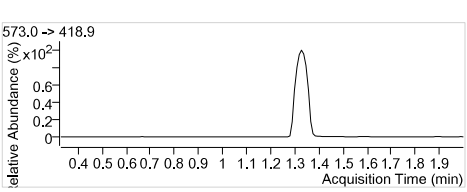
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



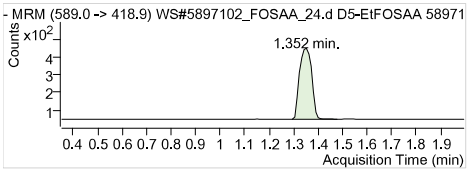


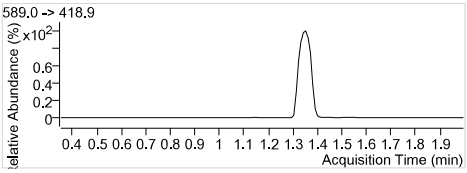
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.344)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



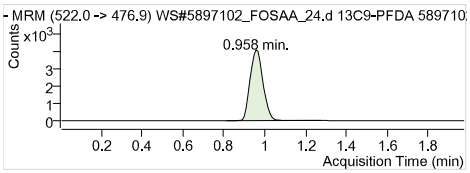


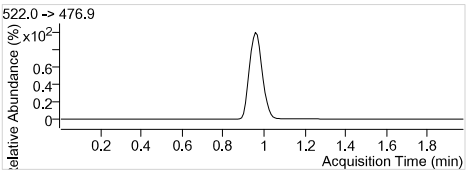
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 91.09 µg/L
Area ratio: 0.08792
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	90.55 µg/L
Area ratio:	0.07935
Sample type:	Sample





13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.958 (0.977)
Calc. conc.	2.27 µg/L
Area ratio:	0
Sample type:	Sample

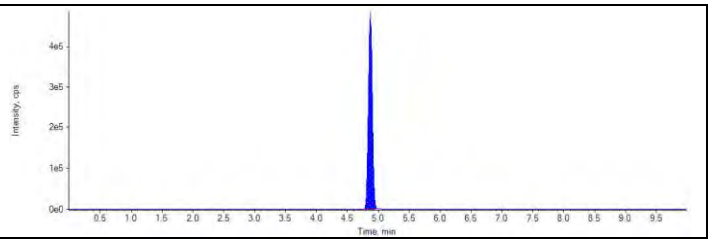
Sample ID	5898852~HXO250-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	14
Acquisition Date	2018/12/21 3:50:25 PM	**Dilution Factor**	0.00400
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	2080000.	4.87	1.00	-
MPFOS	215000.	5.61	1.00	-
D3-MeFOSAA IS	1950000.	6.42	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	0	0.00	N/A	N/A	N/A
PFHxA 1	11300	2.97	N/A	0.152	N/A
PFHxS 1	0	0.00	N/A	N/A	N/A
PFHpA 1	0	0.00	N/A	N/A	N/A
PFOA 1	0	0.00	N/A	N/A	N/A
PFOS 1	0	0.00	N/A	N/A	N/A
PFNA 1	0	0.00	N/A	N/A	N/A
PFDA 1	0	0.00	N/A	N/A	N/A
PFUnA 1	2090	6.70	N/A	0.0432	N/A
PFDoA 1	0	0.00	N/A	N/A	N/A
PFTrDA 1	0	0.00	N/A	N/A	N/A
PFTeDA 1	3250	7.83	N/A	0.0491	N/A
MeFOSAA 1	0	0.00	N/A	N/A	N/A
EtFOSAA 1	0	0.00	N/A	N/A	N/A
13C2-PFHxA	1930000	2.95	N/A	28.3	N/A
13C2-PFDA	1540000	6.18	N/A	31.0	N/A
D5-EtFOSAA	1230000	6.68	N/A	117.	N/A

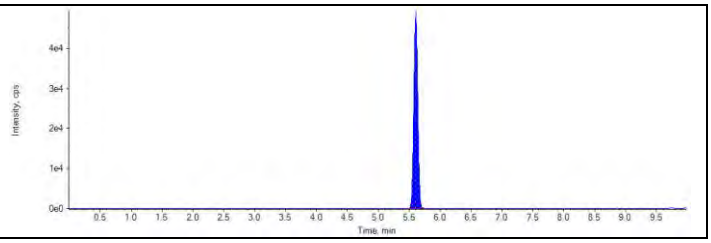
MPFOA (Internal Standard)

RT (Exp. RT): 4.87(4.84) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



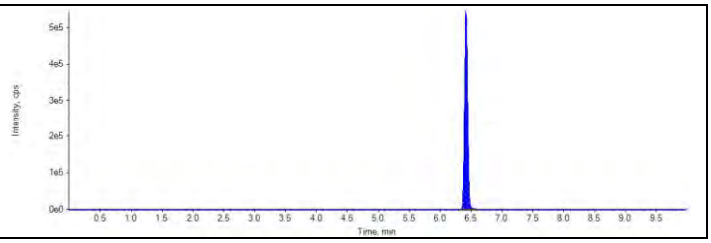
MPFOS (Internal Standard)

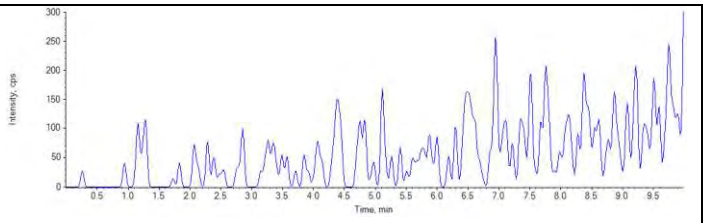
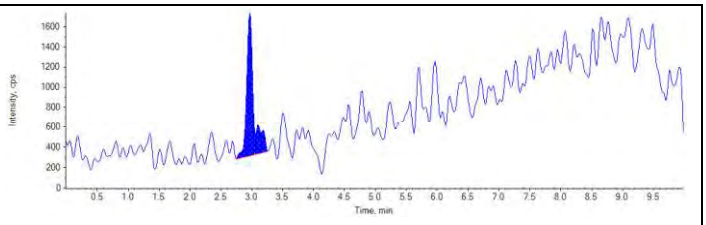
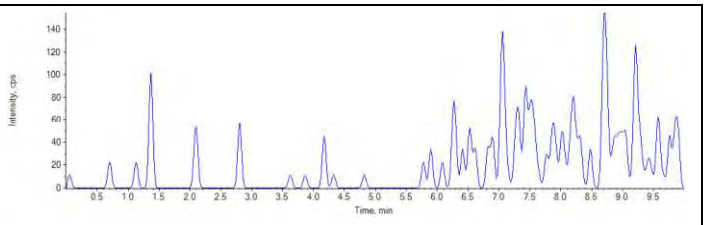
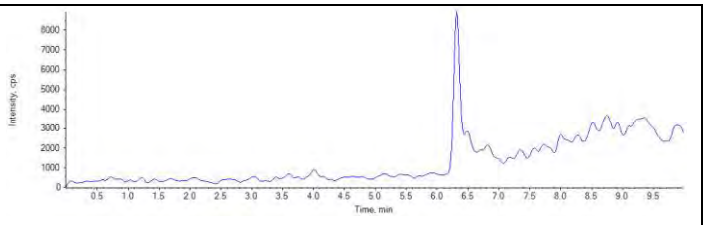
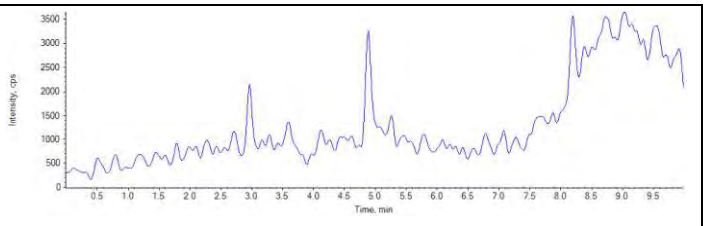
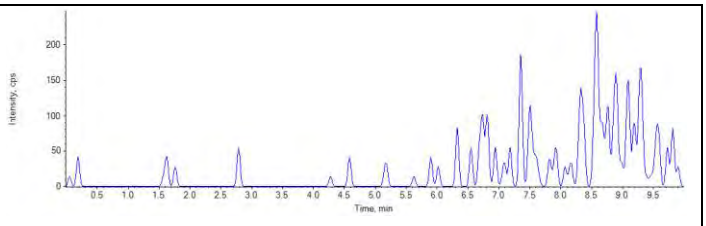
RT (Exp. RT): 5.61(5.38) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)

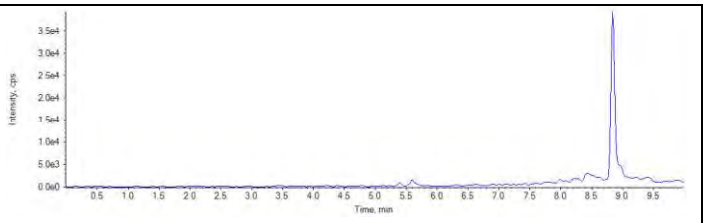
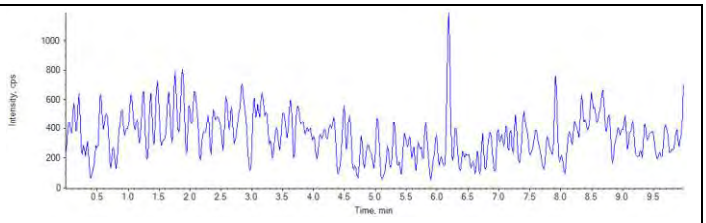
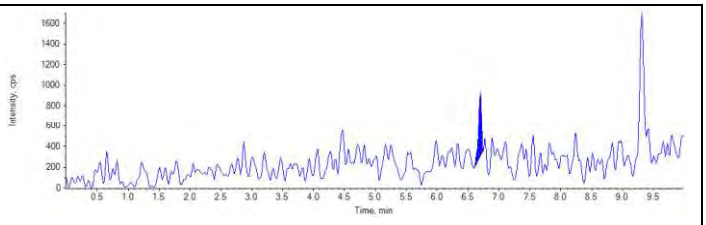
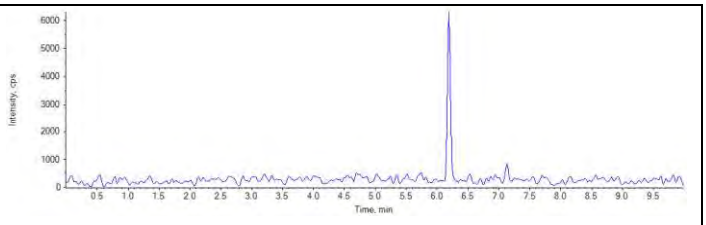
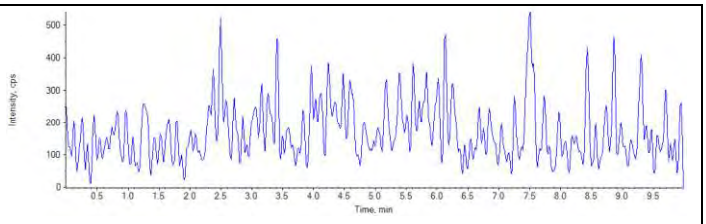
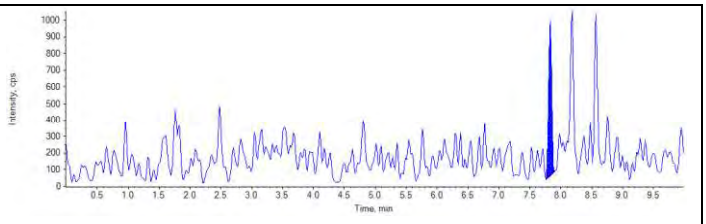


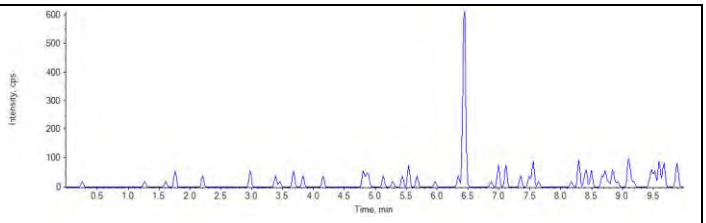
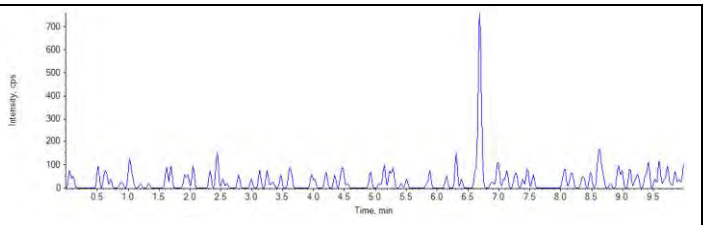
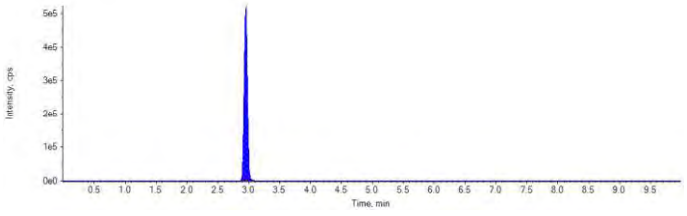
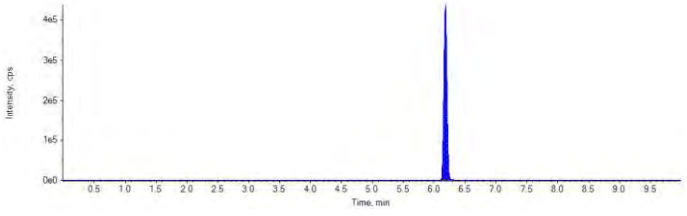
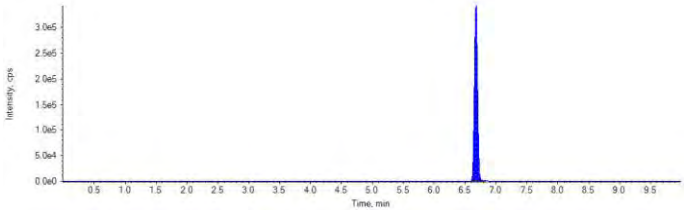
D3-MeFOSAA IS (Internal Standard)

RT (Exp. RT): 6.42(6.43) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



PFBS 1 (298.900/79.900 Da) RT (Exp. RT): 0.00 (1.85) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFHxA 1 (313.000/269.000 Da) RT (Exp. RT): 2.97 (2.97) min Calculated Conc: 0.152 ng/L Area Ratio: 0.00542 Sample Type: (Unknown)	
PFHxS 1 (398.900/79.900 Da) RT (Exp. RT): 0.00 (4.05) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFHpA 1 (363.000/319.000 Da) RT (Exp. RT): 0.00 (3.91) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFOA 1 (413.100/369.000 Da) RT (Exp. RT): 0.00 (4.89) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFOS 1 (498.800/79.900 Da) RT (Exp. RT): 0.00 (5.38) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	

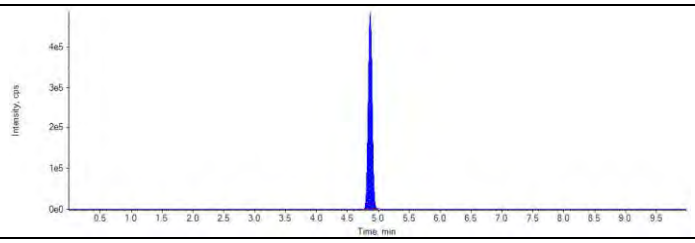
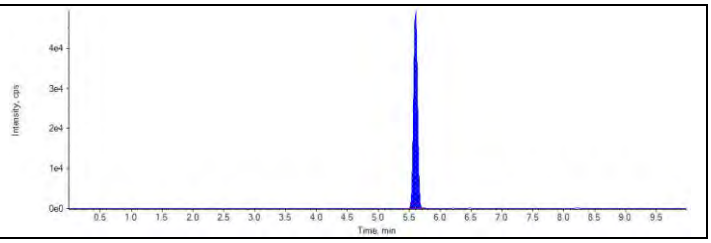
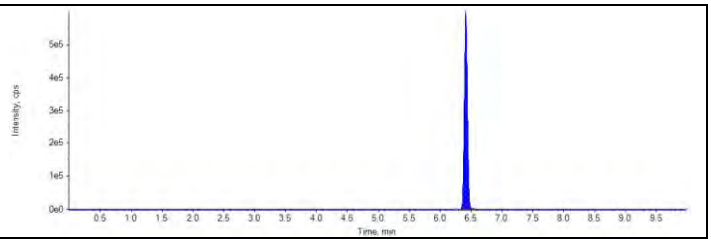
PFNA 1 (462.900/419.200 Da) RT (Exp. RT): 0.00 (5.49) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFDA 1 (513.000/469.100 Da) RT (Exp. RT): 0.00 (6.07) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFUnA 1 (562.900/519.000 Da) RT (Exp. RT): 6.70 (6.62) min Calculated Conc: 0.0432 ng/L Area Ratio: 0.00100 Sample Type: (Unknown)	
PFDoA 1 (612.900/569.000 Da) RT (Exp. RT): 0.00 (7.04) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFTrDA 1 (663.000/619.000 Da) RT (Exp. RT): 0.00 (7.38) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFTeDA 1 (713.000/669.000 Da) RT (Exp. RT): 7.83 (7.64) min Calculated Conc: 0.0491 ng/L Area Ratio: 0.00156 Sample Type: (Unknown)	

MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 0.00 (6.29) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 0.00 (6.66) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 28.3 ng/L Area Ratio: 0.926 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.18 (6.19) min Calculated Conc: 31.0 ng/L Area Ratio: 0.742 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.68 (6.68) min Calculated Conc: 117. ng/L Area Ratio: 0.632 Sample Type: (Unknown)	

Sample ID	5898852~HXO252-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	15
Acquisition Date	2018/12/21 4:06:00 PM	**Dilution Factor**	0.00400
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	2110000.	4.87	1.00	-
MPFOS	214000.	5.60	1.00	-
D3-MeFOSAA IS	2070000.	6.42	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	4690	2.05	N/A	0.178	N/A
PFHxA 1	48200	2.96	N/A	0.640	N/A
PFHxS 1	20400	4.13	N/A	1.35	N/A
PFHpA 1	108000	4.02	N/A	1.26	N/A
PFOA 1	119000	4.88	N/A	1.68	N/A
PFOS 1	15300	5.61	N/A	1.78	N/A
PFNA 1	68600	5.59	N/A	1.81	N/A
PFDA 1	70200	6.19	N/A	1.27	N/A
PFUnA 1	77900	6.69	N/A	1.59	N/A
PFDoA 1	71600	7.13	N/A	1.27	N/A
PFTrDA 1	74800	7.50	N/A	1.30	N/A
PFTeDA 1	77800	7.82	N/A	1.16	N/A
MeFOSAA 1	69100	6.43	N/A	4.43	N/A
EtFOSAA 1	67800	6.69	N/A	4.75	N/A
13C2-PFHxA	791000	2.95	N/A	11.4	N/A
13C2-PFDA	1490000	6.18	N/A	29.5	N/A
D5-EtFOSAA	1380000	6.67	N/A	123.	N/A

MPFOA (Internal Standard) RT (Exp. RT): 4.87(4.84) min Concentration: 1.00 ng/L Sample Type: (Unknown)	
MPFOS (Internal Standard) RT (Exp. RT): 5.60(5.38) min Concentration: 1.00 ng/L Sample Type: (Unknown)	
D3-MeFOSAA IS (Internal Standard) RT (Exp. RT): 6.42(6.43) min Concentration: 1.00 ng/L Sample Type: (Unknown)	

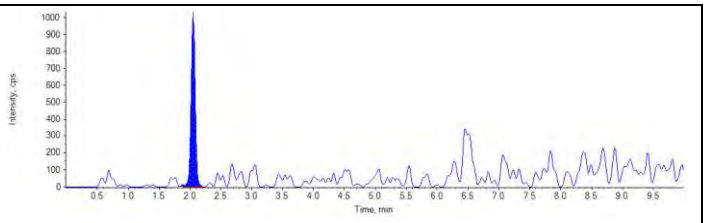
PFBS 1 (298.900/79.900 Da)

RT (Exp. RT): 2.05 (1.85) min

Calculated Conc: 0.178 ng/L

Area Ratio: 0.0219

Sample Type: (Unknown)



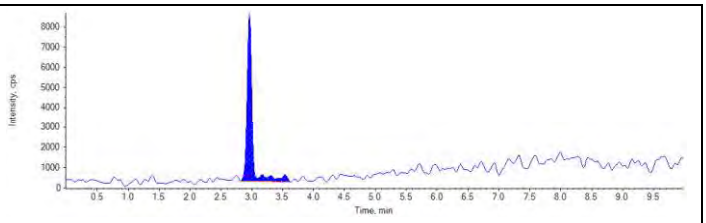
PFHxA 1 (313.000/269.000 Da)

RT (Exp. RT): 2.96 (2.97) min

Calculated Conc: 0.640 ng/L

Area Ratio: 0.0228

Sample Type: (Unknown)



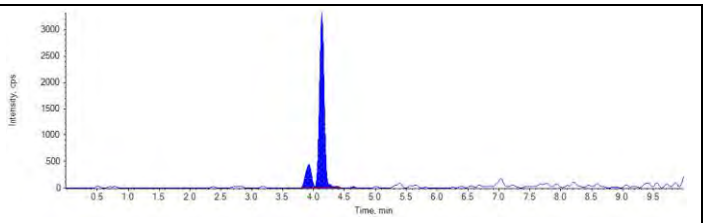
PFHxS 1 (398.900/79.900 Da)

RT (Exp. RT): 4.13 (4.05) min

Calculated Conc: 1.35 ng/L

Area Ratio: 0.0950

Sample Type: (Unknown)



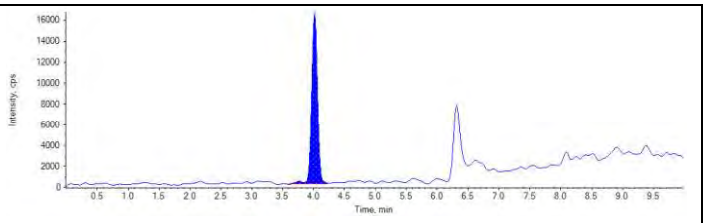
PFHpA 1 (363.000/319.000 Da)

RT (Exp. RT): 4.02 (3.91) min

Calculated Conc: 1.26 ng/L

Area Ratio: 0.0511

Sample Type: (Unknown)



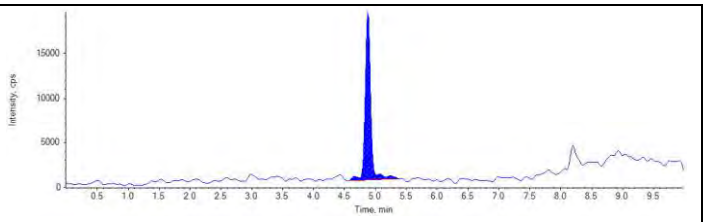
PFOA 1 (413.100/369.000 Da)

RT (Exp. RT): 4.88 (4.89) min

Calculated Conc: 1.68 ng/L

Area Ratio: 0.0563

Sample Type: (Unknown)



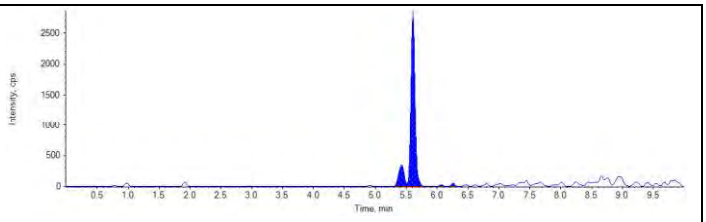
PFOS 1 (498.800/79.900 Da)

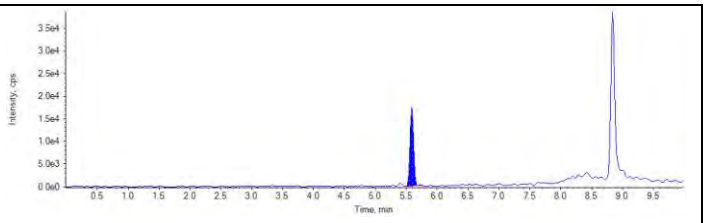
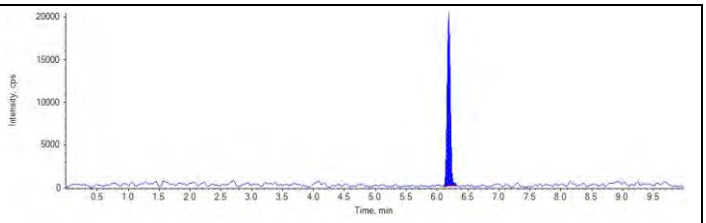
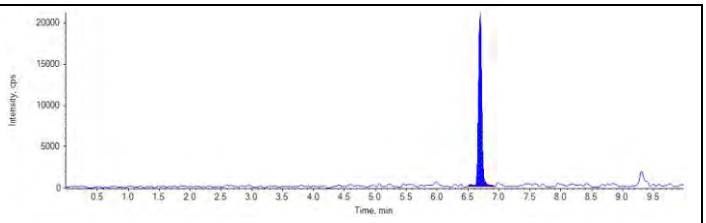
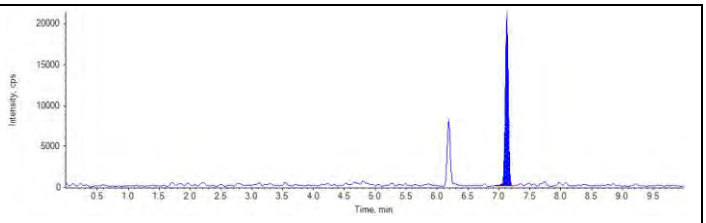
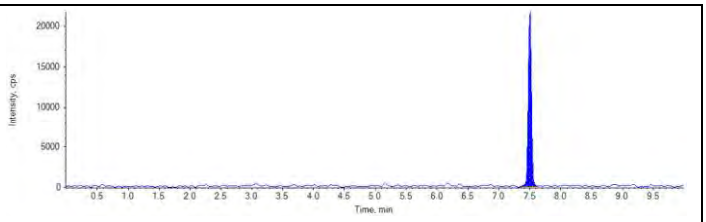
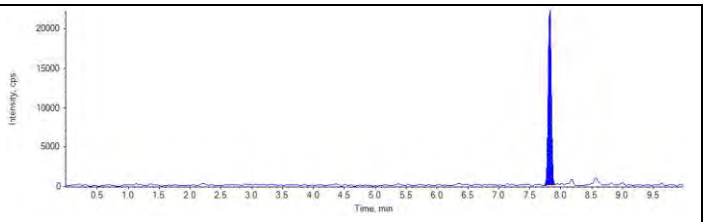
RT (Exp. RT): 5.61 (5.38) min

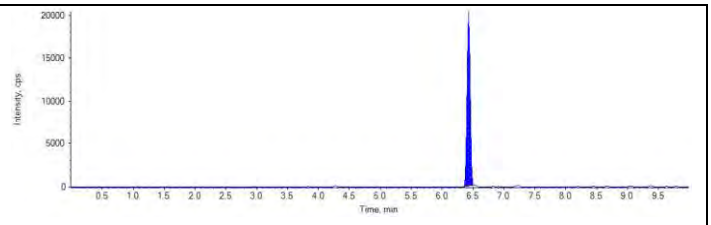
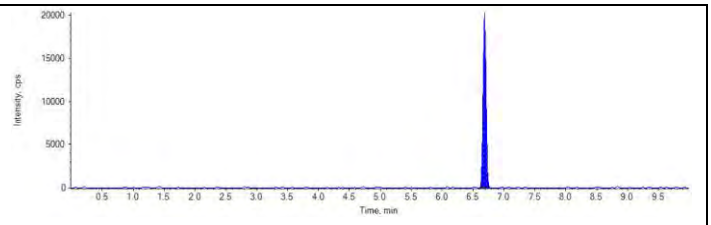
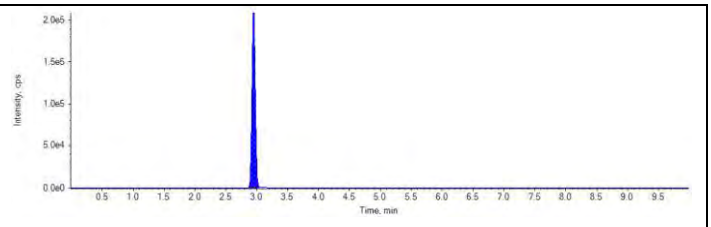
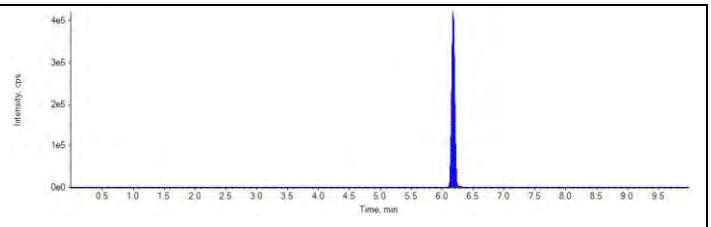
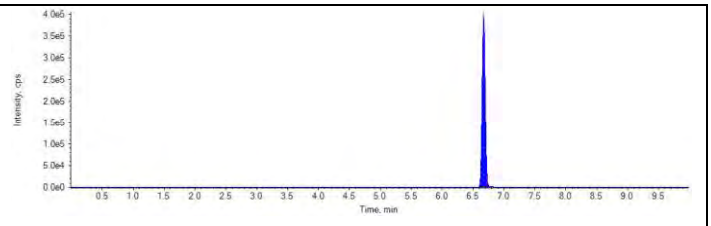
Calculated Conc: 1.78 ng/L

Area Ratio: 0.0715

Sample Type: (Unknown)



PFNA 1 (462.900/419.200 Da) RT (Exp. RT): 5.59 (5.49) min Calculated Conc: 1.81 ng/L Area Ratio: 0.0325 Sample Type: (Unknown)	
PFDA 1 (513.000/469.100 Da) RT (Exp. RT): 6.19 (6.07) min Calculated Conc: 1.27 ng/L Area Ratio: 0.0332 Sample Type: (Unknown)	
PFUnA 1 (562.900/519.000 Da) RT (Exp. RT): 6.69 (6.62) min Calculated Conc: 1.59 ng/L Area Ratio: 0.0369 Sample Type: (Unknown)	
PFDoA 1 (612.900/569.000 Da) RT (Exp. RT): 7.13 (7.04) min Calculated Conc: 1.27 ng/L Area Ratio: 0.0339 Sample Type: (Unknown)	
PFTrDA 1 (663.000/619.000 Da) RT (Exp. RT): 7.50 (7.38) min Calculated Conc: 1.30 ng/L Area Ratio: 0.0354 Sample Type: (Unknown)	
PFTeDA 1 (713.000/669.000 Da) RT (Exp. RT): 7.82 (7.64) min Calculated Conc: 1.16 ng/L Area Ratio: 0.0368 Sample Type: (Unknown)	

MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 6.43 (6.29) min Calculated Conc: 4.43 ng/L Area Ratio: 0.0334 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 6.69 (6.66) min Calculated Conc: 4.75 ng/L Area Ratio: 0.0328 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 11.4 ng/L Area Ratio: 0.374 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.18 (6.19) min Calculated Conc: 29.5 ng/L Area Ratio: 0.706 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.67 (6.68) min Calculated Conc: 123. ng/L Area Ratio: 0.667 Sample Type: (Unknown)	

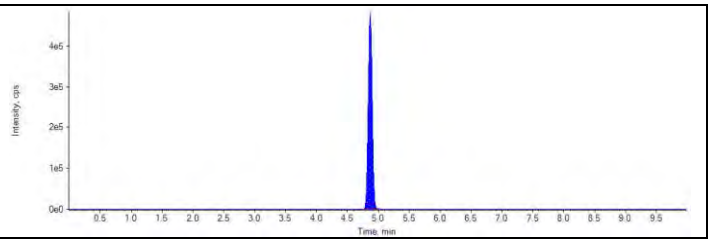
Sample ID	5898852~IOF240-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	16
Acquisition Date	2018/12/21 4:21:34 PM	**Dilution Factor**	0.00370
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	2120000.	4.87	1.00	-
MPFOS	204000.	5.60	1.00	-
D3-MeFOSAA IS	1870000.	6.42	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	4680	2.05	N/A	0.173	N/A
PFHxA 1	55700	2.96	N/A	0.682	N/A
PFHxS 1	36400	4.14	N/A	2.33	N/A
PFHpA 1	0	0.00	N/A	N/A	N/A
PFOA 1	58800	4.88	N/A	0.767	N/A
PFOS 1	0	0.00	N/A	N/A	N/A
PFNA 1	8380	5.59	N/A	0.204	N/A
PFDA 1	0	0.00	N/A	N/A	N/A
PFUnA 1	0	0.00	N/A	N/A	N/A
PFDoA 1	0	0.00	N/A	N/A	N/A
PFTrDA 1	0	0.00	N/A	N/A	N/A
PFTeDA 1	0	0.00	N/A	N/A	N/A
MeFOSAA 1	0	0.00	N/A	N/A	N/A
EtFOSAA 1	0	0.00	N/A	N/A	N/A
13C2-PFHxA	1920000	2.95	N/A	25.6	N/A
13C2-PFDA	1680000	6.18	N/A	30.6	N/A
D5-EtFOSAA	1190000	6.67	N/A	108.	N/A

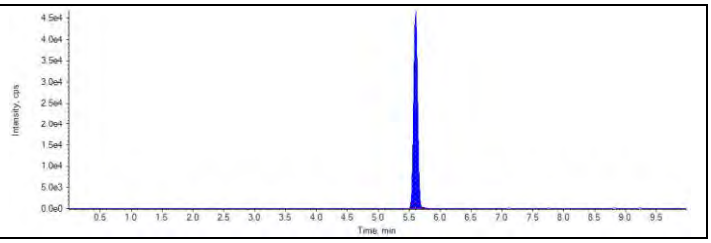
MPFOA (Internal Standard)

RT (Exp. RT): 4.87(4.84) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



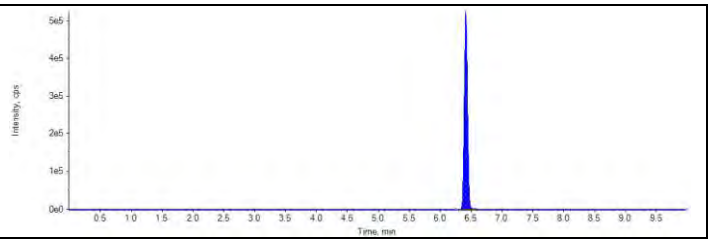
MPFOS (Internal Standard)

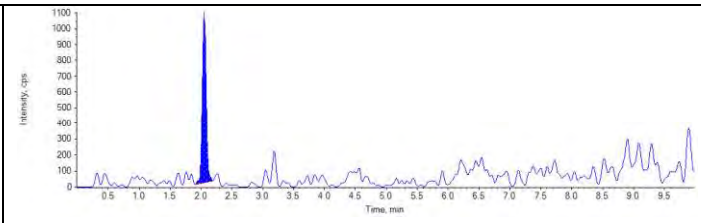
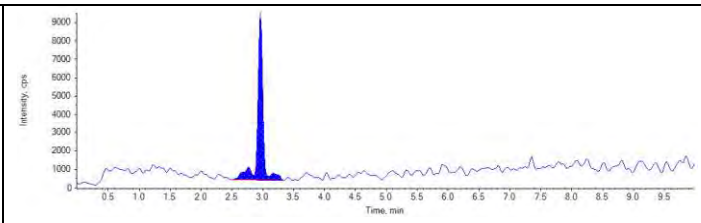
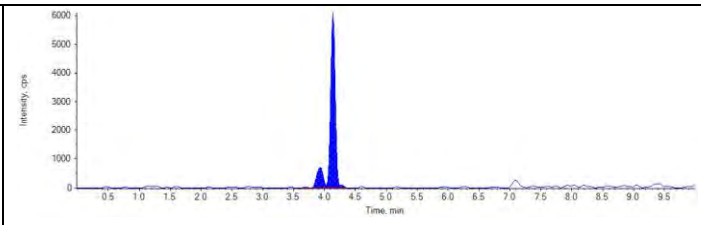
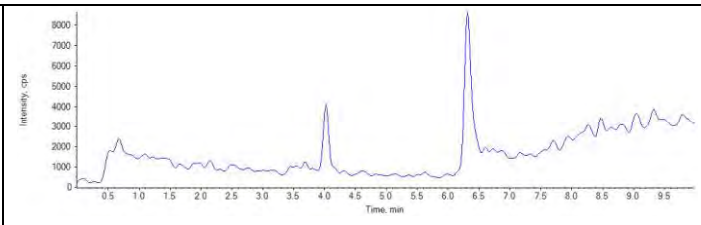
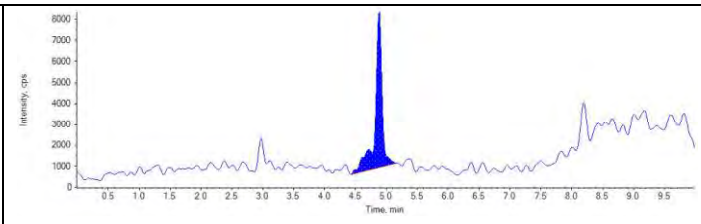
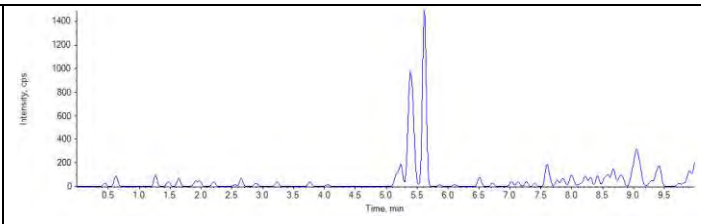
RT (Exp. RT): 5.60(5.38) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



D3-MeFOSAA IS (Internal Standard)

RT (Exp. RT): 6.42(6.43) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



PFBS 1 (298.900/79.900 Da) RT (Exp. RT): 2.05 (1.85) min Calculated Conc: 0.173 ng/L Area Ratio: 0.0229 Sample Type: (Unknown)	
PFHxA 1 (313.000/269.000 Da) RT (Exp. RT): 2.96 (2.97) min Calculated Conc: 0.682 ng/L Area Ratio: 0.0263 Sample Type: (Unknown)	
PFHxS 1 (398.900/79.900 Da) RT (Exp. RT): 4.14 (4.05) min Calculated Conc: 2.33 ng/L Area Ratio: 0.178 Sample Type: (Unknown)	
PFHpA 1 (363.000/319.000 Da) RT (Exp. RT): 0.00 (3.91) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFOA 1 (413.100/369.000 Da) RT (Exp. RT): 4.88 (4.89) min Calculated Conc: 0.767 ng/L Area Ratio: 0.0277 Sample Type: (Unknown)	
PFOS 1 (498.800/79.900 Da) RT (Exp. RT): 0.00 (5.38) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	

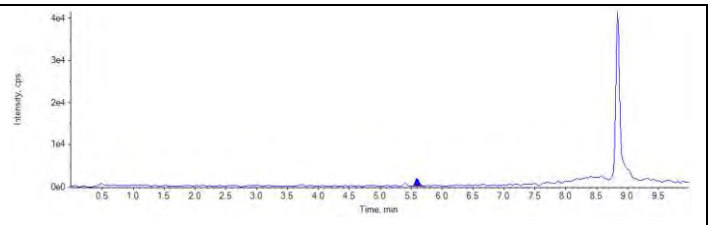
PFNA 1 (462.900/419.200 Da)

RT (Exp. RT): 5.59 (5.49) min

Calculated Conc: 0.204 ng/L

Area Ratio: 0.00395

Sample Type: (Unknown)



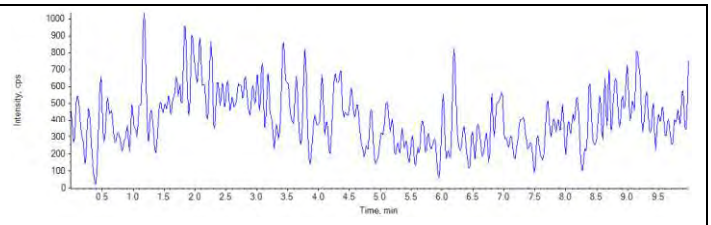
PFDA 1 (513.000/469.100 Da)

RT (Exp. RT): 0.00 (6.07) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



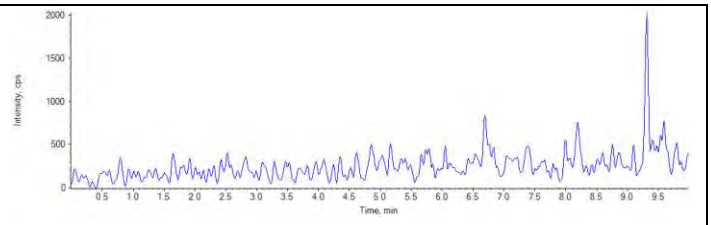
PFUnA 1 (562.900/519.000 Da)

RT (Exp. RT): 0.00 (6.62) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



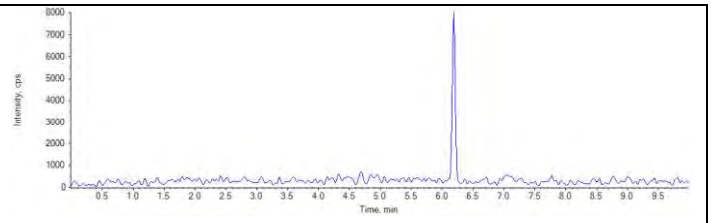
PFDoA 1 (612.900/569.000 Da)

RT (Exp. RT): 0.00 (7.04) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



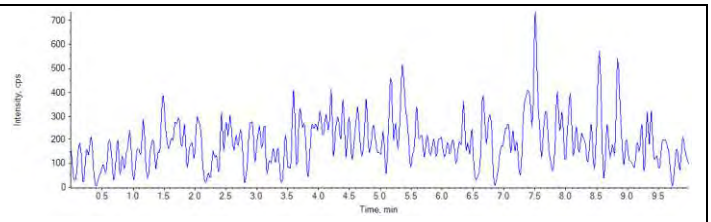
PFTrDA 1 (663.000/619.000 Da)

RT (Exp. RT): 0.00 (7.38) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



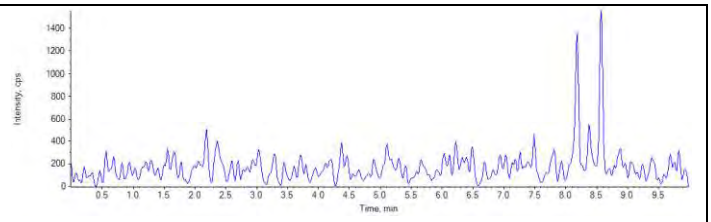
PFTeDA 1 (713.000/669.000 Da)

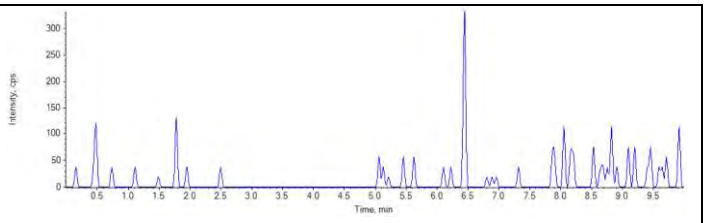
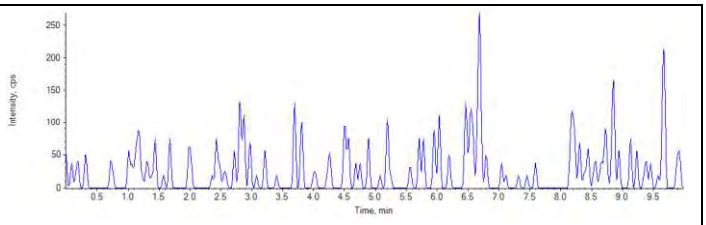
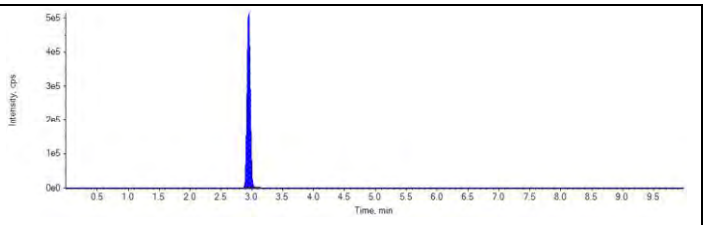
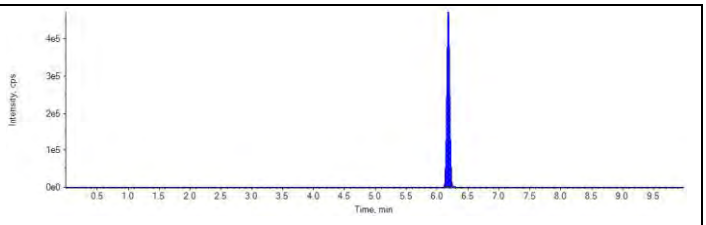
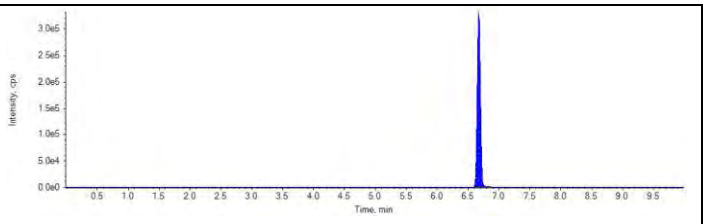
RT (Exp. RT): 0.00 (7.64) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)

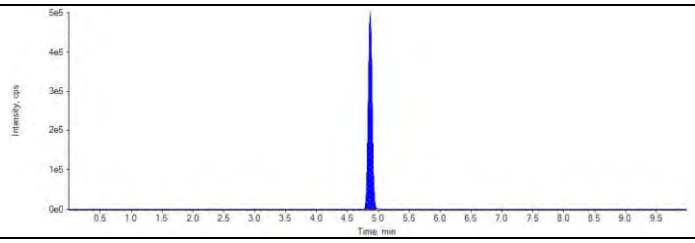
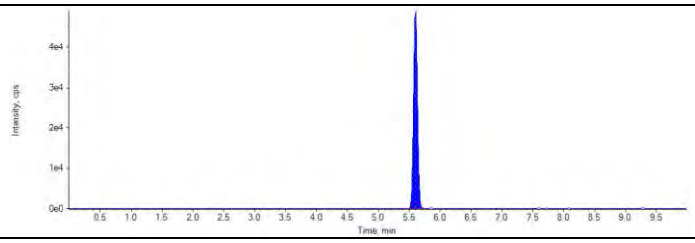
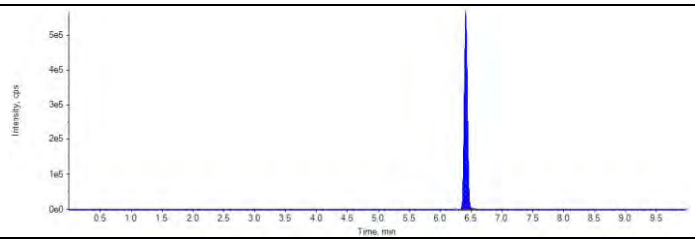


MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 0.00 (6.29) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 0.00 (6.66) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 25.6 ng/L Area Ratio: 0.908 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.18 (6.19) min Calculated Conc: 30.6 ng/L Area Ratio: 0.792 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.67 (6.68) min Calculated Conc: 108. ng/L Area Ratio: 0.636 Sample Type: (Unknown)	

Sample ID	5898852~IOF241-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	17
Acquisition Date	2018/12/21 4:37:09 PM	**Dilution Factor**	0.00400
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	2180000.	4.87	1.00	-
MPFOS	217000.	5.60	1.00	-
D3-MeFOSAA IS	1980000.	6.41	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	6500	2.06	N/A	0.244	N/A
PFHxA 1	71900	2.96	N/A	0.925	N/A
PFHxS 1	416000	4.13	N/A	27.1	N/A
PFHpA 1	73900	4.02	N/A	0.835	N/A
PFOA 1	219000	4.88	N/A	3.00	N/A
PFOS 1	532000	5.61	N/A	60.9	N/A
PFNA 1	0	0.00	N/A	N/A	N/A
PFDA 1	0	0.00	N/A	N/A	N/A
PFUnA 1	0	0.00	N/A	N/A	N/A
PFDoA 1	0	0.00	N/A	N/A	N/A
PFTrDA 1	0	0.00	N/A	N/A	N/A
PFTeDA 1	0	0.00	N/A	N/A	N/A
MeFOSAA 1	0	0.00	N/A	N/A	N/A
EtFOSAA 1	0	0.00	N/A	N/A	N/A
13C2-PFHxA	553000	2.95	N/A	7.75	N/A
13C2-PFDA	1760000	6.18	N/A	33.7	N/A
D5-EtFOSAA	1200000	6.67	N/A	111.	N/A

MPFOA (Internal Standard) RT (Exp. RT): 4.87(4.84) min Concentration: 1.00 ng/L Sample Type: (Unknown)	
MPFOS (Internal Standard) RT (Exp. RT): 5.60(5.38) min Concentration: 1.00 ng/L Sample Type: (Unknown)	
D3-MeFOSAA IS (Internal Standard) RT (Exp. RT): 6.41(6.43) min Concentration: 1.00 ng/L Sample Type: (Unknown)	

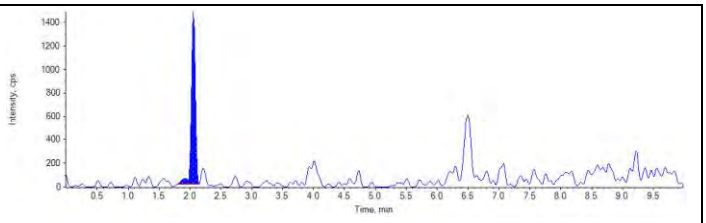
PFBS 1 (298.900/79.900 Da)

RT (Exp. RT): 2.06 (1.85) min

Calculated Conc: 0.244 ng/L

Area Ratio: 0.0299

Sample Type: (Unknown)



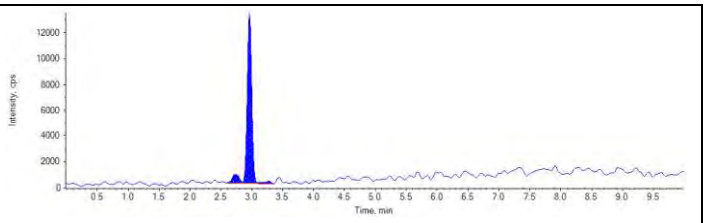
PFHxA 1 (313.000/269.000 Da)

RT (Exp. RT): 2.96 (2.97) min

Calculated Conc: 0.925 ng/L

Area Ratio: 0.0330

Sample Type: (Unknown)



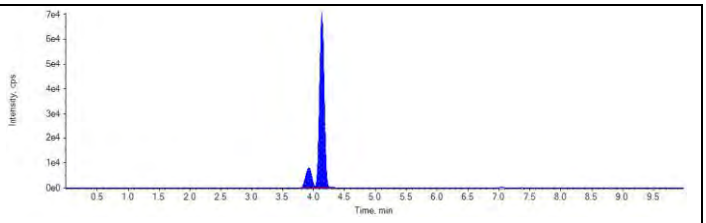
PFHxS 1 (398.900/79.900 Da)

RT (Exp. RT): 4.13 (4.05) min

Calculated Conc: 27.1 ng/L

Area Ratio: 1.92

Sample Type: (Unknown)



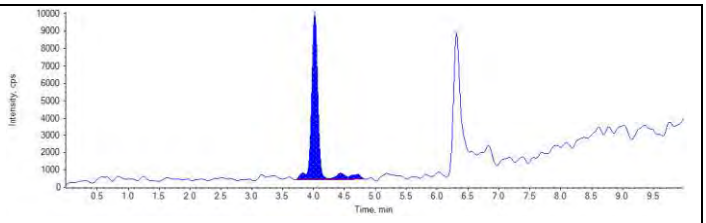
PFHpA 1 (363.000/319.000 Da)

RT (Exp. RT): 4.02 (3.91) min

Calculated Conc: 0.835 ng/L

Area Ratio: 0.0339

Sample Type: (Unknown)



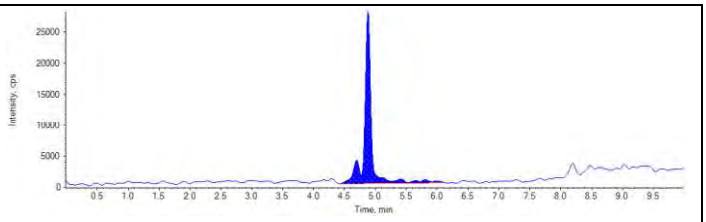
PFOA 1 (413.100/369.000 Da)

RT (Exp. RT): 4.88 (4.89) min

Calculated Conc: 3.00 ng/L

Area Ratio: 0.100

Sample Type: (Unknown)



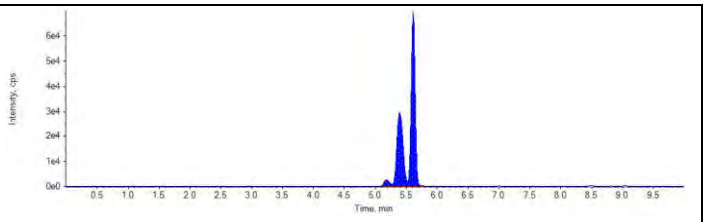
PFOS 1 (498.800/79.900 Da)

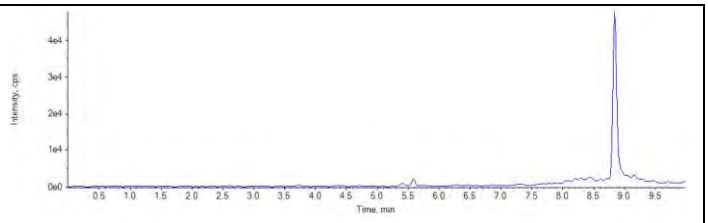
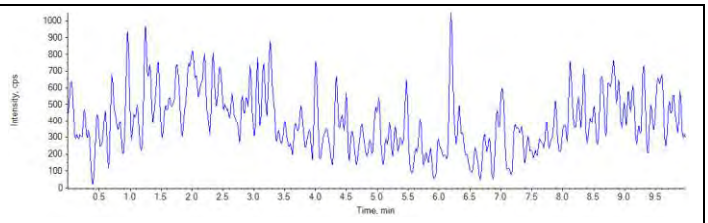
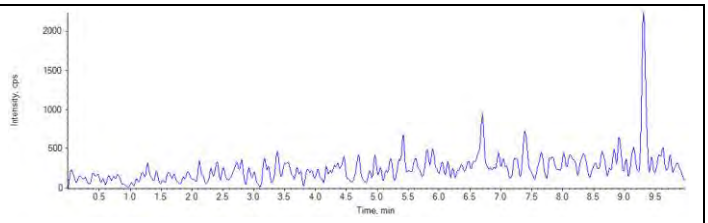
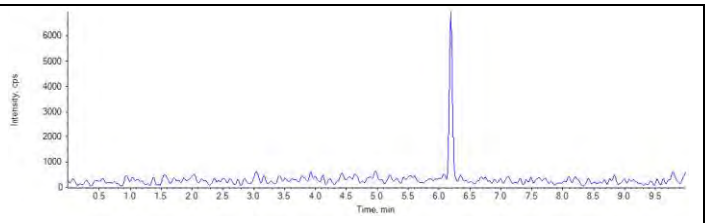
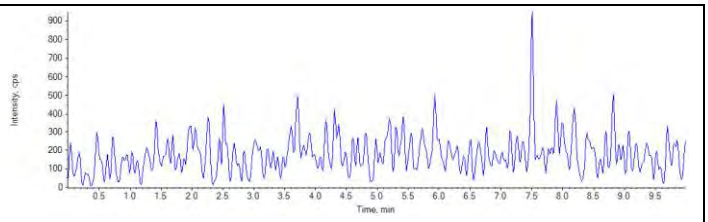
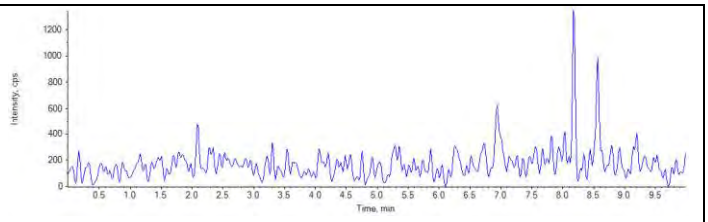
RT (Exp. RT): 5.61 (5.38) min

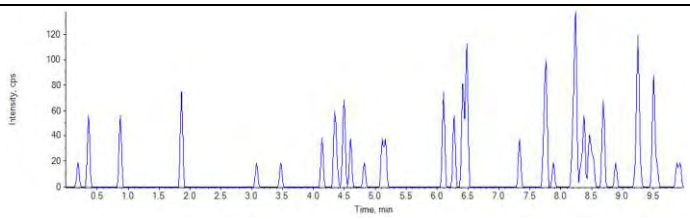
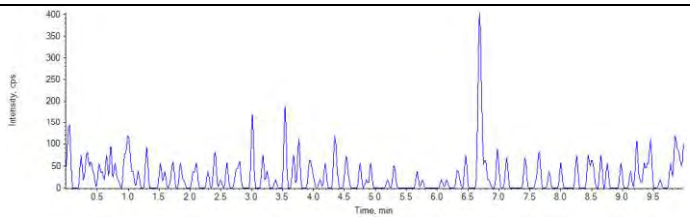
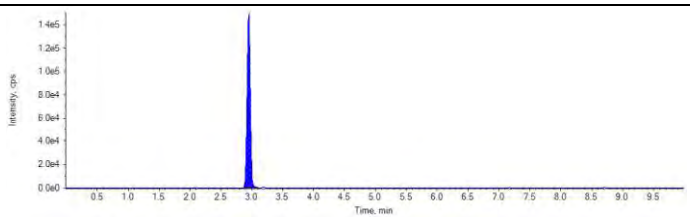
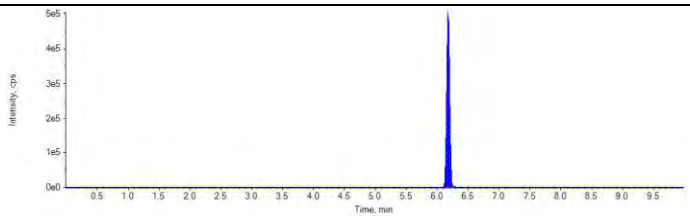
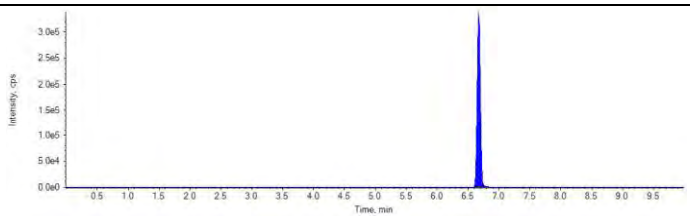
Calculated Conc: 60.9 ng/L

Area Ratio: 2.45

Sample Type: (Unknown)



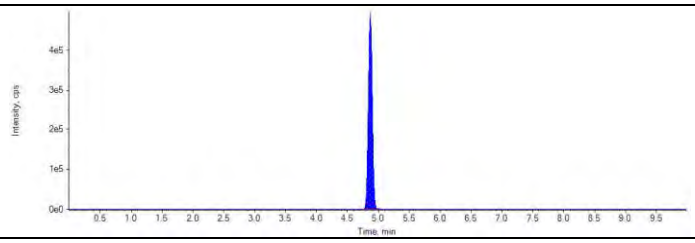
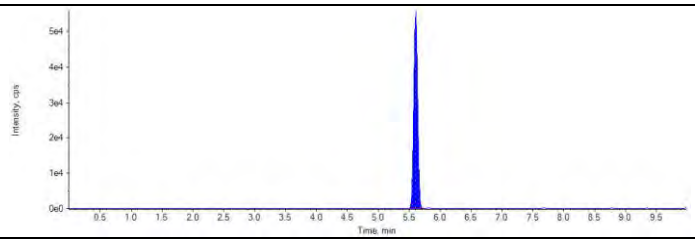
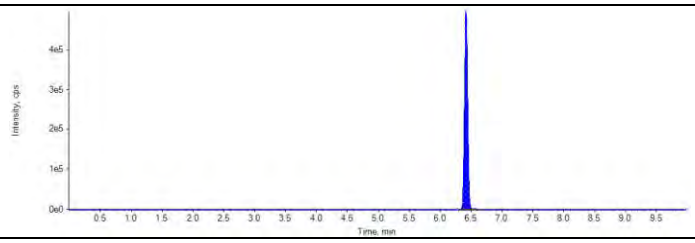
PFNA 1 (462.900/419.200 Da) RT (Exp. RT): 0.00 (5.49) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFDA 1 (513.000/469.100 Da) RT (Exp. RT): 0.00 (6.07) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFUnA 1 (562.900/519.000 Da) RT (Exp. RT): 0.00 (6.62) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFDoA 1 (612.900/569.000 Da) RT (Exp. RT): 0.00 (7.04) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFTrDA 1 (663.000/619.000 Da) RT (Exp. RT): 0.00 (7.38) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFTeDA 1 (713.000/669.000 Da) RT (Exp. RT): 0.00 (7.64) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	

MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 0.00 (6.29) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 0.00 (6.66) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 7.75 ng/L Area Ratio: 0.254 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.18 (6.19) min Calculated Conc: 33.7 ng/L Area Ratio: 0.806 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.67 (6.68) min Calculated Conc: 111. ng/L Area Ratio: 0.604 Sample Type: (Unknown)	

Sample ID	5898852~IOF242-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	18
Acquisition Date	2018/12/21 4:52:44 PM	**Dilution Factor**	0.00350
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	2150000.	4.87	1.00	-
MPFOS	240000.	5.60	1.00	-
D3-MeFOSAA IS	1810000.	6.42	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	7700	2.06	N/A	0.229	N/A
PFHxA 1	104000	2.96	N/A	1.19	N/A
PFHxS 1	316000	4.14	N/A	16.3	N/A
PFHpA 1	90700	4.02	N/A	0.909	N/A
PFOA 1	140000	4.88	N/A	1.71	N/A
PFOS 1	329000	5.62	N/A	29.8	N/A
PFNA 1	11100	5.59	N/A	0.252	N/A
PFDA 1	0	0.00	N/A	N/A	N/A
PFUnA 1	0	0.00	N/A	N/A	N/A
PFDoA 1	0	0.00	N/A	N/A	N/A
PFTrDA 1	0	0.00	N/A	N/A	N/A
PFTeDA 1	0	0.00	N/A	N/A	N/A
MeFOSAA 1	0	0.00	N/A	N/A	N/A
EtFOSAA 1	0	0.00	N/A	N/A	N/A
13C2-PFHxA	698000	2.95	N/A	8.68	N/A
13C2-PFDA	1770000	6.18	N/A	30.2	N/A
D5-EtFOSAA	1220000	6.67	N/A	109.	N/A

MPFOA (Internal Standard) RT (Exp. RT): 4.87(4.84) min Concentration: 1.00 ng/L Sample Type: (Unknown)	
MPFOS (Internal Standard) RT (Exp. RT): 5.60(5.38) min Concentration: 1.00 ng/L Sample Type: (Unknown)	
D3-MeFOSAA IS (Internal Standard) RT (Exp. RT): 6.42(6.43) min Concentration: 1.00 ng/L Sample Type: (Unknown)	

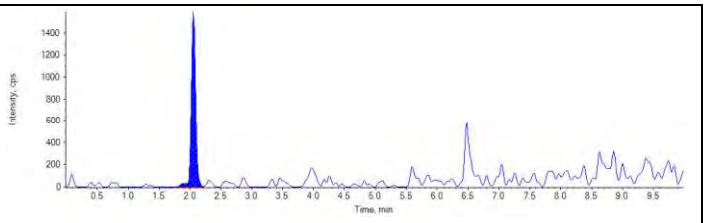
PFBS 1 (298.900/79.900 Da)

RT (Exp. RT): 2.06 (1.85) min

Calculated Conc: 0.229 ng/L

Area Ratio: 0.0321

Sample Type: (Unknown)



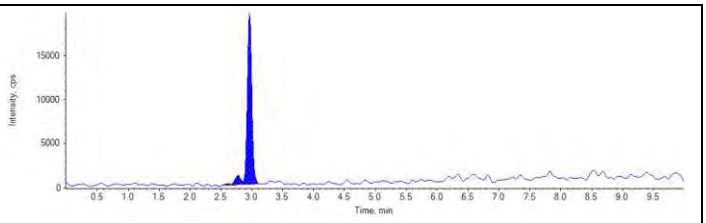
PFHxA 1 (313.000/269.000 Da)

RT (Exp. RT): 2.96 (2.97) min

Calculated Conc: 1.19 ng/L

Area Ratio: 0.0485

Sample Type: (Unknown)



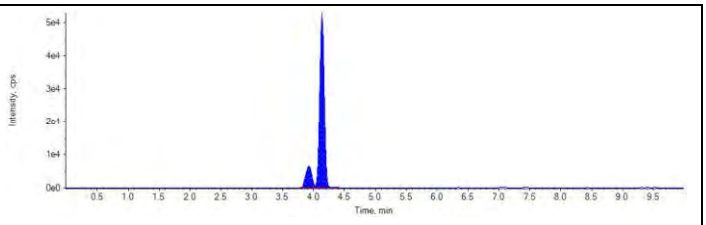
PFHxS 1 (398.900/79.900 Da)

RT (Exp. RT): 4.14 (4.05) min

Calculated Conc: 16.3 ng/L

Area Ratio: 1.32

Sample Type: (Unknown)



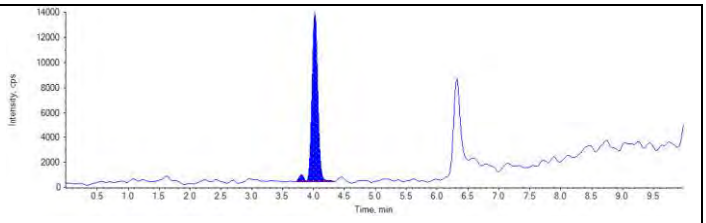
PFHpA 1 (363.000/319.000 Da)

RT (Exp. RT): 4.02 (3.91) min

Calculated Conc: 0.909 ng/L

Area Ratio: 0.0422

Sample Type: (Unknown)



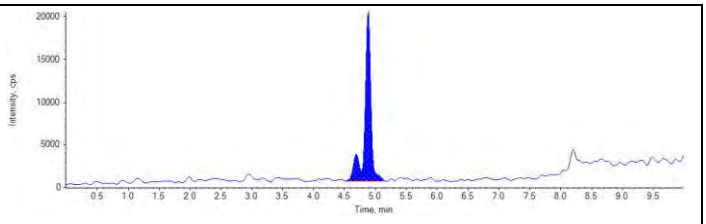
PFOA 1 (413.100/369.000 Da)

RT (Exp. RT): 4.88 (4.89) min

Calculated Conc: 1.71 ng/L

Area Ratio: 0.0653

Sample Type: (Unknown)



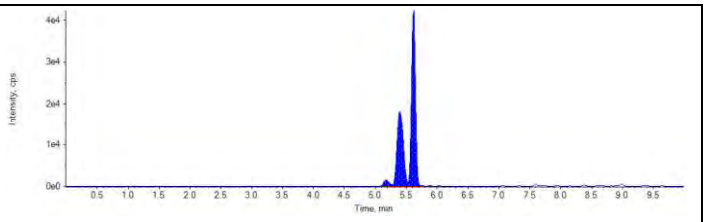
PFOS 1 (498.800/79.900 Da)

RT (Exp. RT): 5.62 (5.38) min

Calculated Conc: 29.8 ng/L

Area Ratio: 1.37

Sample Type: (Unknown)



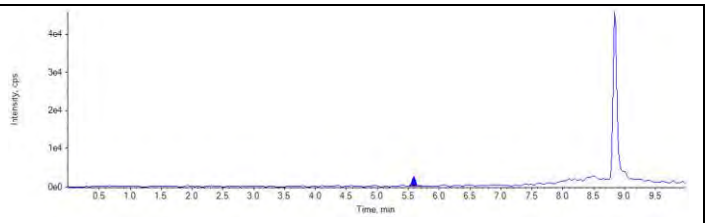
PFNA 1 (462.900/419.200 Da)

RT (Exp. RT): 5.59 (5.49) min

Calculated Conc: 0.252 ng/L

Area Ratio: 0.00515

Sample Type: (Unknown)



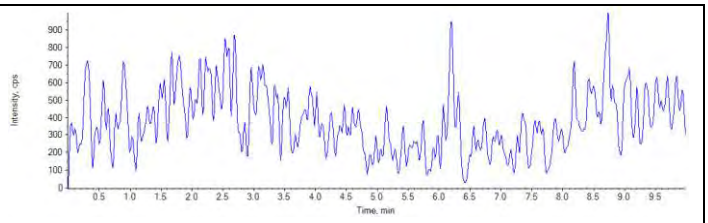
PFDA 1 (513.000/469.100 Da)

RT (Exp. RT): 0.00 (6.07) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



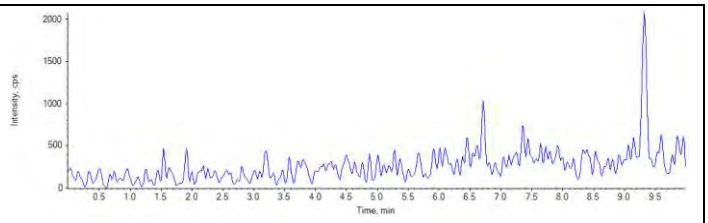
PFUnA 1 (562.900/519.000 Da)

RT (Exp. RT): 0.00 (6.62) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



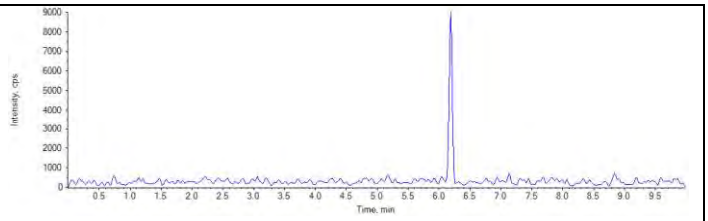
PFDoA 1 (612.900/569.000 Da)

RT (Exp. RT): 0.00 (7.04) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



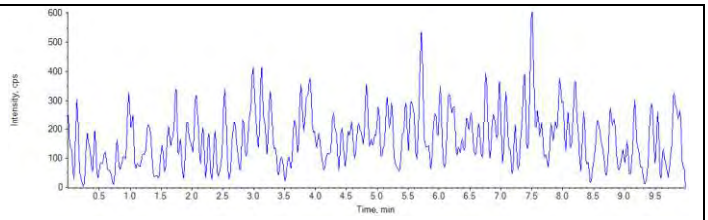
PFTrDA 1 (663.000/619.000 Da)

RT (Exp. RT): 0.00 (7.38) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



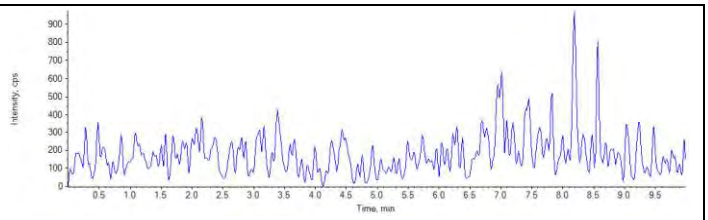
PFTeDA 1 (713.000/669.000 Da)

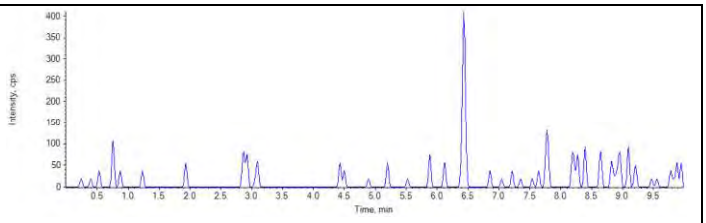
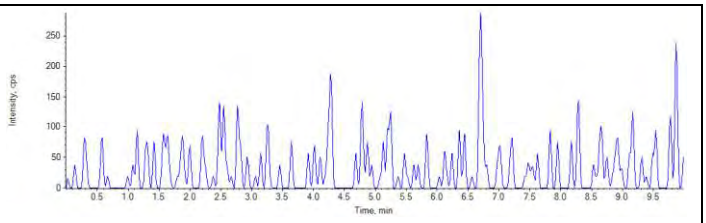
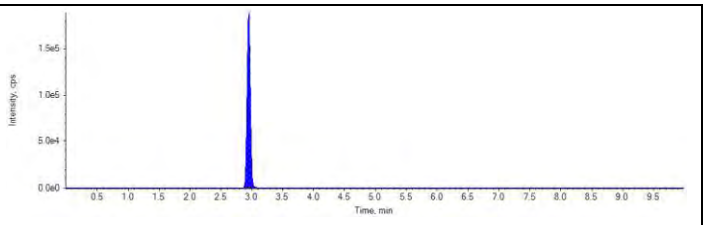
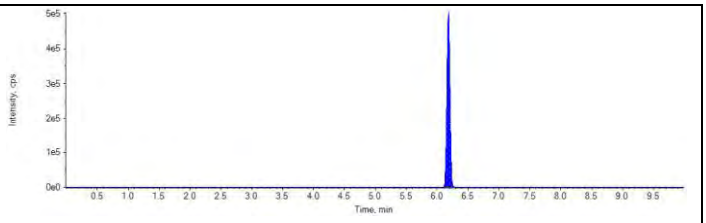
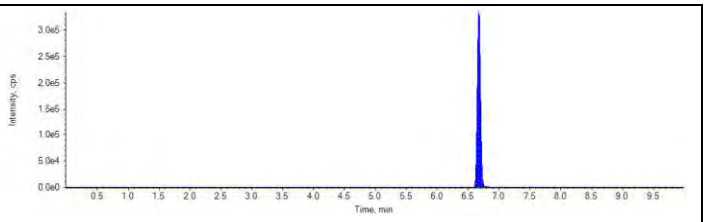
RT (Exp. RT): 0.00 (7.64) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 0.00 (6.29) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 0.00 (6.66) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 8.68 ng/L Area Ratio: 0.325 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.18 (6.19) min Calculated Conc: 30.2 ng/L Area Ratio: 0.825 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.67 (6.68) min Calculated Conc: 109. ng/L Area Ratio: 0.676 Sample Type: (Unknown)	

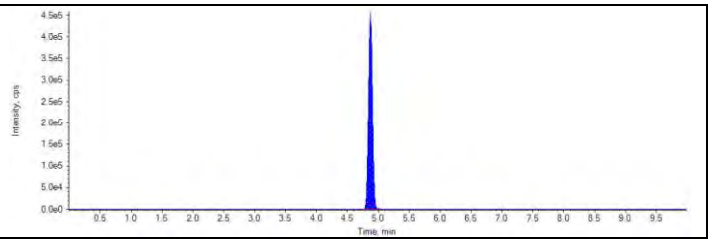
Sample ID	5898852~IOF243-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	19
Acquisition Date	2018/12/21 5:08:18 PM	**Dilution Factor**	0.00370
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	1990000.	4.87	1.00	-
MPFOS	230000.	5.61	1.00	-
D3-MeFOSAA IS	1980000.	6.42	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	68000	2.06	N/A	2.23	N/A
PFHxA 1	274000	2.97	N/A	3.58	N/A
PFHxS 1	299000	4.14	N/A	17.0	N/A
PFHpA 1	109000	4.02	N/A	1.24	N/A
PFOA 1	145000	4.89	N/A	2.01	N/A
PFOS 1	334000	5.62	N/A	33.4	N/A
PFNA 1	10100	5.59	N/A	0.262	N/A
PFDA 1	0	0.00	N/A	N/A	N/A
PFUnA 1	0	0.00	N/A	N/A	N/A
PFDoA 1	0	0.00	N/A	N/A	N/A
PFTrDA 1	0	0.00	N/A	N/A	N/A
PFTeDA 1	0	0.00	N/A	N/A	N/A
MeFOSAA 1	0	0.00	N/A	N/A	N/A
EtFOSAA 1	0	0.00	N/A	N/A	N/A
13C2-PFHxA	2250000	2.95	N/A	31.9	N/A
13C2-PFDA	1560000	6.18	N/A	30.2	N/A
D5-EtFOSAA	1080000	6.68	N/A	93.3	N/A

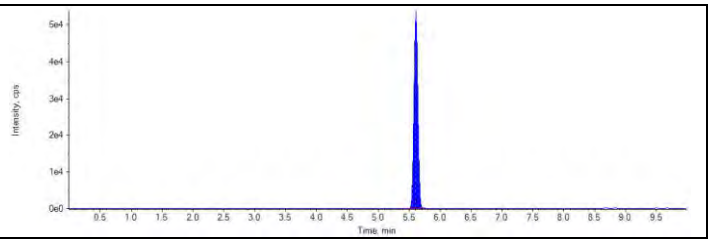
MPFOA (Internal Standard)

RT (Exp. RT): 4.87(4.84) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



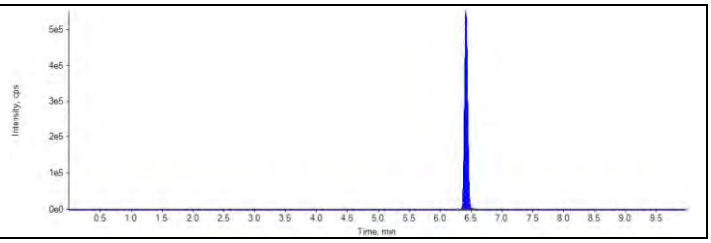
MPFOS (Internal Standard)

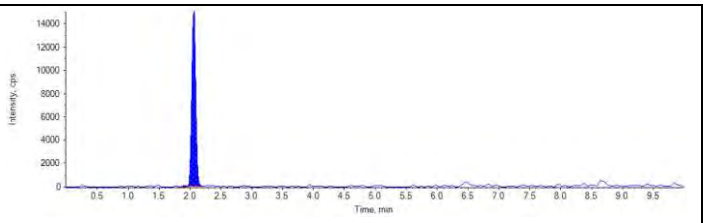
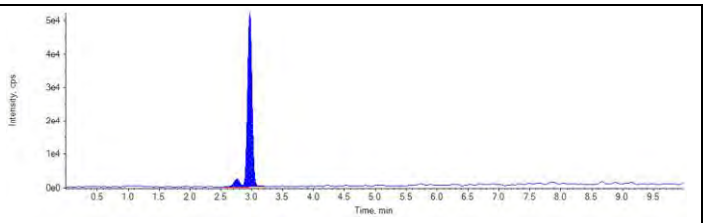
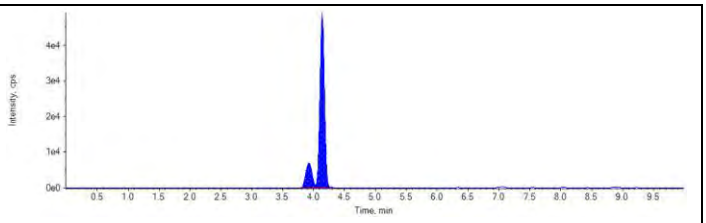
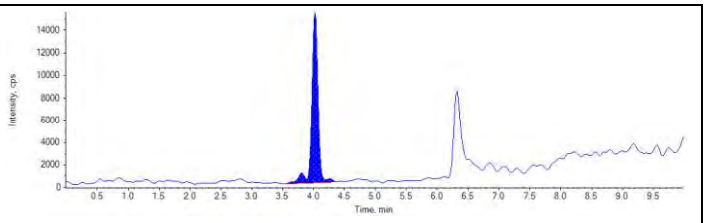
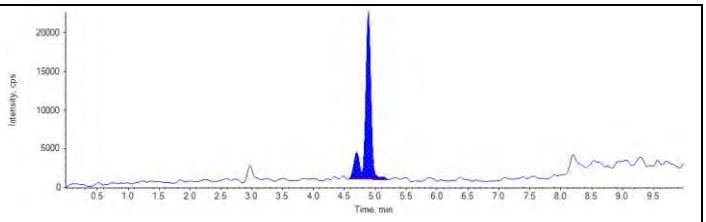
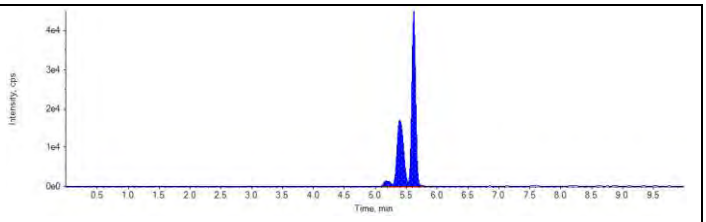
RT (Exp. RT): 5.61(5.38) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



D3-MeFOSAA IS (Internal Standard)

RT (Exp. RT): 6.42(6.43) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



PFBS 1 (298.900/79.900 Da) RT (Exp. RT): 2.06 (1.85) min Calculated Conc: 2.23 ng/L Area Ratio: 0.296 Sample Type: (Unknown)	
PFHxA 1 (313.000/269.000 Da) RT (Exp. RT): 2.97 (2.97) min Calculated Conc: 3.58 ng/L Area Ratio: 0.138 Sample Type: (Unknown)	
PFHxS 1 (398.900/79.900 Da) RT (Exp. RT): 4.14 (4.05) min Calculated Conc: 17.0 ng/L Area Ratio: 1.30 Sample Type: (Unknown)	
PFHpA 1 (363.000/319.000 Da) RT (Exp. RT): 4.02 (3.91) min Calculated Conc: 1.24 ng/L Area Ratio: 0.0545 Sample Type: (Unknown)	
PFOA 1 (413.100/369.000 Da) RT (Exp. RT): 4.89 (4.89) min Calculated Conc: 2.01 ng/L Area Ratio: 0.0726 Sample Type: (Unknown)	
PFOS 1 (498.800/79.900 Da) RT (Exp. RT): 5.62 (5.38) min Calculated Conc: 33.4 ng/L Area Ratio: 1.45 Sample Type: (Unknown)	

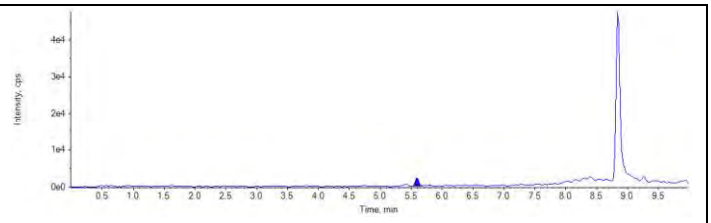
PFNA 1 (462.900/419.200 Da)

RT (Exp. RT): 5.59 (5.49) min

Calculated Conc: 0.262 ng/L

Area Ratio: 0.00507

Sample Type: (Unknown)



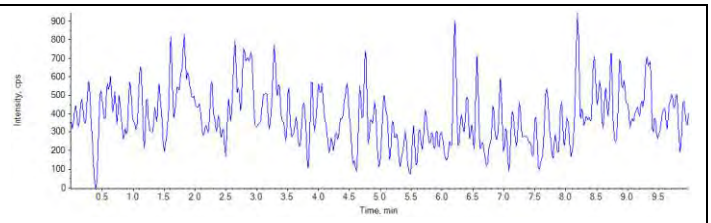
PFDA 1 (513.000/469.100 Da)

RT (Exp. RT): 0.00 (6.07) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



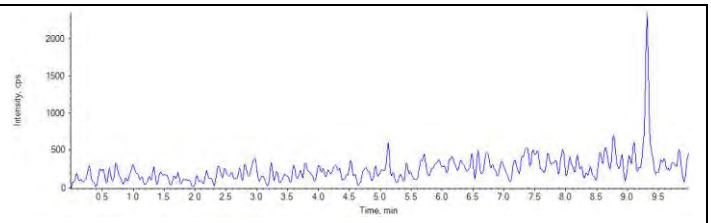
PFUnA 1 (562.900/519.000 Da)

RT (Exp. RT): 0.00 (6.62) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



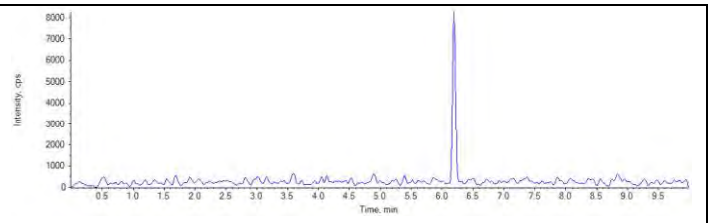
PFDoA 1 (612.900/569.000 Da)

RT (Exp. RT): 0.00 (7.04) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



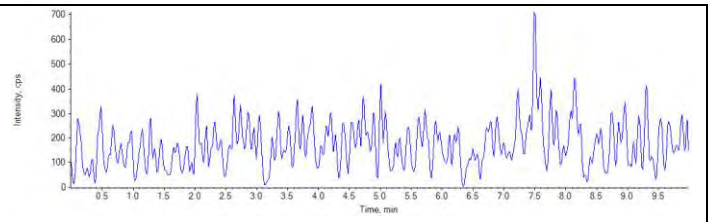
PFTrDA 1 (663.000/619.000 Da)

RT (Exp. RT): 0.00 (7.38) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



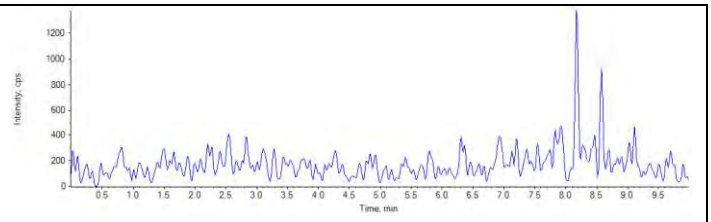
PFTeDA 1 (713.000/669.000 Da)

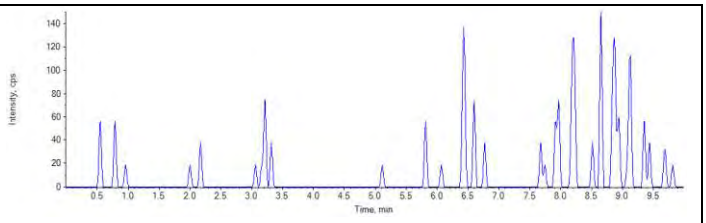
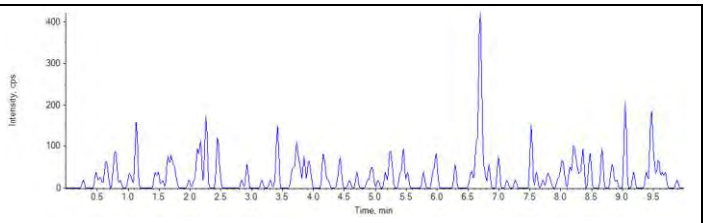
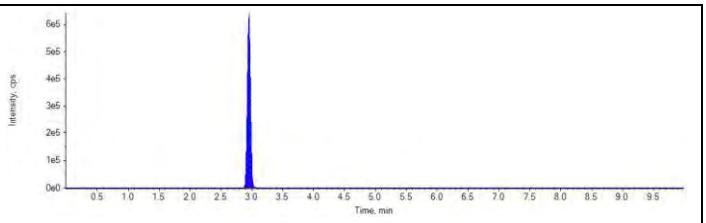
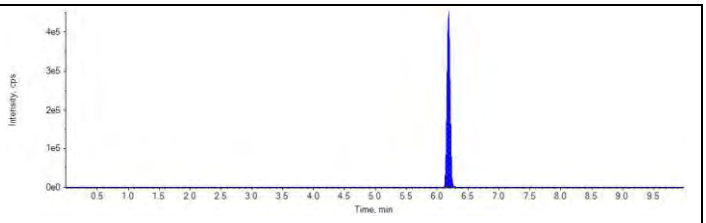
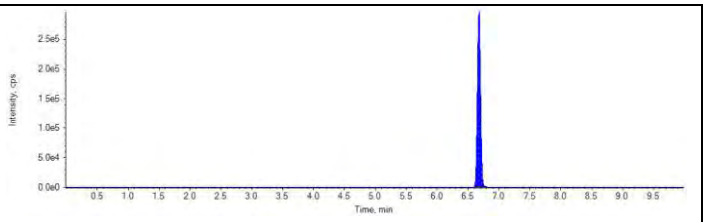
RT (Exp. RT): 0.00 (7.64) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 0.00 (6.29) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 0.00 (6.66) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 31.9 ng/L Area Ratio: 1.13 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.18 (6.19) min Calculated Conc: 30.2 ng/L Area Ratio: 0.781 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.68 (6.68) min Calculated Conc: 93.3 ng/L Area Ratio: 0.547 Sample Type: (Unknown)	

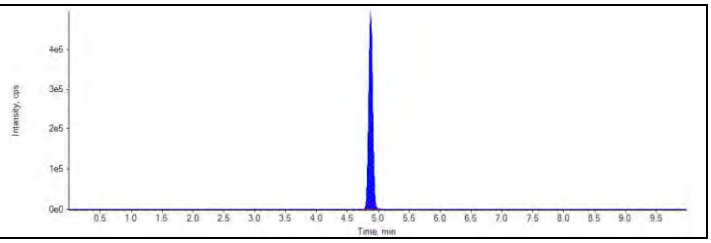
Sample ID	5898852~IOF244-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	20
Acquisition Date	2018/12/21 5:23:53 PM	**Dilution Factor**	0.00400
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	2150000.	4.87	1.00	-
MPFOS	242000.	5.61	1.00	-
D3-MeFOSAA IS	2180000.	6.42	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	6430	2.06	N/A	0.217	N/A
PFHxA 1	99800	2.97	N/A	1.30	N/A
PFHxS 1	22400	4.14	N/A	1.31	N/A
PFHpA 1	0	0.00	N/A	N/A	N/A
PFOA 1	67200	4.89	N/A	0.933	N/A
PFOS 1	0	0.00	N/A	N/A	N/A
PFNA 1	0	0.00	N/A	N/A	N/A
PFDA 1	0	0.00	N/A	N/A	N/A
PFUnA 1	5410	6.71	N/A	0.108	N/A
PFDoA 1	0	0.00	N/A	N/A	N/A
PFTrDA 1	0	0.00	N/A	N/A	N/A
PFTeDA 1	0	0.00	N/A	N/A	N/A
MeFOSAA 1	0	0.00	N/A	N/A	N/A
EtFOSAA 1	0	0.00	N/A	N/A	N/A
13C2-PFHxA	2400000	2.95	N/A	34.1	N/A
13C2-PFDA	1620000	6.19	N/A	31.5	N/A
D5-EtFOSAA	1380000	6.68	N/A	117.	N/A

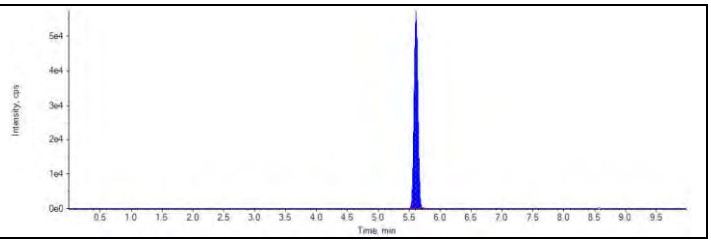
MPFOA (Internal Standard)

RT (Exp. RT): 4.87(4.84) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



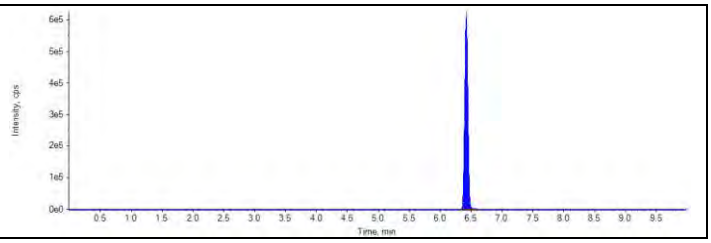
MPFOS (Internal Standard)

RT (Exp. RT): 5.61(5.38) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



D3-MeFOSAA IS (Internal Standard)

RT (Exp. RT): 6.42(6.43) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



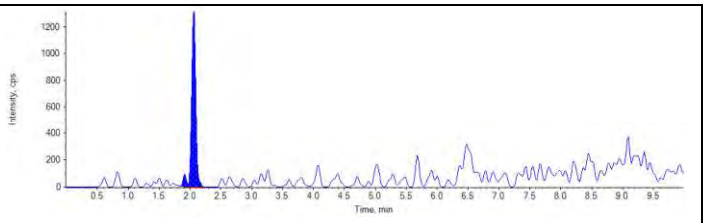
PFBS 1 (298.900/79.900 Da)

RT (Exp. RT): 2.06 (1.85) min

Calculated Conc: 0.217 ng/L

Area Ratio: 0.0266

Sample Type: (Unknown)



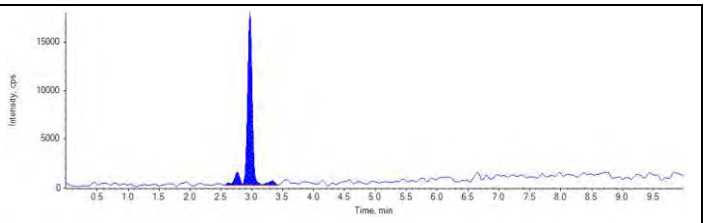
PFHxA 1 (313.000/269.000 Da)

RT (Exp. RT): 2.97 (2.97) min

Calculated Conc: 1.30 ng/L

Area Ratio: 0.0464

Sample Type: (Unknown)



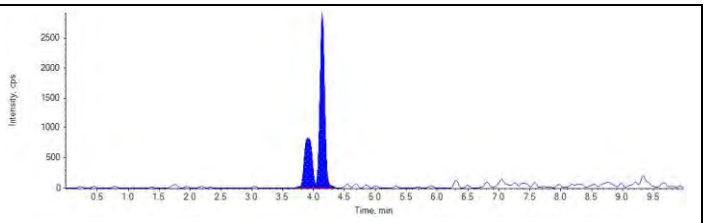
PFHxS 1 (398.900/79.900 Da)

RT (Exp. RT): 4.14 (4.05) min

Calculated Conc: 1.31 ng/L

Area Ratio: 0.0927

Sample Type: (Unknown)



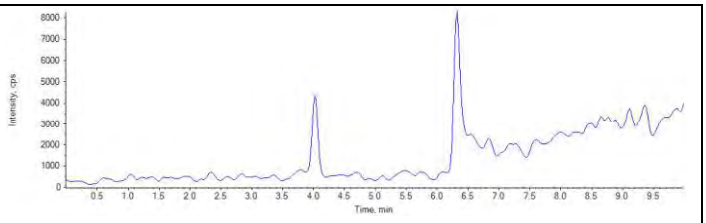
PFHpA 1 (363.000/319.000 Da)

RT (Exp. RT): 0.00 (3.91) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



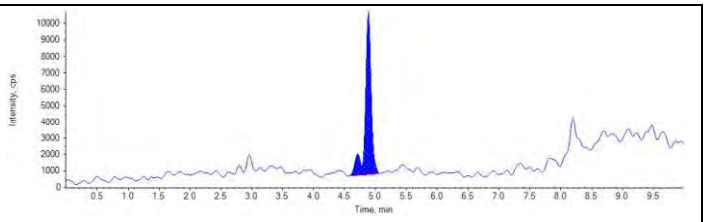
PFOA 1 (413.100/369.000 Da)

RT (Exp. RT): 4.89 (4.89) min

Calculated Conc: 0.933 ng/L

Area Ratio: 0.0312

Sample Type: (Unknown)



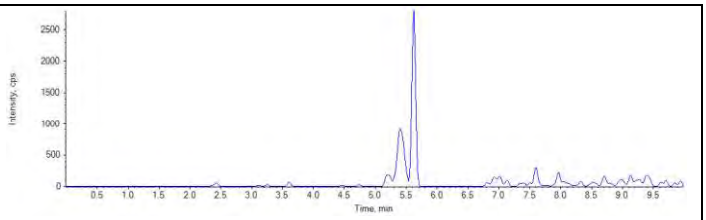
PFOS 1 (498.800/79.900 Da)

RT (Exp. RT): 0.00 (5.38) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



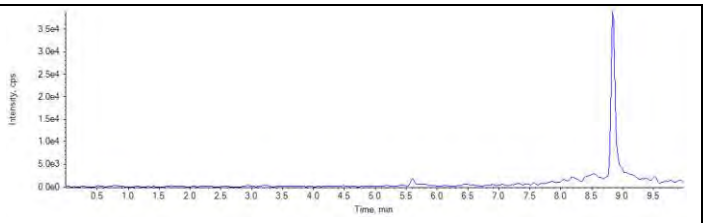
PFNA 1 (462.900/419.200 Da)

RT (Exp. RT): 0.00 (5.49) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



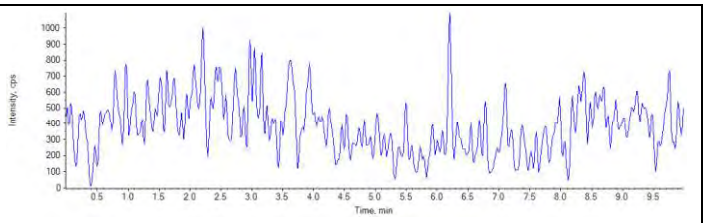
PFDA 1 (513.000/469.100 Da)

RT (Exp. RT): 0.00 (6.07) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



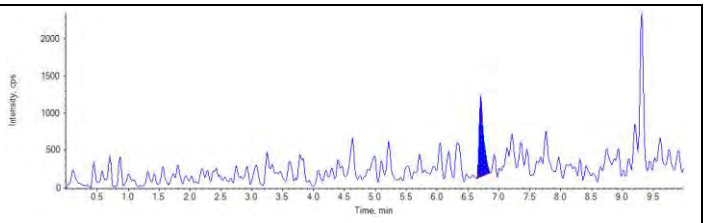
PFUnA 1 (562.900/519.000 Da)

RT (Exp. RT): 6.71 (6.62) min

Calculated Conc: 0.108 ng/L

Area Ratio: 0.00251

Sample Type: (Unknown)



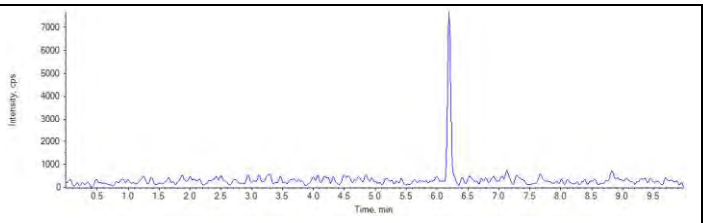
PFDoA 1 (612.900/569.000 Da)

RT (Exp. RT): 0.00 (7.04) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



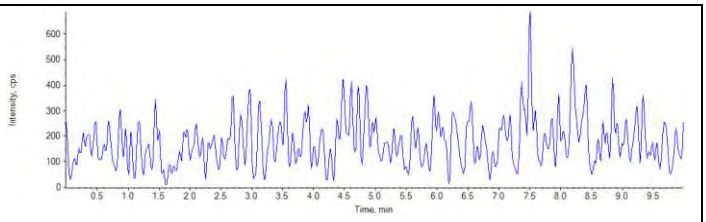
PFTrDA 1 (663.000/619.000 Da)

RT (Exp. RT): 0.00 (7.38) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



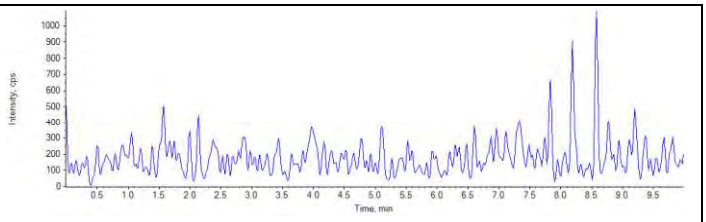
PFTeDA 1 (713.000/669.000 Da)

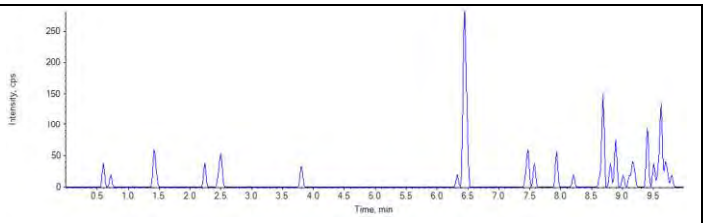
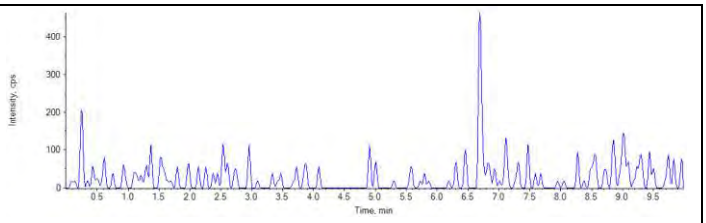
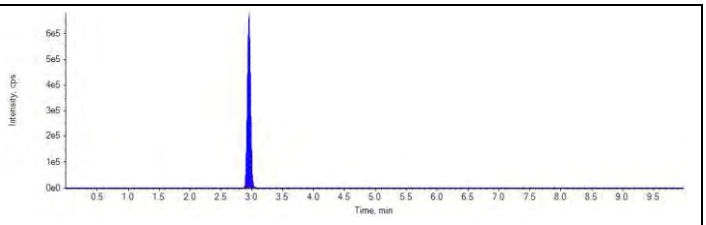
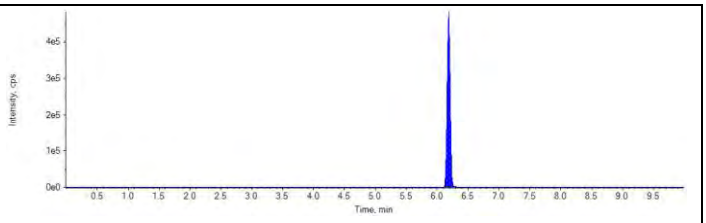
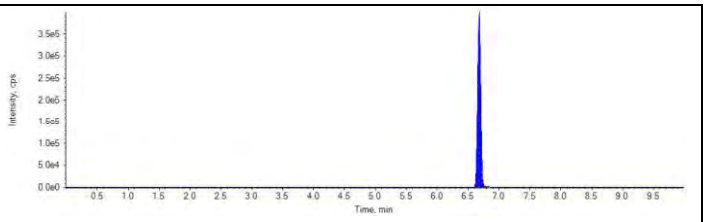
RT (Exp. RT): 0.00 (7.64) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)

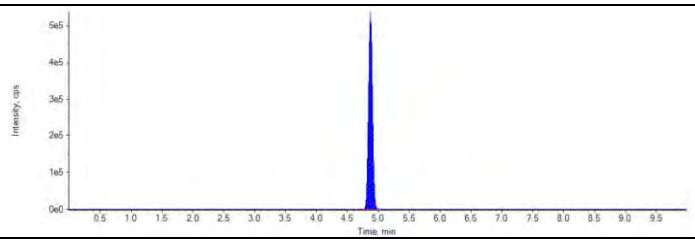
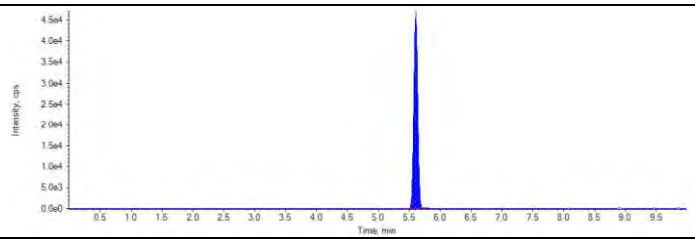
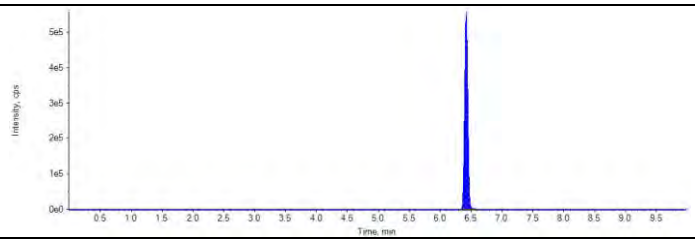


MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 0.00 (6.29) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 0.00 (6.66) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 34.1 ng/L Area Ratio: 1.12 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.19 (6.19) min Calculated Conc: 31.5 ng/L Area Ratio: 0.752 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.68 (6.68) min Calculated Conc: 117. ng/L Area Ratio: 0.632 Sample Type: (Unknown)	

Sample ID	5898852~IOF245-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	21
Acquisition Date	2018/12/21 5:39:28 PM	**Dilution Factor**	0.00350
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	2310000.	4.87	1.00	-
MPFOS	204000.	5.60	1.00	-
D3-MeFOSAA IS	1990000.	6.42	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	0	0.00	N/A	N/A	N/A
PFHxA 1	0	0.00	N/A	N/A	N/A
PFHxS 1	0	0.00	N/A	N/A	N/A
PFHpA 1	0	0.00	N/A	N/A	N/A
PFOA 1	0	0.00	N/A	N/A	N/A
PFOS 1	0	0.00	N/A	N/A	N/A
PFNA 1	0	0.00	N/A	N/A	N/A
PFDA 1	0	0.00	N/A	N/A	N/A
PFUnA 1	0	0.00	N/A	N/A	N/A
PFDoA 1	0	0.00	N/A	N/A	N/A
PFTrDA 1	0	0.00	N/A	N/A	N/A
PFTeDA 1	0	0.00	N/A	N/A	N/A
MeFOSAA 1	0	0.00	N/A	N/A	N/A
EtFOSAA 1	0	0.00	N/A	N/A	N/A
13C2-PFHxA	2010000	2.95	N/A	23.2	N/A
13C2-PFDA	1530000	6.18	N/A	24.2	N/A
D5-EtFOSAA	1100000	6.68	N/A	89.1	N/A

MPFOA (Internal Standard) RT (Exp. RT): 4.87(4.84) min Concentration: 1.00 ng/L Sample Type: (Unknown)	
MPFOS (Internal Standard) RT (Exp. RT): 5.60(5.38) min Concentration: 1.00 ng/L Sample Type: (Unknown)	
D3-MeFOSAA IS (Internal Standard) RT (Exp. RT): 6.42(6.43) min Concentration: 1.00 ng/L Sample Type: (Unknown)	

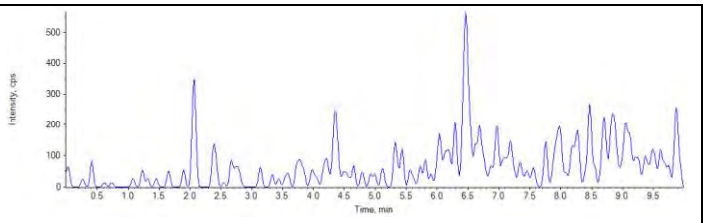
PFBS 1 (298.900/79.900 Da)

RT (Exp. RT): 0.00 (1.85) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



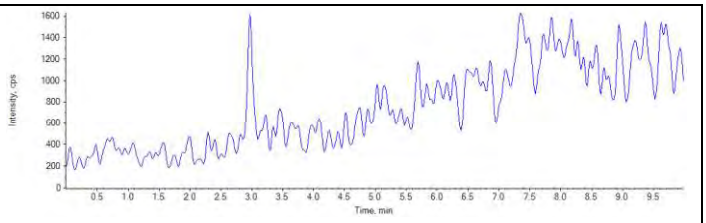
PFHxA 1 (313.000/269.000 Da)

RT (Exp. RT): 0.00 (2.97) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



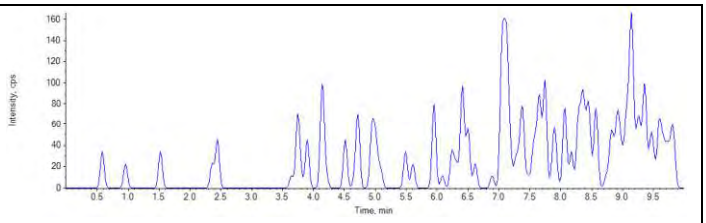
PFHxS 1 (398.900/79.900 Da)

RT (Exp. RT): 0.00 (4.05) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



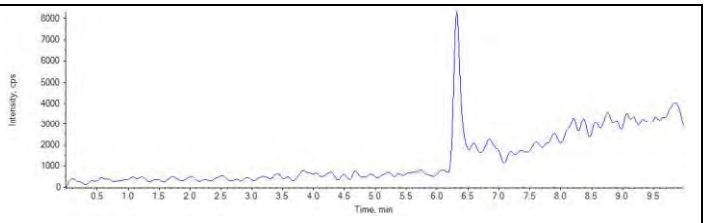
PFHpA 1 (363.000/319.000 Da)

RT (Exp. RT): 0.00 (3.91) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



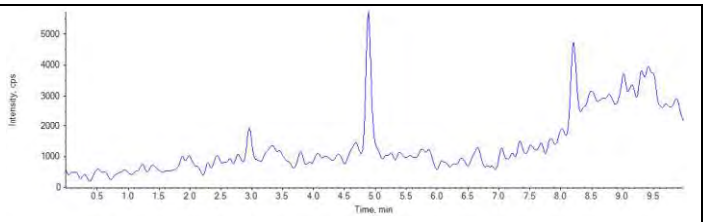
PFOA 1 (413.100/369.000 Da)

RT (Exp. RT): 0.00 (4.89) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



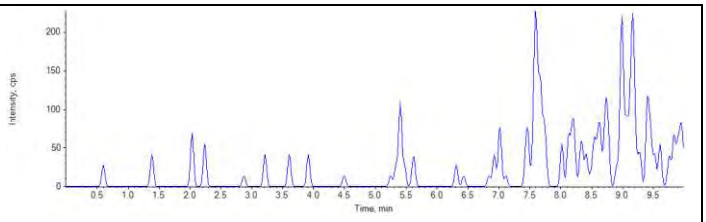
PFOS 1 (498.800/79.900 Da)

RT (Exp. RT): 0.00 (5.38) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



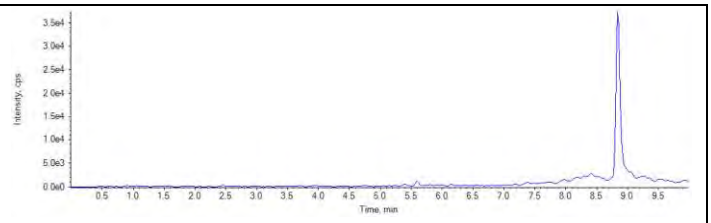
PFNA 1 (462.900/419.200 Da)

RT (Exp. RT): 0.00 (5.49) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



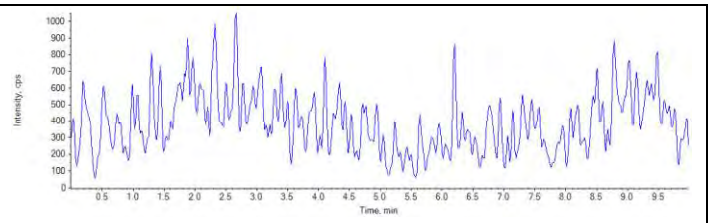
PFDA 1 (513.000/469.100 Da)

RT (Exp. RT): 0.00 (6.07) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



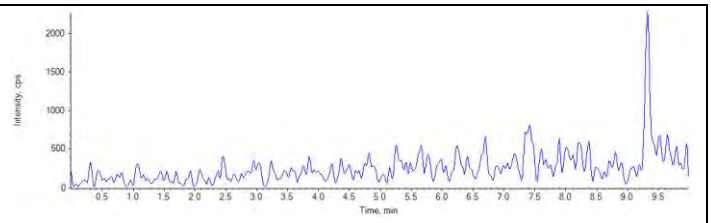
PFUnA 1 (562.900/519.000 Da)

RT (Exp. RT): 0.00 (6.62) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



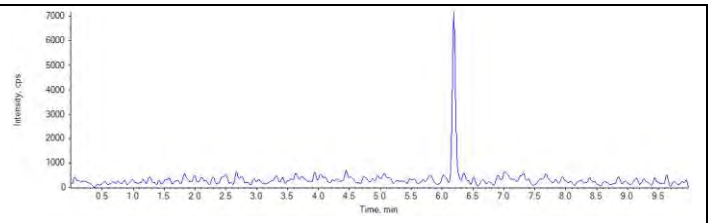
PFDoA 1 (612.900/569.000 Da)

RT (Exp. RT): 0.00 (7.04) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



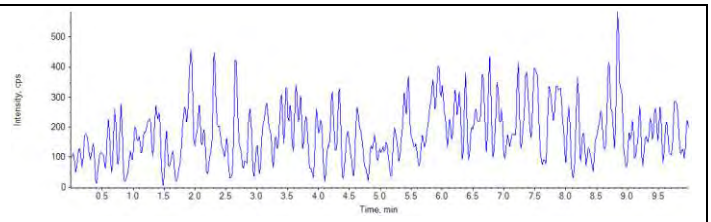
PFTrDA 1 (663.000/619.000 Da)

RT (Exp. RT): 0.00 (7.38) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



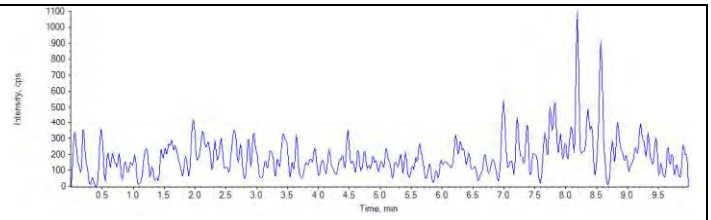
PFTeDA 1 (713.000/669.000 Da)

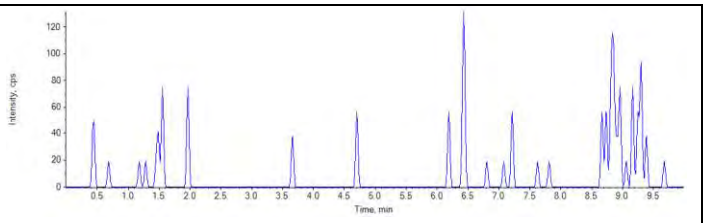
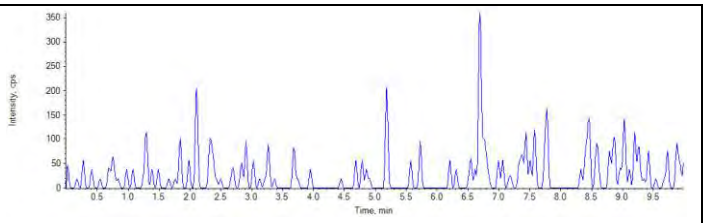
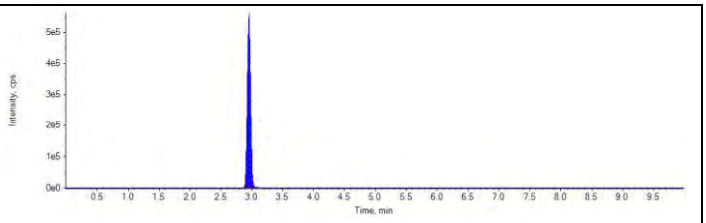
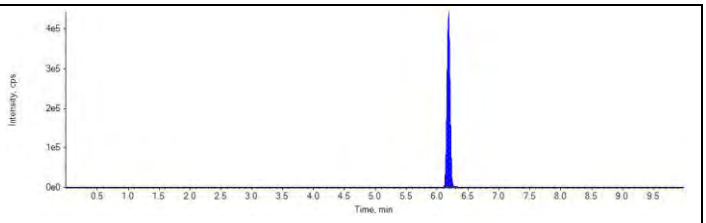
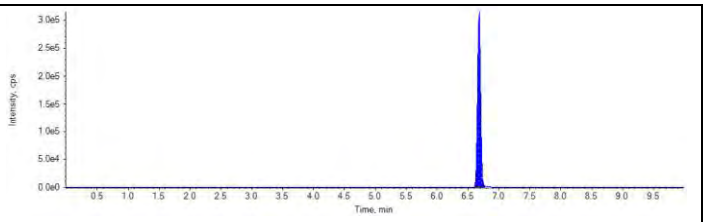
RT (Exp. RT): 0.00 (7.64) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 0.00 (6.29) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 0.00 (6.66) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 23.2 ng/L Area Ratio: 0.868 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.18 (6.19) min Calculated Conc: 24.2 ng/L Area Ratio: 0.661 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.68 (6.68) min Calculated Conc: 89.1 ng/L Area Ratio: 0.552 Sample Type: (Unknown)	

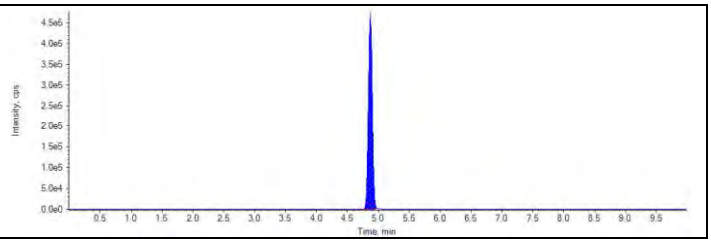
Sample ID	5898852~IOF246-01	**Injection Volume (µL)**	1.5
Sample Type	Unknown	**Injection Vial**	22
Acquisition Date	2018/12/21 5:55:03 PM	**Dilution Factor**	0.00360
Acquisition Method	PFC_Water_EPA537.dam	**Instrument Name**	LCMS03
Project	Enviro\PFOS	**Algorithm Used**	Analyst Classic
Data File	PFC_181221\WS#5898852.wiff		
Result Table	PFC_Water_181221_5898852_EPA537_EToxics.rdb		
Samples Annotation	-		

Internal Standard	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)
MPFOA	2070000.	4.87	1.00	-
MPFOS	226000.	5.60	1.00	-
D3-MeFOSAA IS	2100000.	6.42	1.00	-

Target Analyte	Area (cps)	RT (min)	Target Conc. (ng/L)	Calc. Conc. (ng/L)	Accuracy (%)
PFBS 1	1990	2.07	N/A	0.0647	N/A
PFHxA 1	26200	2.97	N/A	0.320	N/A
PFHxS 1	26200	4.14	N/A	1.48	N/A
PFHpA 1	0	0.00	N/A	N/A	N/A
PFOA 1	52100	4.88	N/A	0.678	N/A
PFOS 1	0	0.00	N/A	N/A	N/A
PFNA 1	0	0.00	N/A	N/A	N/A
PFDA 1	0	0.00	N/A	N/A	N/A
PFUnA 1	0	0.00	N/A	N/A	N/A
PFDoA 1	0	0.00	N/A	N/A	N/A
PFTrDA 1	0	0.00	N/A	N/A	N/A
PFTeDA 1	0	0.00	N/A	N/A	N/A
MeFOSAA 1	0	0.00	N/A	N/A	N/A
EtFOSAA 1	0	0.00	N/A	N/A	N/A
13C2-PFHxA	1660000	2.95	N/A	22.1	N/A
13C2-PFDA	1590000	6.18	N/A	29.0	N/A
D5-EtFOSAA	1280000	6.68	N/A	101.	N/A

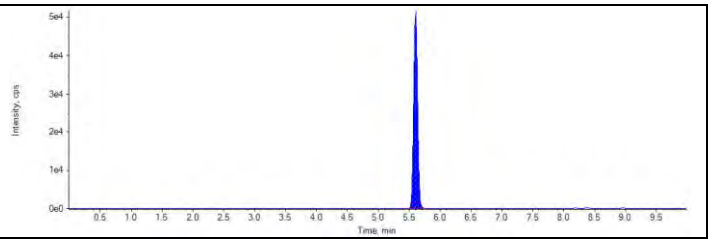
MPFOA (Internal Standard)

RT (Exp. RT): 4.87(4.84) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



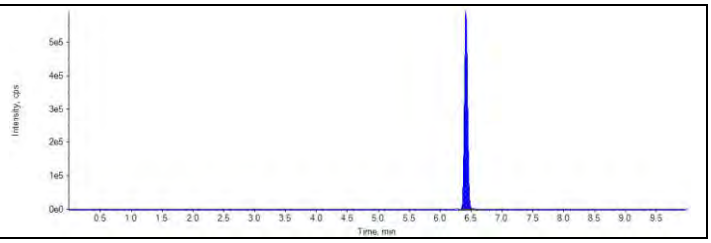
MPFOS (Internal Standard)

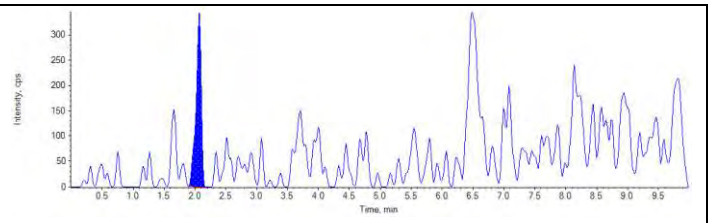
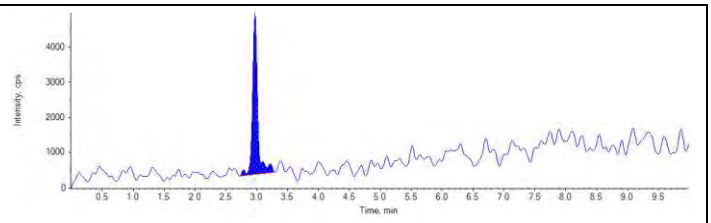
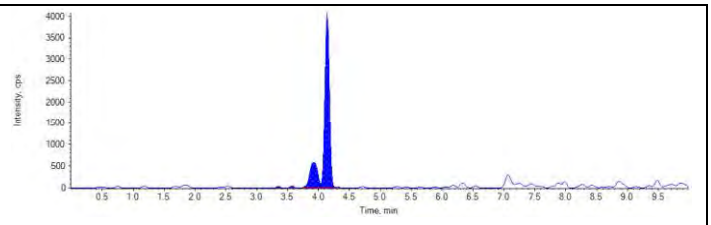
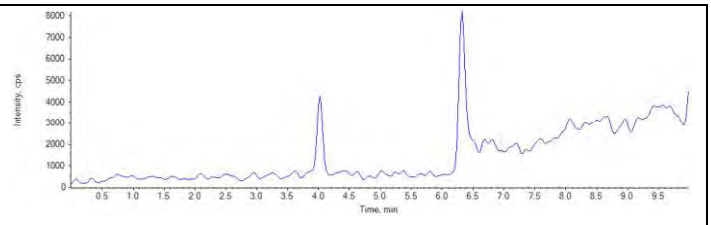
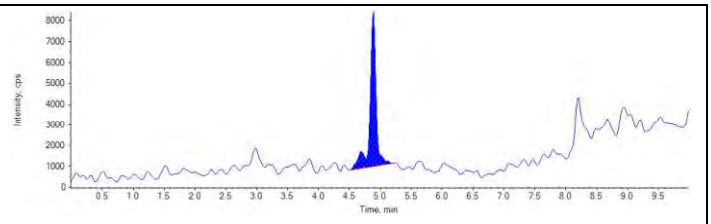
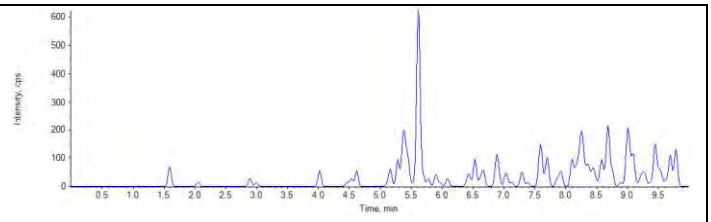
RT (Exp. RT): 5.60(5.38) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



D3-MeFOSAA IS (Internal Standard)

RT (Exp. RT): 6.42(6.43) min
Concentration: 1.00 ng/L
Sample Type: (Unknown)



PFBS 1 (298.900/79.900 Da) RT (Exp. RT): 2.07 (1.85) min Calculated Conc: 0.0647 ng/L Area Ratio: 0.00882 Sample Type: (Unknown)	
PFHxA 1 (313.000/269.000 Da) RT (Exp. RT): 2.97 (2.97) min Calculated Conc: 0.320 ng/L Area Ratio: 0.0127 Sample Type: (Unknown)	
PFHxS 1 (398.900/79.900 Da) RT (Exp. RT): 4.14 (4.05) min Calculated Conc: 1.48 ng/L Area Ratio: 0.116 Sample Type: (Unknown)	
PFHpA 1 (363.000/319.000 Da) RT (Exp. RT): 0.00 (3.91) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
PFOA 1 (413.100/369.000 Da) RT (Exp. RT): 4.88 (4.89) min Calculated Conc: 0.678 ng/L Area Ratio: 0.0252 Sample Type: (Unknown)	
PFOS 1 (498.800/79.900 Da) RT (Exp. RT): 0.00 (5.38) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	

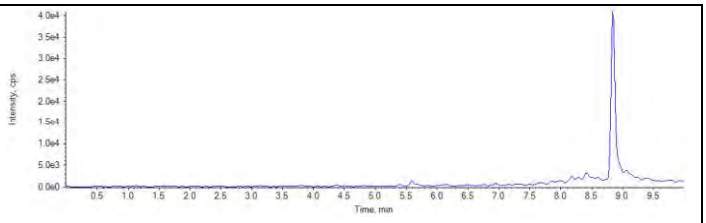
PFNA 1 (462.900/419.200 Da)

RT (Exp. RT): 0.00 (5.49) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



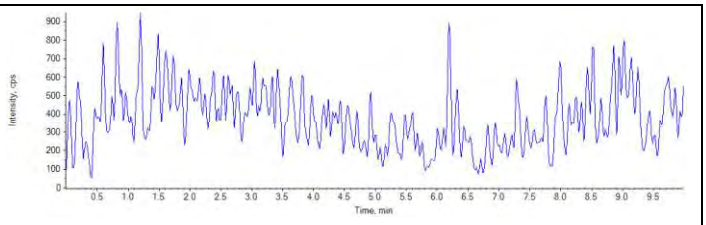
PFDA 1 (513.000/469.100 Da)

RT (Exp. RT): 0.00 (6.07) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



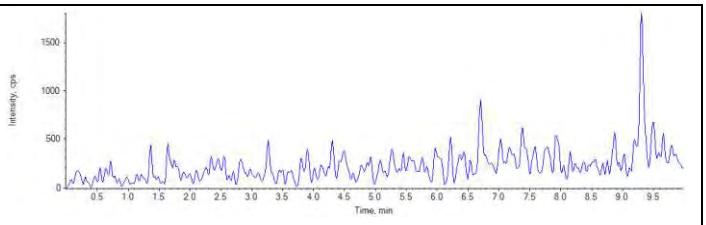
PFUnA 1 (562.900/519.000 Da)

RT (Exp. RT): 0.00 (6.62) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



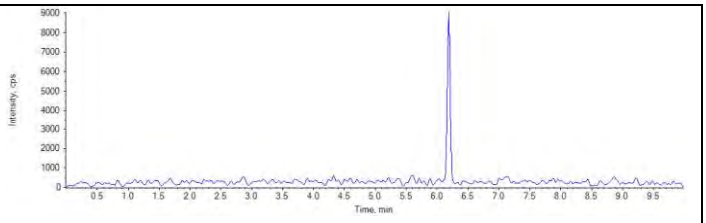
PFDoA 1 (612.900/569.000 Da)

RT (Exp. RT): 0.00 (7.04) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



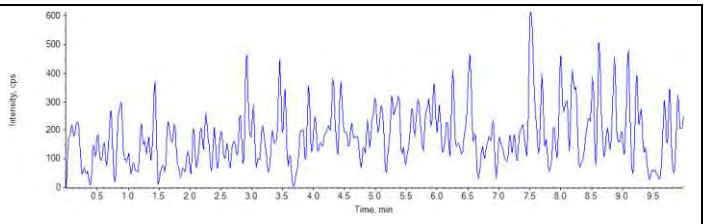
PFTrDA 1 (663.000/619.000 Da)

RT (Exp. RT): 0.00 (7.38) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



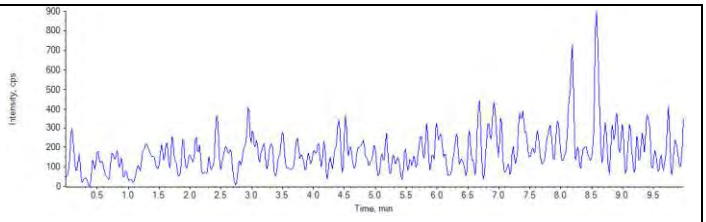
PFTeDA 1 (713.000/669.000 Da)

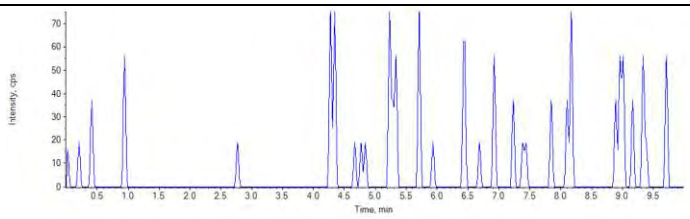
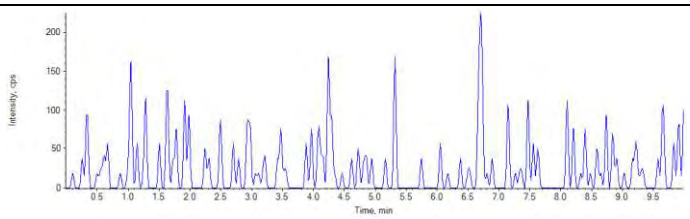
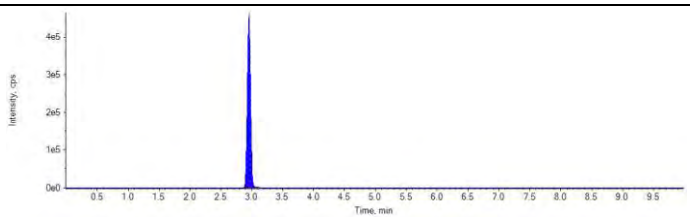
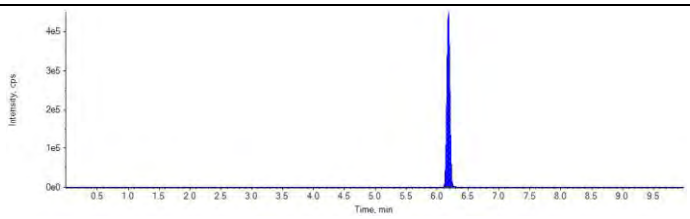
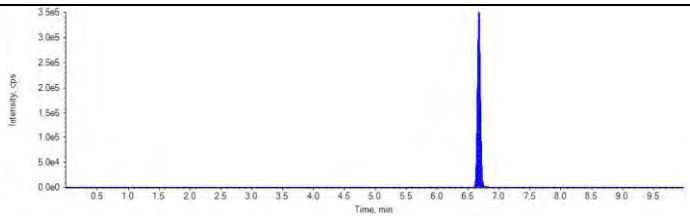
RT (Exp. RT): 0.00 (7.64) min

Calculated Conc: N/A ng/L

Area Ratio: 0.00

Sample Type: (Unknown)



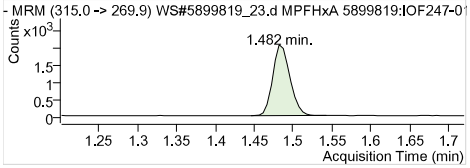
MeFOSAA 1 (570.100/419.100 Da) RT (Exp. RT): 0.00 (6.29) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
EtFOSAA 1 (584.100/419.100 Da) RT (Exp. RT): 0.00 (6.66) min Calculated Conc: N/A ng/L Area Ratio: 0.00 Sample Type: (Unknown)	
13C2-PFHxA (314.900/270.000 Da) RT (Exp. RT): 2.95 (2.96) min Calculated Conc: 22.1 ng/L Area Ratio: 0.804 Sample Type: (Unknown)	
13C2-PFDA (514.900/470.000 Da) RT (Exp. RT): 6.18 (6.19) min Calculated Conc: 29.0 ng/L Area Ratio: 0.770 Sample Type: (Unknown)	
D5-EtFOSAA (589.200/419.000 Da) RT (Exp. RT): 6.68 (6.68) min Calculated Conc: 101. ng/L Area Ratio: 0.609 Sample Type: (Unknown)	

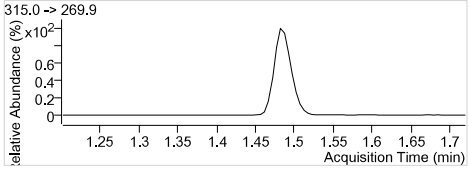
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF247-01**	**Instrument**	LCMS04
Data File	WS#5899819_23.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0231
Acq. Method	PFC_Water_Low.m	**Position**	P1-C2
Acq. Date	2018/12/21 6:22:43 PM	**Injection Volume**	Per Method
Sample Annotation	-		

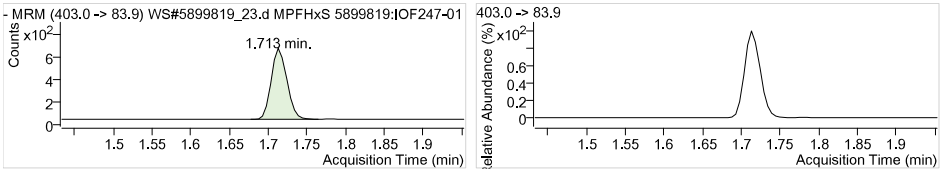
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3122	1.48	1 µg/L		
MPFHxS	859	1.71	1 µg/L		
MPFHpA	4591	1.73	1 µg/L		
MPFOA	4338	1.91	1 µg/L		
MPFOS	912	2.00	1 µg/L		
MPFNA	4237	2.05	1 µg/L		
MPFDA	2789	2.16	1 µg/L		
MPFUnA	3121	2.26	1 µg/L		
MPFDoA	4109	2.35	1 µg/L		
MPFTeDA	4723	2.48	1 µg/L		
13C6-PFHxA IS	16909	1.48	1 µg/L		
13C9-PFDA IS	20265	2.16	1 µg/L		

Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3122	1.48	-	81.71 µg/L	-
18O2-PFHxS	859	1.71	-	87.77 µg/L	-
13C4-PFHpA	4591	1.73	-	83.10 µg/L	-
13C4-PFOA	4338	1.91	-	83.94 µg/L	-
13C4-PFOS	912	2.00	-	84.49 µg/L	-
13C5-PFNA	4237	2.05	-	86.10 µg/L	-
13C2-PFDA	2789	2.16	-	80.46 µg/L	-
13C2-PFUnA	3121	2.26	-	77.14 µg/L	-
13C2-PFDoA	4109	2.35	-	79.07 µg/L	-
13C2-PFTeDA	4723	2.48	-	62.33 µg/L	-
13C6-PFHxA	16909	1.48	-	2.33 µg/L	-
13C9-PFDA	20265	2.16	-	2.35 µg/L	-

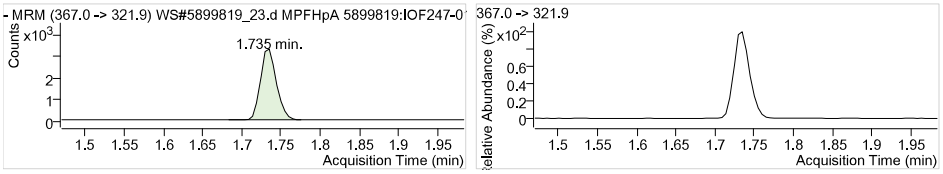




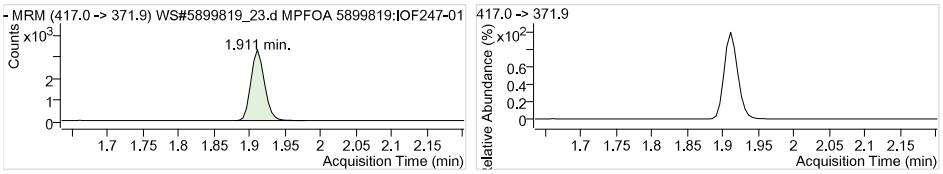
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



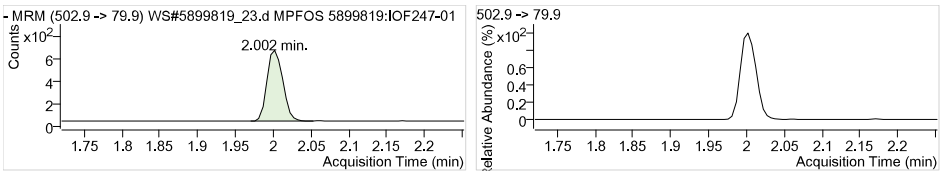
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



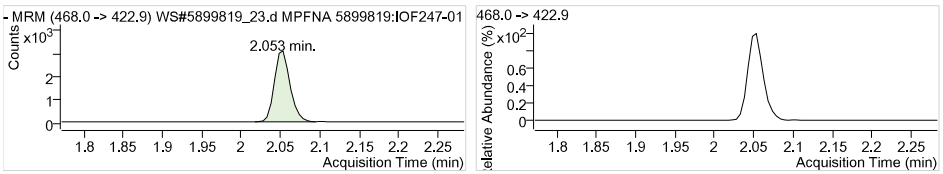
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



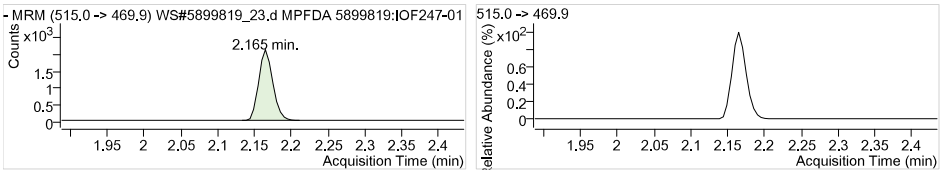
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



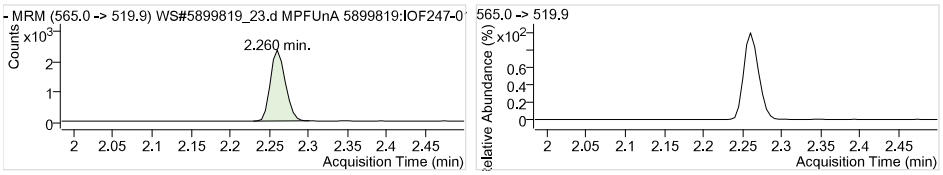
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



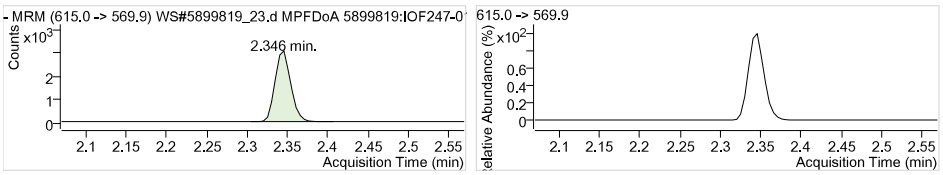
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



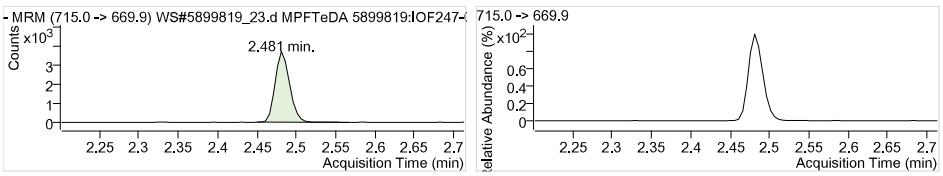
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



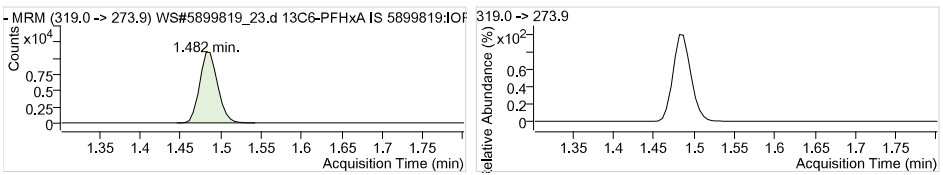
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



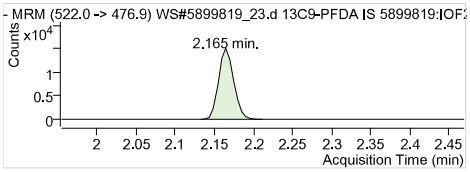
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample

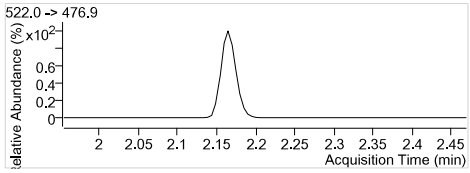


MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample

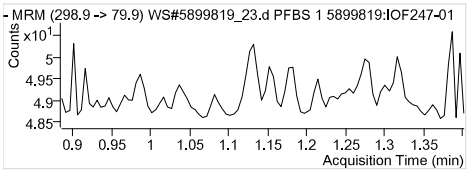


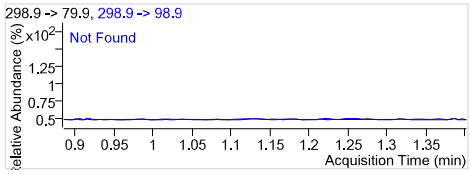
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



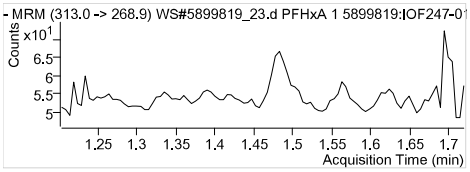


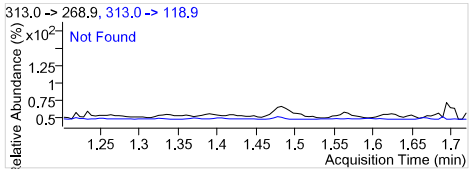
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



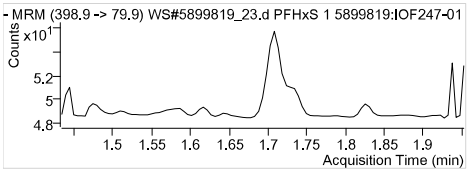


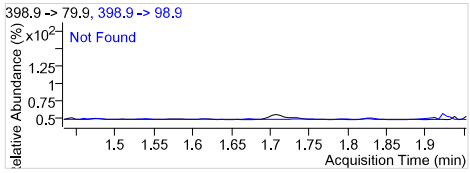
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



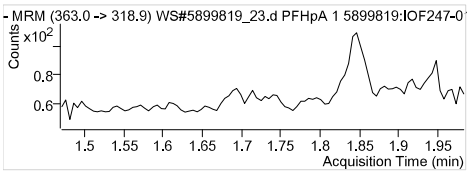


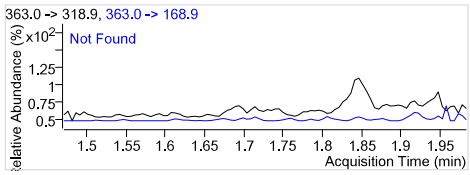
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



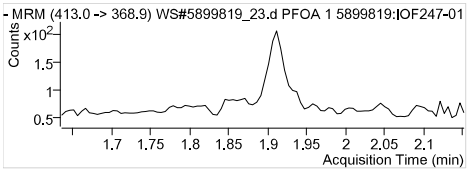


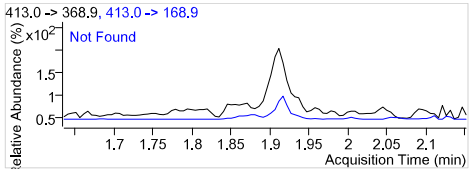
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



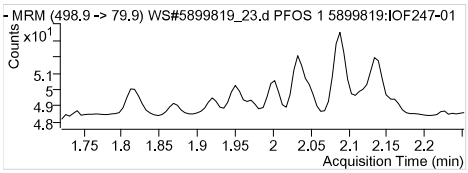


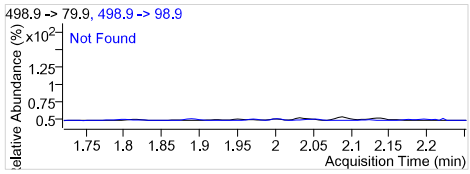
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



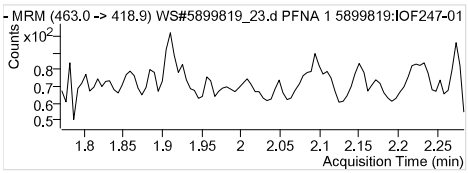


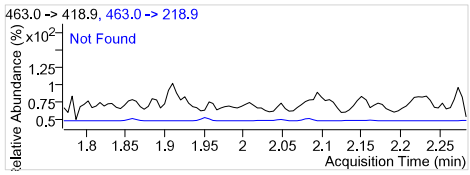
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



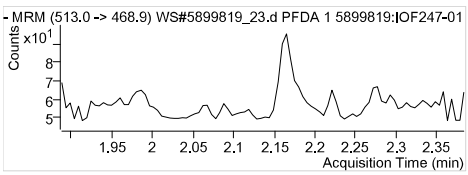


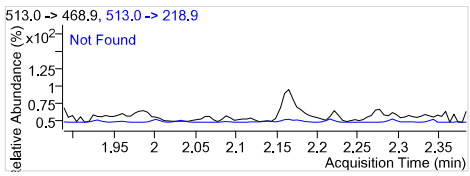
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



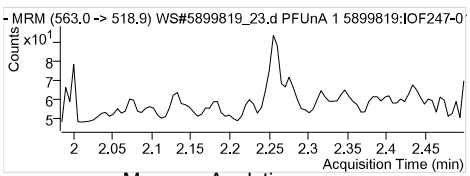


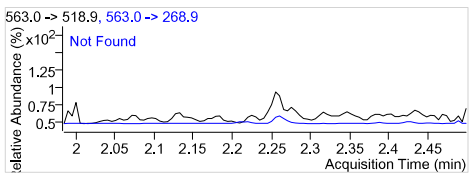
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



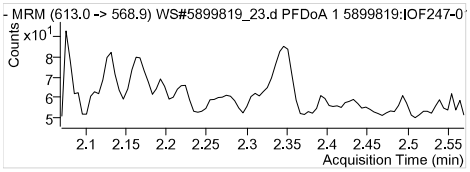


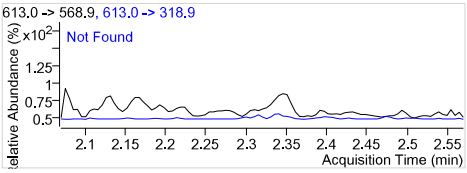
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



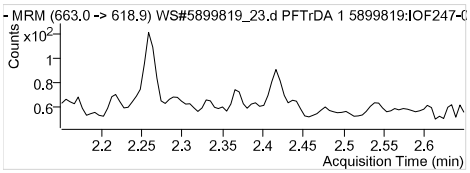


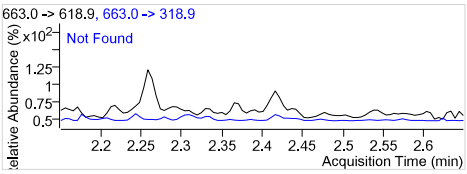
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



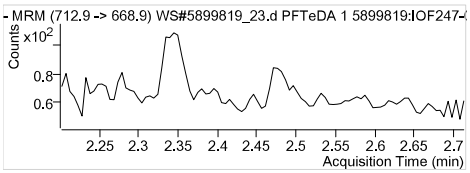


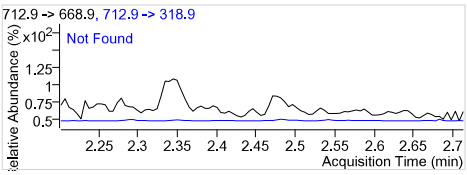
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



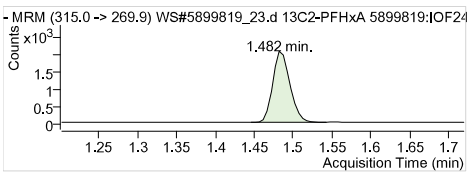


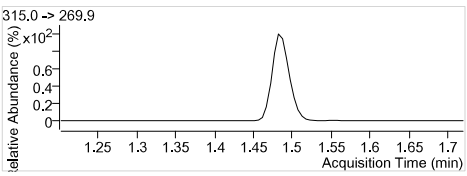
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



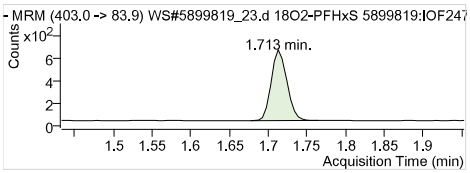


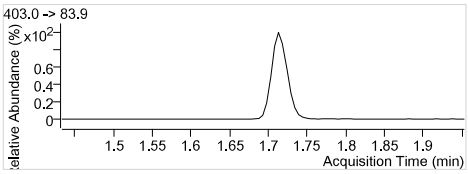
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



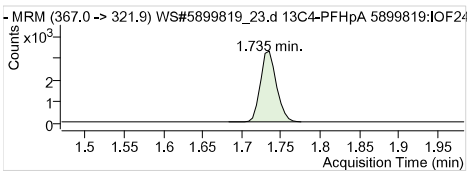


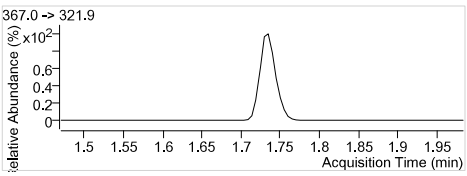
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	81.71 µg/L
Area ratio:	0.18464
Sample type:	Sample



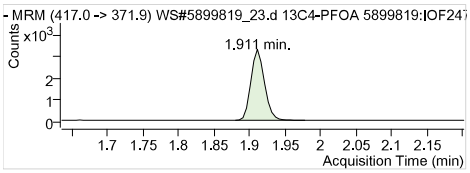


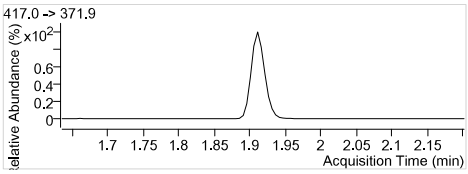
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	87.77 µg/L
Area ratio:	0.05080
Sample type:	Sample



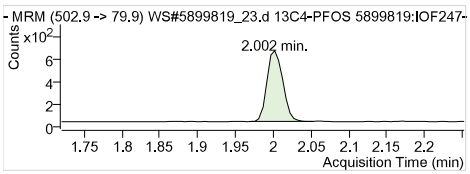


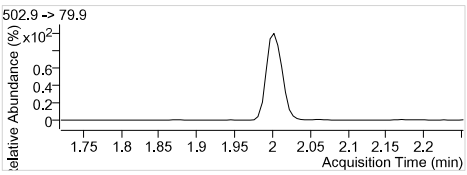
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	83.10 µg/L
Area ratio:	0.27151
Sample type:	Sample



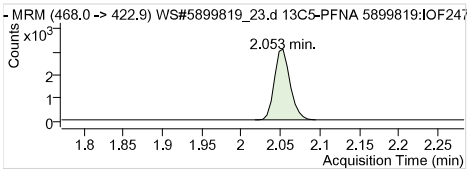


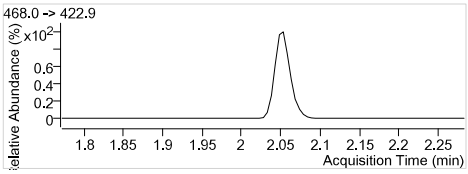
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	83.94 µg/L
Area ratio:	0.25655
Sample type:	Sample



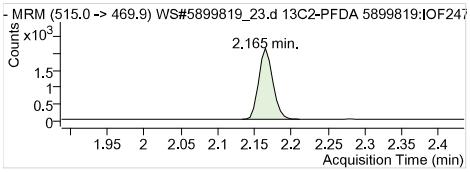


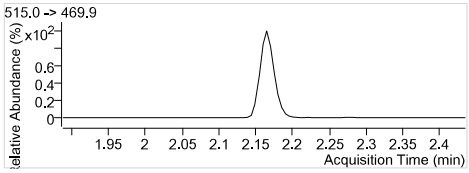
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	84.49 µg/L
Area ratio:	0.05394
Sample type:	Sample



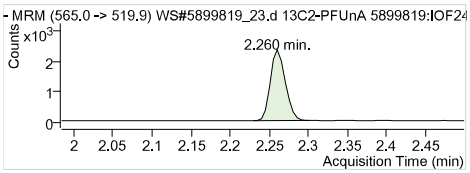


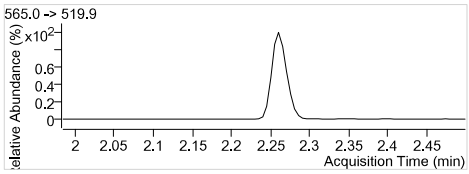
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	86.10 µg/L
Area ratio:	0.25058
Sample type:	Sample



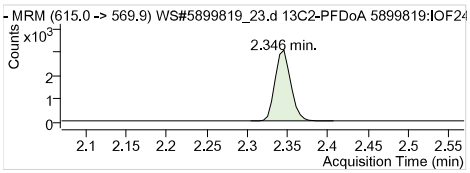


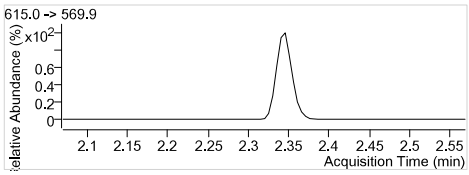
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	80.46 µg/L
Area ratio:	0.13763
Sample type:	Sample



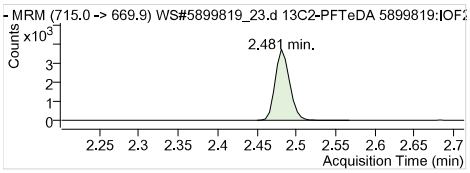


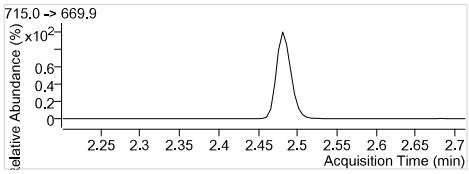
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	77.14 µg/L
Area ratio:	0.15401
Sample type:	Sample



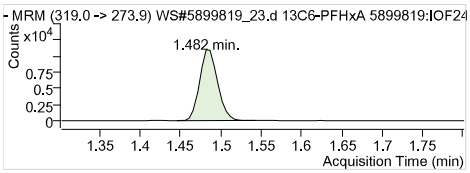


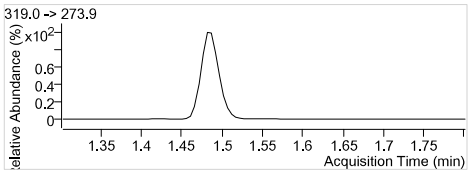
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	79.07 µg/L
Area ratio:	0.20276
Sample type:	Sample



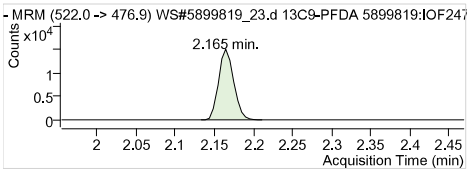


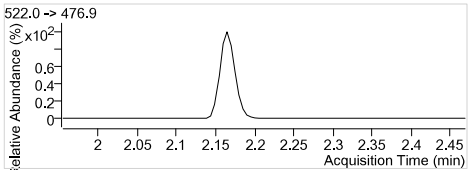
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	62.33 µg/L
Area ratio:	0.23306
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.33 µg/L
Area ratio:	0
Sample type:	Sample





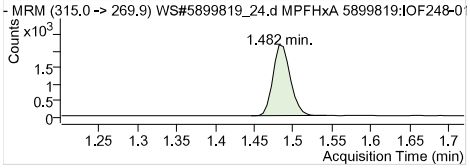
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.35 µg/L
Area ratio:	0
Sample type:	Sample

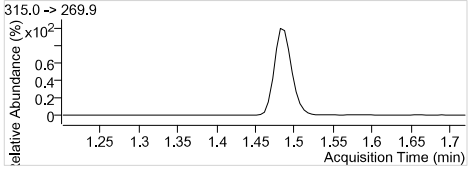
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF248-01**	**Instrument**	LCMS04
Data File	WS#5899819_24.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0234
Acq. Method	PFC_Water_Low.m	**Position**	P1-C3
Acq. Date	2018/12/21 6:27:38 PM	**Injection Volume**	Per Method
Sample Annotation	-		

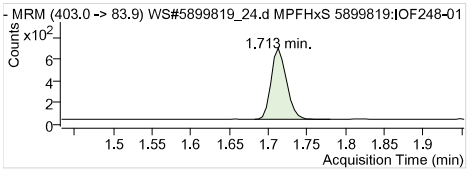
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3322	1.48	1 µg/L		
MPFHxS	889	1.71	1 µg/L		
MPFHpA	4702	1.73	1 µg/L		
MPFOA	4220	1.91	1 µg/L		
MPFOS	933	2.00	1 µg/L		
MPFNA	4058	2.05	1 µg/L		
MPFDA	2883	2.16	1 µg/L		
MPFUnA	3251	2.26	1 µg/L		
MPFDoA	4084	2.35	1 µg/L		
MPFTeDA	4464	2.48	1 µg/L		
13C6-PFHxA IS	16643	1.48	1 µg/L		
13C9-PFDA IS	19674	2.16	1 µg/L		

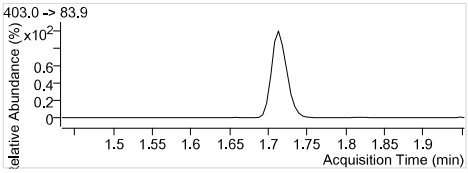
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3322	1.48	-	88.33 µg/L	-
18O2-PFHxS	889	1.71	-	92.28 µg/L	-
13C4-PFHpA	4702	1.73	-	86.47 µg/L	-
13C4-PFOA	4220	1.91	-	82.96 µg/L	-
13C4-PFOS	933	2.00	-	87.82 µg/L	-
13C5-PFNA	4058	2.05	-	83.78 µg/L	-
13C2-PFDA	2883	2.16	-	85.67 µg/L	-
13C2-PFUnA	3251	2.26	-	82.76 µg/L	-
13C2-PFDoA	4084	2.35	-	80.95 µg/L	-
13C2-PFTeDA	4464	2.48	-	60.68 µg/L	-
13C6-PFHxA	16643	1.48	-	2.32 µg/L	-
13C9-PFDA	19674	2.16	-	2.31 µg/L	-



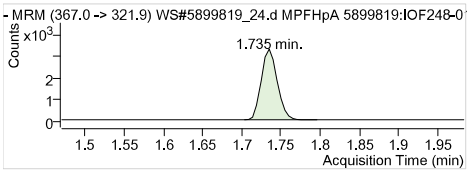


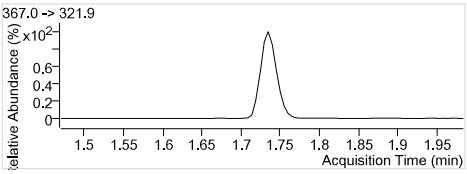
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



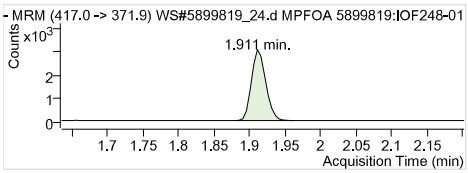


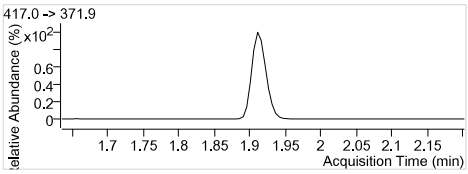
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



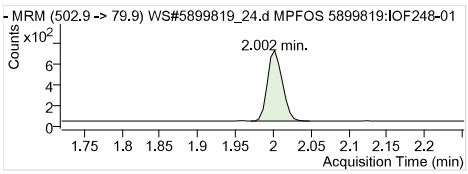


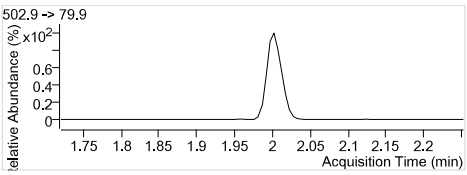
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



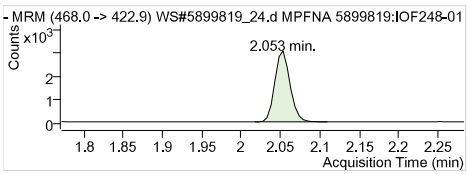


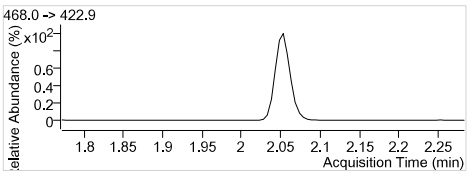
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



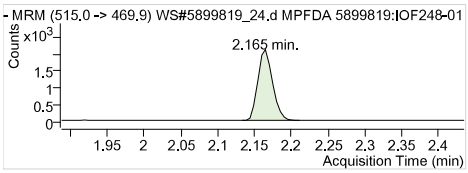


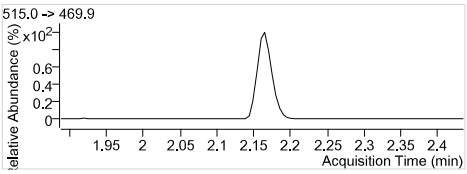
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



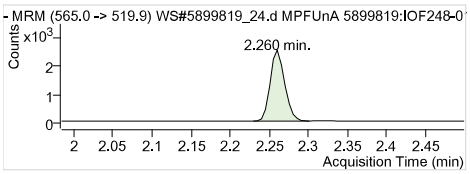


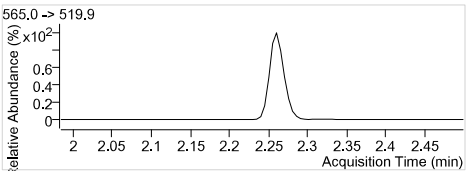
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



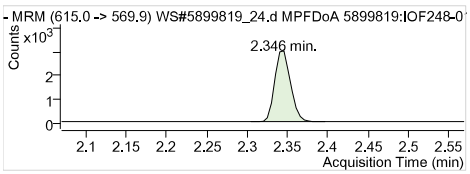


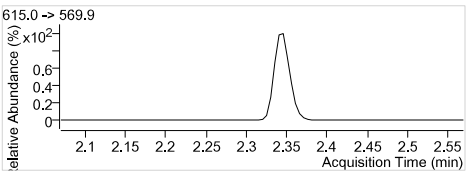
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



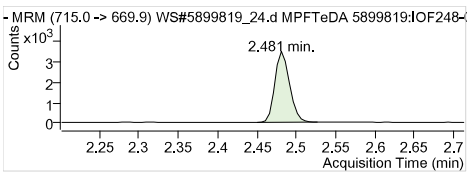


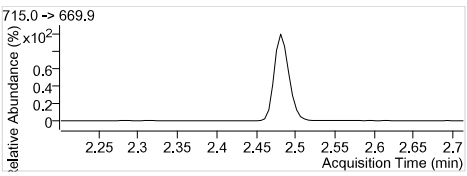
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



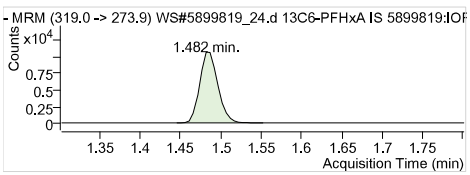


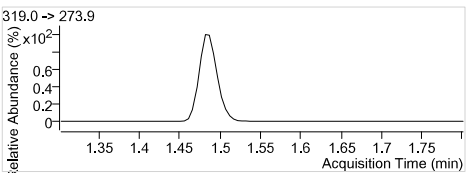
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



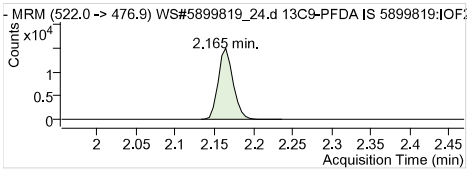


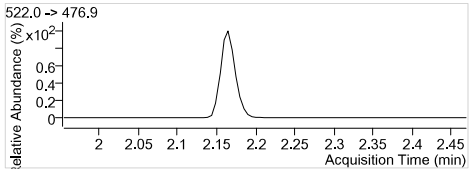
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



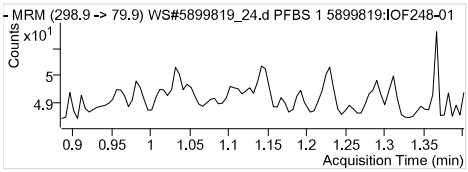


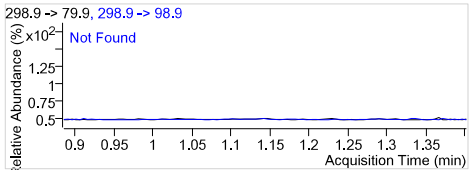
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



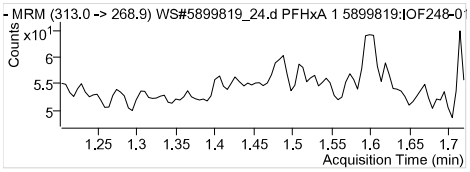


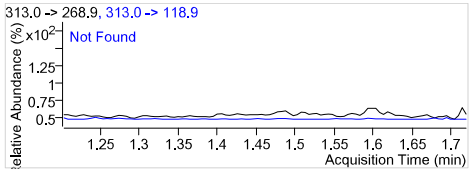
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



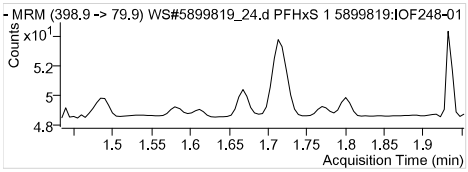


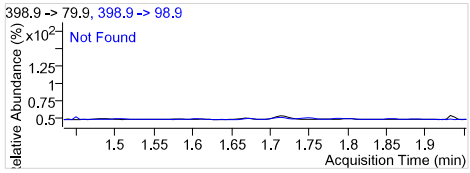
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



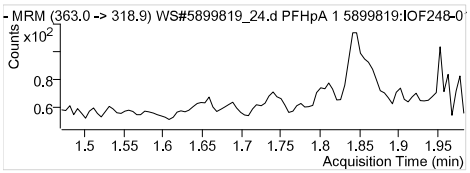


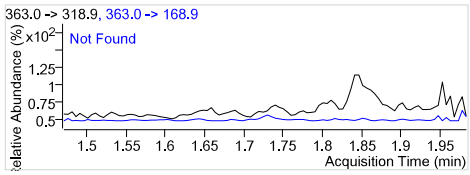
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



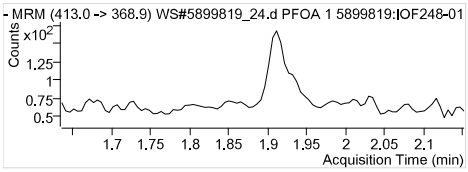


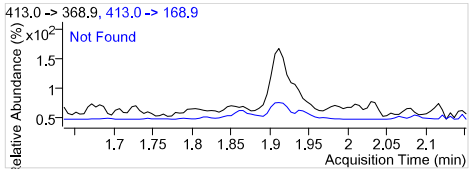
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



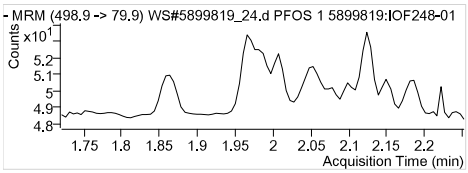


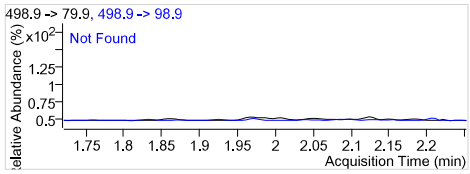
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



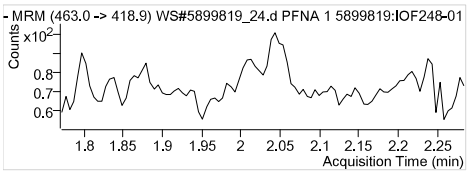


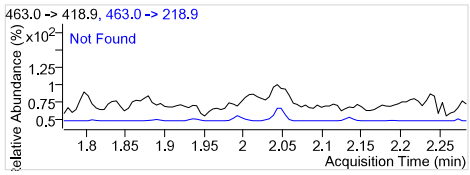
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



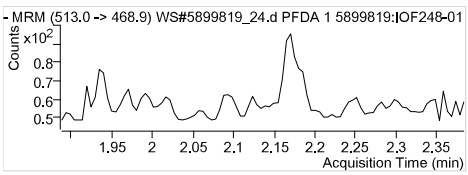


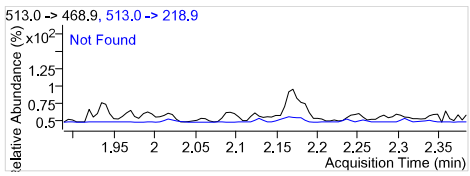
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



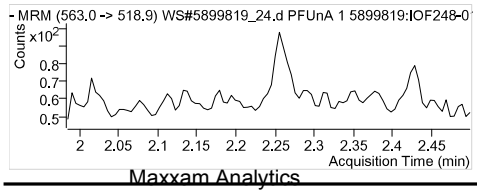


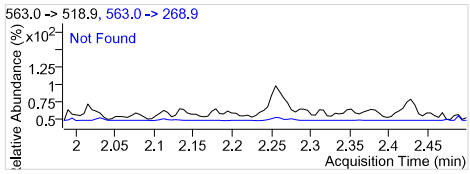
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



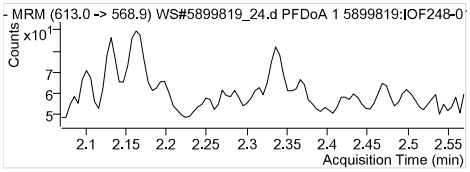


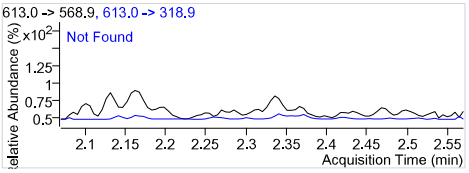
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



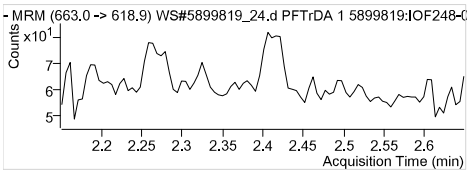


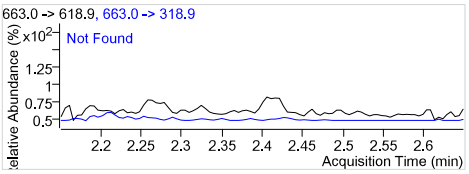
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



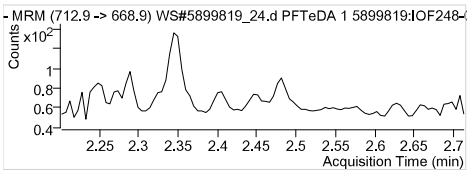


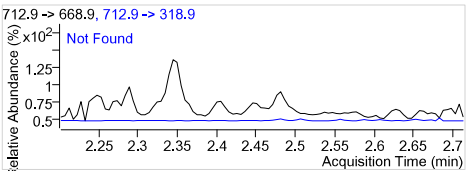
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



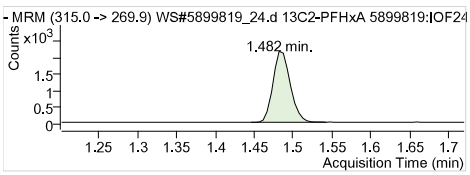


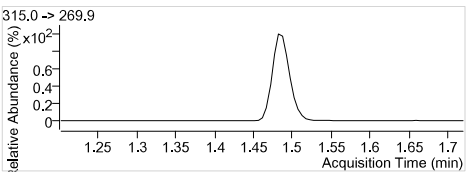
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



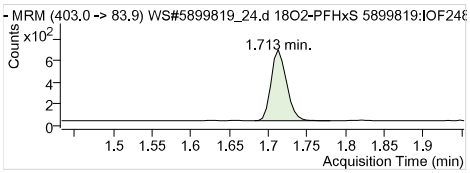


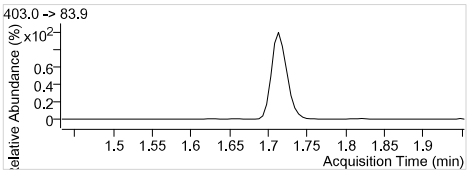
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



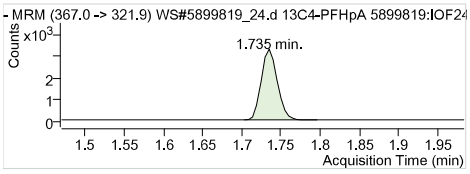


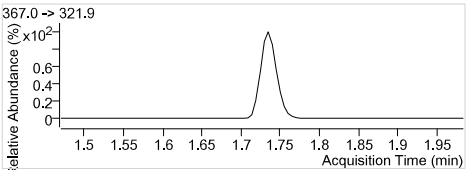
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	88.33 µg/L
Area ratio:	0.19960
Sample type:	Sample



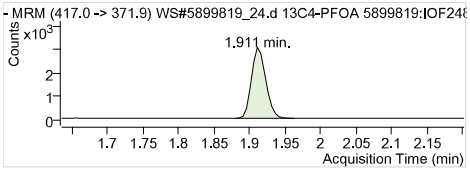


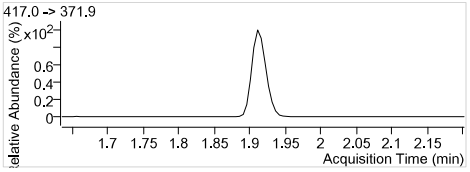
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	92.28 µg/L
Area ratio:	0.05342
Sample type:	Sample



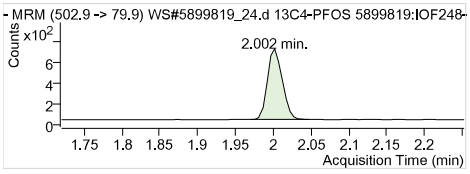


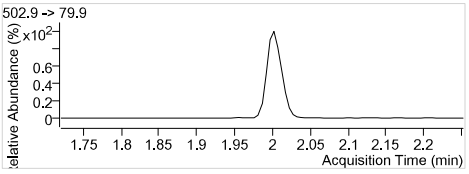
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	86.47 µg/L
Area ratio:	0.28252
Sample type:	Sample



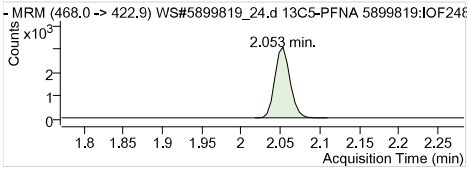


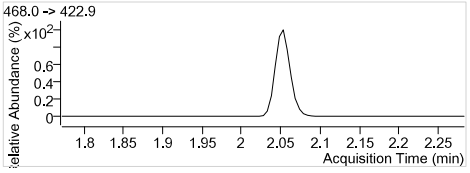
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	82.96 µg/L
Area ratio:	0.25356
Sample type:	Sample



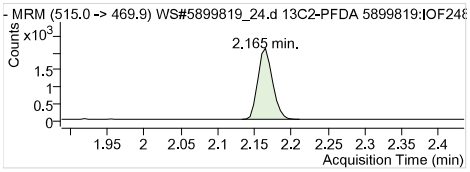


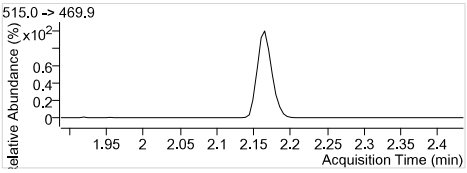
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	87.82 µg/L
Area ratio:	0.05606
Sample type:	Sample



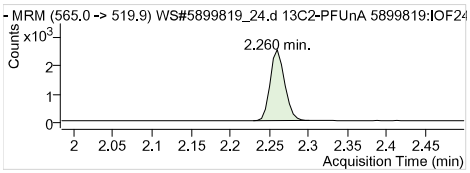


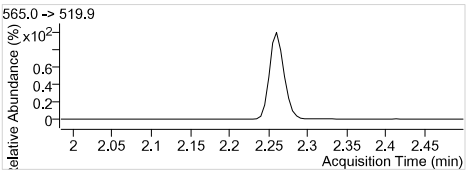
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	83.78 µg/L
Area ratio:	0.24383
Sample type:	Sample



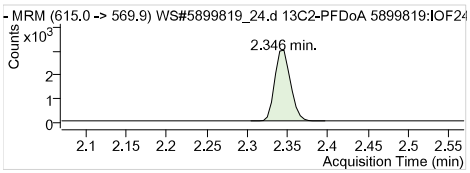


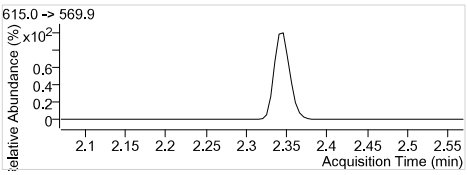
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	85.67 µg/L
Area ratio:	0.14654
Sample type:	Sample



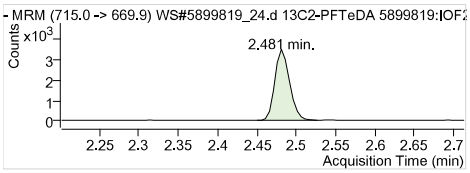


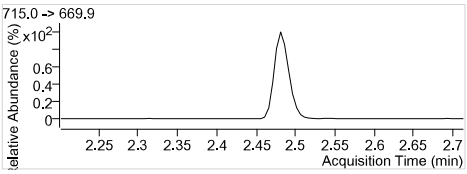
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	82.76 µg/L
Area ratio:	0.16524
Sample type:	Sample



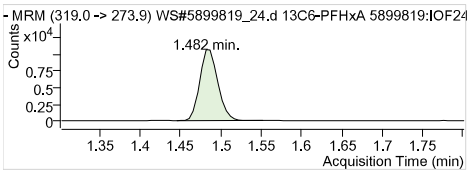


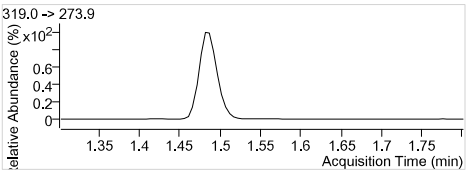
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	80.95 µg/L
Area ratio:	0.20758
Sample type:	Sample



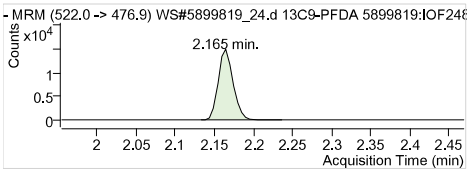


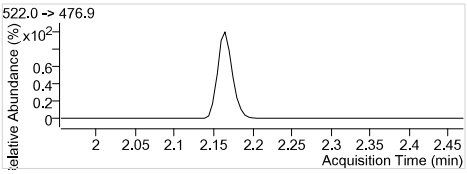
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	60.68 µg/L
Area ratio:	0.22690
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.32 µg/L
Area ratio:	0
Sample type:	Sample





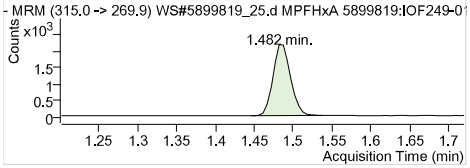
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.31 µg/L
Area ratio:	0
Sample type:	Sample

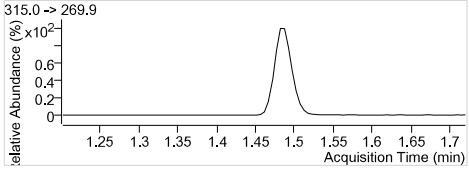
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF249-01**	**Instrument**	LCMS04
Data File	WS#5899819_25.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0221
Acq. Method	PFC_Water_Low.m	**Position**	P1-C4
Acq. Date	2018/12/21 6:32:33 PM	**Injection Volume**	Per Method
Sample Annotation	-		

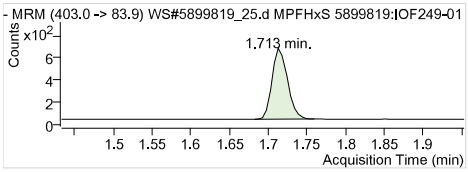
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3357	1.48	1 µg/L		
MPFHxS	869	1.71	1 µg/L		
MPFHpA	4964	1.73	1 µg/L		
MPFOA	4478	1.91	1 µg/L		
MPFOS	951	2.00	1 µg/L		
MPFNA	4198	2.05	1 µg/L		
MPFDA	2933	2.16	1 µg/L		
MPFUnA	3548	2.26	1 µg/L		
MPFDoA	4150	2.34	1 µg/L		
MPFTeDA	4786	2.48	1 µg/L		
13C6-PFHxA IS	16736	1.49	1 µg/L		
13C9-PFDA IS	19960	2.16	1 µg/L		

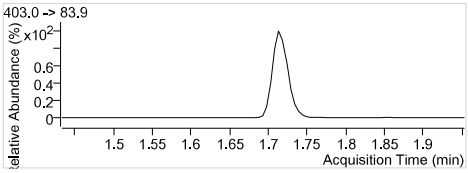
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3357	1.48	-	88.77 µg/L	-
18O2-PFHxS	869	1.71	-	89.71 µg/L	-
13C4-PFHpA	4964	1.73	-	90.78 µg/L	-
13C4-PFOA	4478	1.91	-	87.54 µg/L	-
13C4-PFOS	951	2.00	-	89.02 µg/L	-
13C5-PFNA	4198	2.05	-	86.19 µg/L	-
13C2-PFDA	2933	2.16	-	85.90 µg/L	-
13C2-PFUnA	3548	2.26	-	89.03 µg/L	-
13C2-PFDoA	4150	2.34	-	81.08 µg/L	-
13C2-PFTeDA	4786	2.48	-	64.13 µg/L	-
13C6-PFHxA	16736	1.49	-	2.20 µg/L	-
13C9-PFDA	19960	2.16	-	2.22 µg/L	-



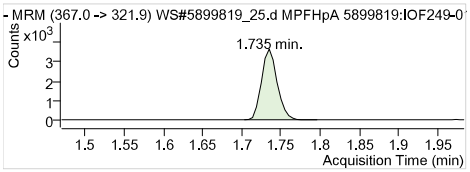


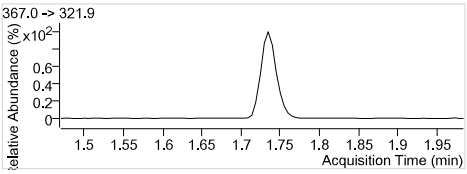
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



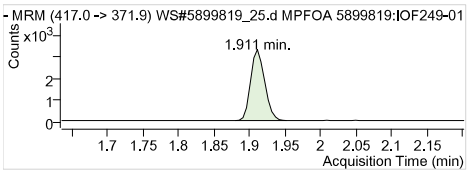


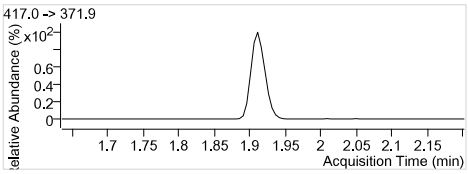
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



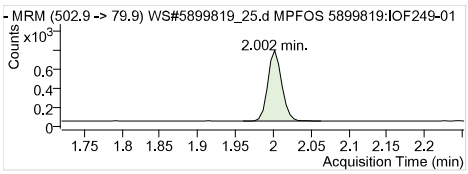


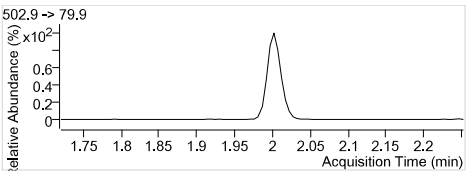
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



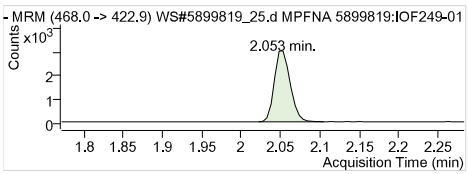


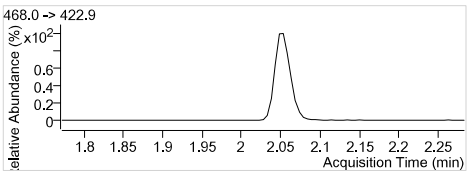
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



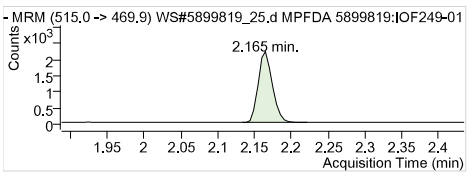


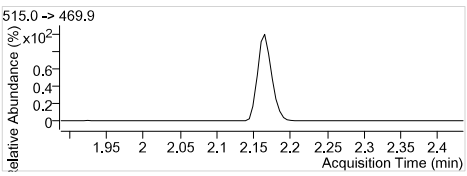
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



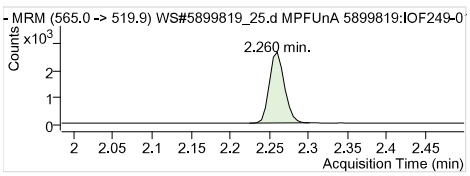


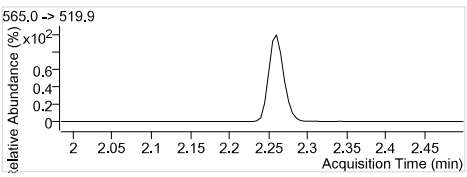
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



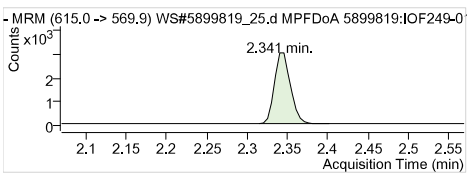


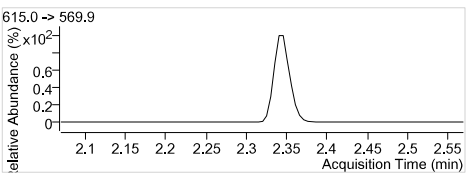
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



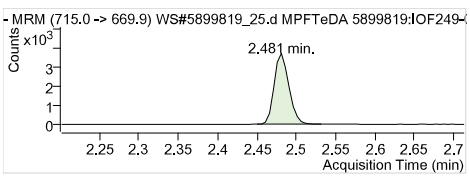


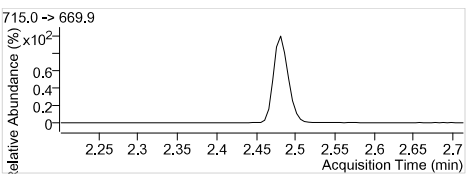
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



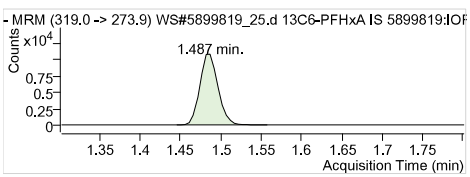


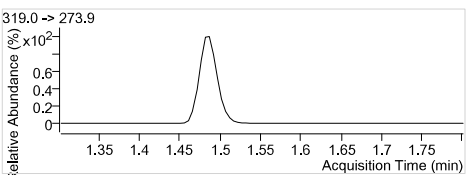
MPFDoA Internal Standard
RT (Exp. RT): 2.341 (2.346)
Concentration: 1 µg/L
Sample type: Sample



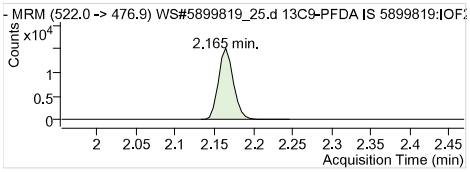


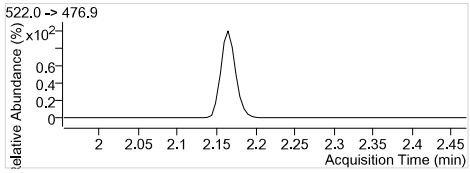
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



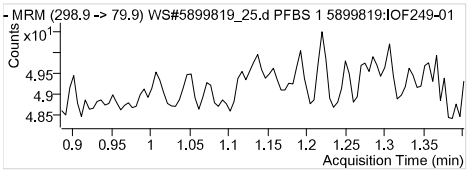


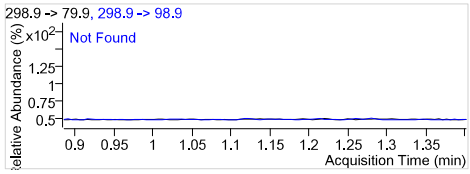
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.487 (1.487)
Concentration: 1 µg/L
Sample type: Sample



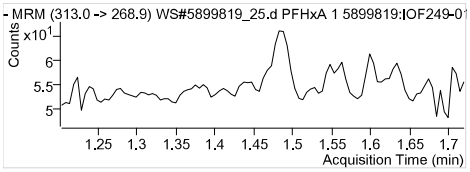


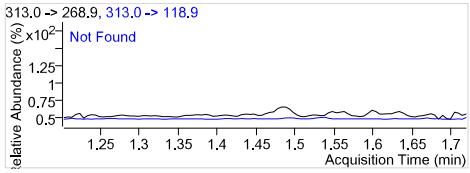
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



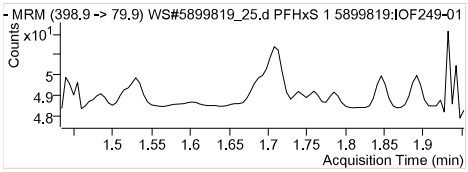


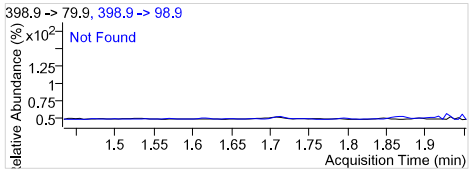
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



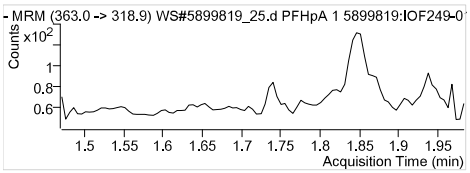


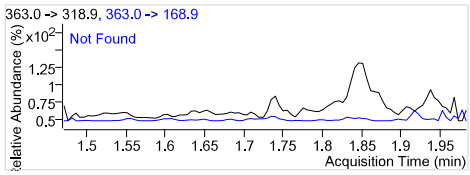
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



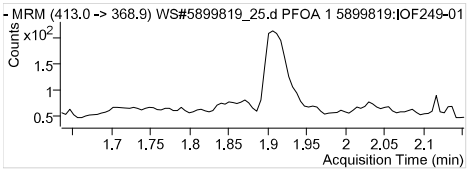


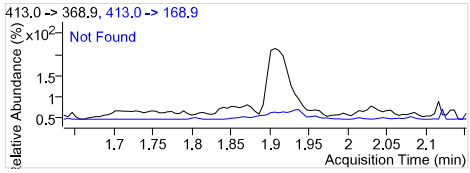
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



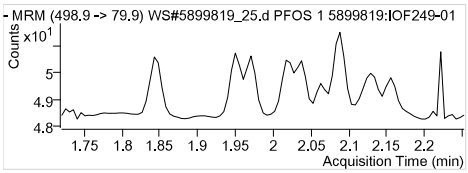


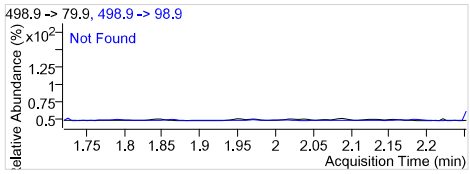
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



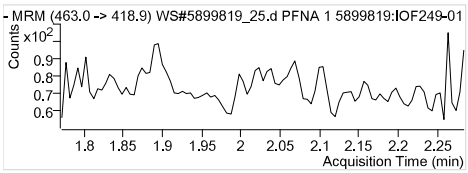


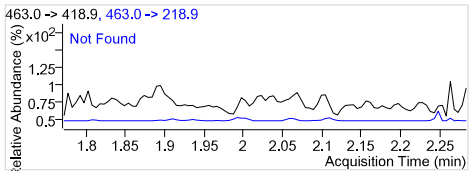
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



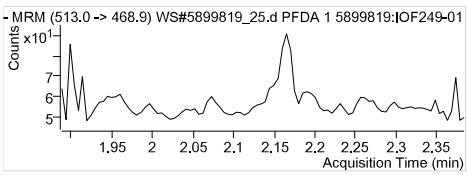


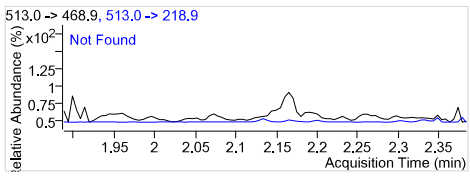
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



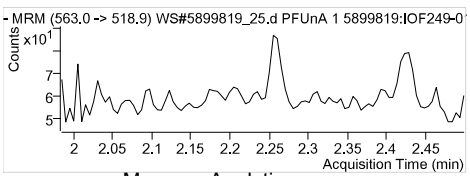


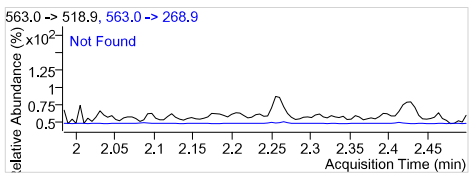
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



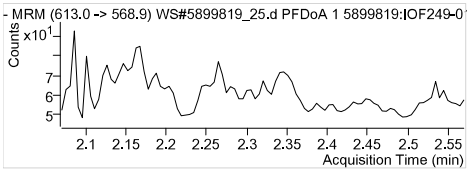


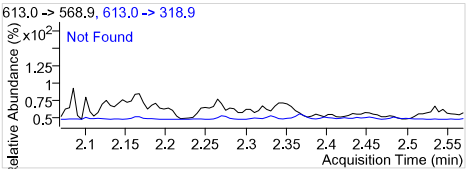
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



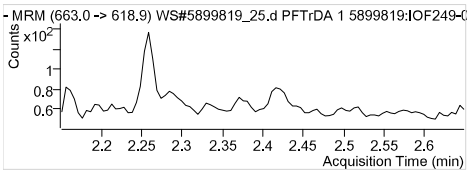


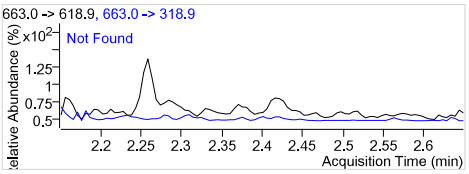
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



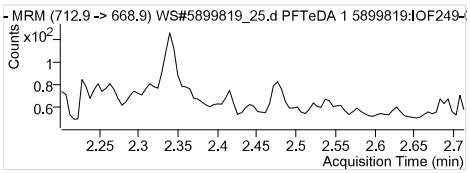


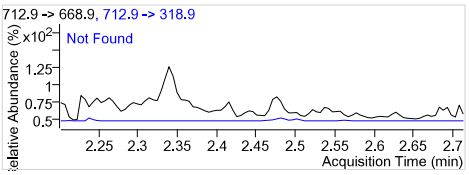
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



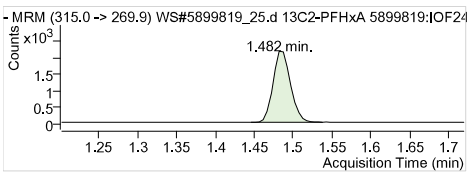


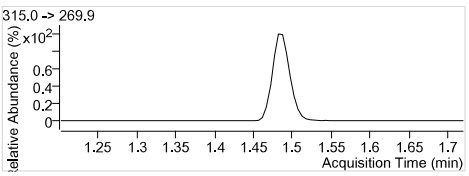
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



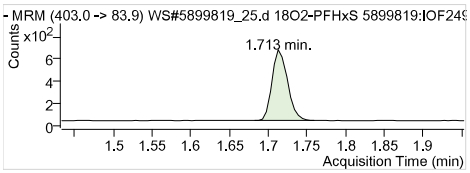


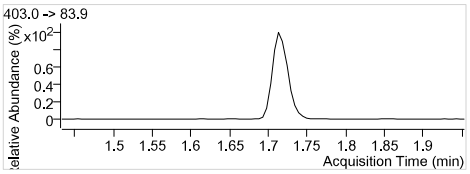
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



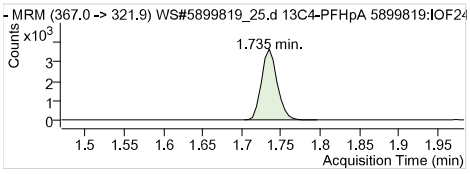


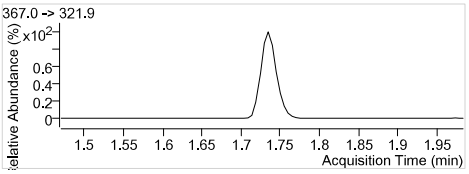
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	88.77 µg/L
Area ratio:	0.20059
Sample type:	Sample



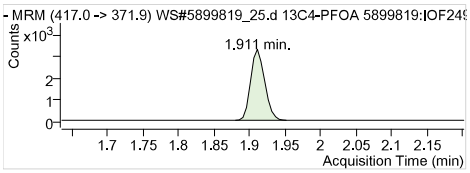


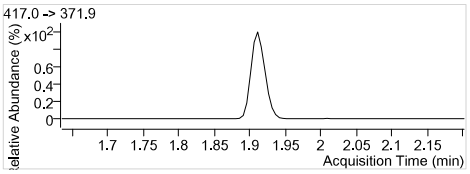
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	89.71 µg/L
Area ratio:	0.05192
Sample type:	Sample



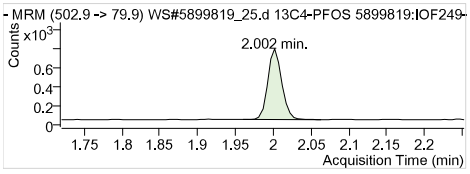


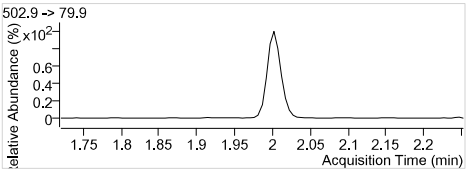
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	90.78 µg/L
Area ratio:	0.29661
Sample type:	Sample



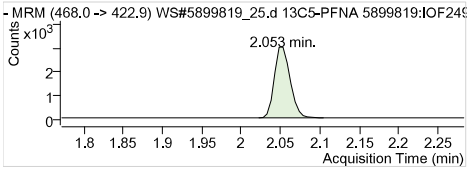


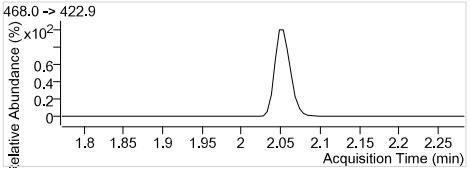
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	87.54 µg/L
Area ratio:	0.26757
Sample type:	Sample



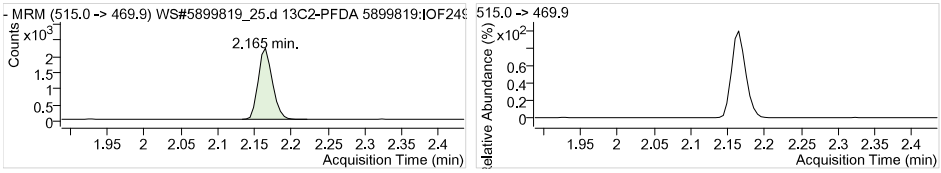


13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	89.02 µg/L
Area ratio:	0.05682
Sample type:	Sample

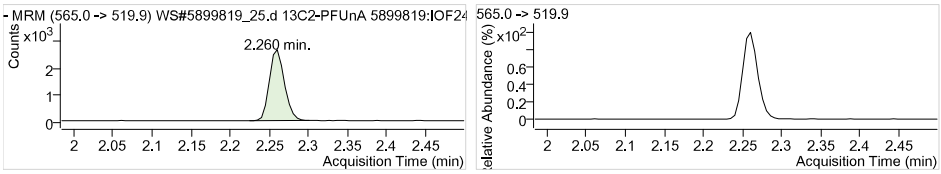




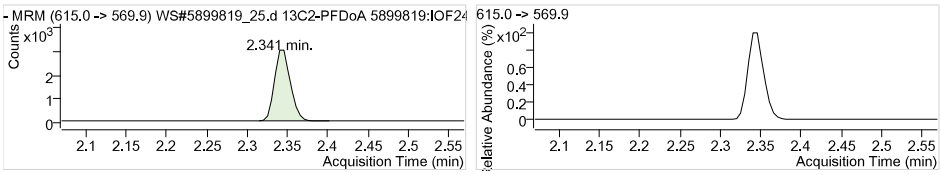
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	86.19 µg/L
Area ratio:	0.25084
Sample type:	Sample



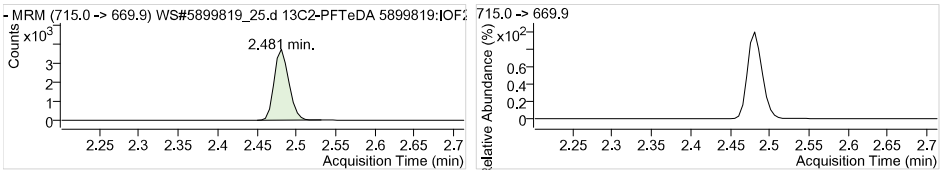
13C2-PFDA 515.0 -> 469.9
RT (Exp. RT): 2.165 (2.165)
Calc. conc. 85.90 µg/L
Area ratio: 0.14694
Sample type: Sample



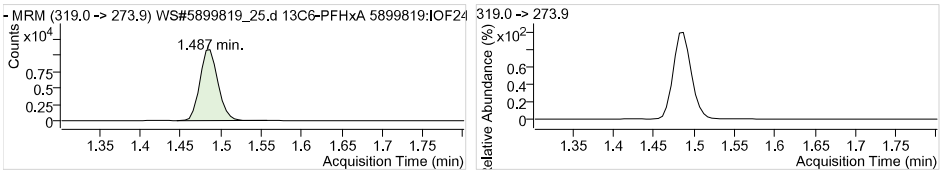
13C2-PFUnA 565.0 -> 519.9
RT (Exp. RT): 2.260 (2.260)
Calc. conc. 89.03 µg/L
Area ratio: 0.17776
Sample type: Sample



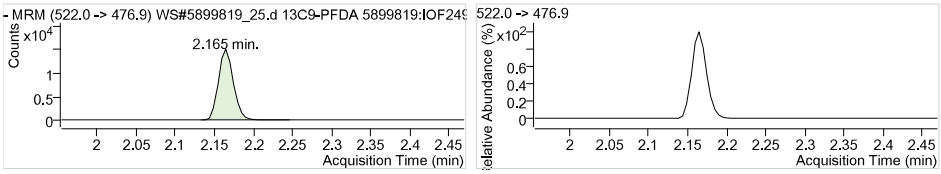
13C2-PFDoA 615.0 -> 569.9
RT (Exp. RT): 2.341 (2.346)
Calc. conc. 81.08 µg/L
Area ratio: 0.20792
Sample type: Sample



13C2-PFTeDA 715.0 -> 669.9
RT (Exp. RT): 2.481 (2.481)
Calc. conc. 64.13 µg/L
Area ratio: 0.23978
Sample type: Sample



13C6-PFHxA 319.0 -> 273.9
RT (Exp. RT): 1.487 (1.487)
Calc. conc. 2.20 µg/L
Area ratio: 0
Sample type: Sample



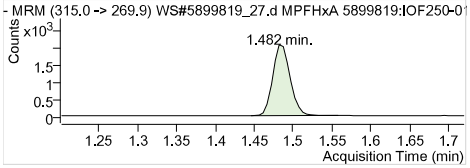
13C9-PFDA 522.0 -> 476.9
RT (Exp. RT): 2.165 (2.165)
Calc. conc. 2.22 µg/L
Area ratio: 0
Sample type: Sample

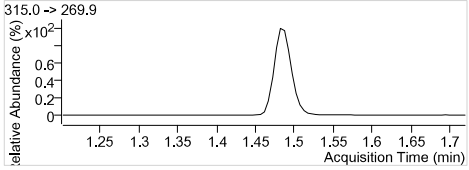
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF250-01**	**Instrument**	LCMS04
Data File	WS#5899819_27.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0213
Acq. Method	PFC_Water_Low.m	**Position**	P1-C5
Acq. Date	2018/12/21 6:42:23 PM	**Injection Volume**	Per Method
Sample Annotation	-		

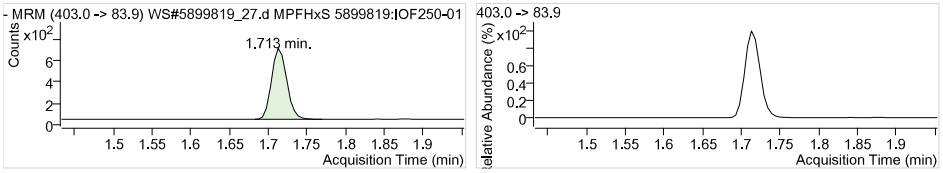
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3187	1.48	1 µg/L		
MPFHxS	892	1.71	1 µg/L		
MPFHpA	4895	1.73	1 µg/L		
MPFOA	4701	1.91	1 µg/L		
MPFOS	966	2.00	1 µg/L		
MPFNA	4344	2.05	1 µg/L		
MPFDA	2823	2.16	1 µg/L		
MPFUnA	3255	2.26	1 µg/L		
MPFDoA	4089	2.35	1 µg/L		
MPFTeDA	4461	2.48	1 µg/L		
13C6-PFHxA IS	16198	1.48	1 µg/L		
13C9-PFDA IS	19384	2.16	1 µg/L		

Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3187	1.48	-	87.07 µg/L	-
18O2-PFHxS	892	1.71	-	95.14 µg/L	-
13C4-PFHpA	4895	1.73	-	92.49 µg/L	-
13C4-PFOA	4701	1.91	-	94.95 µg/L	-
13C4-PFOS	966	2.00	-	93.43 µg/L	-
13C5-PFNA	4344	2.05	-	92.15 µg/L	-
13C2-PFDA	2823	2.16	-	85.14 µg/L	-
13C2-PFUnA	3255	2.26	-	84.11 µg/L	-
13C2-PFDoA	4089	2.35	-	82.26 µg/L	-
13C2-PFTeDA	4461	2.48	-	61.55 µg/L	-
13C6-PFHxA	16198	1.48	-	2.05 µg/L	-
13C9-PFDA	19384	2.16	-	2.07 µg/L	-

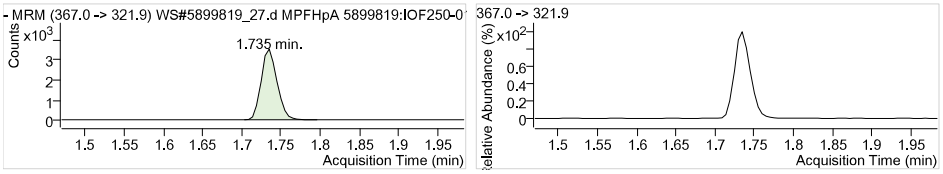




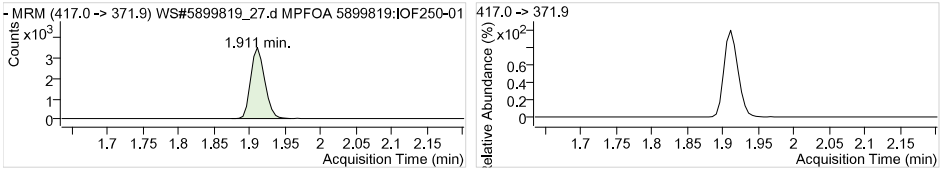
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



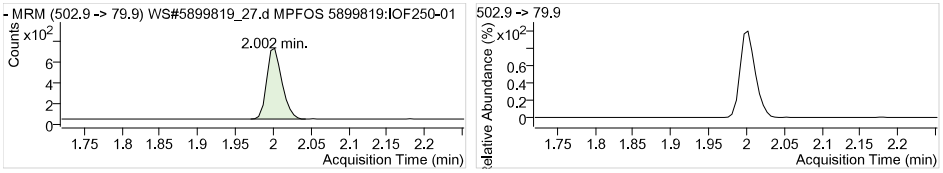
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



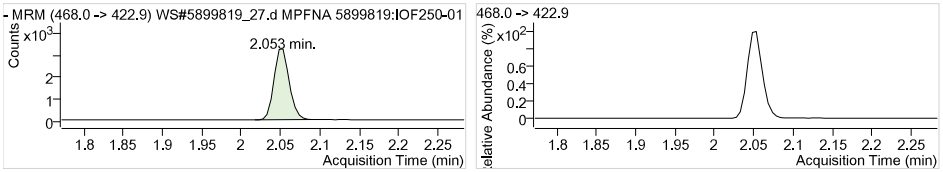
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



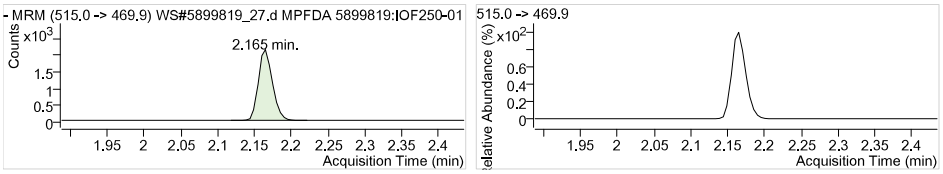
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



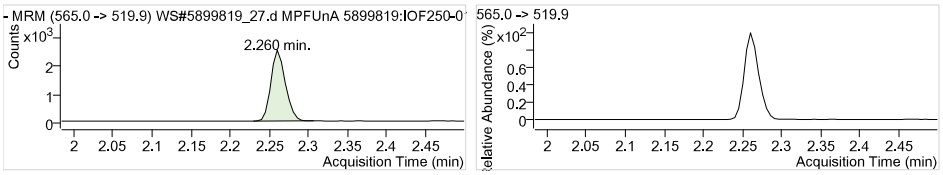
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



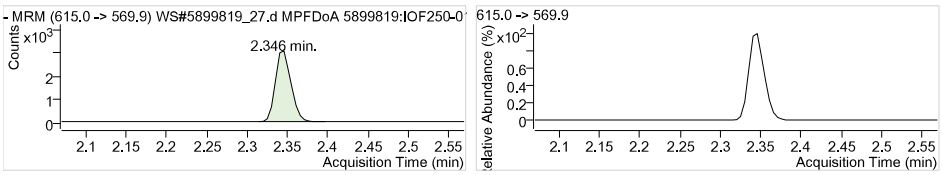
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



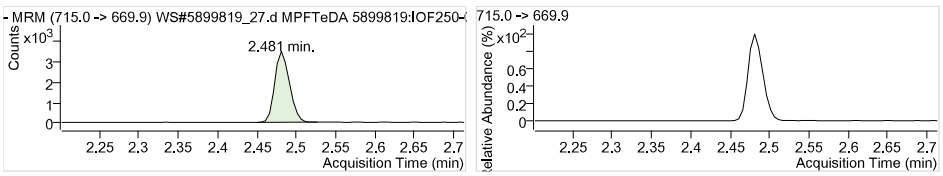
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



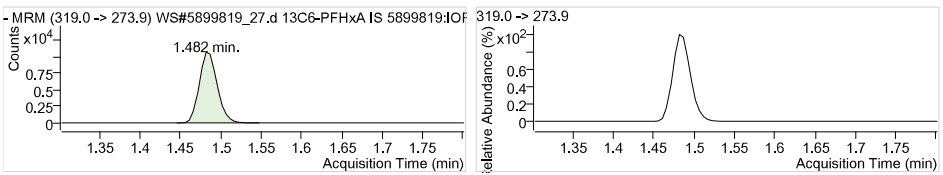
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



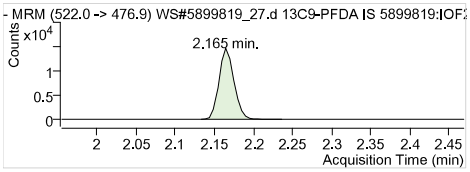
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample

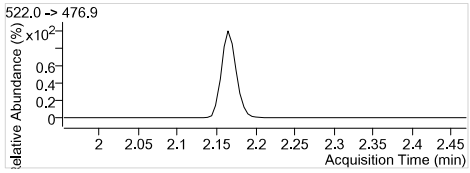


MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample

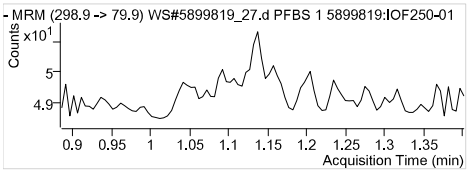


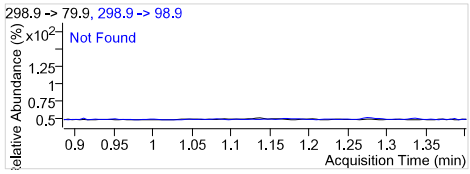
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



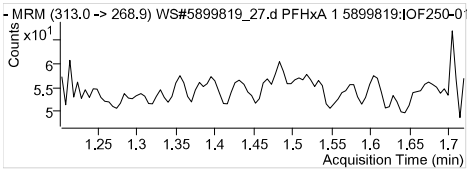


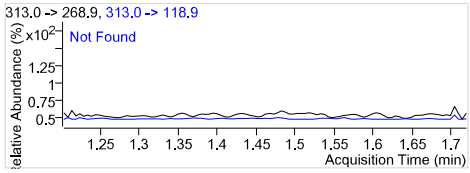
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



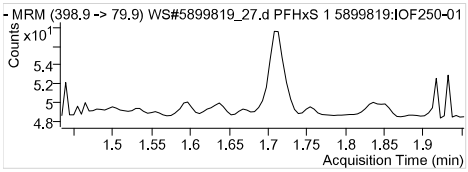


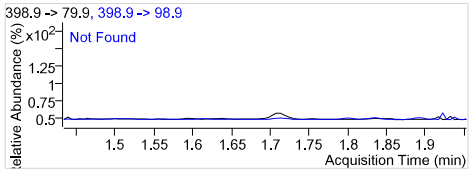
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



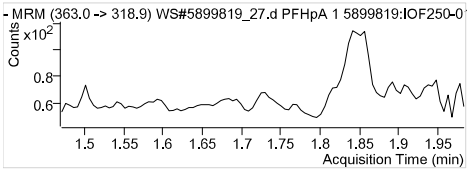


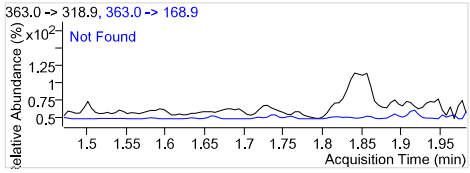
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



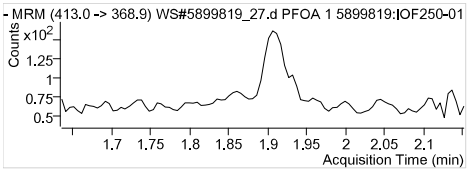


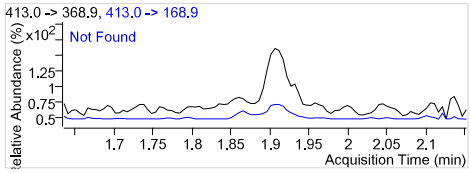
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



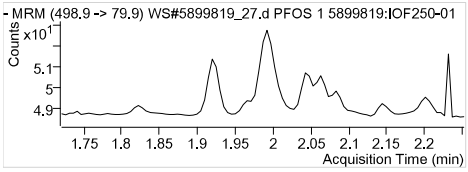


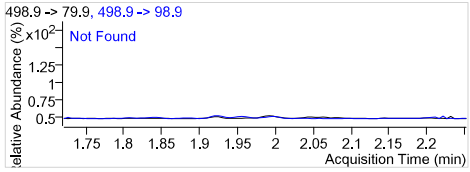
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



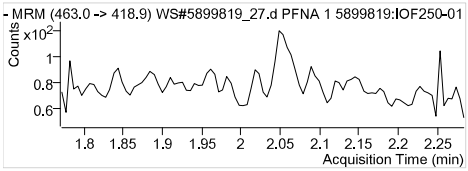


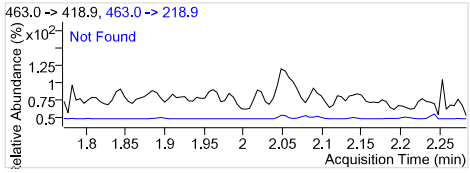
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



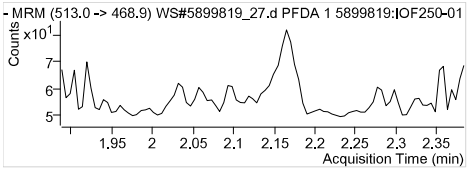


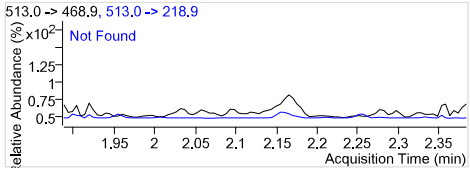
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



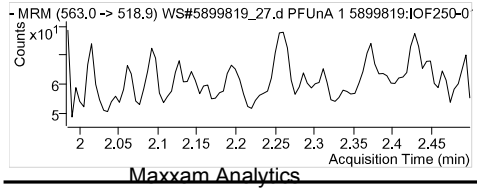


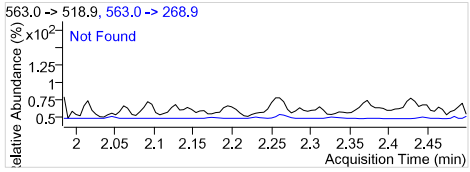
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



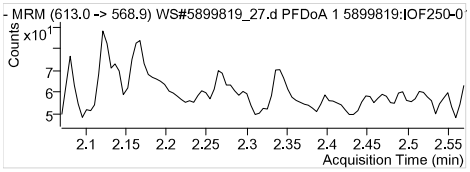


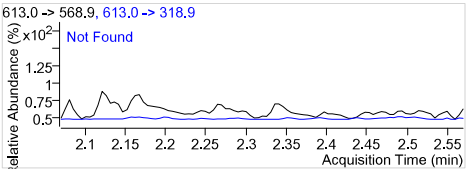
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



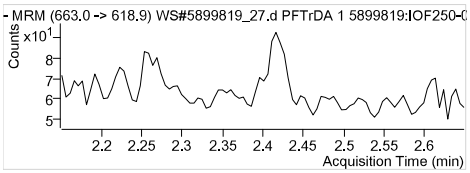


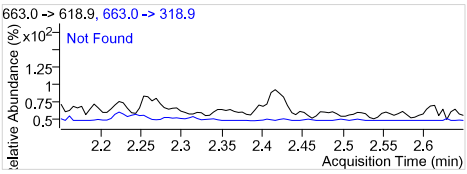
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



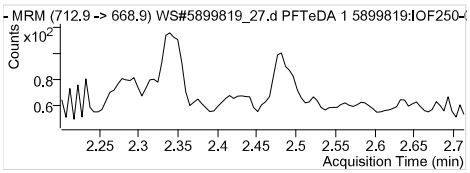


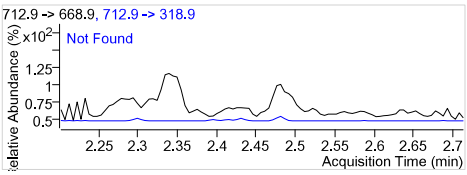
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



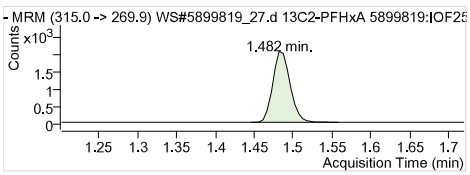


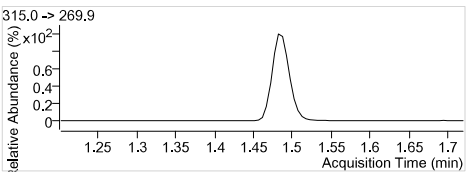
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



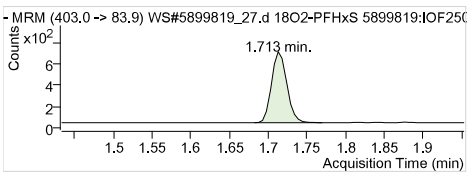


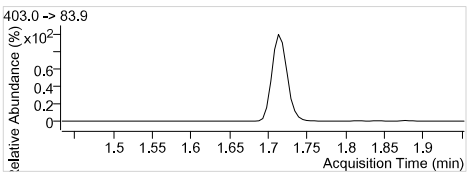
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



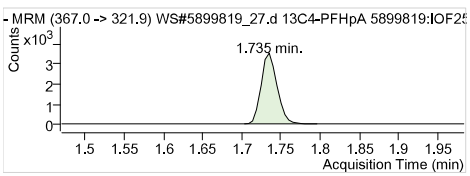


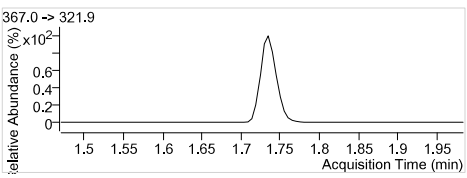
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	87.07 µg/L
Area ratio:	0.19675
Sample type:	Sample



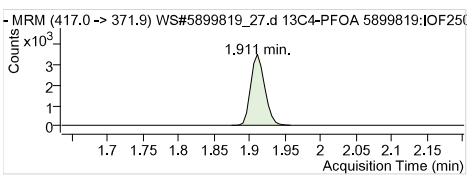


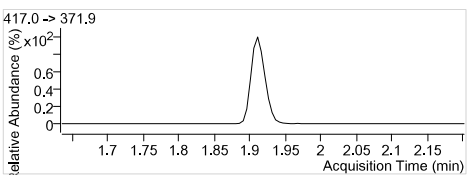
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	95.14 µg/L
Area ratio:	0.05507
Sample type:	Sample



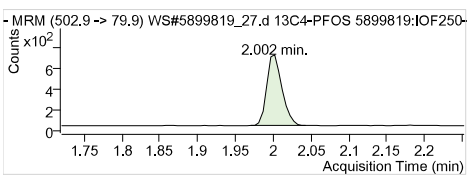


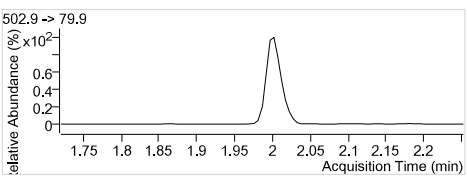
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	92.49 µg/L
Area ratio:	0.30220
Sample type:	Sample



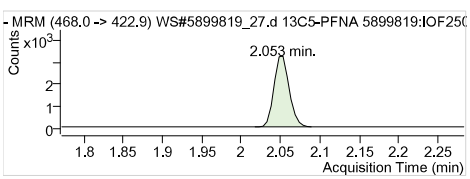


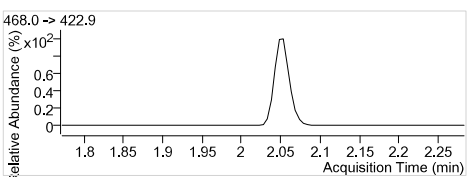
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	94.95 µg/L
Area ratio:	0.29022
Sample type:	Sample



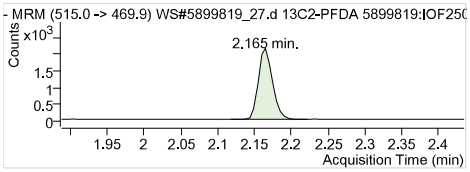


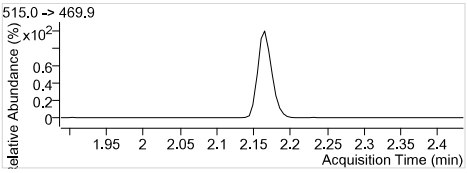
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	93.43 µg/L
Area ratio:	0.05964
Sample type:	Sample



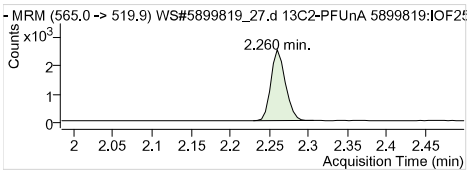


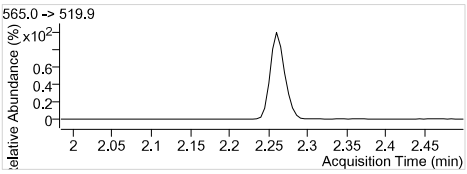
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	92.15 µg/L
Area ratio:	0.26818
Sample type:	Sample



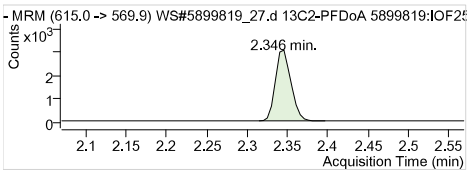


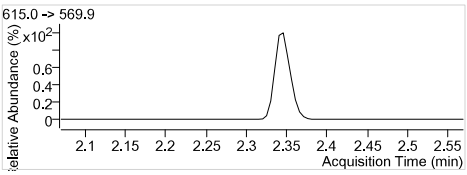
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	85.14 µg/L
Area ratio:	0.14564
Sample type:	Sample



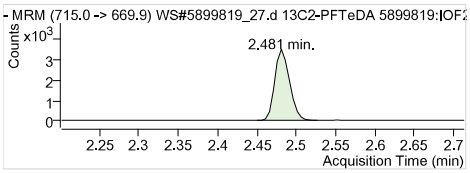


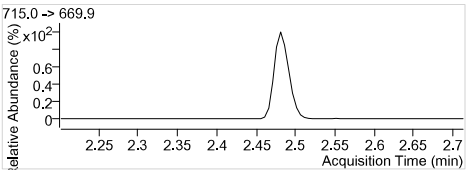
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	84.11 µg/L
Area ratio:	0.16792
Sample type:	Sample



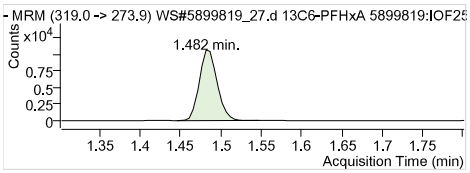


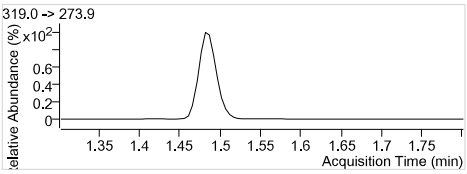
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	82.26 µg/L
Area ratio:	0.21095
Sample type:	Sample



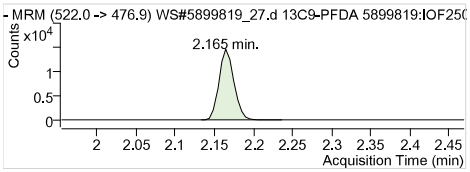


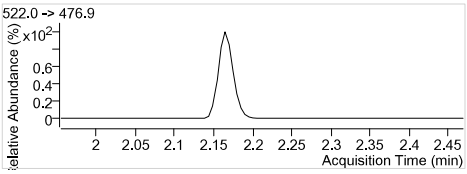
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	61.55 µg/L
Area ratio:	0.23014
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.05 µg/L
Area ratio:	0
Sample type:	Sample





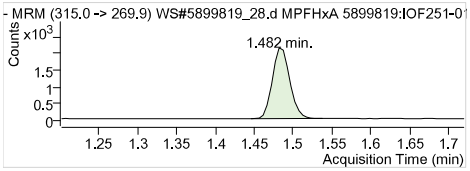
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.07 µg/L
Area ratio:	0
Sample type:	Sample

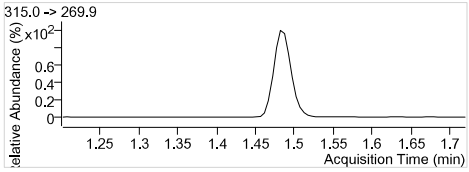
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF251-01**	**Instrument**	LCMS04
Data File	WS#5899819_28.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0234
Acq. Method	PFC_Water_Low.m	**Position**	P1-C6
Acq. Date	2018/12/21 6:47:18 PM	**Injection Volume**	Per Method
Sample Annotation	-		

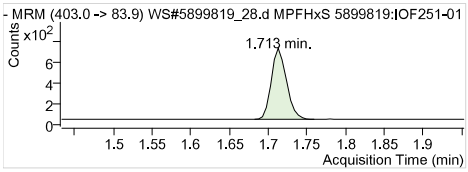
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3281	1.48	1 µg/L		
MPFHxS	918	1.71	1 µg/L		
MPFHpA	4984	1.73	1 µg/L		
MPFOA	4523	1.91	1 µg/L		
MPFOS	1024	2.00	1 µg/L		
MPFNA	4314	2.05	1 µg/L		
MPFDA	2816	2.16	1 µg/L		
MPFUnA	3415	2.26	1 µg/L		
MPFDoA	4558	2.35	1 µg/L		
MPFTeDA	5916	2.48	1 µg/L		
13C6-PFHxA IS	16680	1.48	1 µg/L		
13C9-PFDA IS	20433	2.16	1 µg/L		

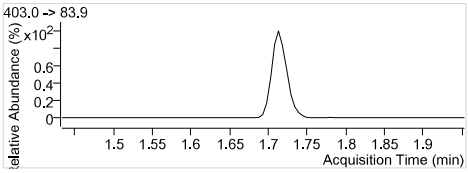
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1	716	1.48	-	0.01 µg/L	-
PFHxS 1	164	1.71	-	0.01 µg/L	-
PFHpA 1	538	1.74	-	0.01 µg/L	-
PFOA 1	644	1.91	-	0.00 µg/L	-
PFOS 1	852	2.00	-	0.05 µg/L	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3281	1.48	-	87.05 µg/L	-
18O2-PFHxS	918	1.71	-	95.08 µg/L	-
13C4-PFHpA	4984	1.73	-	91.45 µg/L	-
13C4-PFOA	4523	1.91	-	88.72 µg/L	-
13C4-PFOS	1024	2.00	-	96.17 µg/L	-
13C5-PFNA	4314	2.05	-	88.87 µg/L	-
13C2-PFDA	2816	2.16	-	80.57 µg/L	-
13C2-PFUnA	3415	2.26	-	83.71 µg/L	-
13C2-PFDoA	4558	2.35	-	86.99 µg/L	-
13C2-PFTeDA	5916	2.48	-	77.44 µg/L	-
13C6-PFHxA	16680	1.48	-	2.32 µg/L	-
13C9-PFDA	20433	2.16	-	2.40 µg/L	-



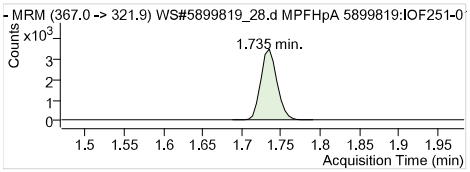


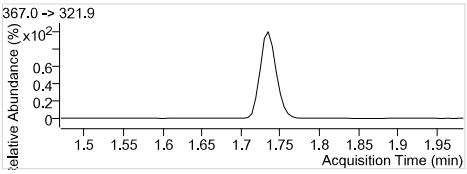
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



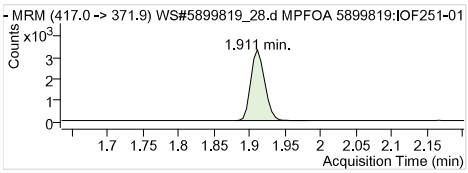


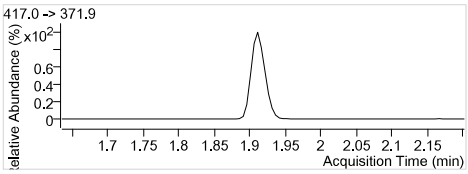
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



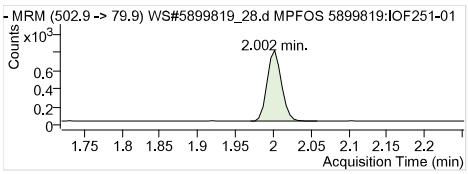


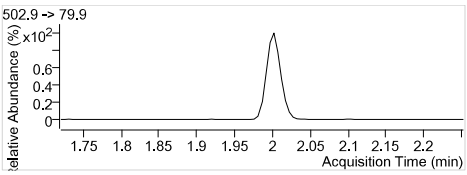
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



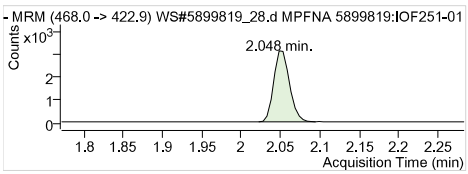


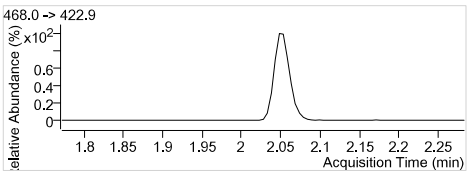
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



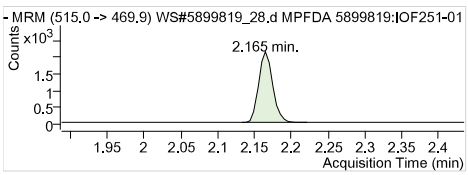


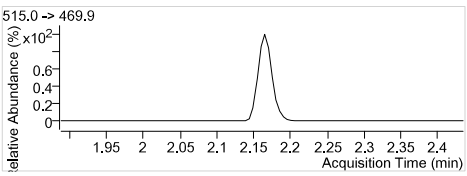
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



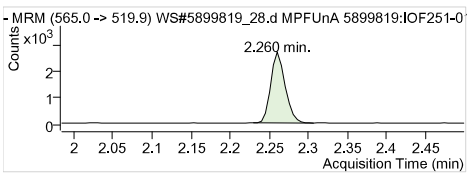


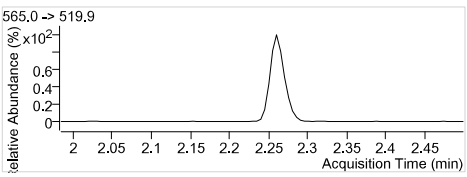
MPFNA Internal Standard
RT (Exp. RT): 2.048 (2.053)
Concentration: 1 µg/L
Sample type: Sample



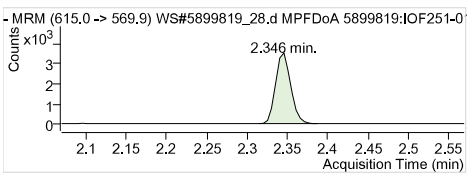


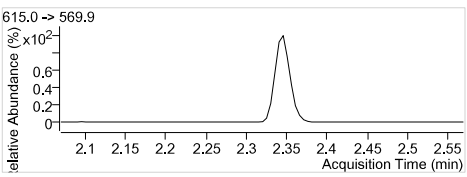
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



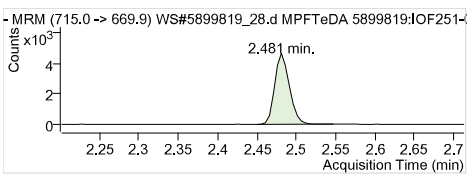


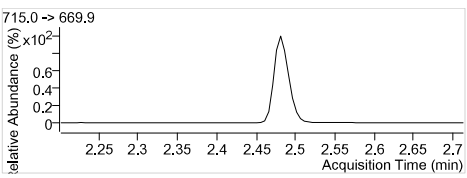
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



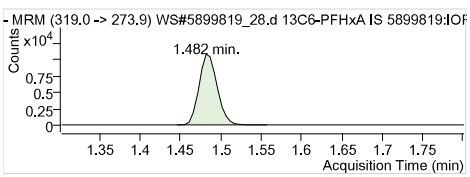


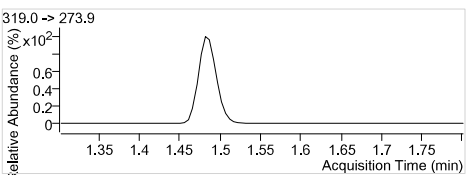
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



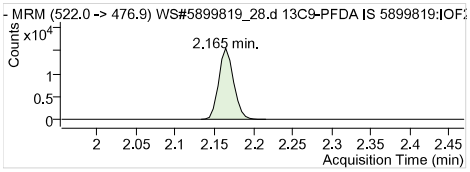


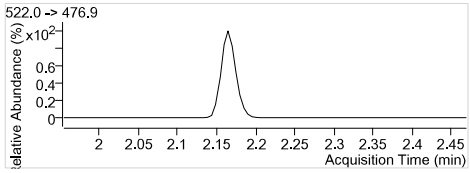
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



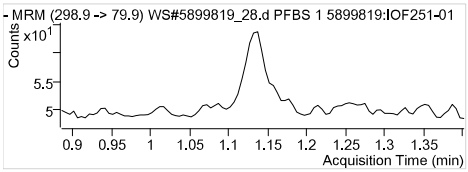


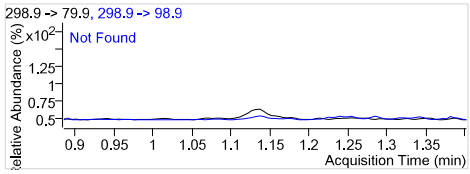
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



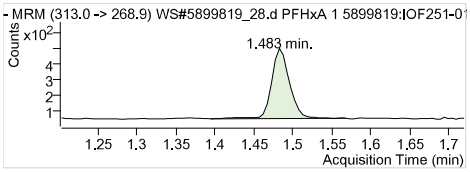


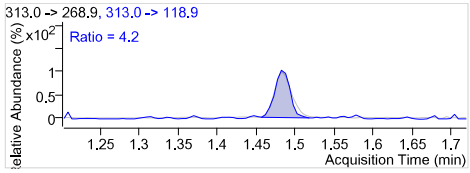
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



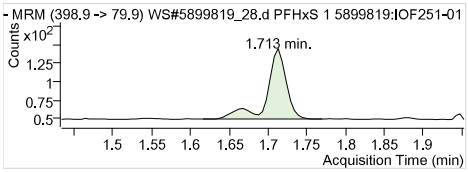


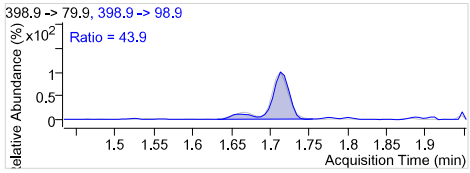
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



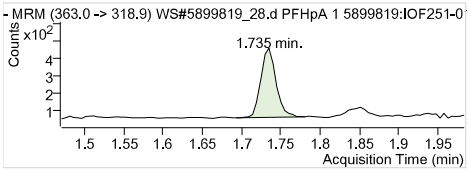


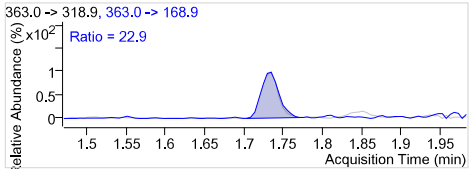
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 1.483 (1.488)
Calc. conc. 0.01 µg/L
Area ratio: 0.21823
Sample type: Sample



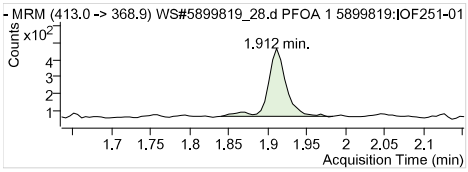


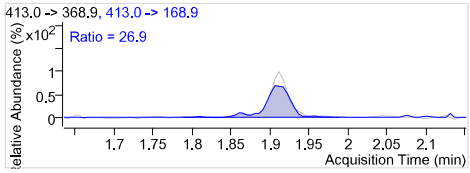
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 0.01 µg/L
Area ratio: 0.17865
Sample type: Sample



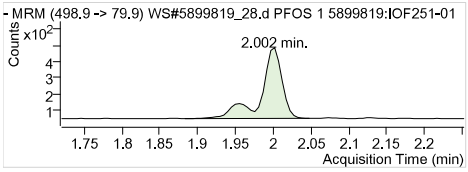


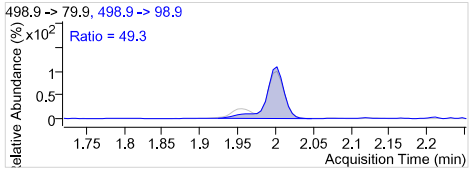
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 1.735 (1.735)
Calc. conc. 0.01 µg/L
Area ratio: 0.10795
Sample type: Sample



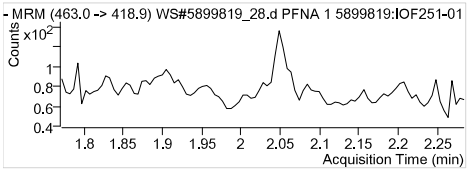


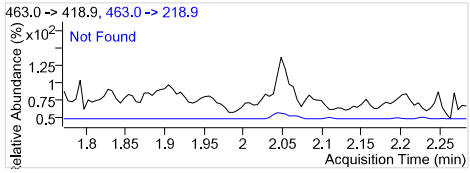
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 1.912 (1.912)
Calc. conc. 0.00 µg/L
Area ratio: 0.14238
Sample type: Sample



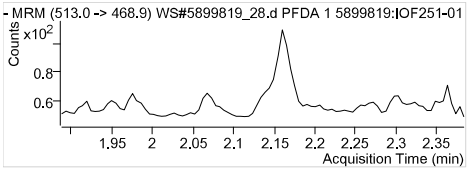


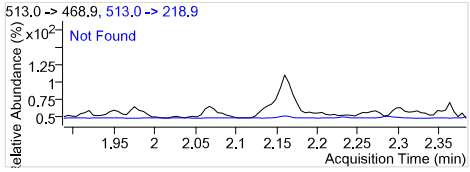
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 0.05 µg/L
Area ratio: 0.83203
Sample type: Sample



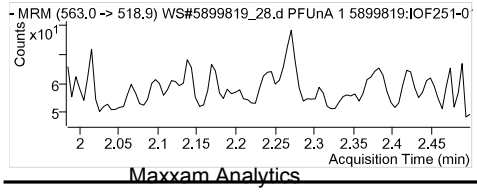


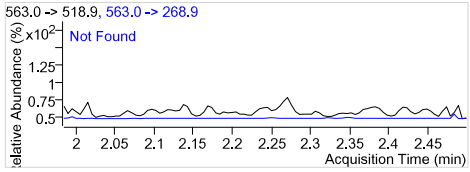
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



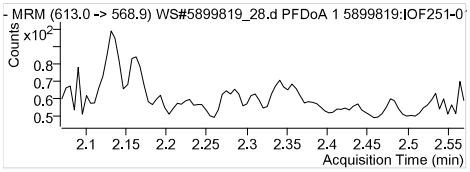


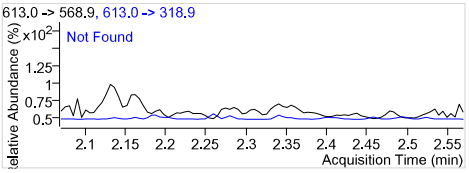
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



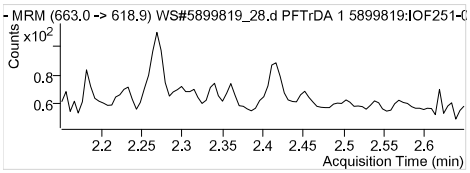


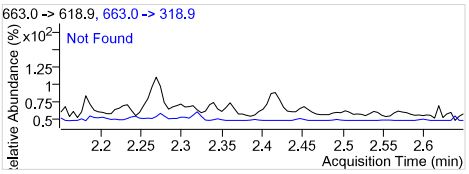
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



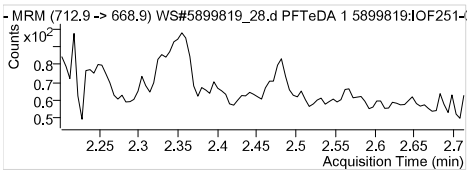


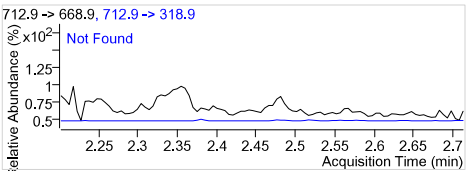
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



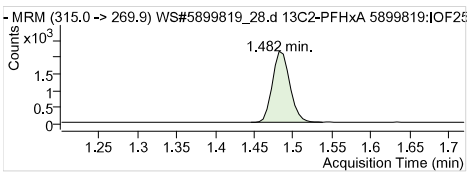


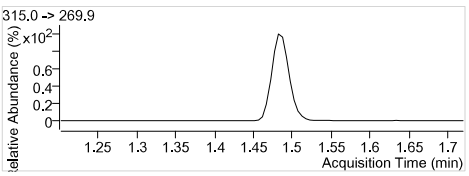
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



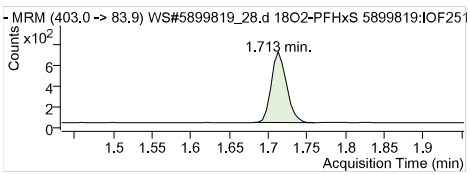


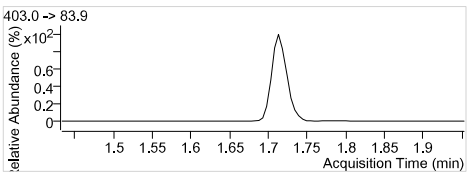
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



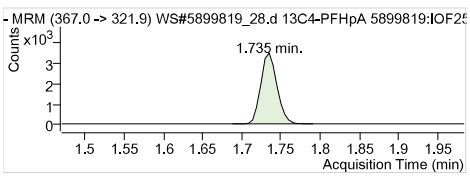


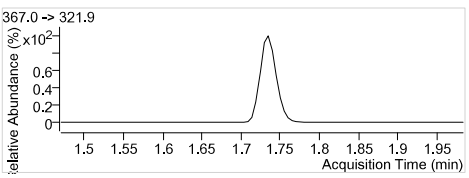
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	87.05 µg/L
Area ratio:	0.19670
Sample type:	Sample



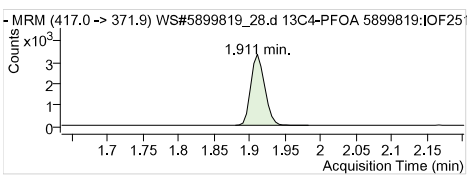


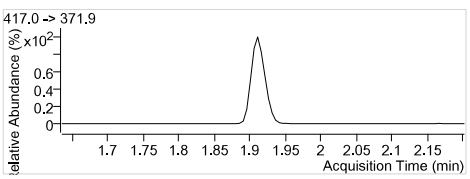
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	95.08 µg/L
Area ratio:	0.05504
Sample type:	Sample



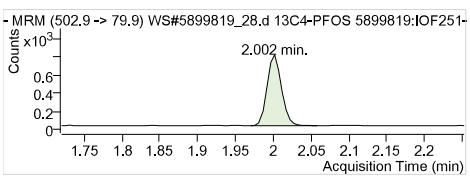


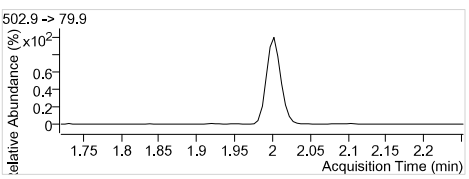
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	91.45 µg/L
Area ratio:	0.29880
Sample type:	Sample



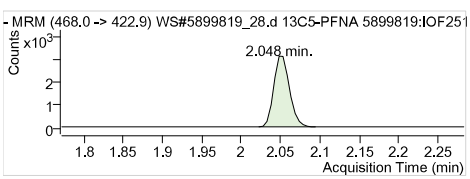


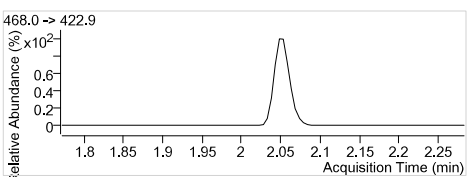
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	88.72 µg/L
Area ratio:	0.27116
Sample type:	Sample



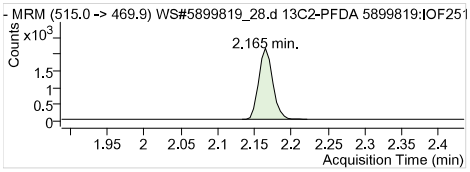


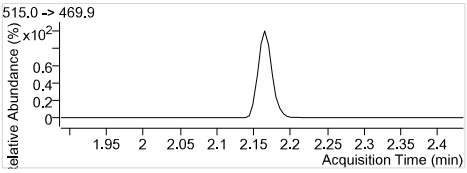
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	96.17 µg/L
Area ratio:	0.06139
Sample type:	Sample



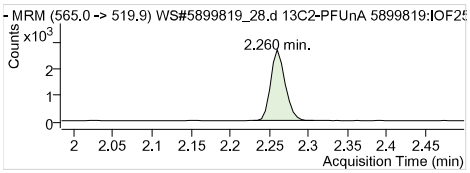


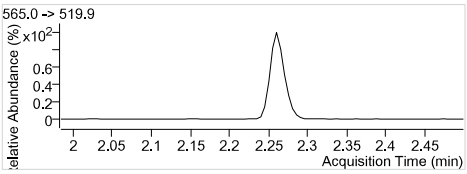
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.048 (2.053)
Calc. conc.	88.87 µg/L
Area ratio:	0.25863
Sample type:	Sample



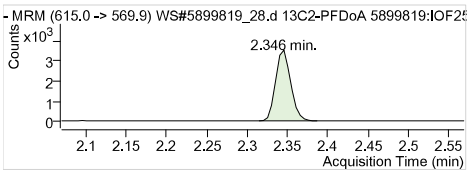


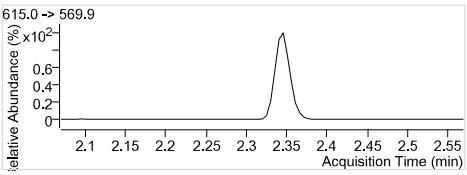
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	80.57 µg/L
Area ratio:	0.13782
Sample type:	Sample



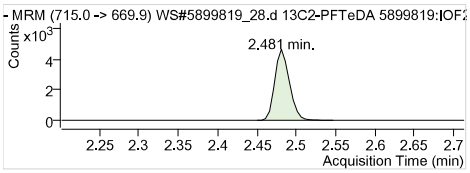


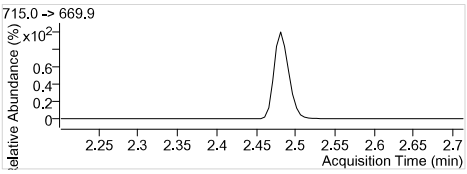
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	83.71 µg/L
Area ratio:	0.16713
Sample type:	Sample



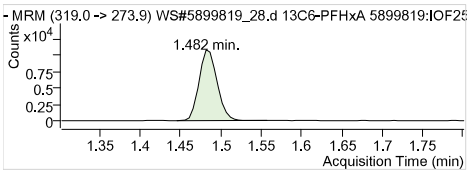


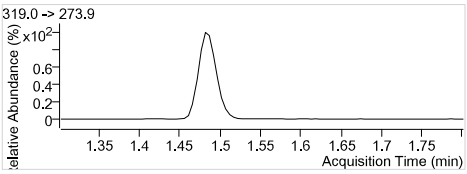
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	86.99 µg/L
Area ratio:	0.22307
Sample type:	Sample



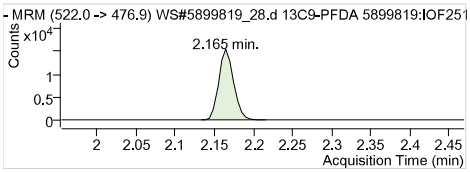


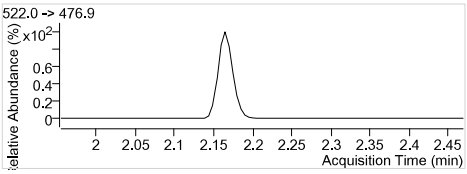
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	77.44 µg/L
Area ratio:	0.28953
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.32 µg/L
Area ratio:	0
Sample type:	Sample





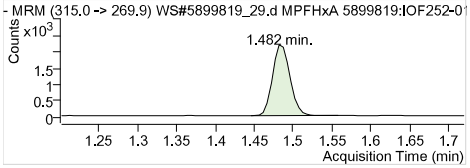
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.40 µg/L
Area ratio:	0
Sample type:	Sample

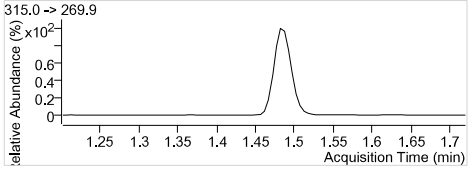
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF252-01**	**Instrument**	LCMS04
Data File	WS#5899819_29.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0227
Acq. Method	PFC_Water_Low.m	**Position**	P1-C7
Acq. Date	2018/12/21 6:52:13 PM	**Injection Volume**	Per Method
Sample Annotation	-		

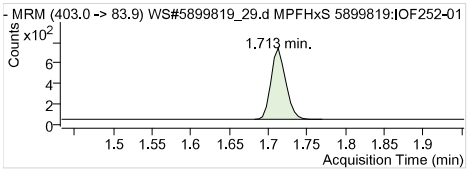
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3357	1.48	1 µg/L		
MPFHxS	901	1.71	1 µg/L		
MPFHpA	4879	1.73	1 µg/L		
MPFOA	4682	1.91	1 µg/L		
MPFOS	1056	2.00	1 µg/L		
MPFNA	4401	2.05	1 µg/L		
MPFDA	2993	2.16	1 µg/L		
MPFUnA	3442	2.26	1 µg/L		
MPFDoA	4534	2.35	1 µg/L		
MPFTeDA	5804	2.48	1 µg/L		
13C6-PFHxA IS	16591	1.48	1 µg/L		
13C9-PFDA IS	19890	2.16	1 µg/L		

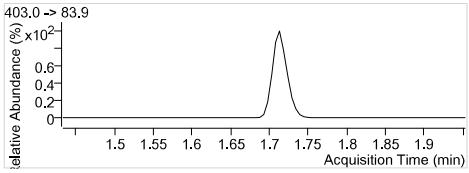
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1	157	1.14	-	0.01 µg/L	-
PFHxA 1	579	1.48	-	0.01 µg/L	-
PFHxS 1	475	1.71	-	0.03 µg/L	-
PFHpA 1	290	1.74	-	0.00 µg/L	-
PFOA 1	448	1.91	-	0.00 µg/L	-
PFOS 1	1115	2.00	-	0.06 µg/L	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3357	1.48	-	89.54 µg/L	-
18O2-PFHxS	901	1.71	-	93.82 µg/L	-
13C4-PFHpA	4879	1.73	-	90.00 µg/L	-
13C4-PFOA	4682	1.91	-	92.33 µg/L	-
13C4-PFOS	1056	2.00	-	99.71 µg/L	-
13C5-PFNA	4401	2.05	-	91.15 µg/L	-
13C2-PFDA	2993	2.16	-	87.97 µg/L	-
13C2-PFUnA	3442	2.26	-	86.68 µg/L	-
13C2-PFDoA	4534	2.35	-	88.89 µg/L	-
13C2-PFTeDA	5804	2.48	-	78.04 µg/L	-
13C6-PFHxA	16591	1.48	-	2.24 µg/L	-
13C9-PFDA	19890	2.16	-	2.27 µg/L	-



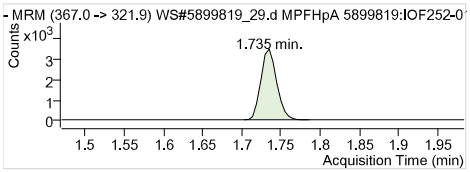


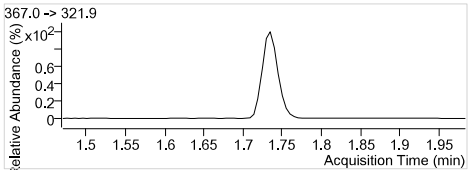
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



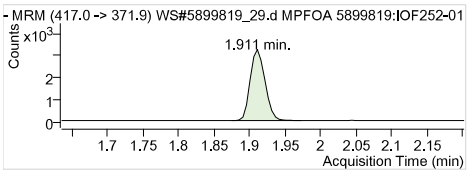


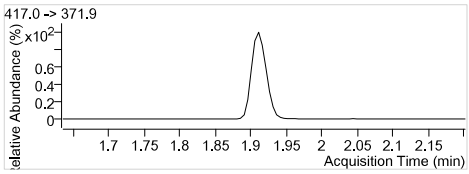
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



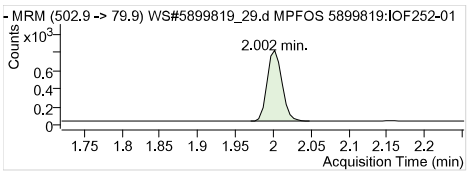


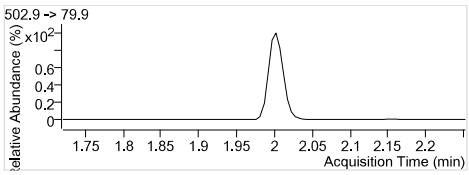
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



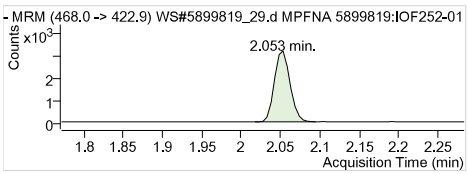


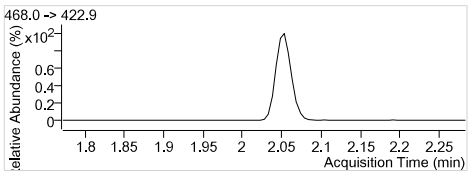
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



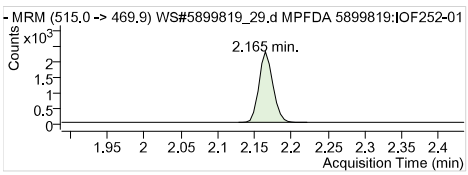


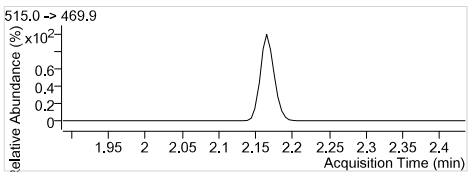
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



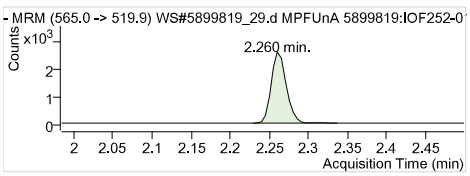


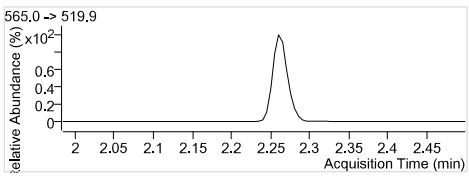
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



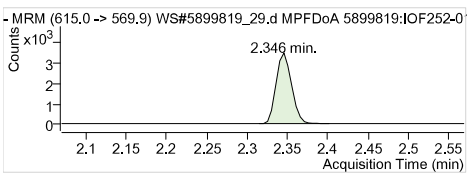


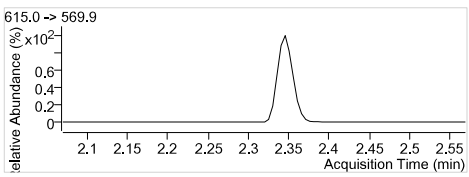
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



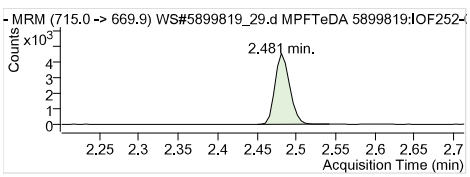


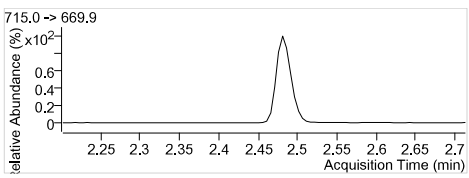
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



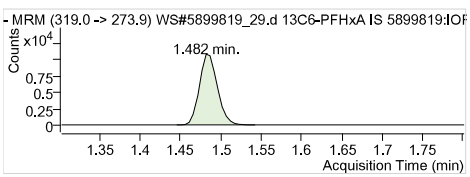


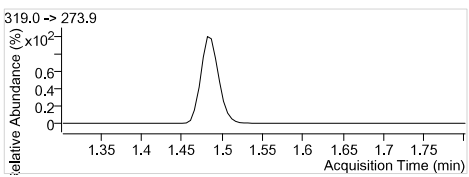
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



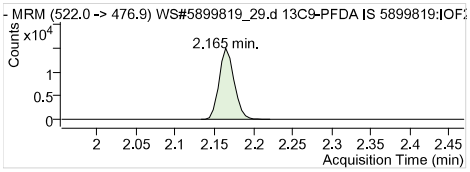


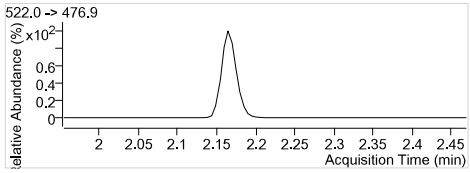
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



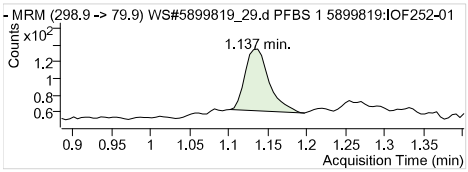


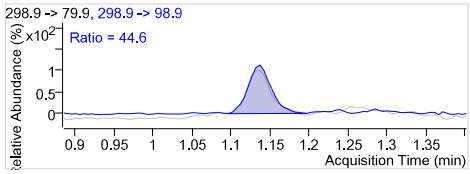
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



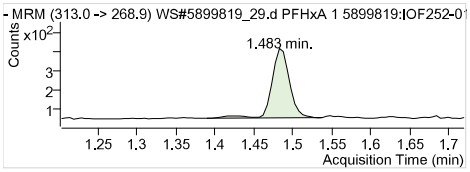


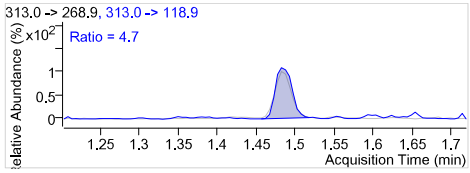
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



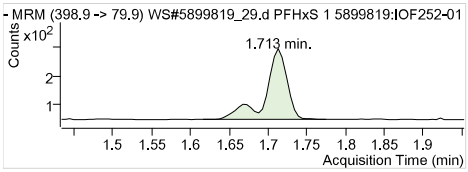


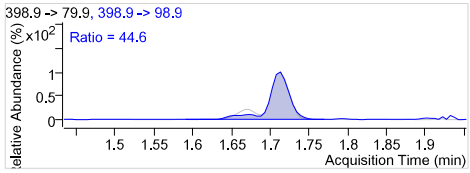
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 1.137 (1.162)
Calc. conc. 0.01 µg/L
Area ratio: 0.17425
Sample type: Sample



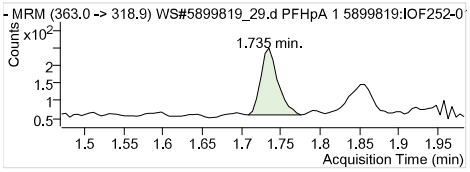


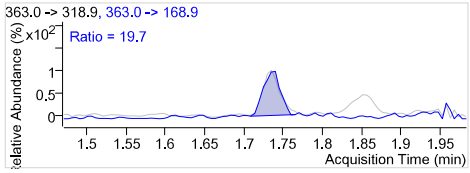
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 1.483 (1.488)
Calc. conc. 0.01 µg/L
Area ratio: 0.17248
Sample type: Sample



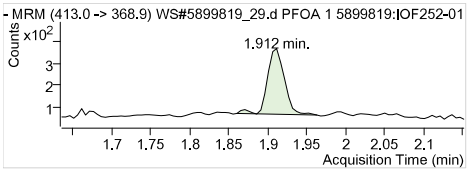


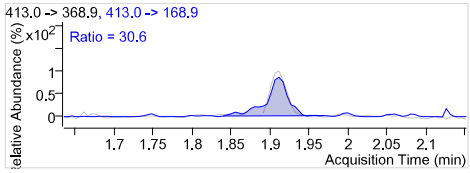
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 0.03 µg/L
Area ratio: 0.52719
Sample type: Sample



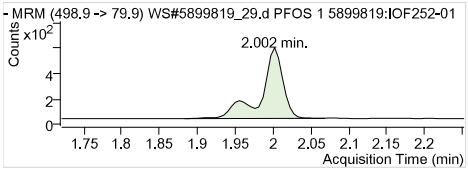


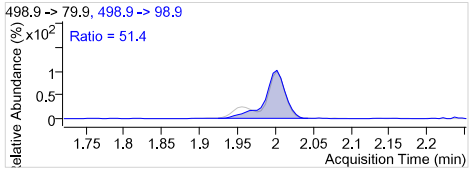
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 1.735 (1.735)
Calc. conc. 0.00 µg/L
Area ratio: 0.05944
Sample type: Sample



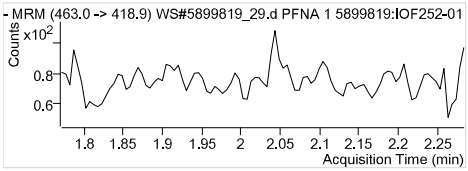


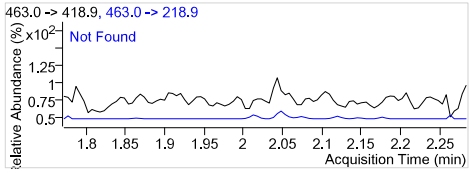
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 1.912 (1.912)
Calc. conc. 0.00 µg/L
Area ratio: 0.09569
Sample type: Sample



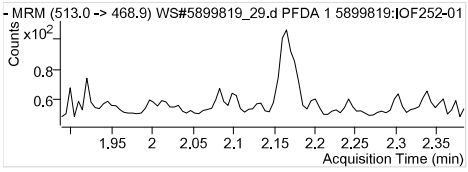


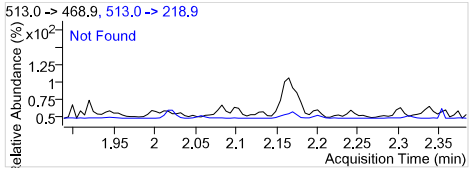
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 0.06 µg/L
Area ratio: 1.05587
Sample type: Sample



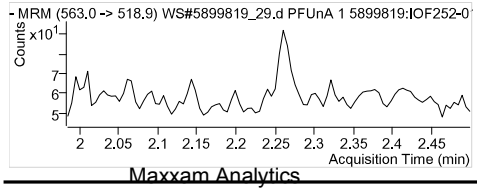


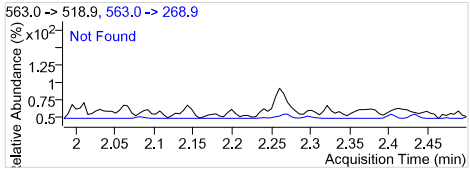
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



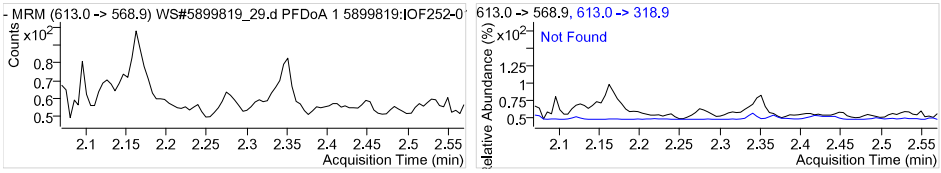


PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample

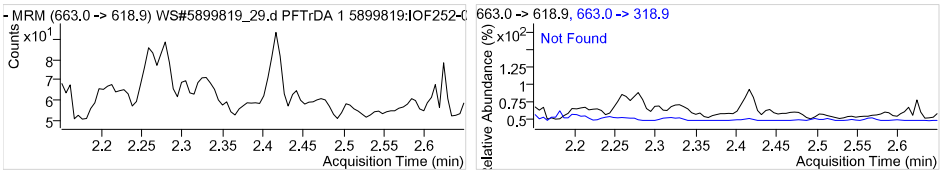




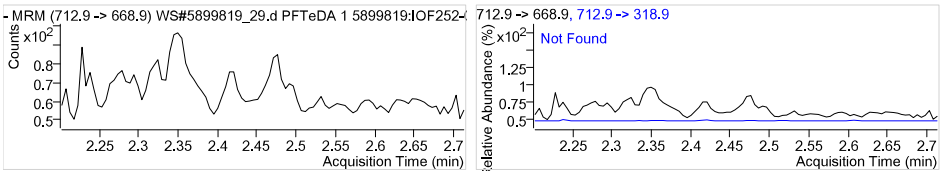
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



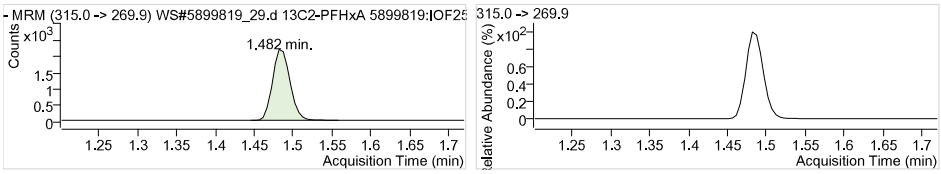
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



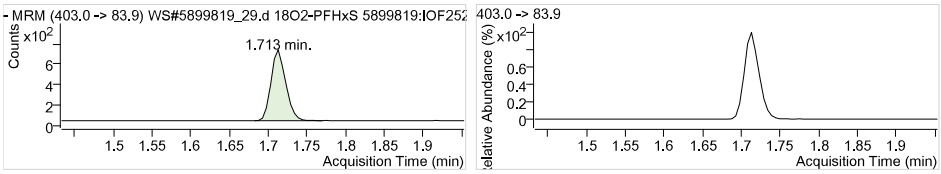
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



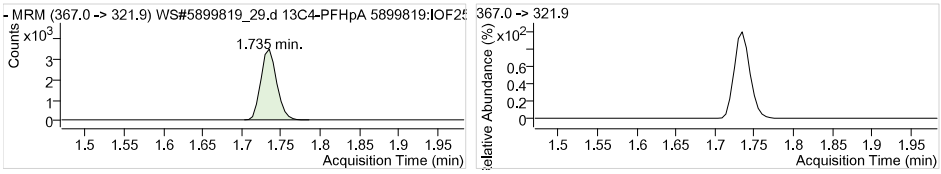
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



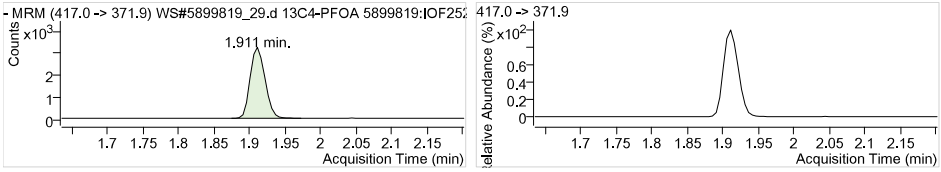
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	89.54 µg/L
Area ratio:	0.20234
Sample type:	Sample



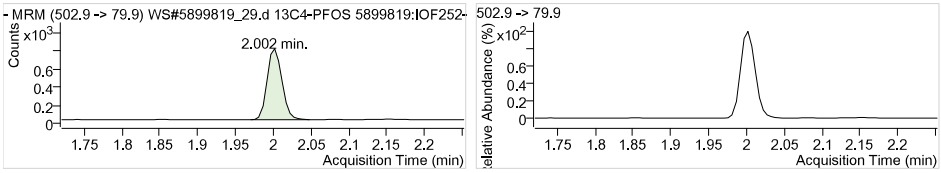
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	93.82 µg/L
Area ratio:	0.05431
Sample type:	Sample



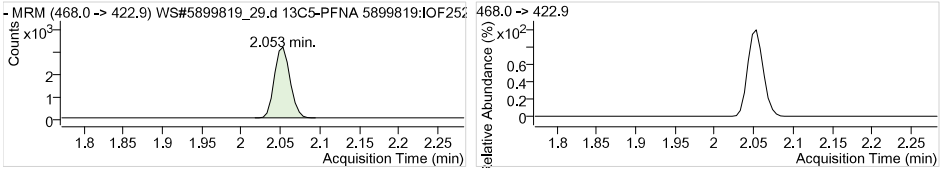
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	90.00 µg/L
Area ratio:	0.29408
Sample type:	Sample



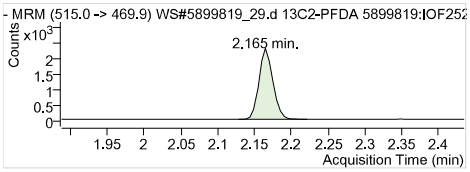
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	92.33 µg/L
Area ratio:	0.28220
Sample type:	Sample

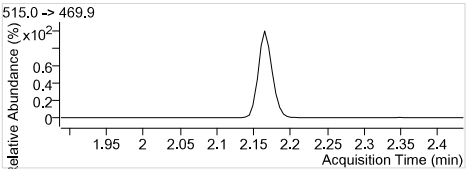


13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	99.71 µg/L
Area ratio:	0.06365
Sample type:	Sample

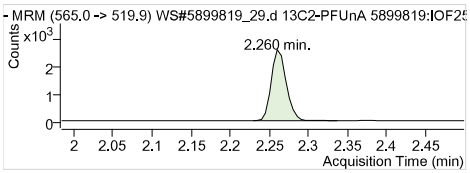


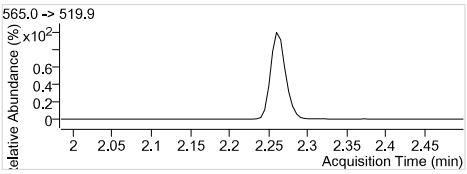
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	91.15 µg/L
Area ratio:	0.26526
Sample type:	Sample



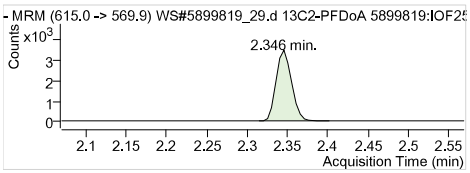


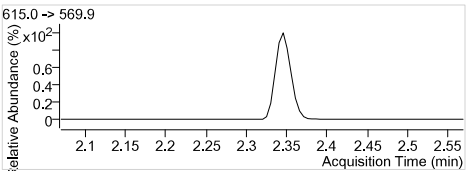
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	87.97 µg/L
Area ratio:	0.15048
Sample type:	Sample



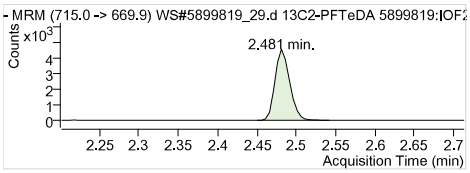


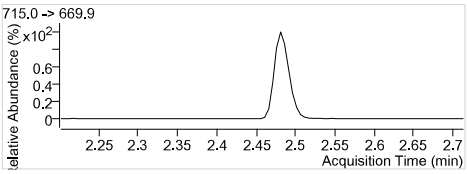
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	86.68 µg/L
Area ratio:	0.17305
Sample type:	Sample



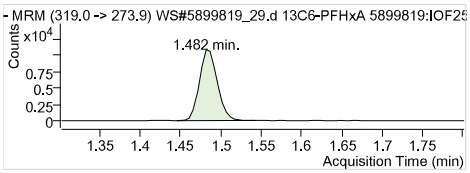


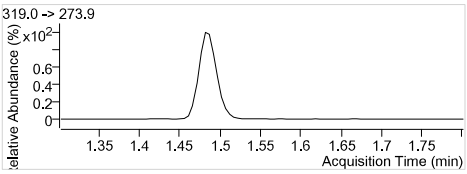
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	88.89 µg/L
Area ratio:	0.22795
Sample type:	Sample



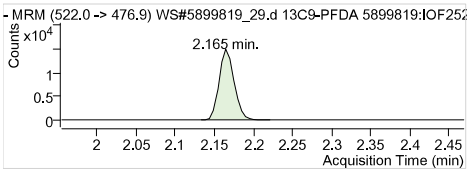


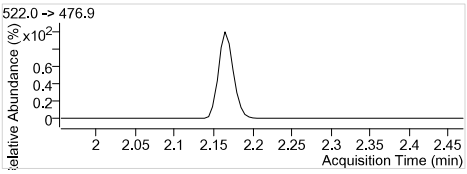
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	78.04 µg/L
Area ratio:	0.29180
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.24 µg/L
Area ratio:	0
Sample type:	Sample





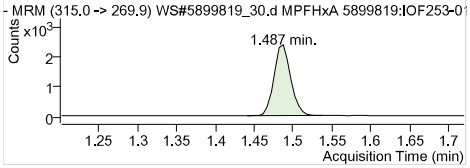
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.27 µg/L
Area ratio:	0
Sample type:	Sample

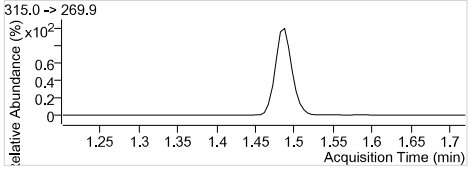
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF253-01**	**Instrument**	LCMS04
Data File	WS#5899819_30.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0211
Acq. Method	PFC_Water_Low.m	**Position**	P1-C8
Acq. Date	2018/12/21 6:57:08 PM	**Injection Volume**	Per Method
Sample Annotation	-		

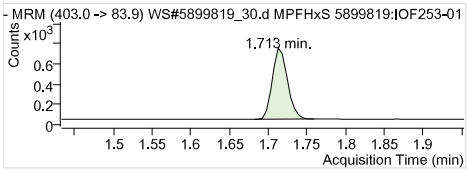
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3486	1.49	1 µg/L		
MPFHxS	949	1.71	1 µg/L		
MPFHpA	5217	1.73	1 µg/L		
MPFOA	4749	1.91	1 µg/L		
MPFOS	1006	2.00	1 µg/L		
MPFNA	4608	2.05	1 µg/L		
MPFDA	2929	2.16	1 µg/L		
MPFUnA	3607	2.26	1 µg/L		
MPFDoA	4532	2.35	1 µg/L		
MPFTeDA	5887	2.48	1 µg/L		
13C6-PFHxA IS	17048	1.49	1 µg/L		
13C9-PFDA IS	20155	2.16	1 µg/L		

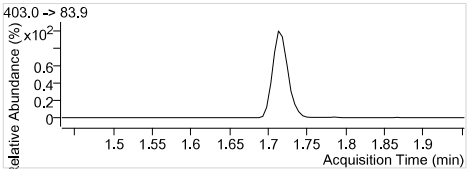
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3486	1.49	-	90.49 µg/L	-
18O2-PFHxS	949	1.71	-	96.17 µg/L	-
13C4-PFHpA	5217	1.73	-	93.66 µg/L	-
13C4-PFOA	4749	1.91	-	91.14 µg/L	-
13C4-PFOS	1006	2.00	-	92.44 µg/L	-
13C5-PFNA	4608	2.05	-	92.88 µg/L	-
13C2-PFDA	2929	2.16	-	84.96 µg/L	-
13C2-PFUnA	3607	2.26	-	89.64 µg/L	-
13C2-PFDoA	4532	2.35	-	87.69 µg/L	-
13C2-PFTeDA	5887	2.48	-	78.12 µg/L	-
13C6-PFHxA	17048	1.49	-	2.14 µg/L	-
13C9-PFDA	20155	2.16	-	2.14 µg/L	-



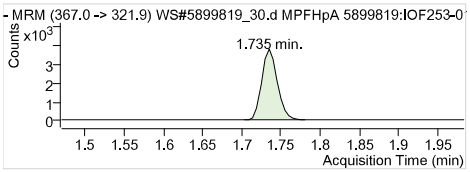


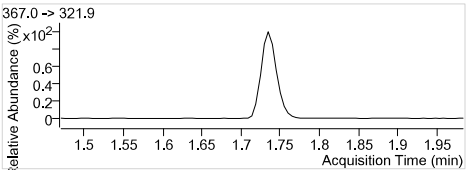
MPFHxA	Internal Standard
RT (Exp. RT):	1.487 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



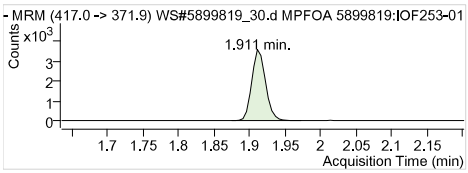


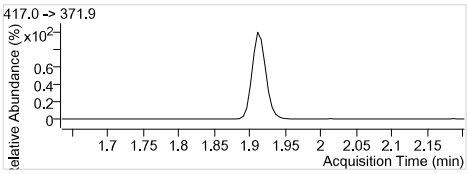
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



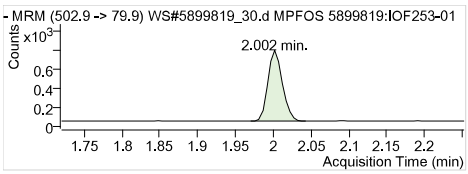


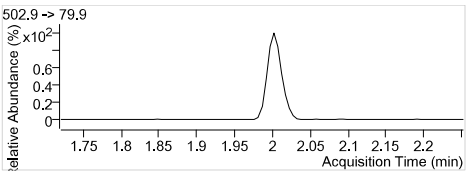
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



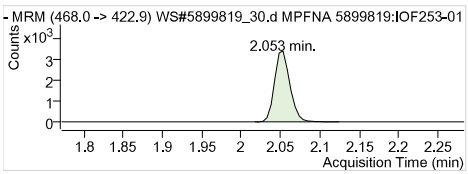


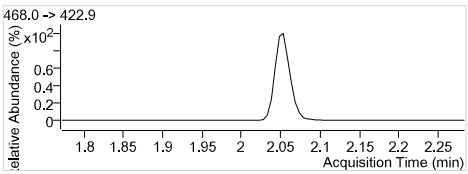
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



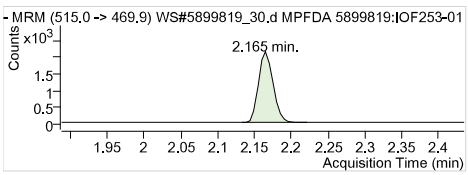


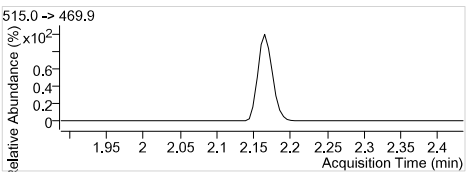
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



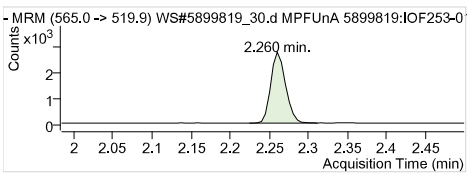


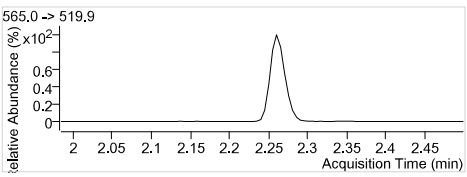
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



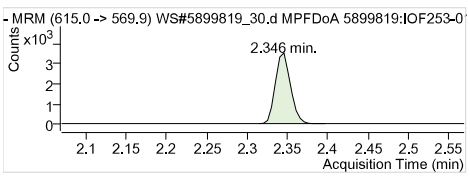


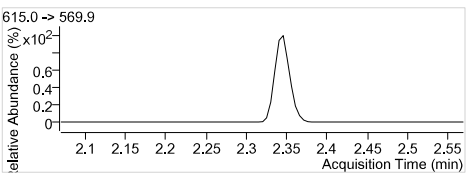
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



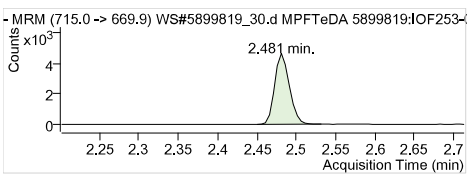


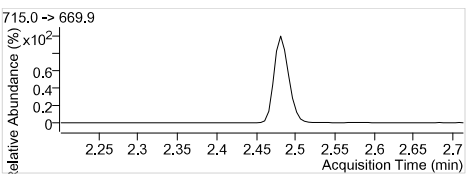
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



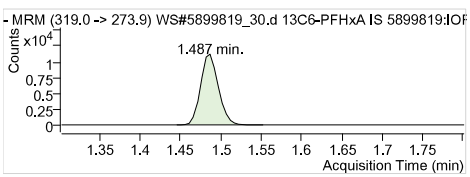


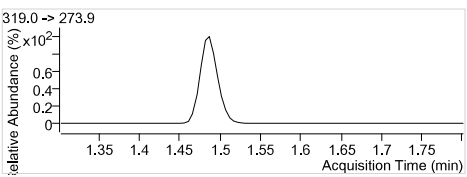
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



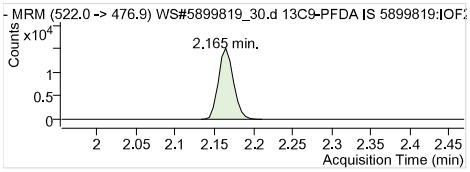


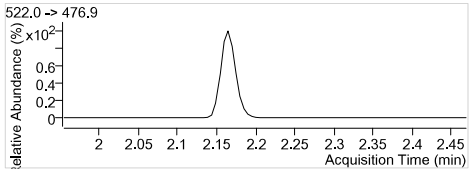
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



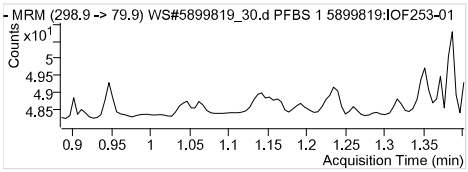


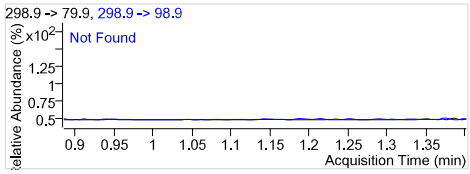
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.487 (1.487)
Concentration: 1 µg/L
Sample type: Sample



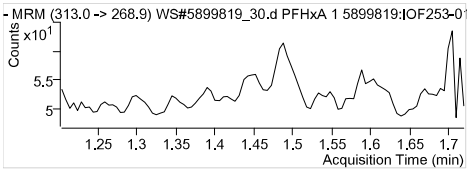


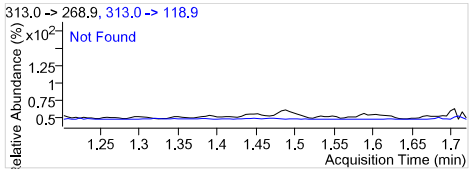
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



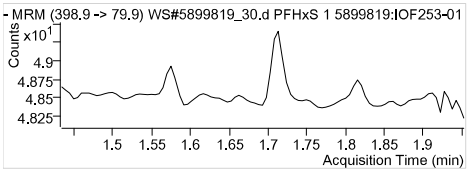


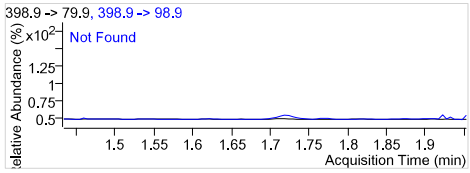
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



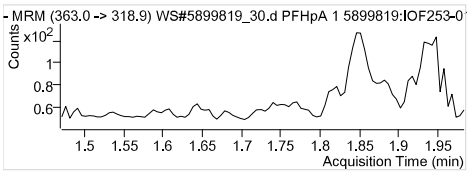


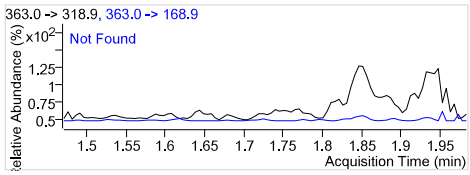
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



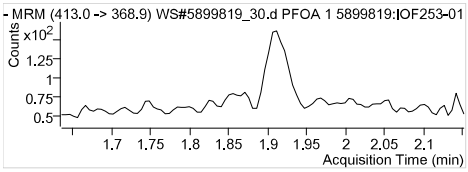


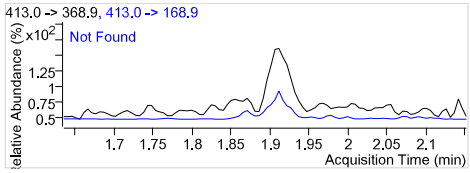
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



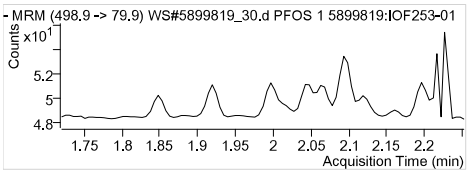


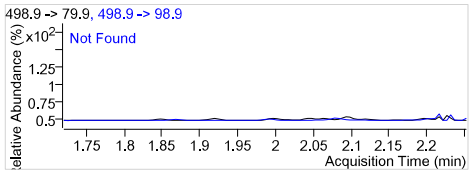
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



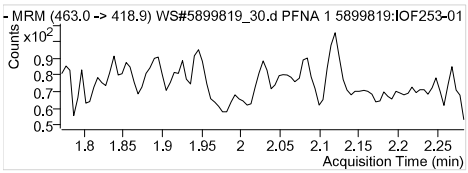


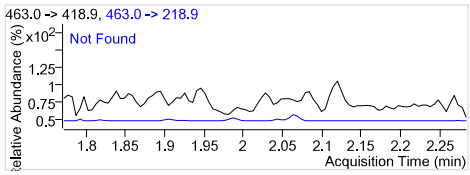
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



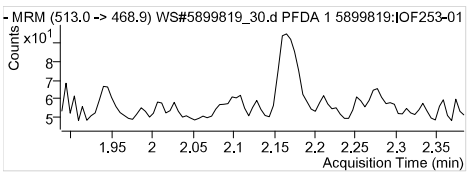


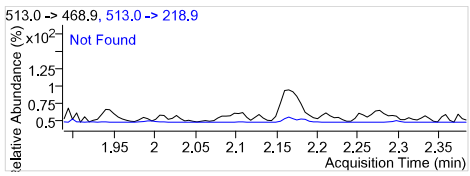
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



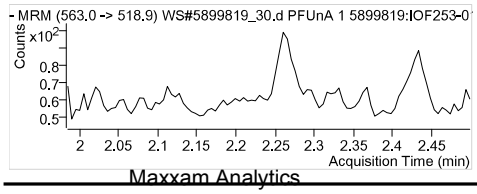


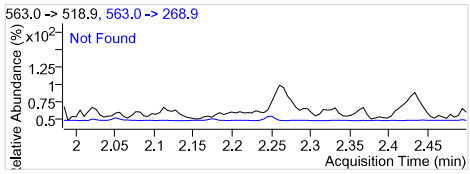
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



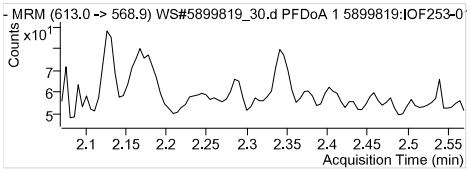


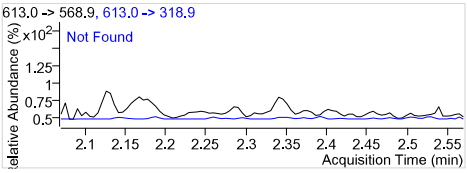
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



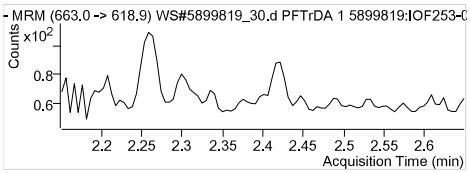


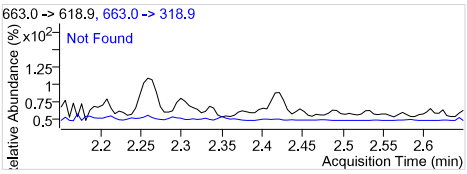
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



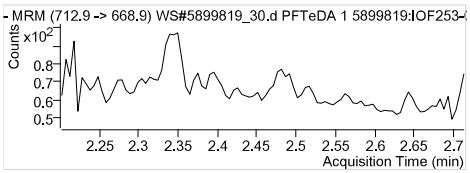


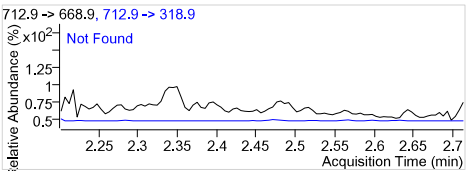
PFDoA 1 613.0 -> 568.9
RT (Exp. RT): 0.000 (2.346)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



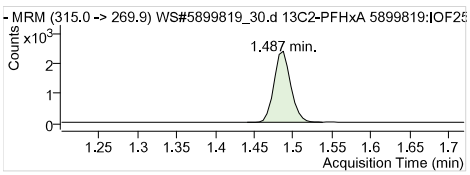


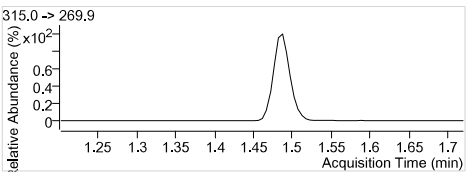
PFTrDA 1 663.0 -> 618.9
RT (Exp. RT): 0.000 (2.416)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



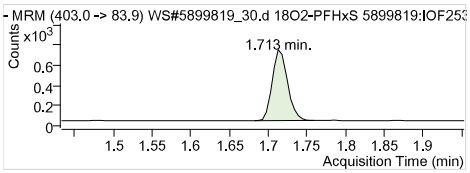


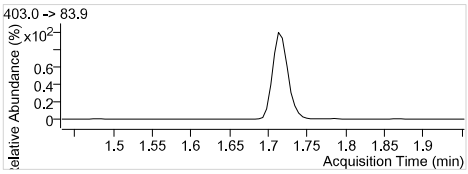
PFTeDA 1 712.9 -> 668.9
RT (Exp. RT): 0.000 (2.481)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



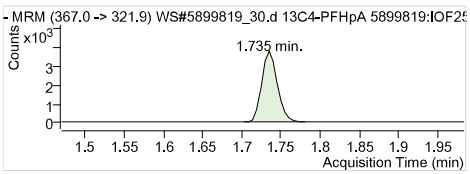


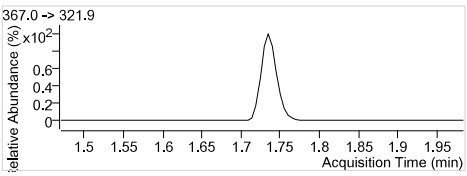
13C2-PFHxA 315.0 -> 269.9
RT (Exp. RT): 1.487 (1.487)
Calc. conc. 90.49 µg/L
Area ratio: 0.20448
Sample type: Sample



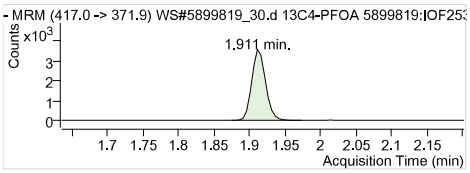


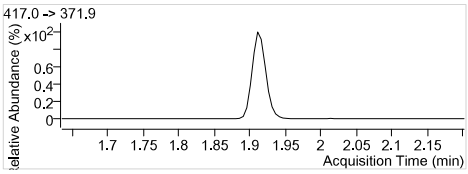
18O2-PFHxS 403.0 -> 83.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 96.17 µg/L
Area ratio: 0.05567
Sample type: Sample



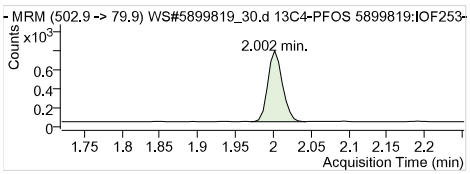


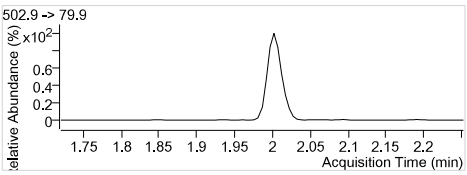
13C4-PFHpA 367.0 -> 321.9
RT (Exp. RT): 1.735 (1.735)
Calc. conc. 93.66 µg/L
Area ratio: 0.30602
Sample type: Sample



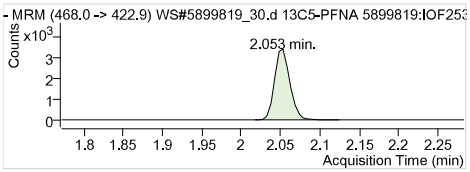


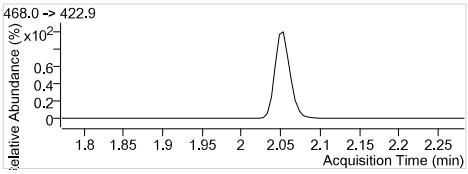
13C4-PFOA 417.0 -> 371.9
RT (Exp. RT): 1.911 (1.911)
Calc. conc. 91.14 µg/L
Area ratio: 0.27857
Sample type: Sample



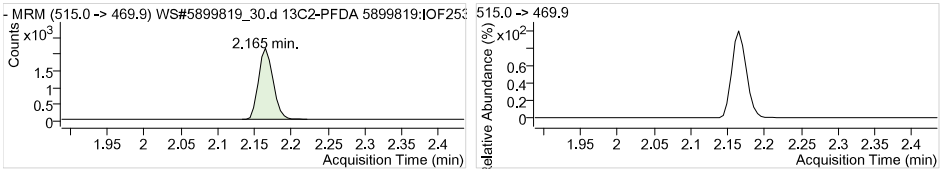


13C4-PFOS 502.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 92.44 µg/L
Area ratio: 0.05901
Sample type: Sample

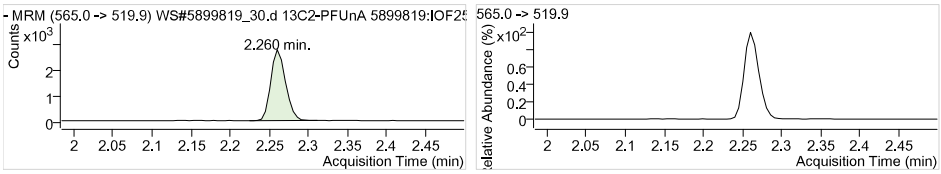




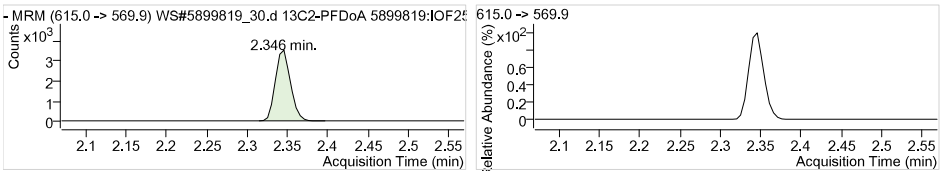
13C5-PFNA 468.0 -> 422.9
RT (Exp. RT): 2.053 (2.053)
Calc. conc. 92.88 µg/L
Area ratio: 0.27030
Sample type: Sample



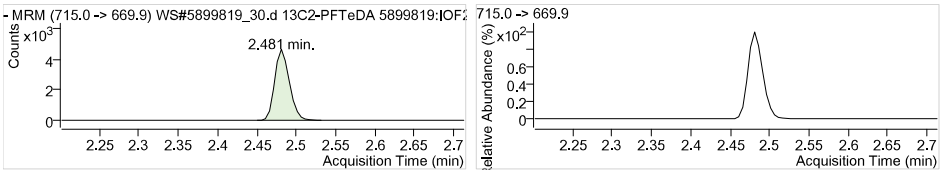
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	84.96 µg/L
Area ratio:	0.14532
Sample type:	Sample



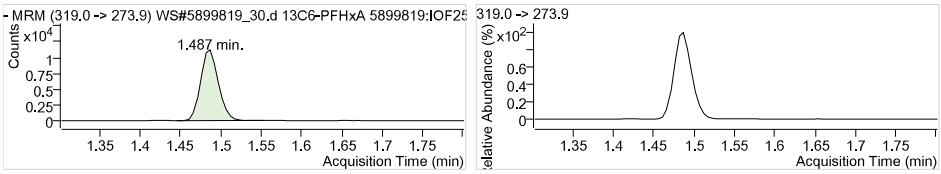
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	89.64 µg/L
Area ratio:	0.17896
Sample type:	Sample



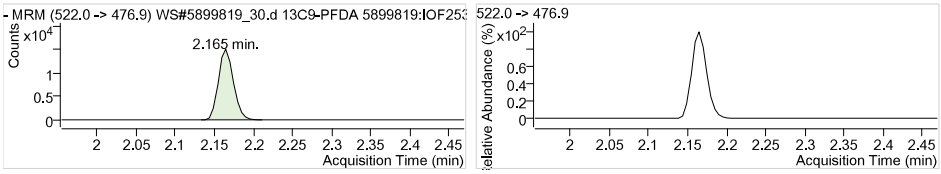
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	87.69 µg/L
Area ratio:	0.22486
Sample type:	Sample



13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	78.12 µg/L
Area ratio:	0.29209
Sample type:	Sample



13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.487 (1.487)
Calc. conc.	2.14 µg/L
Area ratio:	0
Sample type:	Sample



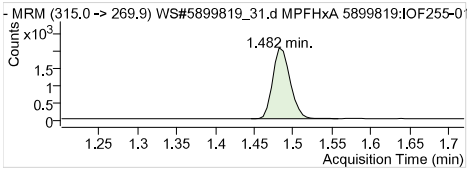
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.14 µg/L
Area ratio:	0
Sample type:	Sample

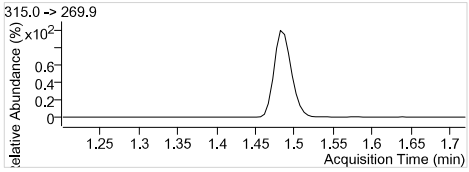
Batch Path T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF255-01**	**Instrument**	LCMS04
Data File	WS#5899819_31.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0216
Acq. Method	PFC_Water_Low.m	**Position**	P1-C9
Acq. Date	2018/12/21 7:02:04 PM	**Injection Volume**	Per Method
Sample Annotation	-		

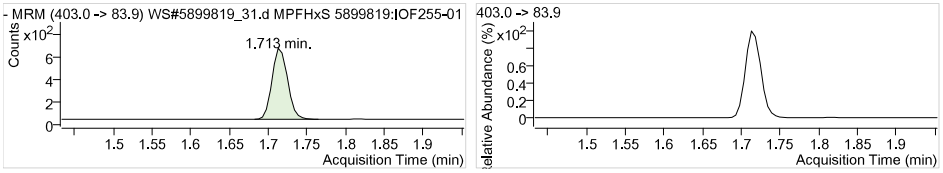
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3170	1.48	1 µg/L		
MPFHxS	871	1.71	1 µg/L		
MPFHpA	4664	1.73	1 µg/L		
MPFOA	4339	1.91	1 µg/L		
MPFOS	962	2.00	1 µg/L		
MPFNA	4316	2.05	1 µg/L		
MPFDA	2985	2.16	1 µg/L		
MPFUnA	3210	2.26	1 µg/L		
MPFDoA	4168	2.35	1 µg/L		
MPFTeDA	5630	2.48	1 µg/L		
13C6-PFHxA IS	16749	1.48	1 µg/L		
13C9-PFDA IS	19615	2.16	1 µg/L		

Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1	417	1.48	-	0.01 µg/L	-
PFHxS 1	180	1.71	-	0.01 µg/L	-
PFHpA 1	227	1.74	-	0.00 µg/L	-
PFOA 1	407	1.91	-	0.00 µg/L	-
PFOS 1	554	2.00	-	0.03 µg/L	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3170	1.48	-	83.76 µg/L	-
18O2-PFHxS	871	1.71	-	89.84 µg/L	-
13C4-PFHpA	4664	1.73	-	85.23 µg/L	-
13C4-PFOA	4339	1.91	-	84.76 µg/L	-
13C4-PFOS	962	2.00	-	89.98 µg/L	-
13C5-PFNA	4316	2.05	-	88.55 µg/L	-
13C2-PFDA	2985	2.16	-	88.97 µg/L	-
13C2-PFUnA	3210	2.26	-	81.97 µg/L	-
13C2-PFDoA	4168	2.35	-	82.86 µg/L	-
13C2-PFTeDA	5630	2.48	-	76.77 µg/L	-
13C6-PFHxA	16749	1.48	-	2.15 µg/L	-
13C9-PFDA	19615	2.16	-	2.13 µg/L	-

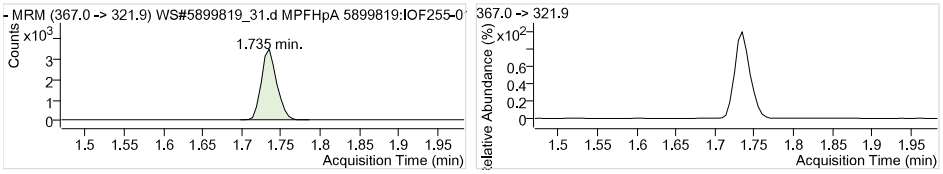




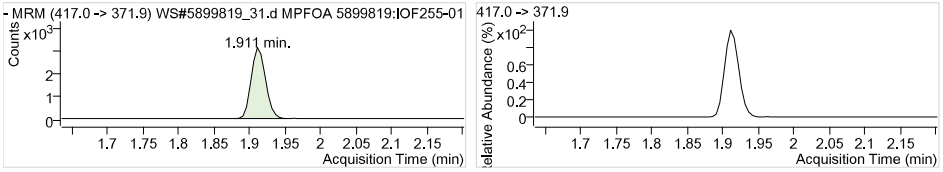
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



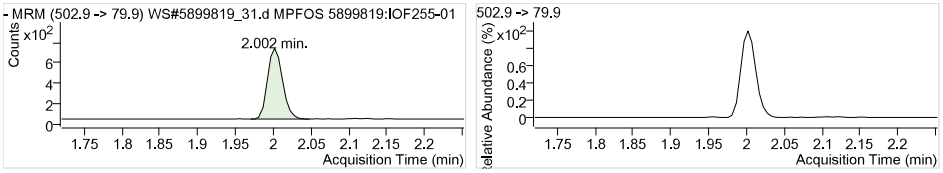
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



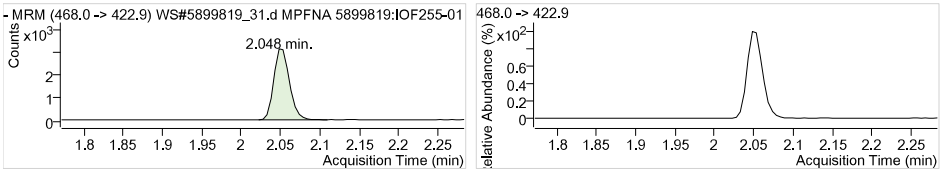
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



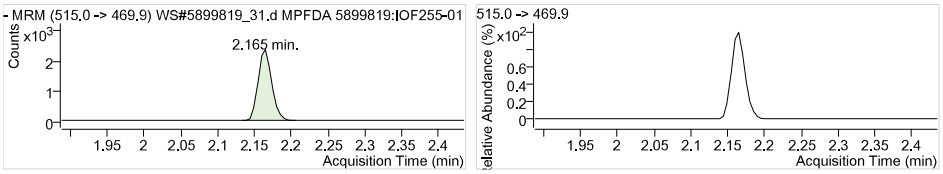
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



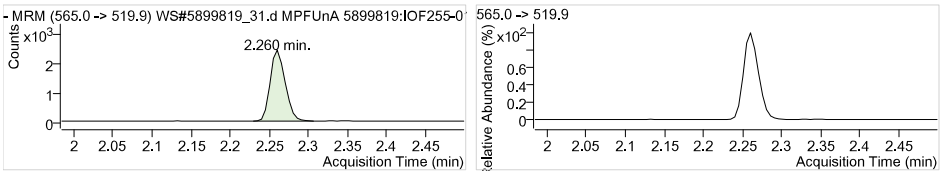
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



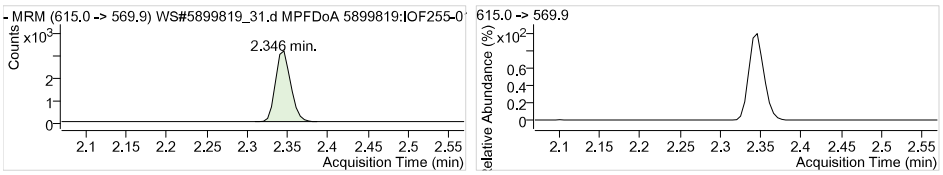
MPFNA Internal Standard
RT (Exp. RT): 2.048 (2.053)
Concentration: 1 µg/L
Sample type: Sample



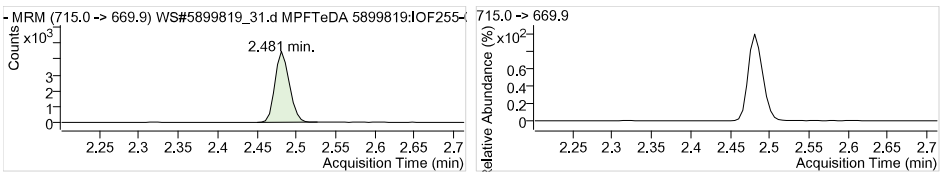
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



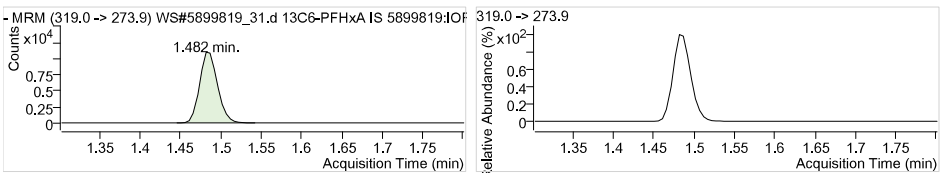
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



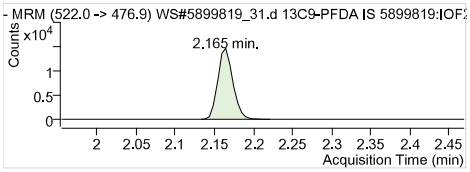
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample

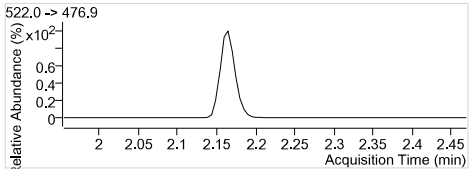


MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample

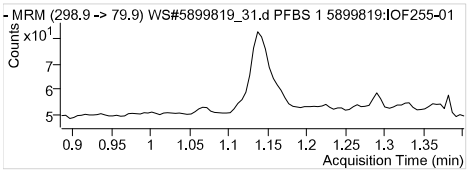


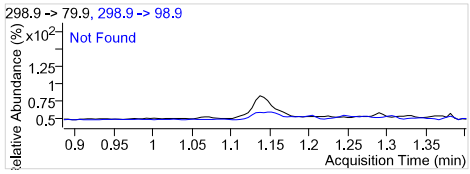
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



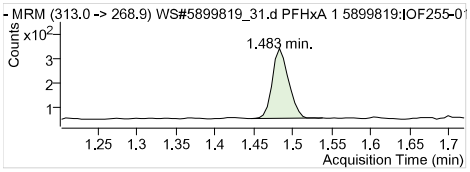


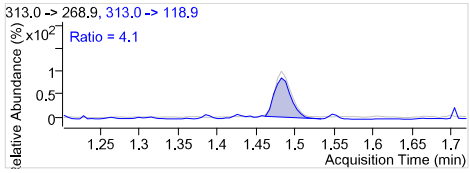
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



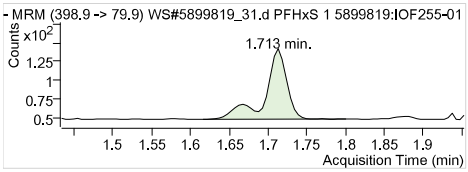


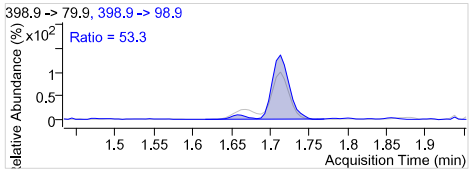
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



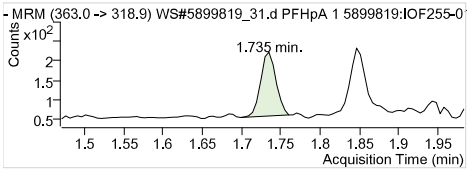


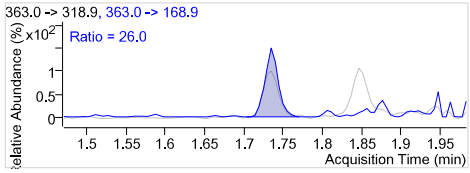
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 1.483 (1.488)
Calc. conc. 0.01 µg/L
Area ratio: 0.13155
Sample type: Sample



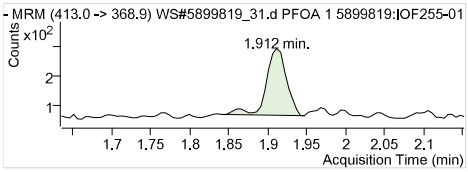


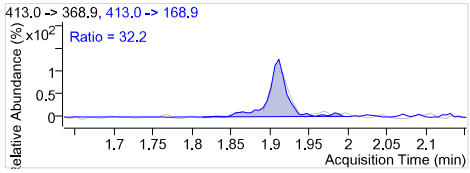
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 1.713 (1.713)
Calc. conc. 0.01 µg/L
Area ratio: 0.20666
Sample type: Sample



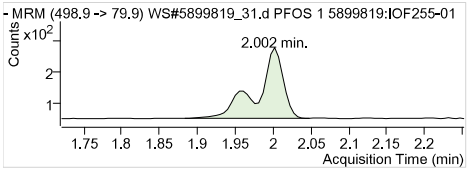


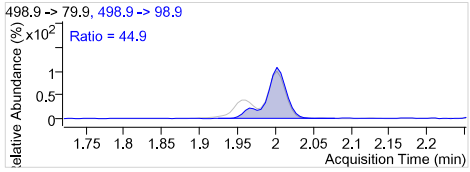
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 1.735 (1.735)
Calc. conc. 0.00 µg/L
Area ratio: 0.04867
Sample type: Sample



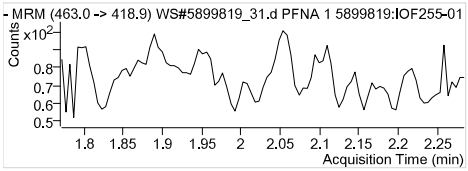


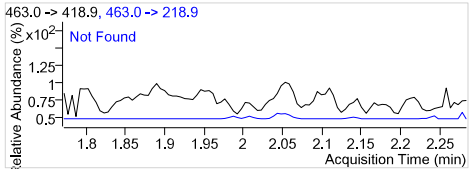
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 1.912 (1.912)
Calc. conc. 0.00 µg/L
Area ratio: 0.09380
Sample type: Sample



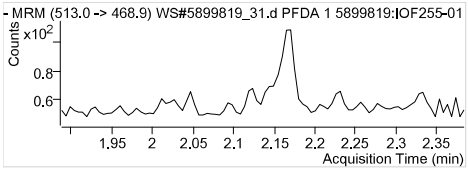


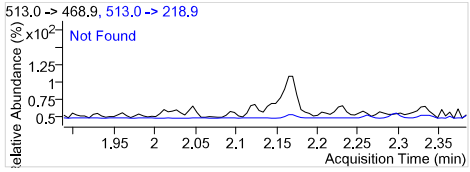
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 2.002 (2.002)
Calc. conc. 0.03 µg/L
Area ratio: 0.57588
Sample type: Sample



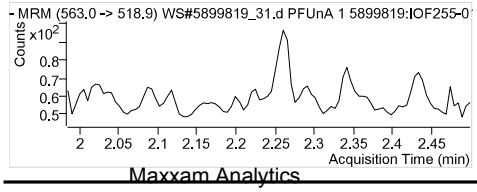


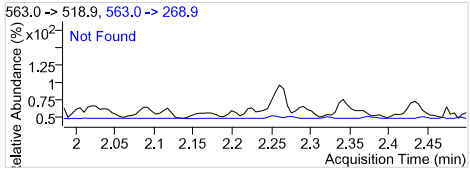
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



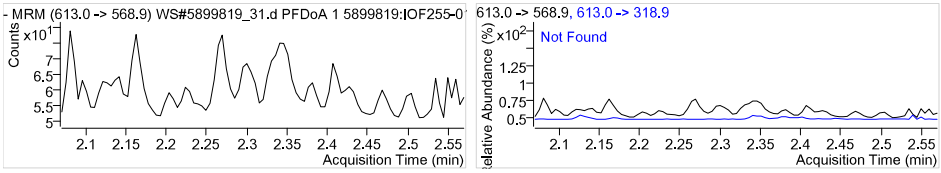


PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample

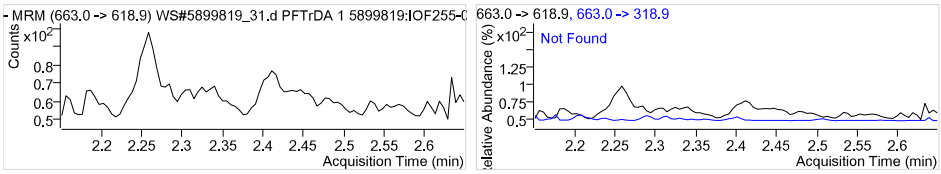




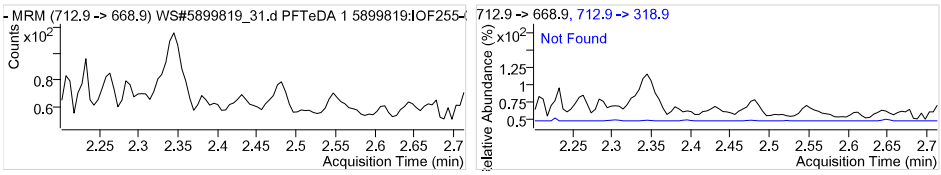
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



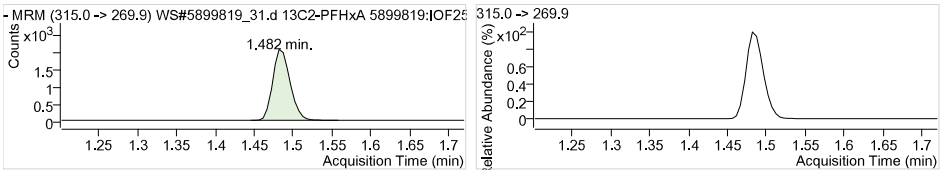
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



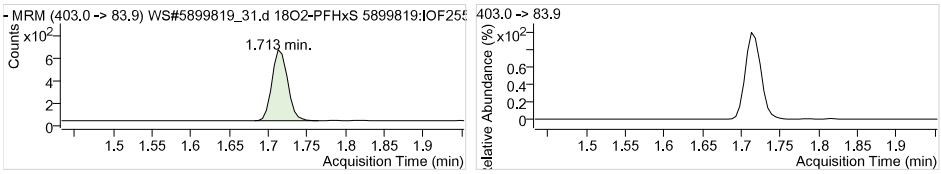
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



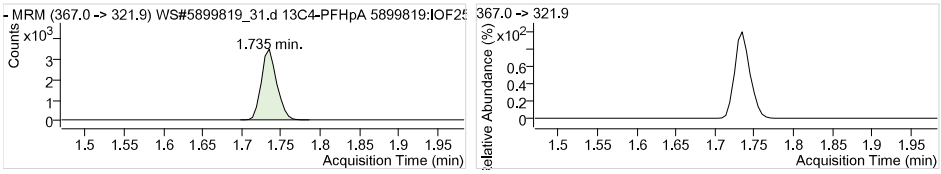
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



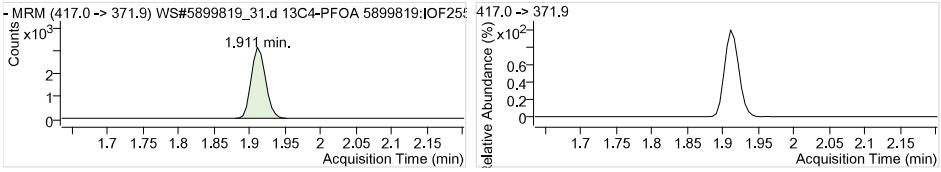
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	83.76 µg/L
Area ratio:	0.18927
Sample type:	Sample



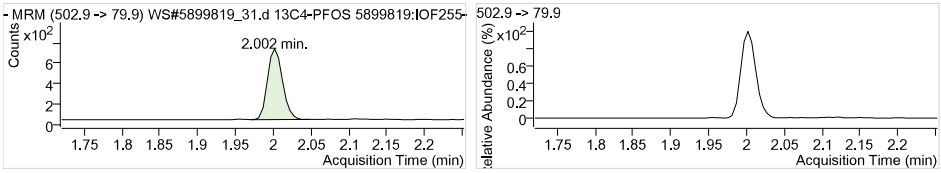
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	89.84 µg/L
Area ratio:	0.05200
Sample type:	Sample



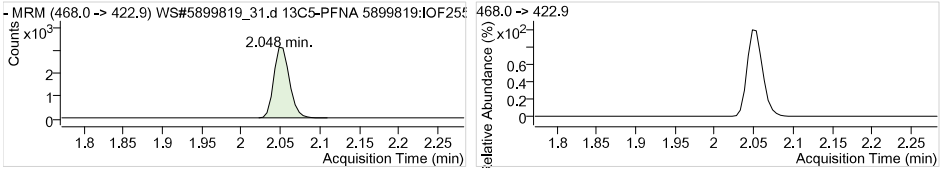
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	85.23 µg/L
Area ratio:	0.27846
Sample type:	Sample



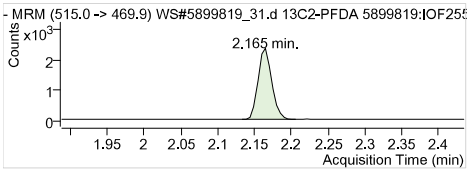
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	84.76 µg/L
Area ratio:	0.25906
Sample type:	Sample

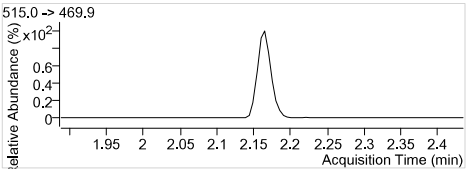


13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	89.98 µg/L
Area ratio:	0.05744
Sample type:	Sample

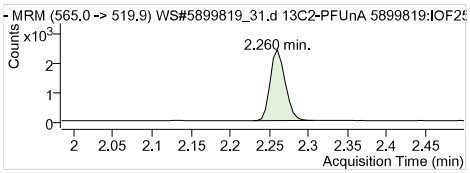


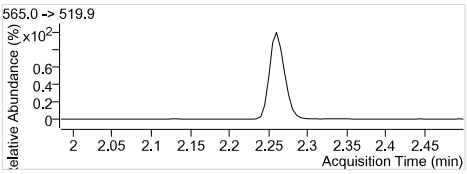
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.048 (2.053)
Calc. conc.	88.55 µg/L
Area ratio:	0.25769
Sample type:	Sample



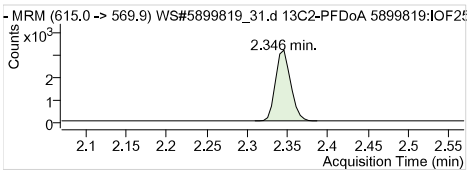


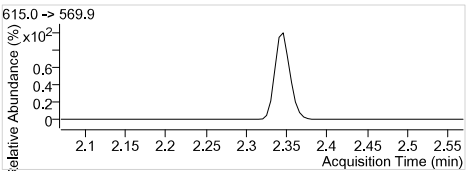
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	88.97 µg/L
Area ratio:	0.15218
Sample type:	Sample



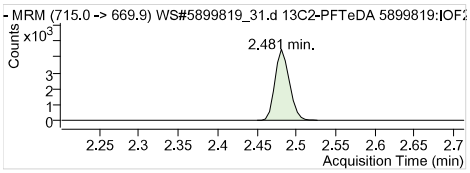


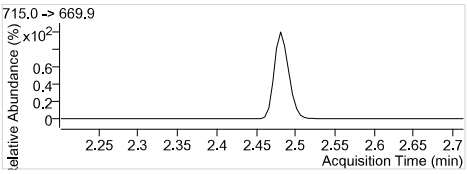
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	81.97 µg/L
Area ratio:	0.16365
Sample type:	Sample



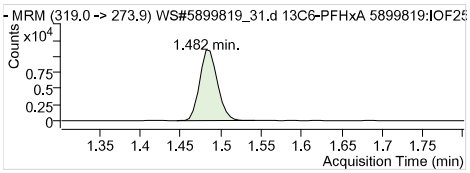


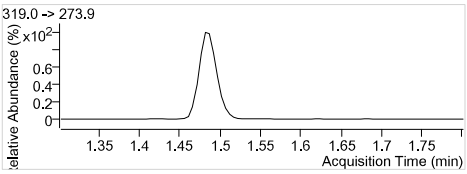
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	82.86 µg/L
Area ratio:	0.21249
Sample type:	Sample



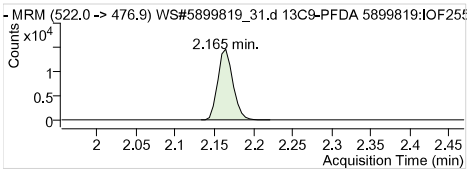


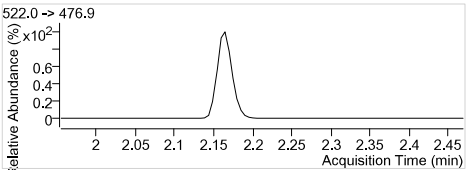
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	76.77 µg/L
Area ratio:	0.28703
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.15 µg/L
Area ratio:	0
Sample type:	Sample





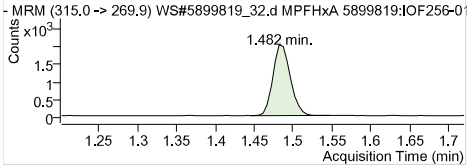
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.13 µg/L
Area ratio:	0
Sample type:	Sample

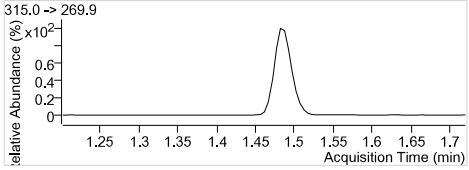
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF256-01**	**Instrument**	LCMS04
Data File	WS#5899819_32.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0229
Acq. Method	PFC_Water_Low.m	**Position**	P1-D1
Acq. Date	2018/12/21 7:06:58 PM	**Injection Volume**	Per Method
Sample Annotation	-		

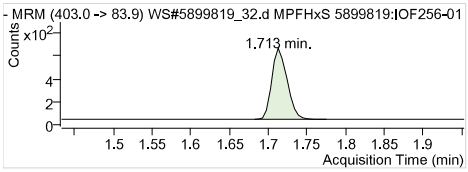
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3123	1.48	1 µg/L		
MPFHxS	836	1.71	1 µg/L		
MPFHpA	4465	1.73	1 µg/L		
MPFOA	4236	1.91	1 µg/L		
MPFOS	882	2.00	1 µg/L		
MPFNA	3960	2.05	1 µg/L		
MPFDA	2795	2.16	1 µg/L		
MPFUnA	3192	2.26	1 µg/L		
MPFDoA	4120	2.35	1 µg/L		
MPFTeDA	5682	2.48	1 µg/L		
13C6-PFHxA IS	16754	1.48	1 µg/L		
13C9-PFDA IS	19827	2.16	1 µg/L		

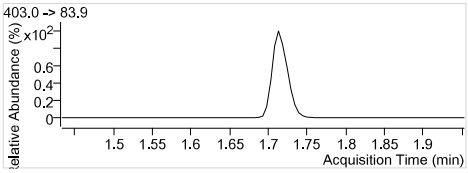
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3123	1.48	-	82.49 µg/L	-
18O2-PFHxS	836	1.71	-	86.21 µg/L	-
13C4-PFHpA	4465	1.73	-	81.57 µg/L	-
13C4-PFOA	4236	1.91	-	82.72 µg/L	-
13C4-PFOS	882	2.00	-	82.47 µg/L	-
13C5-PFNA	3960	2.05	-	81.22 µg/L	-
13C2-PFDA	2795	2.16	-	82.41 µg/L	-
13C2-PFUnA	3192	2.26	-	80.64 µg/L	-
13C2-PFDoA	4120	2.35	-	81.03 µg/L	-
13C2-PFTeDA	5682	2.48	-	76.65 µg/L	-
13C6-PFHxA	16754	1.48	-	2.28 µg/L	-
13C9-PFDA	19827	2.16	-	2.28 µg/L	-



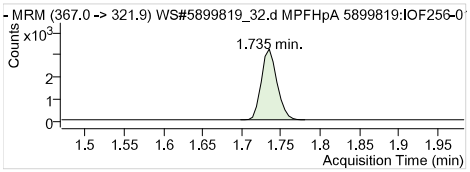


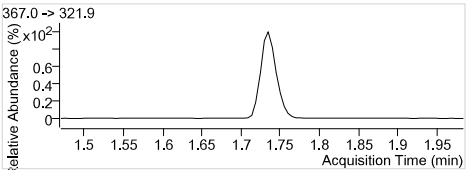
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



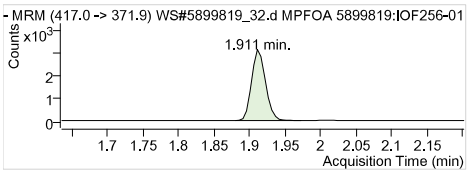


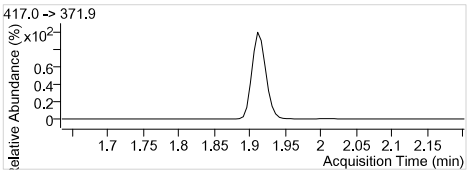
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



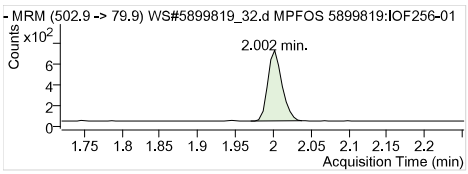


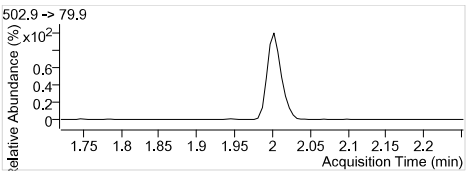
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



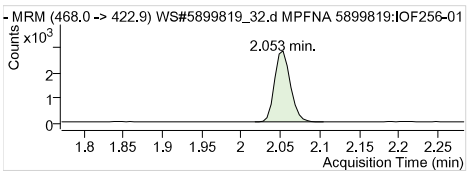


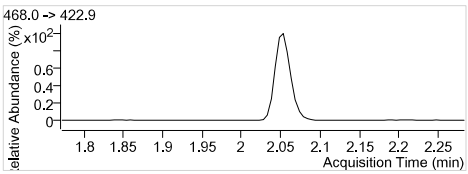
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



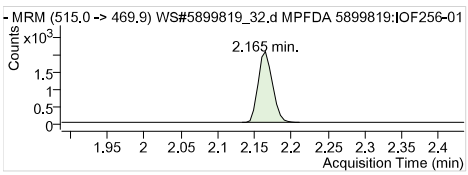


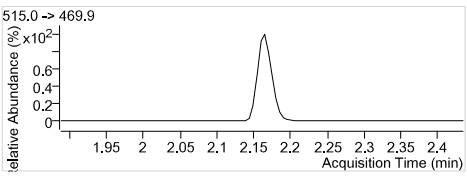
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



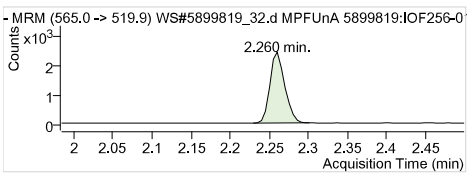


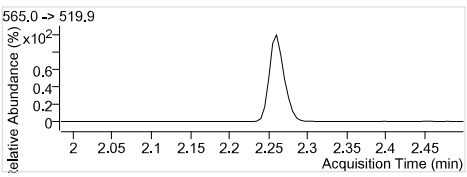
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



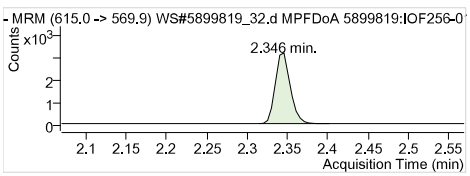


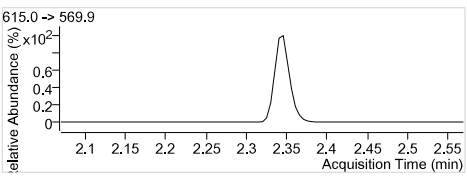
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



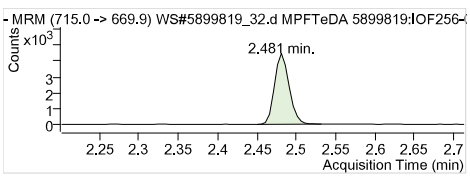


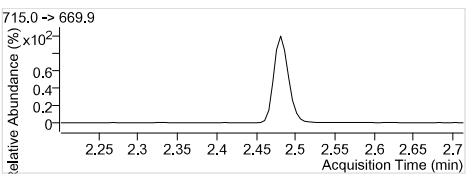
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



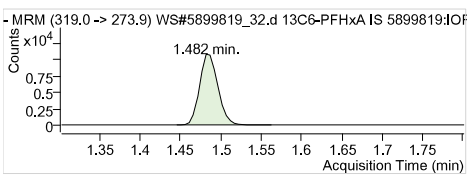


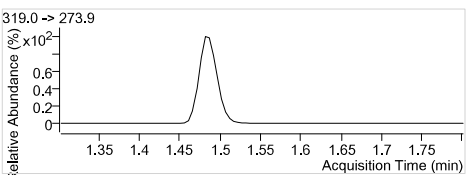
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample



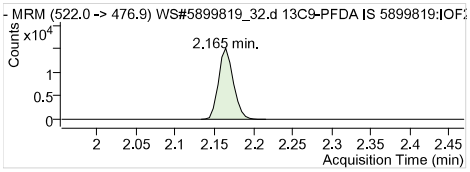


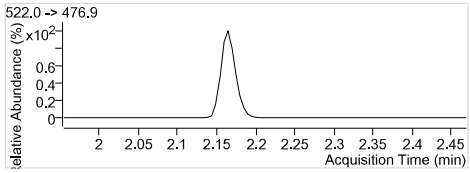
MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample



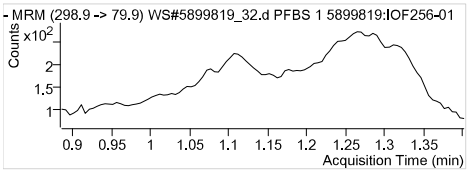


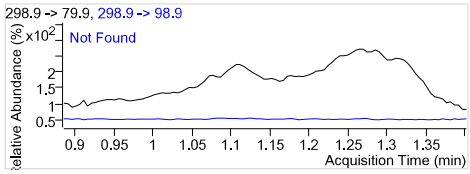
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



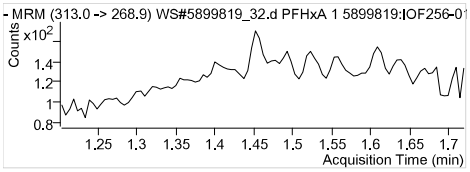


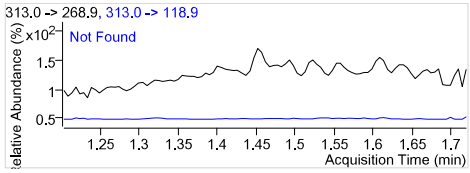
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



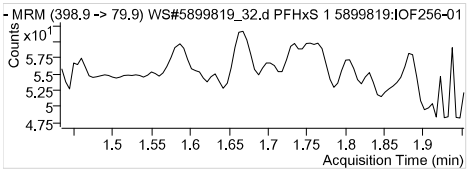


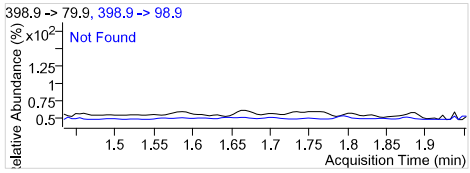
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



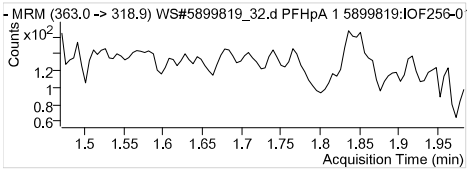


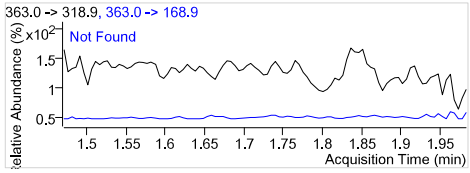
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



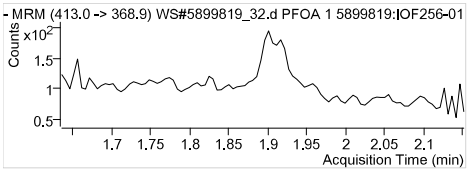


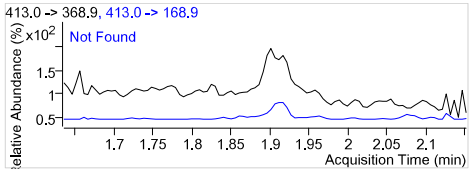
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



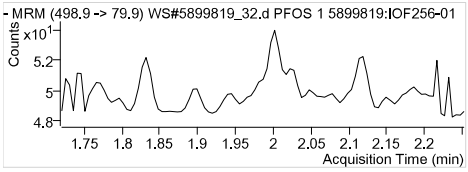


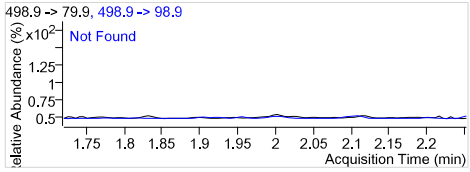
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



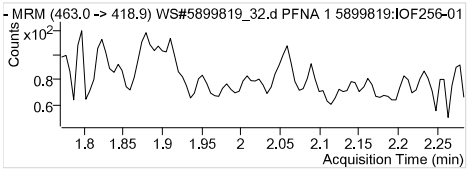


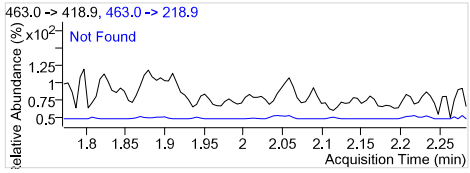
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



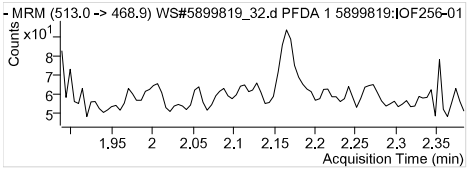


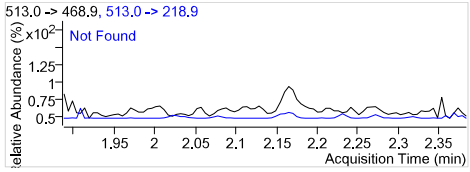
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



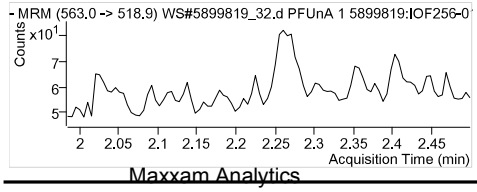


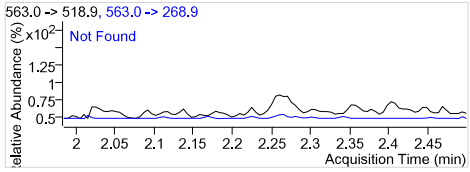
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



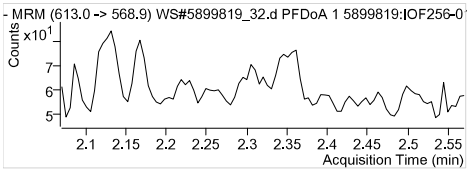


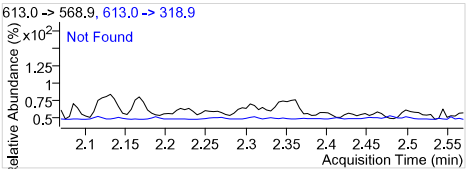
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



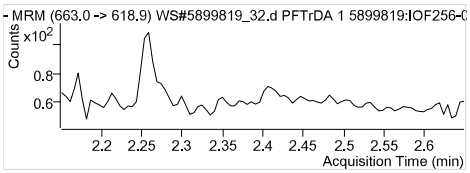


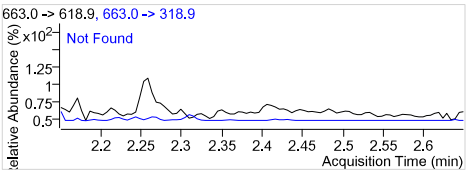
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



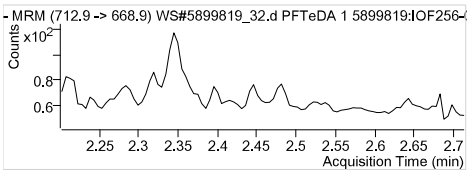


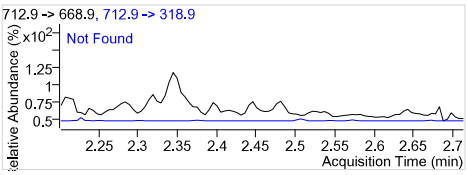
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



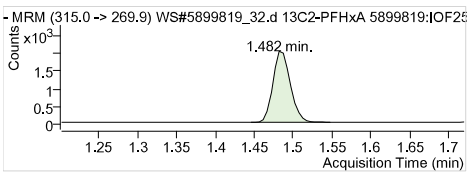


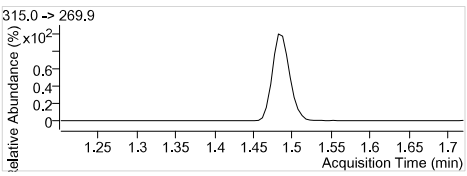
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



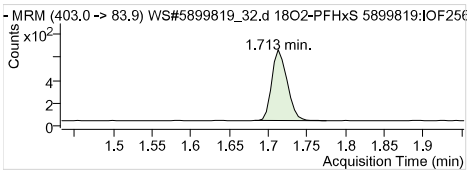


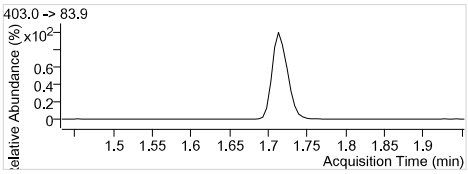
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



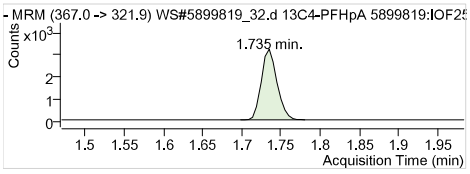


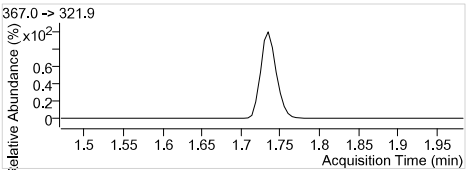
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	82.49 µg/L
Area ratio:	0.18640
Sample type:	Sample



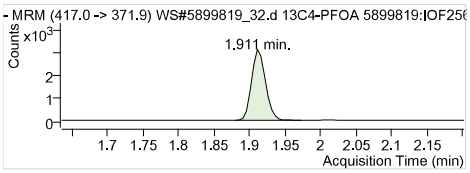


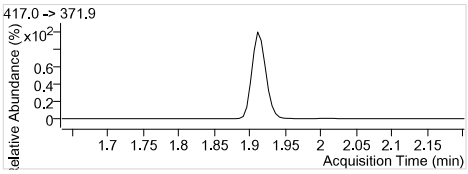
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	86.21 µg/L
Area ratio:	0.04990
Sample type:	Sample



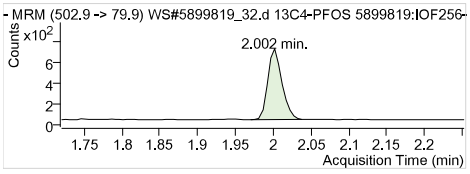


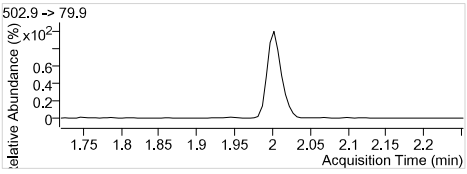
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	81.57 µg/L
Area ratio:	0.26650
Sample type:	Sample



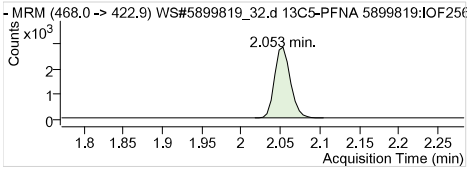


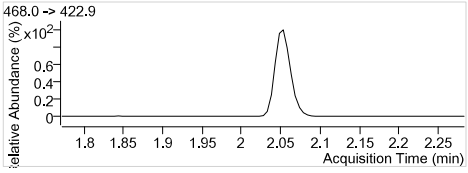
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	82.72 µg/L
Area ratio:	0.25284
Sample type:	Sample



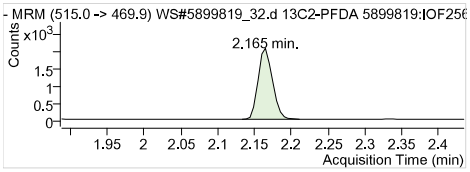


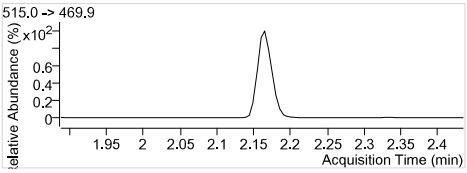
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	82.47 µg/L
Area ratio:	0.05264
Sample type:	Sample



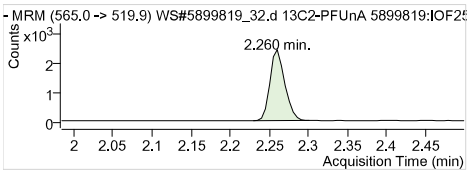


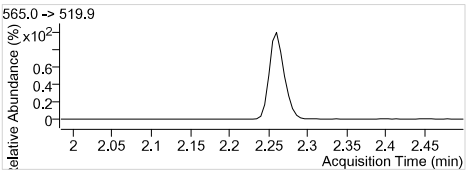
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	81.22 µg/L
Area ratio:	0.23636
Sample type:	Sample



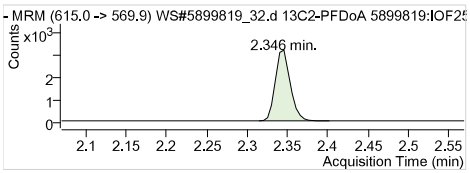


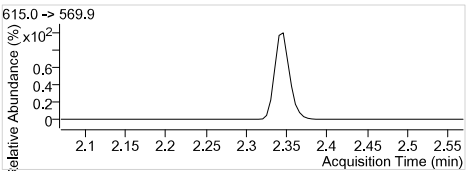
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	82.41 µg/L
Area ratio:	0.14097
Sample type:	Sample



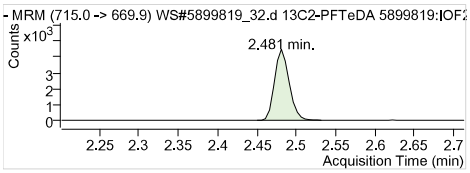


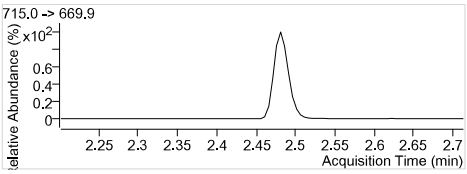
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	80.64 µg/L
Area ratio:	0.16099
Sample type:	Sample



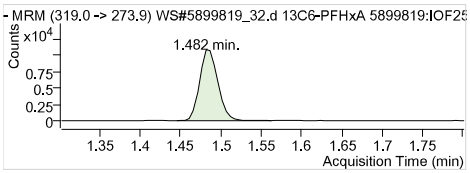


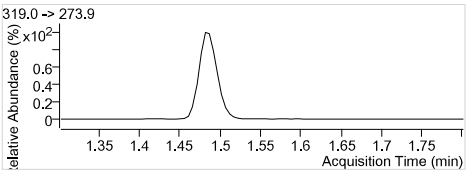
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	81.03 µg/L
Area ratio:	0.20780
Sample type:	Sample



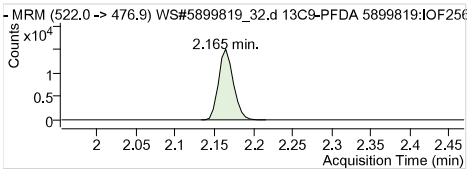


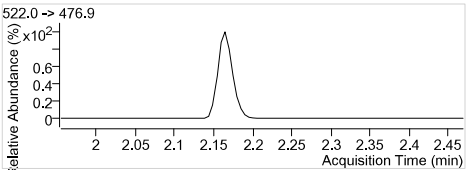
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	76.65 µg/L
Area ratio:	0.28658
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.28 µg/L
Area ratio:	0
Sample type:	Sample





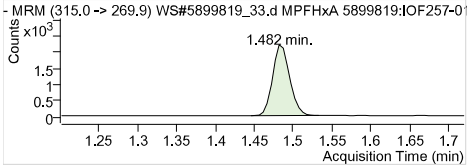
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.28 µg/L
Area ratio:	0
Sample type:	Sample

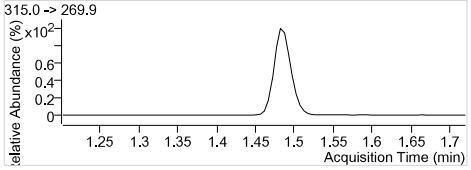
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819\QuantResults\PFC_Water_Low_20181221_WS#5899819_EToxics

Sample Name	**5899819:IOF257-01**	**Instrument**	LCMS04
Data File	WS#5899819_33.d	**Operator**	
Sample Type	Sample	**Dilution**	0.024
Acq. Method	PFC_Water_Low.m	**Position**	P1-D2
Acq. Date	2018/12/21 7:11:53 PM	**Injection Volume**	Per Method
Sample Annotation	-		

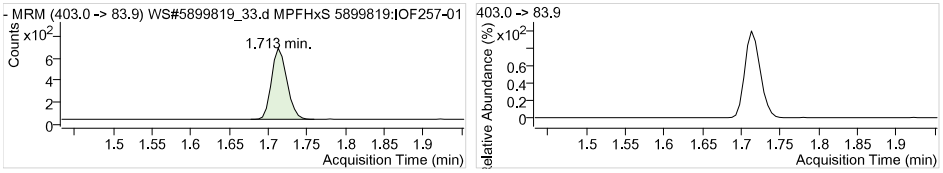
ISTD Compounds	Response	RT	Target conc.		
MPFHxA	3293	1.48	1 µg/L		
MPFHxS	868	1.71	1 µg/L		
MPFHpA	4726	1.73	1 µg/L		
MPFOA	4568	1.91	1 µg/L		
MPFOS	972	2.00	1 µg/L		
MPFNA	4355	2.05	1 µg/L		
MPFDA	2837	2.16	1 µg/L		
MPFUnA	3503	2.26	1 µg/L		
MPFDoA	4192	2.35	1 µg/L		
MPFTeDA	5839	2.48	1 µg/L		
13C6-PFHxA IS	16612	1.48	1 µg/L		
13C9-PFDA IS	19863	2.16	1 µg/L		

Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
PFBS 1			-	ND	-
PFHxA 1			-	ND	-
PFHxS 1			-	ND	-
PFHpA 1			-	ND	-
PFOA 1			-	ND	-
PFOS 1			-	ND	-
PFNA 1			-	ND	-
PFDA 1			-	ND	-
PFUnA 1			-	ND	-
PFDoA 1			-	ND	-
PFTrDA 1			-	ND	-
PFTeDA 1			-	ND	-
13C2-PFHxA	3293	1.48	-	87.72 µg/L	-
18O2-PFHxS	868	1.71	-	90.27 µg/L	-
13C4-PFHpA	4726	1.73	-	87.07 µg/L	-
13C4-PFOA	4568	1.91	-	89.97 µg/L	-
13C4-PFOS	972	2.00	-	91.66 µg/L	-
13C5-PFNA	4355	2.05	-	90.08 µg/L	-
13C2-PFDA	2837	2.16	-	83.50 µg/L	-
13C2-PFUnA	3503	2.26	-	88.33 µg/L	-
13C2-PFDoA	4192	2.35	-	82.30 µg/L	-
13C2-PFTeDA	5839	2.48	-	78.62 µg/L	-
13C6-PFHxA	16612	1.48	-	2.37 µg/L	-
13C9-PFDA	19863	2.16	-	2.40 µg/L	-

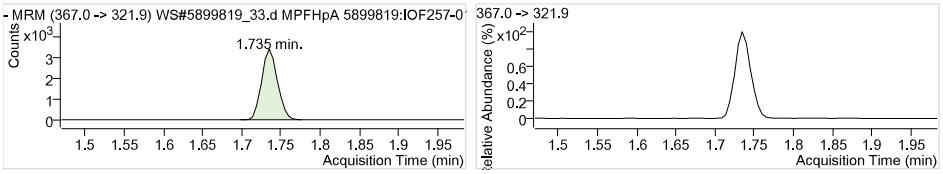




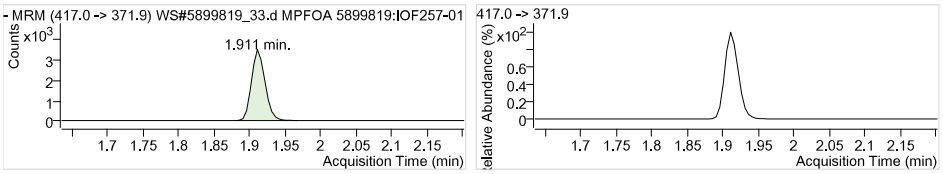
MPFHxA	Internal Standard
RT (Exp. RT):	1.482 (1.487)
Concentration:	1 µg/L
Sample type:	Sample



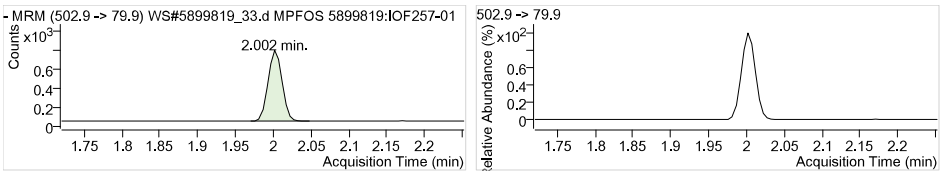
MPFHxS Internal Standard
RT (Exp. RT): 1.713 (1.713)
Concentration: 1 µg/L
Sample type: Sample



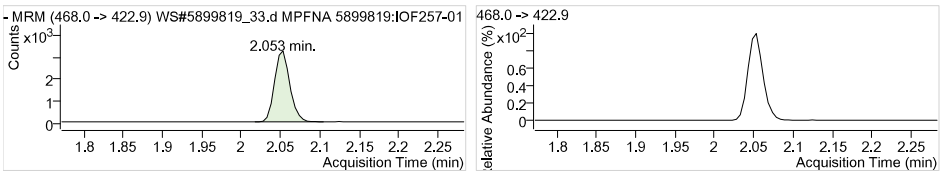
MPFHpA Internal Standard
RT (Exp. RT): 1.735 (1.735)
Concentration: 1 µg/L
Sample type: Sample



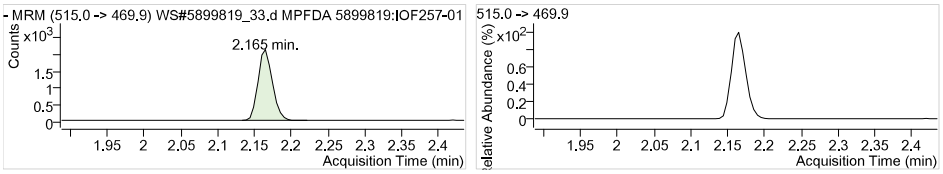
MPFOA Internal Standard
RT (Exp. RT): 1.911 (1.911)
Concentration: 1 µg/L
Sample type: Sample



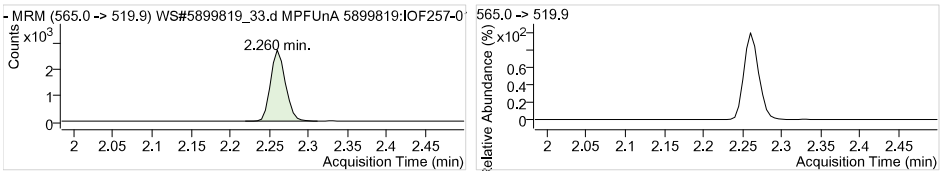
MPFOS Internal Standard
RT (Exp. RT): 2.002 (2.002)
Concentration: 1 µg/L
Sample type: Sample



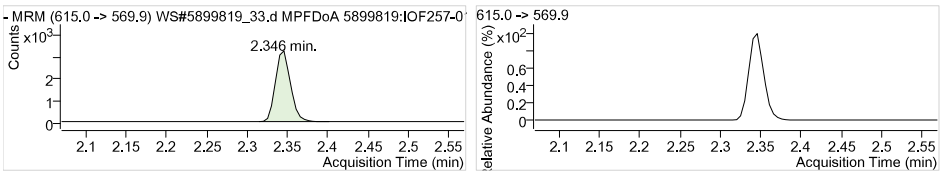
MPFNA Internal Standard
RT (Exp. RT): 2.053 (2.053)
Concentration: 1 µg/L
Sample type: Sample



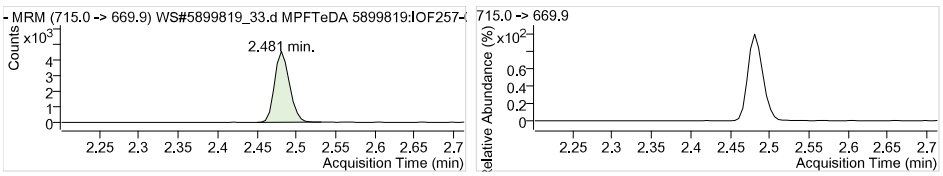
MPFDA Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



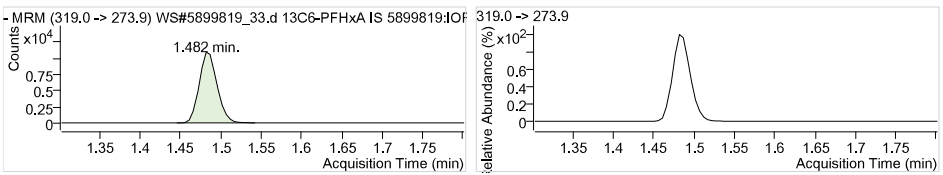
MPFUnA Internal Standard
RT (Exp. RT): 2.260 (2.260)
Concentration: 1 µg/L
Sample type: Sample



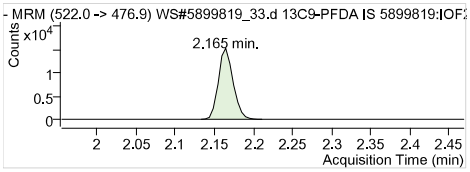
MPFDoA Internal Standard
RT (Exp. RT): 2.346 (2.346)
Concentration: 1 µg/L
Sample type: Sample

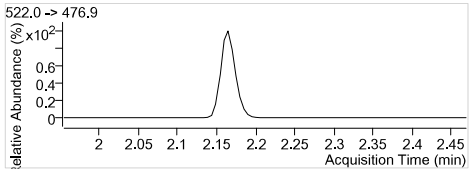


MPFTeDA Internal Standard
RT (Exp. RT): 2.481 (2.481)
Concentration: 1 µg/L
Sample type: Sample

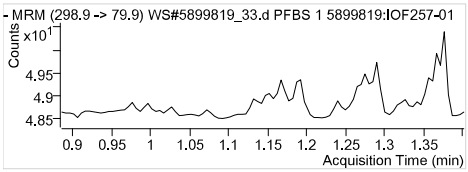


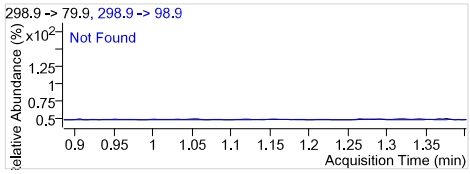
13C6-PFHxA IS Internal Standard
RT (Exp. RT): 1.482 (1.487)
Concentration: 1 µg/L
Sample type: Sample



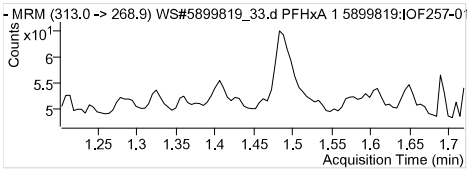


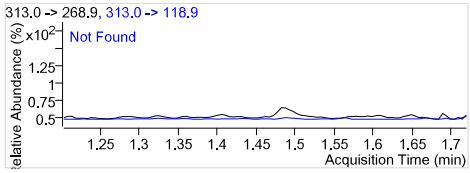
13C9-PFDA IS Internal Standard
RT (Exp. RT): 2.165 (2.165)
Concentration: 1 µg/L
Sample type: Sample



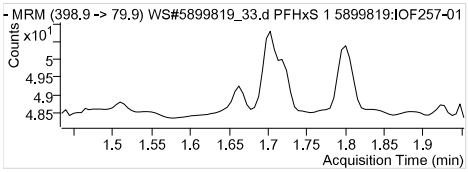


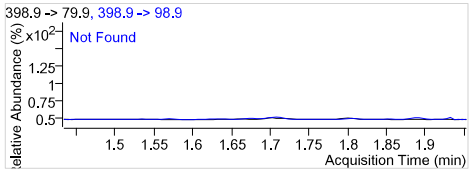
PFBS 1 298.9 -> 79.9
RT (Exp. RT): 0.000 (1.162)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



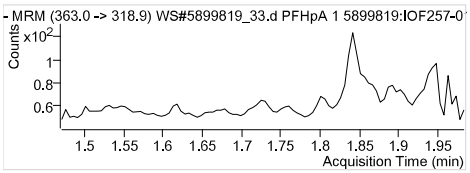


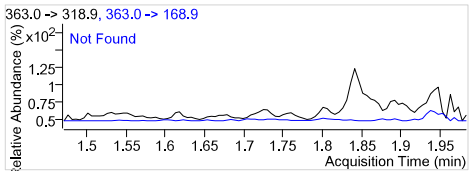
PFHxA 1 313.0 -> 268.9
RT (Exp. RT): 0.000 (1.488)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



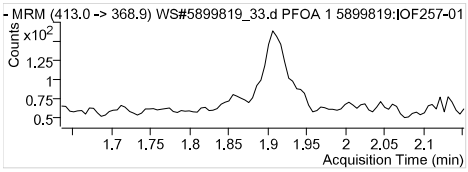


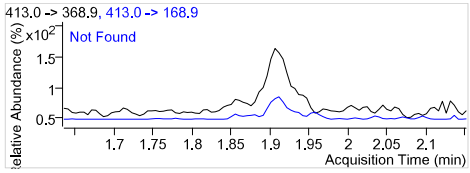
PFHxS 1 398.9 -> 79.9
RT (Exp. RT): 0.000 (1.713)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



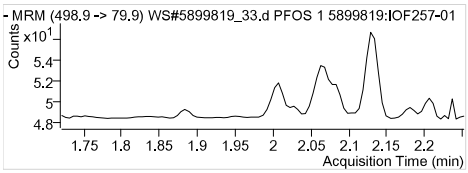


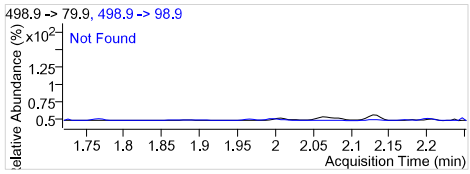
PFHpA 1 363.0 -> 318.9
RT (Exp. RT): 0.000 (1.735)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



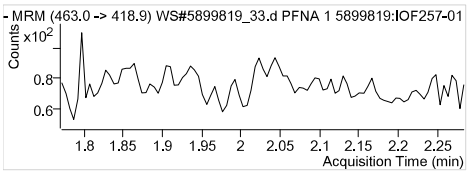


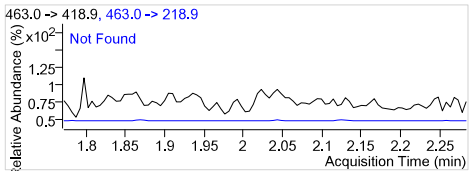
PFOA 1 413.0 -> 368.9
RT (Exp. RT): 0.000 (1.912)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



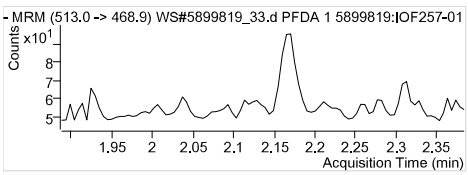


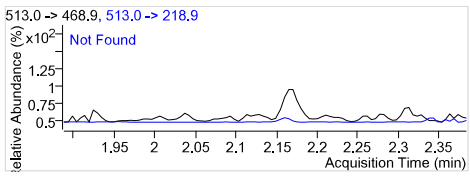
PFOS 1 498.9 -> 79.9
RT (Exp. RT): 0.000 (2.002)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



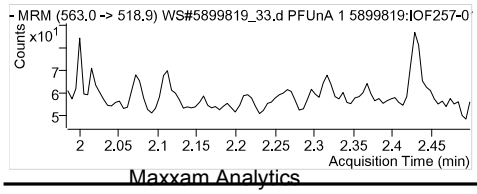


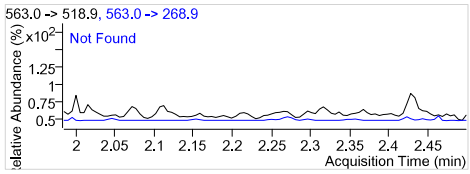
PFNA 1 463.0 -> 418.9
RT (Exp. RT): 0.000 (2.053)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



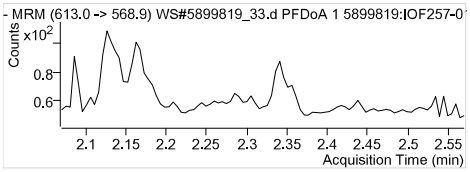


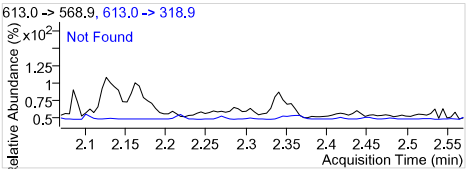
PFDA 1 513.0 -> 468.9
RT (Exp. RT): 0.000 (2.165)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



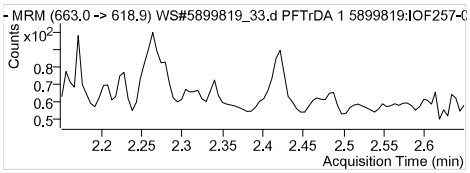


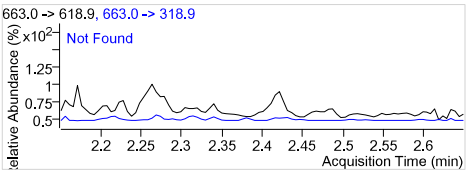
PFUnA 1 563.0 -> 518.9
RT (Exp. RT): 0.000 (2.260)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



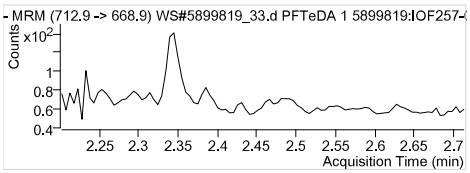


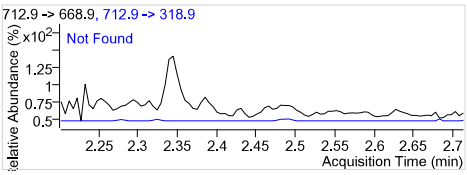
PFDoA 1	613.0 -> 568.9
RT (Exp. RT):	0.000 (2.346)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



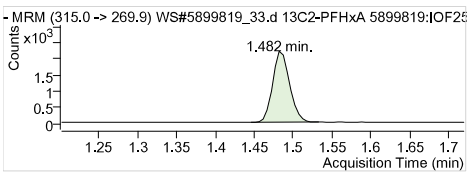


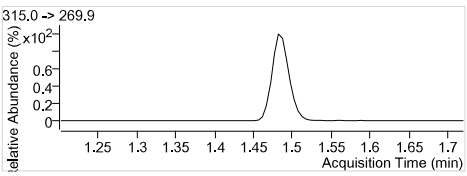
PFTrDA 1	663.0 -> 618.9
RT (Exp. RT):	0.000 (2.416)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



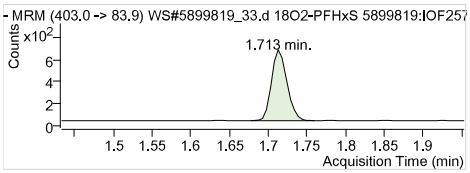


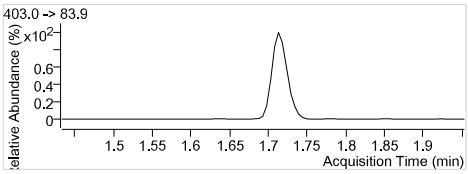
PFTeDA 1	712.9 -> 668.9
RT (Exp. RT):	0.000 (2.481)
Calc. conc.	N.D.
Area ratio:	0
Sample type:	Sample



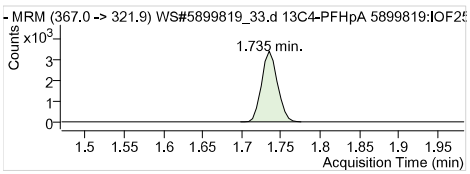


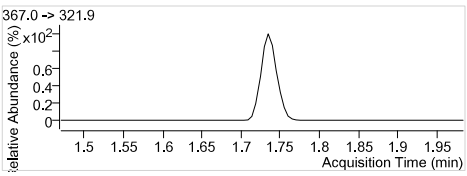
13C2-PFHxA	315.0 -> 269.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	87.72 µg/L
Area ratio:	0.19823
Sample type:	Sample



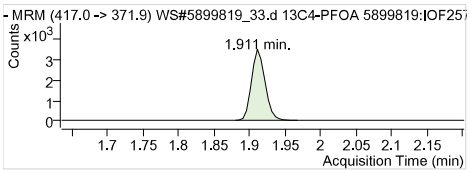


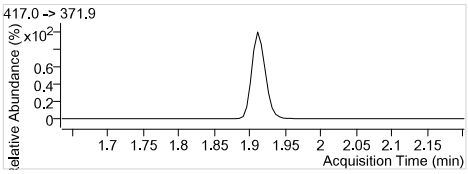
18O2-PFHxS	403.0 -> 83.9
RT (Exp. RT):	1.713 (1.713)
Calc. conc.	90.27 µg/L
Area ratio:	0.05225
Sample type:	Sample



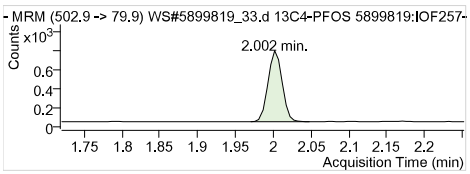


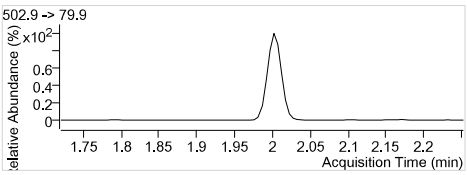
13C4-PFHpA	367.0 -> 321.9
RT (Exp. RT):	1.735 (1.735)
Calc. conc.	87.07 µg/L
Area ratio:	0.28449
Sample type:	Sample



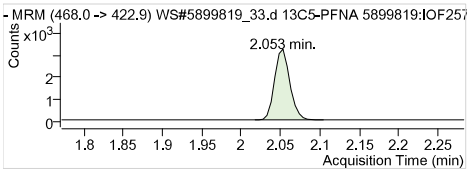


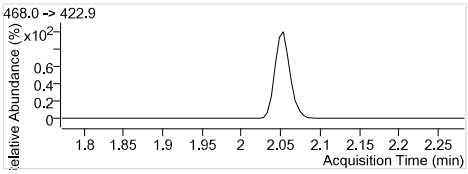
13C4-PFOA	417.0 -> 371.9
RT (Exp. RT):	1.911 (1.911)
Calc. conc.	89.97 µg/L
Area ratio:	0.27498
Sample type:	Sample



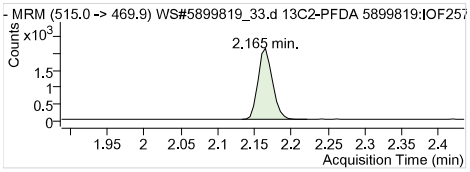


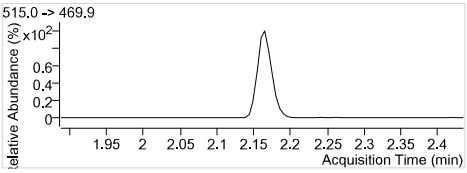
13C4-PFOS	502.9 -> 79.9
RT (Exp. RT):	2.002 (2.002)
Calc. conc.	91.66 µg/L
Area ratio:	0.05851
Sample type:	Sample



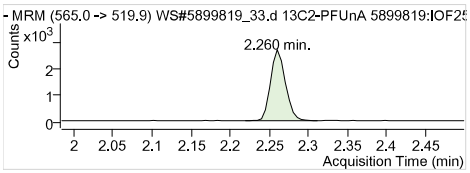


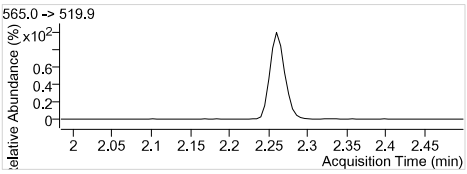
13C5-PFNA	468.0 -> 422.9
RT (Exp. RT):	2.053 (2.053)
Calc. conc.	90.08 µg/L
Area ratio:	0.26216
Sample type:	Sample



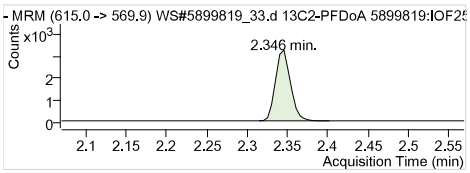


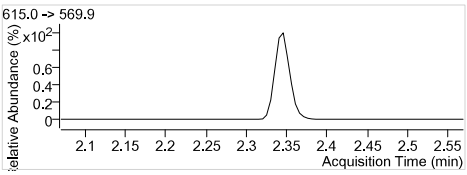
13C2-PFDA	515.0 -> 469.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	83.50 µg/L
Area ratio:	0.14283
Sample type:	Sample



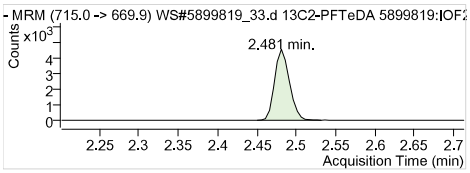


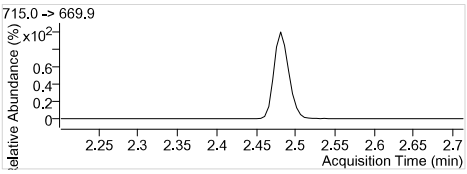
13C2-PFUnA	565.0 -> 519.9
RT (Exp. RT):	2.260 (2.260)
Calc. conc.	88.33 µg/L
Area ratio:	0.17636
Sample type:	Sample



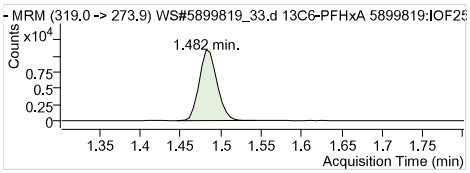


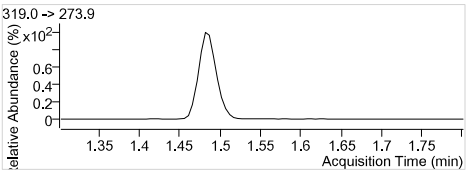
13C2-PFDoA	615.0 -> 569.9
RT (Exp. RT):	2.346 (2.346)
Calc. conc.	82.30 µg/L
Area ratio:	0.21105
Sample type:	Sample



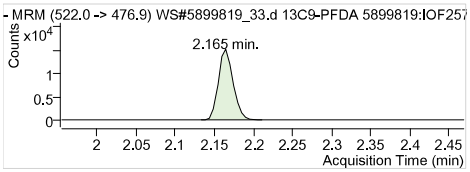


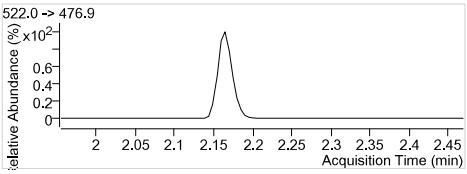
13C2-PFTeDA	715.0 -> 669.9
RT (Exp. RT):	2.481 (2.481)
Calc. conc.	78.62 µg/L
Area ratio:	0.29396
Sample type:	Sample





13C6-PFHxA	319.0 -> 273.9
RT (Exp. RT):	1.482 (1.487)
Calc. conc.	2.37 µg/L
Area ratio:	0
Sample type:	Sample





13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	2.165 (2.165)
Calc. conc.	2.40 µg/L
Area ratio:	0
Sample type:	Sample

Quantitation Results

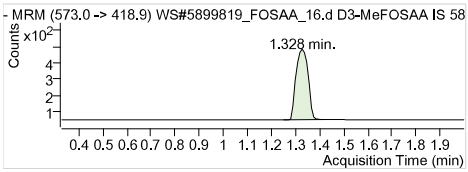
Agilent Technologies

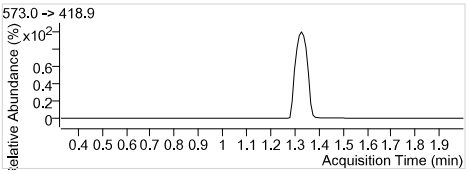
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5899819_FOSAA_ETOxics

Sample Name	**5899819:IOF247-01**	**Instrument**	LCMS04
Data File	WS#5899819_FOSAA_16.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0231
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P1-C2
Acq. Date	2018/12/22 12:00:29 AM	**Injection Volume**	Per Method
Sample Annotation	-		

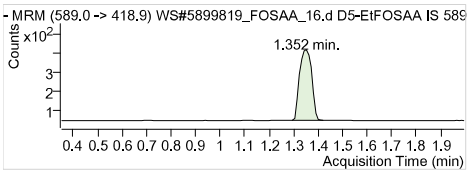
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1520	1.33	1 µg/L		
D5-EtFOSAA IS	1285	1.35	1 µg/L		
13C9-PFDA IS	22184	0.93	1 µg/L		

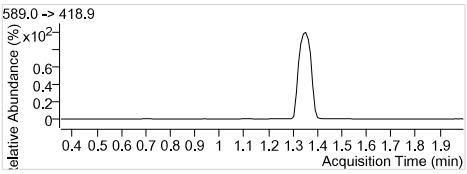
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1520	1.33	-	80.79 µg/L	-
D5-EtFOSAA	1287	1.35	-	76.33 µg/L	-
13C9-PFDA	22186	0.93	-	2.47 µg/L	-



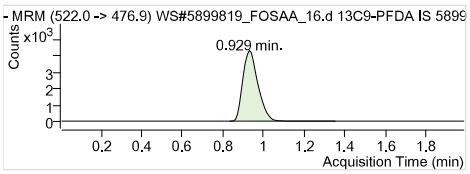


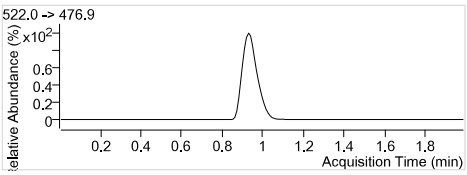
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



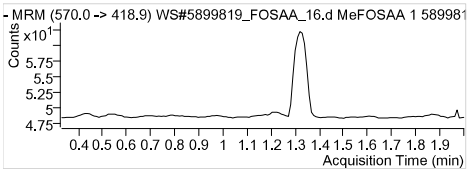


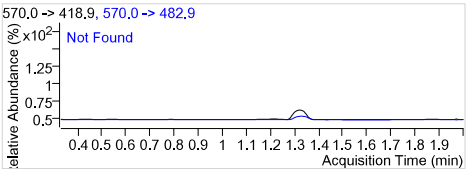
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



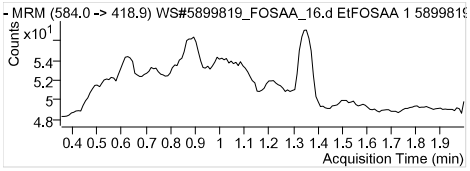


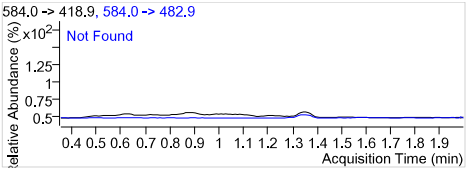
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.929 (0.986)
Concentration: 1 µg/L
Sample type: Sample



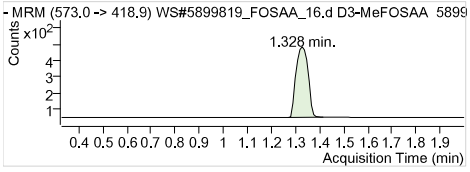


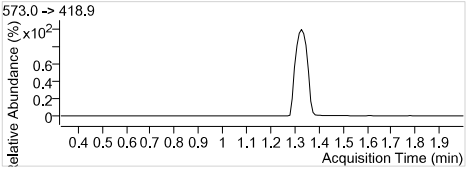
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



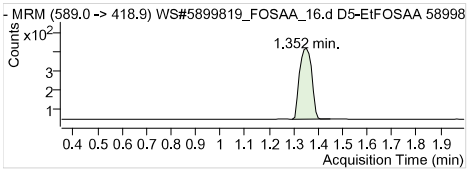


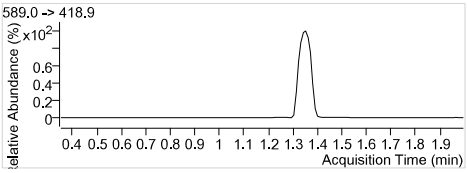
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.354)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



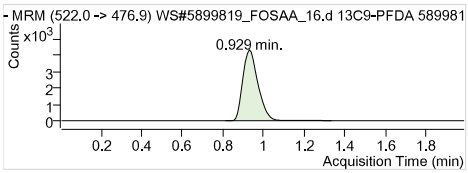


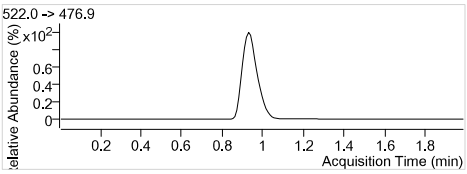
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 80.79 µg/L
Area ratio: 0.06852
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	76.33 µg/L
Area ratio:	0.05801
Sample type:	Sample





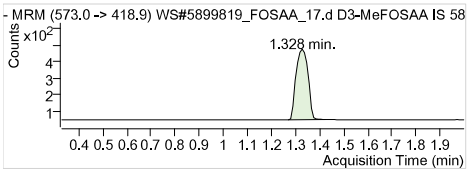
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.929 (0.986)
Calc. conc.	2.47 µg/L
Area ratio:	0
Sample type:	Sample

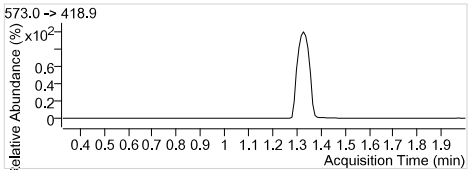
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5899819_FOSAA_EToxics

Sample Name	**5899819:IOF248-01**	**Instrument**	LCMS04
Data File	WS#5899819_FOSAA_17.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0234
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P1-C3
Acq. Date	2018/12/22 12:02:52 AM	**Injection Volume**	Per Method
Sample Annotation	-		

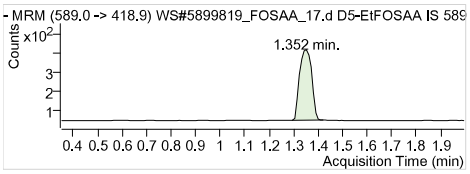
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1472	1.33	1 µg/L		
D5-EtFOSAA IS	1288	1.35	1 µg/L		
13C9-PFDA IS	21781	0.93	1 µg/L		

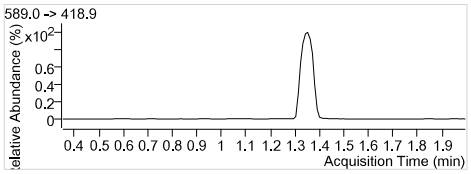
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1483	1.33	-	80.28 µg/L	-
D5-EtFOSAA	1300	1.35	-	78.52 µg/L	-
13C9-PFDA	21772	0.93	-	2.45 µg/L	-



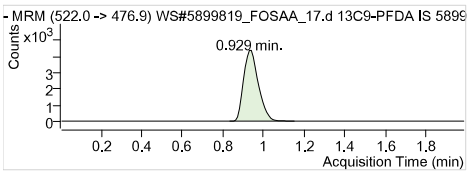


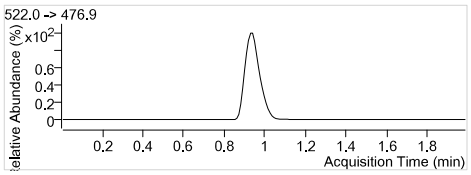
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



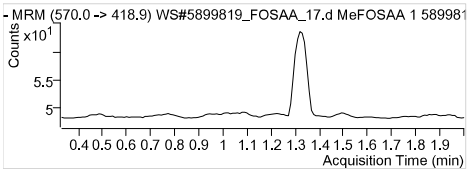


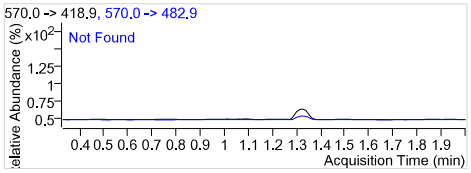
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



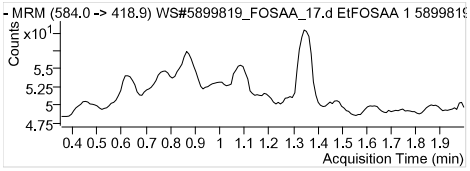


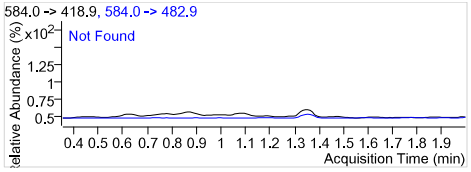
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.929 (0.986)
Concentration: 1 µg/L
Sample type: Sample



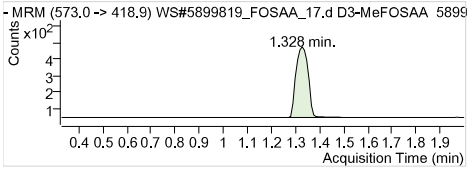


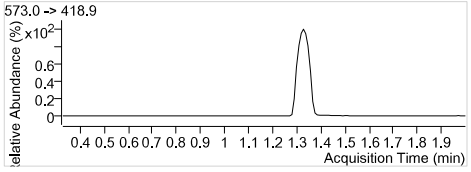
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



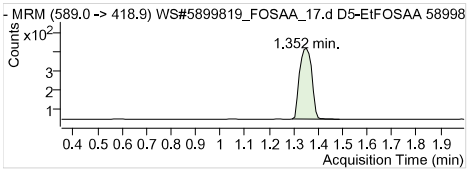


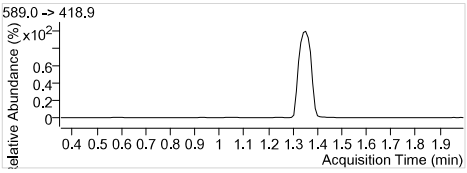
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.354)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



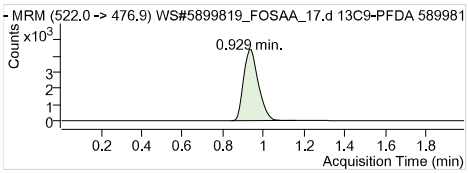


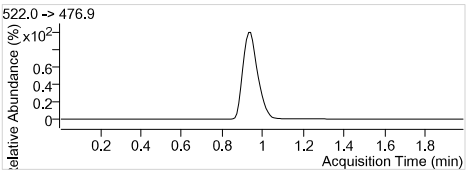
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 80.28 µg/L
Area ratio: 0.06809
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	78.52 µg/L
Area ratio:	0.05969
Sample type:	Sample





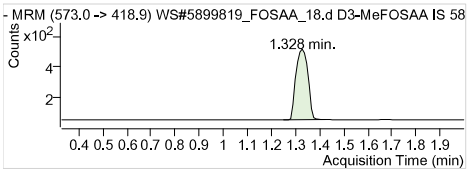
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.929 (0.986)
Calc. conc.	2.45 µg/L
Area ratio:	0
Sample type:	Sample

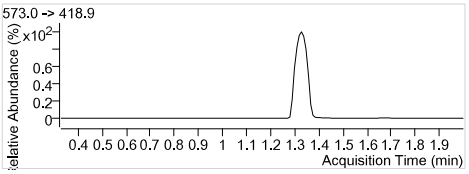
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5899819_FOSAA_ETOxics

Sample Name	**5899819:IOF249-01**	**Instrument**	LCMS04
Data File	WS#5899819_FOSAA_18.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0221
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P1-C4
Acq. Date	2018/12/22 12:05:13 AM	**Injection Volume**	Per Method
Sample Annotation	-		

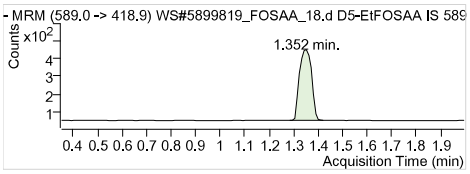
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1624	1.33	1 µg/L		
D5-EtFOSAA IS	1396	1.35	1 µg/L		
13C9-PFDA IS	22450	0.92	1 µg/L		

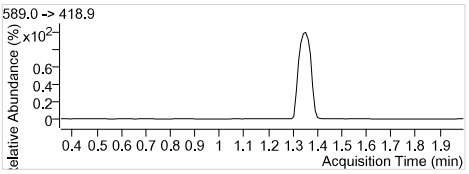
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1630	1.33	-	85.61 µg/L	-
D5-EtFOSAA	1401	1.35	-	82.10 µg/L	-
13C9-PFDA	22564	0.92	-	2.40 µg/L	-



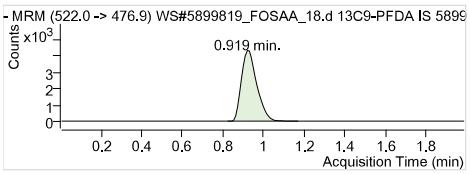


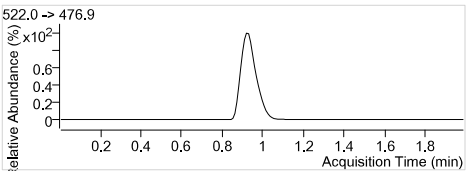
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



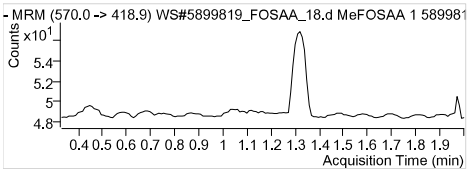


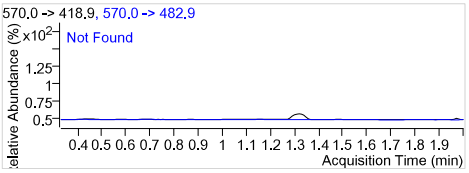
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



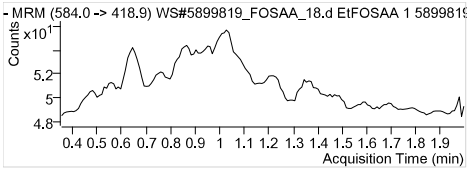


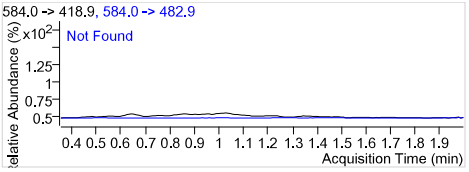
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.919 (0.986)
Concentration: 1 µg/L
Sample type: Sample



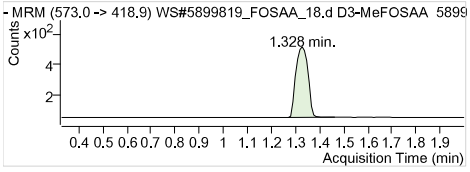


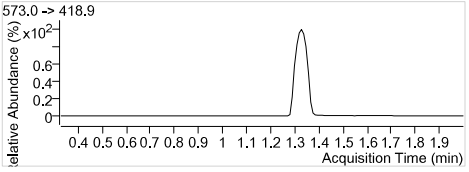
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



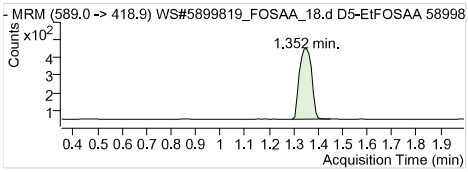


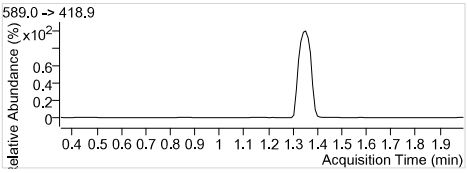
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.354)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



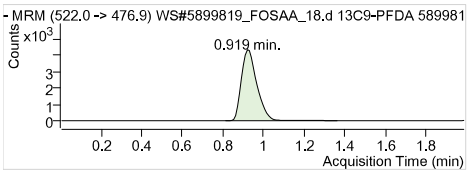


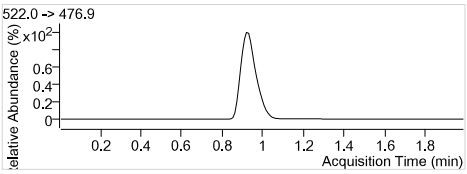
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 85.61 µg/L
Area ratio: 0.07261
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	82.10 µg/L
Area ratio:	0.06241
Sample type:	Sample





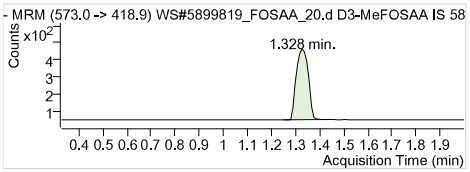
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.919 (0.986)
Calc. conc.	2.40 µg/L
Area ratio:	0
Sample type:	Sample

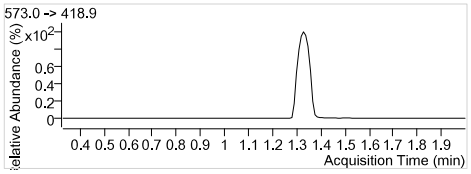
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5899819_FOSAA_ETOxics

Sample Name	**5899819:IOF250-01**	**Instrument**	LCMS04
Data File	WS#5899819_FOSAA_20.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0213
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P1-C5
Acq. Date	2018/12/22 12:09:59 AM	**Injection Volume**	Per Method
Sample Annotation	-		

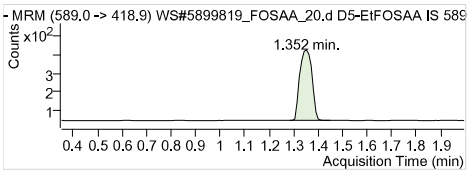
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1436	1.33	1 µg/L		
D5-EtFOSAA IS	1299	1.35	1 µg/L		
13C9-PFDA IS	20731	0.94	1 µg/L		

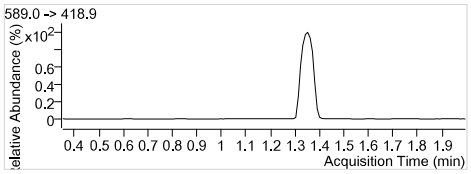
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1438	1.33	-	81.79 µg/L	-
D5-EtFOSAA	1297	1.35	-	82.31 µg/L	-
13C9-PFDA	20727	0.94	-	2.12 µg/L	-



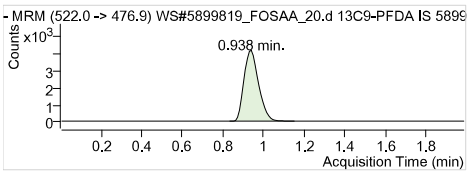


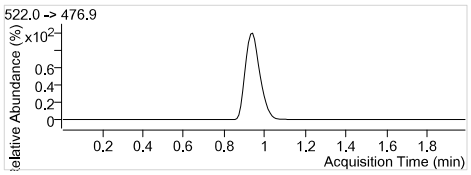
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



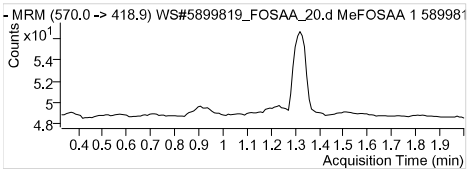


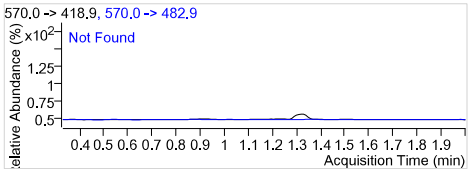
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



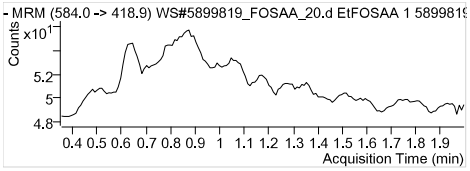


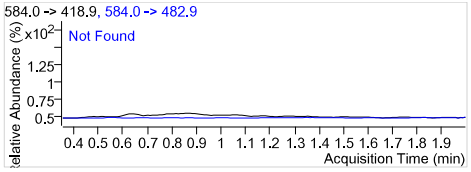
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.938 (0.986)
Concentration: 1 µg/L
Sample type: Sample



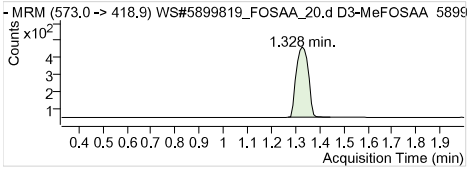


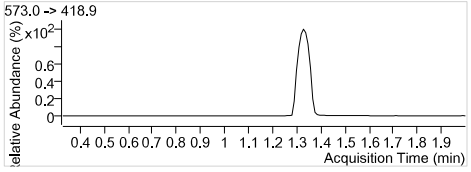
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



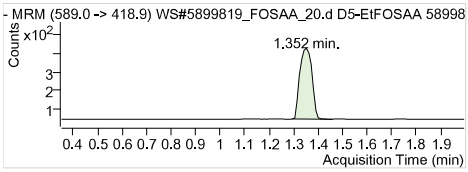


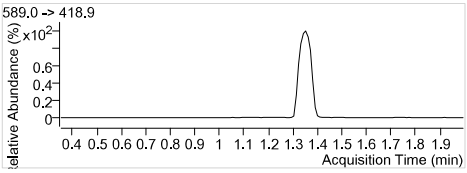
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.354)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



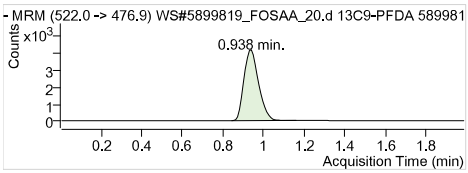


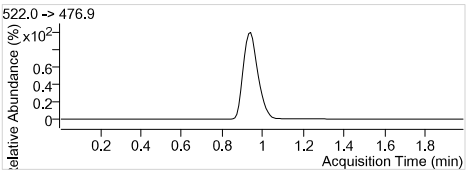
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 81.79 µg/L
Area ratio: 0.06936
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	82.31 µg/L
Area ratio:	0.06256
Sample type:	Sample





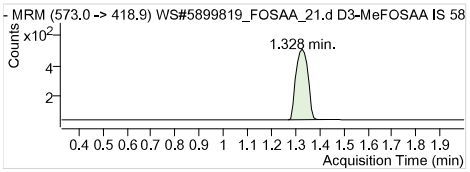
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.938 (0.986)
Calc. conc.	2.12 µg/L
Area ratio:	0
Sample type:	Sample

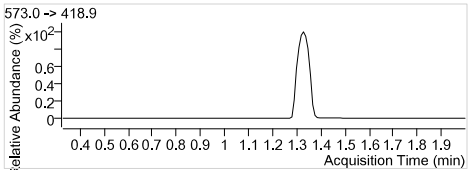
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5899819_FOSAA_ETOxics

Sample Name	**5899819:IOF251-01**	**Instrument**	LCMS04
Data File	WS#5899819_FOSAA_21.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0234
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P1-C6
Acq. Date	2018/12/22 12:12:22 AM	**Injection Volume**	Per Method
Sample Annotation	-		

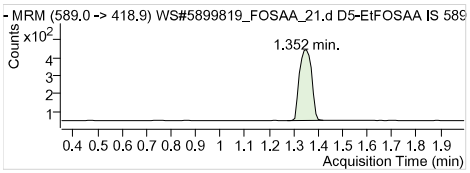
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1596	1.33	1 µg/L		
D5-EtFOSAA IS	1368	1.35	1 µg/L		
13C9-PFDA IS	21466	0.92	1 µg/L		

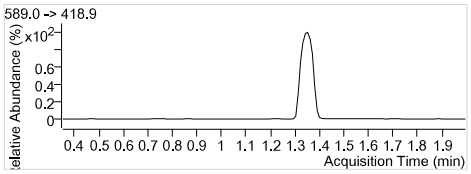
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1596	1.33	-	87.66 µg/L	-
D5-EtFOSAA	1370	1.35	-	83.97 µg/L	-
13C9-PFDA	21467	0.92	-	2.42 µg/L	-



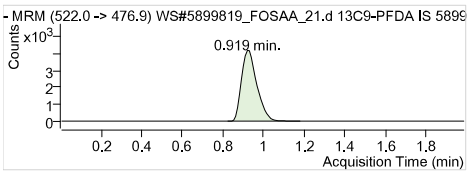


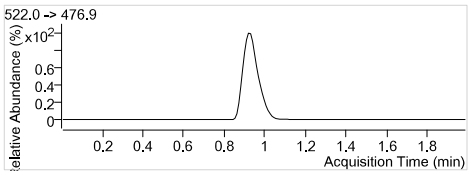
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



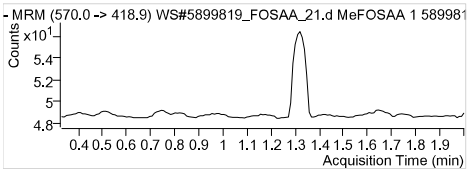


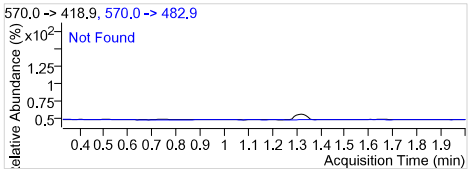
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



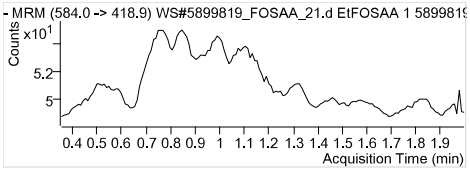


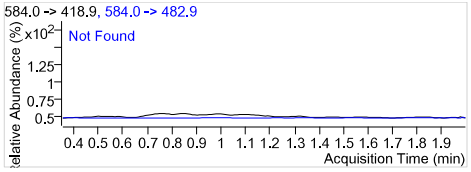
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.919 (0.986)
Concentration: 1 µg/L
Sample type: Sample



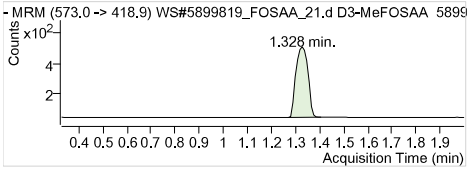


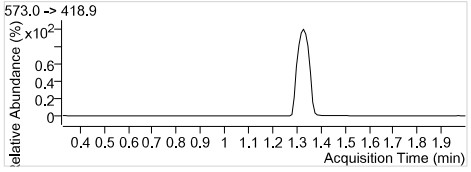
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



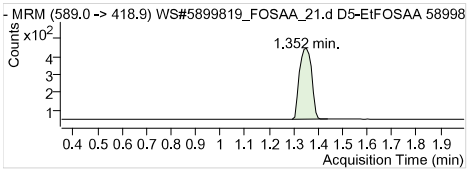


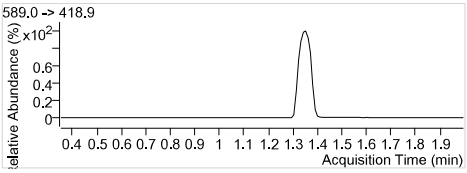
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.354)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



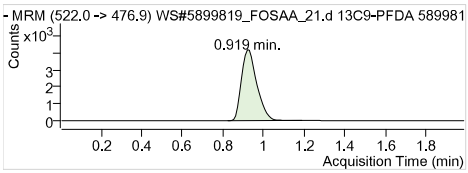


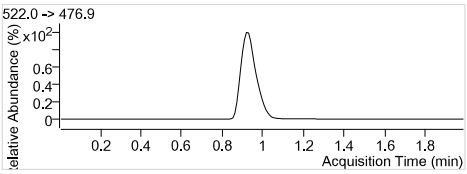
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 87.66 µg/L
Area ratio: 0.07435
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	83.97 µg/L
Area ratio:	0.06382
Sample type:	Sample





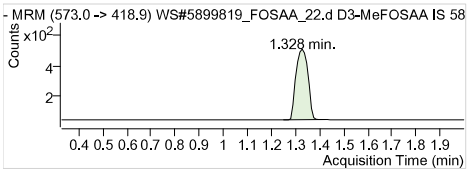
13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.919 (0.986)
Calc. conc.	2.42 µg/L
Area ratio:	0
Sample type:	Sample

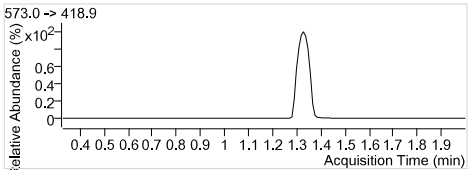
Batch Path	T:\LCMS04\PFC\20181221\WS#5899819_FOSAA\QuantResults\PFC_Water_Low_20181221_WS#5899819_FOSAA_ETOxics

Sample Name	**5899819:IOF252-01**	**Instrument**	LCMS04
Data File	WS#5899819_FOSAA_22.d	**Operator**	
Sample Type	Sample	**Dilution**	0.0227
Acq. Method	PFC_Water_Low_FOSAA.m	**Position**	P1-C7
Acq. Date	2018/12/22 12:14:44 AM	**Injection Volume**	Per Method
Sample Annotation	-		

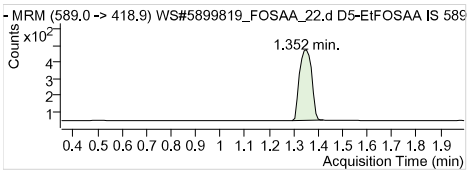
ISTD Compounds	Response	RT	Target conc.		
D3-MeFOSAA IS	1598	1.33	1 µg/L		
D5-EtFOSAA IS	1482	1.35	1 µg/L		
13C9-PFDA IS	21036	0.92	1 µg/L		

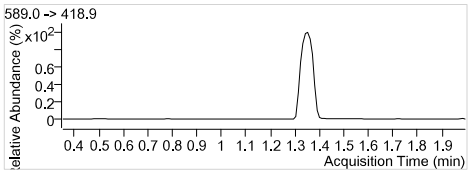
Compound	Response	RT	Target Conc.	Calc. Conc.	Accuracy
MeFOSAA 1			-	ND	-
EtFOSAA 1			-	ND	-
D3-MeFOSAA	1609	1.33	-	90.18 µg/L	-
D5-EtFOSAA	1491	1.35	-	93.25 µg/L	-
13C9-PFDA	21040	0.92	-	2.30 µg/L	-



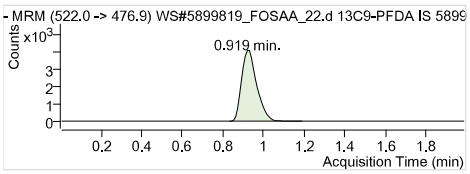


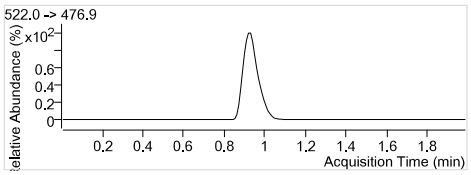
D3-MeFOSAA IS Internal Standard
RT (Exp. RT): 1.328 (1.328)
Concentration: 1 µg/L
Sample type: Sample



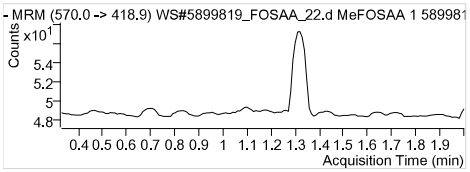


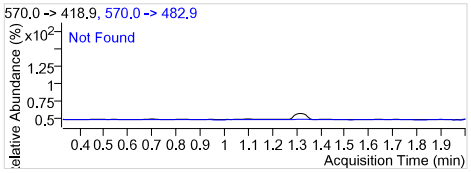
D5-EtFOSAA IS Internal Standard
RT (Exp. RT): 1.352 (1.352)
Concentration: 1 µg/L
Sample type: Sample



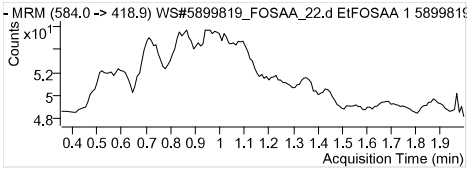


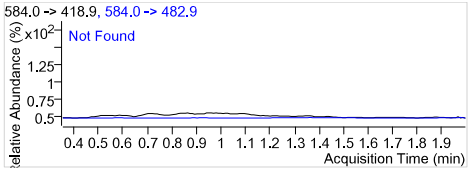
13C9-PFDA IS Internal Standard
RT (Exp. RT): 0.919 (0.986)
Concentration: 1 µg/L
Sample type: Sample



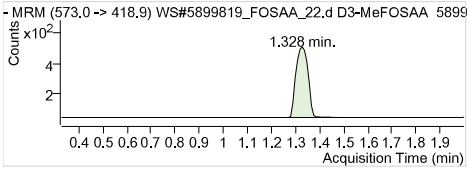


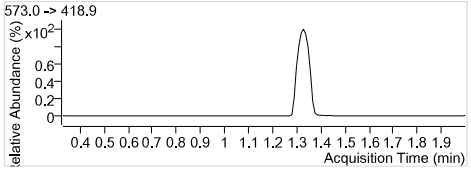
MeFOSAA 1 570.0 -> 418.9
RT (Exp. RT): 0.000 (1.329)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



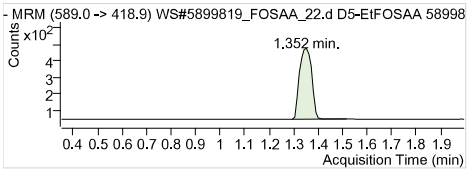


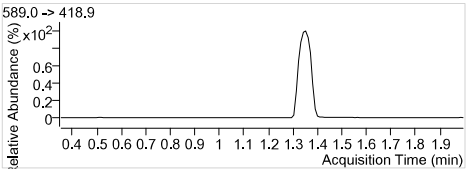
EtFOSAA 1 584.0 -> 418.9
RT (Exp. RT): 0.000 (1.354)
Calc. conc. N.D.
Area ratio: 0
Sample type: Sample



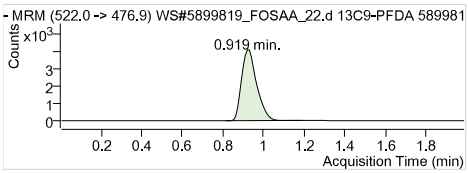


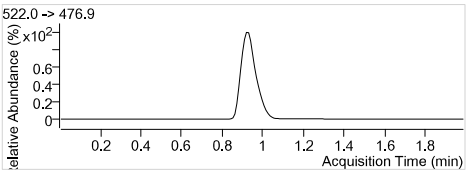
D3-MeFOSAA 573.0 -> 418.9
RT (Exp. RT): 1.328 (1.328)
Calc. conc. 90.18 µg/L
Area ratio: 0.07649
Sample type: Sample





D5-EtFOSAA	589.0 -> 418.9
RT (Exp. RT):	1.352 (1.352)
Calc. conc.	93.25 µg/L
Area ratio:	0.07088
Sample type:	Sample





13C9-PFDA	522.0 -> 476.9
RT (Exp. RT):	0.919 (0.986)
Calc. conc.	2.30 µg/L
Area ratio:	0
Sample type:	Sample