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NELAP Certification Number: CA00046
DoD-ELAP Certification Number 4064.01
State Certification Number:

December 27, 2022

Watson Tanji
AECOM Honolulu
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

RE: Red Hill AFFF Assessment Sampling
22L0057

Enclosed are the results of analyses for samples received by our laboratory on 12/8/2022. If you have any questions concerning this report, please feel free to contact me.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or designee, as verified by the following signature.

Sincerely,

Greg Salata For Gregory Salata
Project Manager

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AECOM Honolulu
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Data Validatable Report

Analysis Case Narrative

EPA 1633: Manual integrations were performed for this method in accordance with APPL's SOP. Chromatograms after manual integration are enclosed for specific samples and analytes. Abbreviated flags for technical justification are listed on the chromatogram. Some extracted internal standards recovered outside of control limits in some samples, these samples were diluted and recovered in control, unless stated otherwise.

Sample 01 - ADIT6-DU03-SON01MI-22DEC was re-extracted due to failing EIS. The re-extract is reported for NMeFOSE, NEtFOSE, NMeFOSA, NEtFOSA, and 6:2FTS and the associated extracted internal standards.

The extracted internal standard D5-NEtFOSAA recovered above the upper control limit in sample 03 - AF-RHMW17-WGN01LF-2212W1.

The extracted internal standard 13C6-PFDA recovered above the upper control limit in the BBL0205-BLK1.

The extracted internal standards 13C7-PFUnA and 13C2-PFDoA recovered above the upper control limit in the BBL0205-BS1.

The analyte NFDHA recovered below the lower control limit in the BBL0205-MRL1.

The analyte PFOA recovered above ½ the PQL in the BBL0206-BLK1. The sample 01 - ADIT6-DU03-SON01MI-22DEC was re-extracted and the results compared closely, only the original analysis has been reported.

The analytes PFOA and PFDA recovered above the upper control limit in the BBL0206-MRL1.

The analytes PFHxA and 6:2FTS recovered below the lower control limit in the BBL0206-MS1 performed on sample 01 - ADIT6-DU03-SON01MI-22DEC. The extracted internal standards 13C3-PFBS and 13C2-6:2FTS recovered above the upper control limit.

The analytes PFHxA and 6:2FTS recovered below the lower control limit in the BBL0206-MSD1 performed on sample 01 - ADIT6-DU03-SON01MI-22DEC. The analyte PFHxA recovered above the upper control limit. The analytes PFTrDA, NFDHA, and PFTeDA recovered with high RPD.

The analytes PFOA and NFDHA recovered above the upper control limit in the SB03835-LCV1.

The analytes PFDoA, PFTeDA, 8:2FTS, and 7:3FTcA recovered above the upper control limit in the SB03845-LCV1.

The analyte PFTeDA recovered above the upper control limit in the SB03951-LCV1.

EPA 1633 SPLP:

The extracted internal standard D5-NETFOA recovered below the lower control limit in the BBL0372-BS1.

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
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AECOM Honolulu
 1001 Bishop Street, Suite 1600
 Honolulu, HI 96813

Project: Red Hill AFFF Assessment Sampling
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 Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Samples in this Report (Continued)

Lab ID	Sample	Matrix	Date Sampled	Date Received
22L0057-01	ADIT6-DU03-SON01MI-22DEC	Solid	12/07/2022 13:50	12/08/2022
22L0057-02	ADIT6-DU03-WQFB01-22DEC	Water	12/07/2022 15:05	12/08/2022
22L0057-03	AF-RHMW17-WGN01LF-2212W1	Water	12/07/2022 13:25	12/08/2022

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Containers Received

Lab ID	Container Type	Count	Preservation Check
22L0057-01	Client Provided	6	
22L0057-02	250mL P	2	
22L0057-03	500mL P	2	

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Sample Results

**Sample: ADIT6-DU03-SON01MI-22DEC
22L0057-01 (Solid)**

Per- and Polyfluoroalkyl Substances

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
PFBA	1.4	0.29	0.20	0.15	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFPEA	0.85	0.079	0.039	0.021	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFHXA	8.0	0.039	0.020	0.015	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFHPA	0.12	0.039	0.020	0.015	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFOA	0.12	0.039	0.029	0.021	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFNA	0.029 U	0.039	0.029	0.021	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFDA	0.029 U IR2,	0.039	0.029	0.022	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFUnA	0.020 U	0.039	0.020	0.020	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFDOA	0.029 U IR2,	0.039	0.029	0.023	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFTRDA	0.020 U	0.039	0.020	0.016	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFTEDA	0.029 U IR2,	0.039	0.029	0.025	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFBS	0.020 U	0.039	0.020	0.016	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFPEs	0.020 U	0.039	0.020	0.012	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFHXS	0.020 U	0.039	0.020	0.015	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFHPS	0.020 U	0.039	0.020	0.011	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFOS	0.051	0.039	0.020	0.0096	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFNS	0.020 U	0.039	0.020	0.014	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFDS	0.020 U	0.039	0.020	0.013	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFDOS	0.020 U	0.039	0.020	0.013	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
4:2FTS	0.31	0.16	0.079	0.045	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
6:2FTS	48	0.13	0.067	0.051	ug/kg Dry	12/22/22	1	EPA 1633	BBL0400
8:2FTS	0.079 U	0.16	0.079	0.050	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFOSA	0.020 U	0.039	0.020	0.012	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
NMeFOSA	0.067 U	0.13	0.067	0.055	ug/kg Dry	12/22/22	1	EPA 1633	BBL0400
NEtFOSA	0.067 U	0.13	0.067	0.023	ug/kg Dry	12/22/22	1	EPA 1633	BBL0400
NMeFOSAA	0.020 U	0.039	0.020	0.0099	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
NEtFOSAA	0.020 U	0.039	0.020	0.018	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
NMeFOSE	0.067 U	0.13	0.067	0.045	ug/kg Dry	12/22/22	1	EPA 1633	BBL0400
NEtFOSE	0.067 U	0.13	0.067	0.039	ug/kg Dry	12/22/22	1	EPA 1633	BBL0400
HFPO-DA	0.039 U	0.079	0.039	0.021	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
ADONA	0.039 U	0.079	0.039	0.026	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFEESA	0.039 U	0.079	0.039	0.017	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFMPA	0.039 U	0.079	0.039	0.027	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
PFMBA	0.039 U	0.079	0.039	0.032	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
NFDHA	0.059 U	0.079	0.059	0.048	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
9CL-PF3ONS	0.039 U	0.079	0.039	0.024	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
11CL-PF3OUDS	0.039 U	0.079	0.039	0.026	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
3:3FTCA	0.079 U	0.16	0.079	0.063	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
5:3FTCA	0.29	0.16	0.079	0.064	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
7:3FTCA	0.079 U	0.16	0.079	0.049	ug/kg Dry	12/15/22	1	EPA 1633	BBL0206
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Surrogate: 13C4-PFBA	111%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C5-PFPEA	98.3%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C5-PFHXA	108%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C4-PFHPA	104%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C8-PFOA	119%		20-150			12/15/22	1	EPA 1633	BBL0206

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Sample Results (Continued)

Sample: ADIT6-DU03-SON01MI-22DEC (Continued)
22L0057-01 (Solid)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
Surrogate: 13C9-PFNA	102%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C6-PFDA	123%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C7-PFUnA	106%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C2-PFDOA	106%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C2-PFTEDA	98.9%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C3-PFBS	124%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C3-PFHXS	122%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C8-PFOS	119%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C2-4:2FTS	130%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C2-6:2FTS	93.7%		20-150			12/22/22	1	EPA 1633	BBL0400
Surrogate: 13C2-8:2FTS	117%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: 13C8-PFOA	76.5%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: D5-NETFOA	66.5%		20-150			12/22/22	1	EPA 1633	BBL0400
Surrogate: D3-NMEFOA	62.3%		20-150			12/22/22	1	EPA 1633	BBL0400
Surrogate: D3-NMEFOA	128%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: D5-NETFOA	150%		20-150			12/15/22	1	EPA 1633	BBL0206
Surrogate: D7-NMEFOA	63.5%		20-150			12/22/22	1	EPA 1633	BBL0400
Surrogate: D9-NETFOA	67.4%		20-150			12/22/22	1	EPA 1633	BBL0400
Surrogate: 13C3-HFPO-DA	106%		20-150			12/15/22	1	EPA 1633	BBL0206
PFBA	190	7.5	3.7	0.98	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFPEA	65	3.7	3.7	0.30	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFHXA	410	1.9	1.9	0.26	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFHPA	13	1.9	0.93	0.19	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFOA	25	1.9	0.93	0.70	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFNA	0.93 U IR2,	1.9	0.93	0.38	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFDA	3.8	1.9	0.93	0.47	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFUnA	0.93 U	1.9	0.93	0.75	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFDOA	0.93 U	1.9	0.93	0.51	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFTRDA	1.4 U	1.9	1.4	0.93	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFTEDA	0.93 U	1.9	0.93	0.93	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFBS	0.93 U	1.9	0.93	0.17	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFPEA	0.93 U	1.9	0.93	0.29	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFHXS	0.36 J	1.9	0.93	0.15	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFHPS	0.93 U	1.9	0.93	0.24	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFOS	2.9	1.9	0.93	0.30	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFNS	0.93 U	1.9	0.93	0.56	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFDS	0.93 U	1.9	0.93	0.70	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFDOS	0.93 U	1.9	0.93	0.56	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
4:2FTS	35	7.5	3.7	1.4	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
6:2FTS	4700	75	37	14	ng/L	12/22/22	10	EPA 1633 SPLP	BBL0372
8:2FTS	3.7 U	7.5	3.7	0.38	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFOA	0.93 U	1.9	0.93	0.47	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
NMeFOA	3.7 U	7.5	3.7	2.2	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
NEtFOA	3.7 U	7.5	3.7	1.9	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
NMeFOSAA	0.93 U	1.9	0.93	0.51	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
NEtFOSAA	0.93 U	1.9	0.93	0.51	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

AECOM Honolulu
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Honolulu, HI 96813

Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Sample Results (Continued)

Sample: ADIT6-DU03-SON01MI-22DEC (Continued)
22L0057-01 (Solid)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
NMeFOSE	5.6 U	7.5	5.6	4.7	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
NEtFOSE	5.6 U	7.5	5.6	4.7	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
HFPO-DA	1.9 U	3.7	1.9	0.79	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
ADONA	1.9 U	3.7	1.9	0.56	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFEESA	1.9 U	3.7	1.9	0.51	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFMPA	1.9 U	3.7	1.9	0.25	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
PFMBA	1.9 U	3.7	1.9	0.42	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
NFDHA	1.9 U	3.7	1.9	1.4	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
9CL-PF3ONS	1.9 U	3.7	1.9	0.98	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
11CL-PF3OUDS	1.9 U	3.7	1.9	0.98	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
3:3FTCA	3.7 U	7.5	3.7	2.7	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
5:3FTCA	35	7.5	3.7	2.0	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
7:3FTCA	3.7 U	7.5	3.7	2.6	ng/L	12/22/22	1	EPA 1633 SPLP	BBL0372
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Surrogate: 13C4-PFBA	95.8%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C5-PFPEA	101%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C5-PFHXA	91.0%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C4-PFHFA	85.7%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C8-PFOA	97.3%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C9-PFNA	86.7%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C6-PFDA	77.4%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C7-PFUnA	45.7%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C2-PFDOA	58.7%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C2-PFTEDA	46.1%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C3-PFBS	113%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C3-PFHXS	88.8%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C8-PFOS	103%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C2-4:2FTS	121%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C2-6:2FTS	114%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C2-6:2FTS	132%		20-150			12/22/22	10	EPA 1633 SPLP	BBL0372
Surrogate: 13C2-8:2FTS	18.8% S1		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C2-8:2FTS	66.5%		20-150			12/22/22	10	EPA 1633 SPLP	BBL0372
Surrogate: 13C8-PFOA	70.6%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: D5-NETFOA	44.1%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: D3-NMEFOA	46.3%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: D3-NMEFOA	148%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: D5-NETFOA	111%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: D7-NMEFOSE	81.5%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: D9-NETFOSE	76.6%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372
Surrogate: 13C3-HFPO-DA	93.7%		20-150			12/22/22	1	EPA 1633 SPLP	BBL0372

WetLab

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
% Solids	91.1	2.00	1.50	0.750	%	12/12/22	1	ISM02.2	BBL0215

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Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

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Sample Results (Continued)

**Sample: ADIT6-DU03-WQFB01-22DEC
22L0057-02 (Water)**

Per- and Polyfluoroalkyl Substances

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
PFBA	1.3 U	2.7	1.3	0.35	ng/L	12/14/22	1	EPA 1633	BBL0205
PFPEA	0.66 U	1.3	0.66	0.11	ng/L	12/14/22	1	EPA 1633	BBL0205
PFHXA	0.33 U	0.66	0.33	0.091	ng/L	12/14/22	1	EPA 1633	BBL0205
PFHPA	0.33 U	0.66	0.33	0.068	ng/L	12/14/22	1	EPA 1633	BBL0205
PFOA	0.33 U	0.66	0.33	0.25	ng/L	12/14/22	1	EPA 1633	BBL0205
PFNA	0.33 U	0.66	0.33	0.14	ng/L	12/14/22	1	EPA 1633	BBL0205
PFDA	0.33 U	0.66	0.33	0.17	ng/L	12/14/22	1	EPA 1633	BBL0205
PFUnA	0.33 U	0.66	0.33	0.27	ng/L	12/14/22	1	EPA 1633	BBL0205
PFDOA	0.33 U	0.66	0.33	0.19	ng/L	12/14/22	1	EPA 1633	BBL0205
PFTRDA	0.50 U	0.66	0.50	0.34	ng/L	12/14/22	1	EPA 1633	BBL0205
PFTEDA	0.33 U	0.66	0.33	0.33	ng/L	12/14/22	1	EPA 1633	BBL0205
PFBS	0.33 U	0.66	0.33	0.061	ng/L	12/14/22	1	EPA 1633	BBL0205
PFPEs	0.33 U	0.66	0.33	0.10	ng/L	12/14/22	1	EPA 1633	BBL0205
PFHXS	0.33 U	0.66	0.33	0.053	ng/L	12/14/22	1	EPA 1633	BBL0205
PFHPS	0.33 U	0.66	0.33	0.085	ng/L	12/14/22	1	EPA 1633	BBL0205
PFOS	0.33 U	0.66	0.33	0.11	ng/L	12/14/22	1	EPA 1633	BBL0205
PFNS	0.33 U	0.66	0.33	0.20	ng/L	12/14/22	1	EPA 1633	BBL0205
PFDS	0.33 U	0.66	0.33	0.25	ng/L	12/14/22	1	EPA 1633	BBL0205
PFDOS	0.33 U	0.66	0.33	0.20	ng/L	12/14/22	1	EPA 1633	BBL0205
4:2FTS	1.3 U	2.7	1.3	0.48	ng/L	12/14/22	1	EPA 1633	BBL0205
6:2FTS	1.3 U	2.7	1.3	0.52	ng/L	12/14/22	1	EPA 1633	BBL0205
8:2FTS	1.3 U	2.7	1.3	0.14	ng/L	12/14/22	1	EPA 1633	BBL0205
PFOSA	0.33 U	0.66	0.33	0.17	ng/L	12/14/22	1	EPA 1633	BBL0205
NMeFOSA	1.3 U	2.7	1.3	0.79	ng/L	12/14/22	1	EPA 1633	BBL0205
NEtFOSA	1.3 U	2.7	1.3	0.69	ng/L	12/14/22	1	EPA 1633	BBL0205
NMeFOSAA	0.33 U	0.66	0.33	0.18	ng/L	12/14/22	1	EPA 1633	BBL0205
NEtFOSAA	0.33 U	0.66	0.33	0.19	ng/L	12/14/22	1	EPA 1633	BBL0205
NMeFOSE	2.0 U	2.7	2.0	1.7	ng/L	12/14/22	1	EPA 1633	BBL0205
NEtFOSE	2.0 U	2.7	2.0	1.7	ng/L	12/14/22	1	EPA 1633	BBL0205
HFPO-DA	0.66 U	1.3	0.66	0.29	ng/L	12/14/22	1	EPA 1633	BBL0205
ADONA	0.66 U	1.3	0.66	0.20	ng/L	12/14/22	1	EPA 1633	BBL0205
PFEESA	0.66 U	1.3	0.66	0.18	ng/L	12/14/22	1	EPA 1633	BBL0205
PFMPA	0.66 U	1.3	0.66	0.090	ng/L	12/14/22	1	EPA 1633	BBL0205
PFMBA	0.66 U	1.3	0.66	0.15	ng/L	12/14/22	1	EPA 1633	BBL0205
NFDHA	0.66 U	1.3	0.66	0.50	ng/L	12/14/22	1	EPA 1633	BBL0205
9CL-PF3ONS	0.66 U	1.3	0.66	0.35	ng/L	12/14/22	1	EPA 1633	BBL0205
11CL-PF3OUDS	0.66 U	1.3	0.66	0.34	ng/L	12/14/22	1	EPA 1633	BBL0205
3:3FTCA	1.3 U	2.7	1.3	0.95	ng/L	12/14/22	1	EPA 1633	BBL0205
5:3FTCA	1.3 U	2.7	1.3	0.74	ng/L	12/14/22	1	EPA 1633	BBL0205
7:3FTCA	1.3 U	2.7	1.3	0.92	ng/L	12/14/22	1	EPA 1633	BBL0205
<hr/>									
Surrogate: 13C4-PFBA	133%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C5-PFPEA	113%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C5-PFHXA	126%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C4-PFHPA	129%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C8-PFOA	137%		20-150			12/14/22	1	EPA 1633	BBL0205

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Sample Results (Continued)

Sample: ADIT6-DU03-WQFB01-22DEC (Continued)
22L0057-02 (Water)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
Surrogate: 13C9-PFNA	112%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C6-PFDA	130%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C7-PFUnA	125%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-PFDOA	118%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-PFTEDA	112%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C3-PFBS	131%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C3-PFHXS	134%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C8-PFOS	126%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-4:2FTS	130%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-6:2FTS	136%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-8:2FTS	148%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C8-PFOA	120%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D5-NETFOA	73.6%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D3-NMEFOA	68.5%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D3-NMEFOA	120%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D5-NETFOA	144%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D7-NMEFOE	97.3%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D9-NETFOE	103%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C3-HFPO-DA	127%		20-150			12/14/22	1	EPA 1633	BBL0205

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Sample Results (Continued)

**Sample: AF-RHMW17-WGN01LF-2212W1
22L0057-03 (Water)**

Per- and Polyfluoroalkyl Substances

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
PFBA	4.6	1.4	0.69	0.18	ng/L	12/14/22	1	EPA 1633	BBL0205
PFPEA	7.6	0.69	0.34	0.056	ng/L	12/14/22	1	EPA 1633	BBL0205
PFHXA	2.9	0.34	0.17	0.047	ng/L	12/14/22	1	EPA 1633	BBL0205
PFHPA	0.98	0.34	0.17	0.035	ng/L	12/14/22	1	EPA 1633	BBL0205
PFOA	0.23 J	0.34	0.17	0.13	ng/L	12/14/22	1	EPA 1633	BBL0205
PFNA	0.17 U	0.34	0.17	0.070	ng/L	12/14/22	1	EPA 1633	BBL0205
PFDA	0.17 U	0.34	0.17	0.087	ng/L	12/14/22	1	EPA 1633	BBL0205
PFUnA	0.17 U	0.34	0.17	0.14	ng/L	12/14/22	1	EPA 1633	BBL0205
PFDOA	0.17 U	0.34	0.17	0.096	ng/L	12/14/22	1	EPA 1633	BBL0205
PFTRDA	0.26 U	0.34	0.26	0.18	ng/L	12/14/22	1	EPA 1633	BBL0205
PFTEDA	0.17 U	0.34	0.17	0.17	ng/L	12/14/22	1	EPA 1633	BBL0205
PFBS	0.19 J	0.34	0.17	0.032	ng/L	12/14/22	1	EPA 1633	BBL0205
PFPEs	0.17 U	0.34	0.17	0.054	ng/L	12/14/22	1	EPA 1633	BBL0205
PFHXS	0.053 J MIS,	0.34	0.17	0.027	ng/L	12/14/22	1	EPA 1633	BBL0205
PFHPS	0.17 U	0.34	0.17	0.044	ng/L	12/14/22	1	EPA 1633	BBL0205
PFOS	0.096 J MIS,	0.34	0.17	0.055	ng/L	12/14/22	1	EPA 1633	BBL0205
PFNS	0.17 U	0.34	0.17	0.11	ng/L	12/14/22	1	EPA 1633	BBL0205
PFDS	0.17 U	0.34	0.17	0.13	ng/L	12/14/22	1	EPA 1633	BBL0205
PFDOS	0.17 U	0.34	0.17	0.11	ng/L	12/14/22	1	EPA 1633	BBL0205
4:2FTS	0.69 U	1.4	0.69	0.25	ng/L	12/14/22	1	EPA 1633	BBL0205
6:2FTS	13	1.4	0.69	0.27	ng/L	12/14/22	1	EPA 1633	BBL0205
8:2FTS	0.69 U	1.4	0.69	0.071	ng/L	12/14/22	1	EPA 1633	BBL0205
PFOSA	0.72	0.34	0.17	0.089	ng/L	12/14/22	1	EPA 1633	BBL0205
NMeFOSA	0.69 U	1.4	0.69	0.41	ng/L	12/14/22	1	EPA 1633	BBL0205
NEtFOSA	0.69 U	1.4	0.69	0.35	ng/L	12/14/22	1	EPA 1633	BBL0205
NMeFOSAA	0.17 U	0.34	0.17	0.091	ng/L	12/14/22	1	EPA 1633	BBL0205
NEtFOSAA	0.17 U	0.34	0.17	0.099	ng/L	12/14/22	1	EPA 1633	BBL0205
NMeFOSE	1.0 U	1.4	1.0	0.87	ng/L	12/14/22	1	EPA 1633	BBL0205
NEtFOSE	1.0 U	1.4	1.0	0.90	ng/L	12/14/22	1	EPA 1633	BBL0205
HFPO-DA	0.34 U	0.69	0.34	0.15	ng/L	12/14/22	1	EPA 1633	BBL0205
ADONA	0.34 U	0.69	0.34	0.11	ng/L	12/14/22	1	EPA 1633	BBL0205
PFEESA	0.34 U	0.69	0.34	0.094	ng/L	12/14/22	1	EPA 1633	BBL0205
PFMPA	0.34 U	0.69	0.34	0.046	ng/L	12/14/22	1	EPA 1633	BBL0205
PFMBA	0.34 U	0.69	0.34	0.078	ng/L	12/14/22	1	EPA 1633	BBL0205
NFDHA	0.34 U	0.69	0.34	0.26	ng/L	12/14/22	1	EPA 1633	BBL0205
9CL-PF3ONS	0.34 U	0.69	0.34	0.18	ng/L	12/14/22	1	EPA 1633	BBL0205
11CL-PF3OUDS	0.34 U	0.69	0.34	0.18	ng/L	12/14/22	1	EPA 1633	BBL0205
3:3FTCA	0.69 U	1.4	0.69	0.49	ng/L	12/14/22	1	EPA 1633	BBL0205
5:3FTCA	0.69 U IR2,	1.4	0.69	0.38	ng/L	12/14/22	1	EPA 1633	BBL0205
7:3FTCA	0.69 U	1.4	0.69	0.48	ng/L	12/14/22	1	EPA 1633	BBL0205
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Surrogate: 13C4-PFBA	109%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C5-PFPEA	109%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C5-PFHXA	114%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C4-PFHPA	112%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C8-PFOA	130%		20-150			12/14/22	1	EPA 1633	BBL0205

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Sample Results (Continued)

Sample: AF-RHMW17-WGN01LF-2212W1 (Continued)
22L0057-03 (Water)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result /Qual	LOQ	LOD	DL	Units	Date Analyzed	DF	Method	Prep Batch
Surrogate: 13C9-PFNA	111%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C6-PFDA	125%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C7-PFUnA	146%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-PFDOA	118%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-PFTEDA	107%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C3-PFBS	150%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C3-PFHXS	131%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C8-PFOS	120%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-4:2FTS	397% S2		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-4:2FTS	137%		20-150			12/14/22	10	EPA 1633	BBL0205
Surrogate: 13C2-6:2FTS	165% S2		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-6:2FTS	111%		20-150			12/14/22	10	EPA 1633	BBL0205
Surrogate: 13C2-8:2FTS	156% S2		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C2-8:2FTS	101%		20-150			12/14/22	10	EPA 1633	BBL0205
Surrogate: 13C8-PFOA	91.0%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D5-NETFOA	61.9%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D3-NMEFOA	58.9%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D3-NMEFOA	133%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D5-NETFOA	164% S2		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D5-NETFOA	180% S2		20-150			12/14/22	10	EPA 1633	BBL0205
Surrogate: D7-NMEFOE	72.9%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: D9-NETFOE	71.2%		20-150			12/14/22	1	EPA 1633	BBL0205
Surrogate: 13C3-HFPO-DA	106%		20-150			12/14/22	1	EPA 1633	BBL0205

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Quality Control

Per- and Polyfluoroalkyl Substances

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0205 - 1633

Blank (BBL0205-BLK1)

Prepared: 12/09/22 14:19 Analyzed: 12/14/22 12:12

Analyte	Result/Qual	LOQ	LOD	MDL
	ng/L			
PFBA	0.80 U	1.6	0.80	0.21
PFPEA	0.40 U	0.80	0.40	0.065
PFHXA	0.20 U	0.40	0.20	0.055
PFHPA	0.20 U	0.40	0.20	0.041
PFOA	0.20 U	0.40	0.20	0.15
PFNA	0.20 U	0.40	0.20	0.082
PFDA	0.20 U	0.40	0.20	0.10
PFUnA	0.20 U	0.40	0.20	0.16
PFDOA	0.20 U	0.40	0.20	0.11
PFTRDA	0.30 U	0.40	0.30	0.20
PFTEDA	0.20 U	0.40	0.20	0.20
PFBS	0.20 U	0.40	0.20	0.037
PFPEs	0.20 U	0.40	0.20	0.063
PFHXS	0.20 U	0.40	0.20	0.032
PFHPS	0.20 U	0.40	0.20	0.051
PFOS	0.0893 J IR2,	0.40	0.20	0.064
PFNS	0.20 U	0.40	0.20	0.12
PFDS	0.20 U	0.40	0.20	0.15
PFDOS	0.20 U	0.40	0.20	0.12
4:2FTS	0.80 U	1.6	0.80	0.29
6:2FTS	0.80 U	1.6	0.80	0.31
8:2FTS	0.80 U	1.6	0.80	0.082
PFOSA	0.20 U	0.40	0.20	0.10
NMeFOSA	0.80 U	1.6	0.80	0.47
NEtFOSA	0.80 U	1.6	0.80	0.41
NMeFOSAA	0.20 U	0.40	0.20	0.11
NEtFOSAA	0.20 U	0.40	0.20	0.11
NMeFOSE	1.2 U	1.6	1.2	1.0
NEtFOSE	1.2 U	1.6	1.2	1.0
HFPO-DA	0.40 U	0.80	0.40	0.17
ADONA	0.40 U	0.80	0.40	0.12
PFEESA	0.40 U	0.80	0.40	0.11
PFMPA	0.40 U	0.80	0.40	0.054
PFMBA	0.40 U	0.80	0.40	0.091
NFDHA	0.40 U	0.80	0.40	0.30
9CL-PF3ONS	0.40 U	0.80	0.40	0.21
11CL-PF3OUDS	0.40 U	0.80	0.40	0.21
3:3FTCA	0.80 U	1.6	0.80	0.57
5:3FTCA	0.80 U	1.6	0.80	0.44
7:3FTCA	0.80 U	1.6	0.80	0.55

Surrogates

13C4-PFBA	42.1	32.0	132	20-150
13C5-PFPEA	20.0	16.0	125	20-150
13C5-PFHXA	10.1	8.00	126	20-150
13C4-PFHPA	9.57	8.00	120	20-150
13C8-PFOA	9.34	8.00	117	20-150

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0205 - 1633 (Continued)

Blank (BBL0205-BLK1)

Prepared: 12/09/22 14:19 Analyzed: 12/14/22 12:12

ng/L

Surrogates

13C9-PFNA	4.73				4.00		118	20-150		
13C6-PFDA	6.07 S2				4.00		152	20-150		
13C7-PFUnA	5.81				4.00		145	20-150		
13C2-PFDOA	5.33				4.00		133	20-150		
13C2-PFTEDA	5.70				4.00		142	20-150		
13C3-PFBS	9.98				8.00		125	20-150		
13C3-PFHXS	10.2				8.00		128	20-150		
13C8-PFOS	7.97				8.00		99.6	20-150		
13C2-4:2FTS	20.1				16.0		126	20-150		
13C2-6:2FTS	18.2				16.0		114	20-150		
13C2-8:2FTS	19.6				16.0		123	20-150		
13C8-PFOA	7.39				8.00		92.4	20-150		
D5-NETFOA	3.71				8.00		46.3	20-150		
D3-NMEFOA	3.63				8.00		45.4	20-150		
D3-NMEFOA	14.5				16.0		90.5	20-150		
D5-NETFOA	16.1				16.0		101	20-150		
D7-NMEFOA	49.3				80.0		61.7	20-150		
D9-NETFOA	48.7				80.0		60.9	20-150		
13C3-HFPO-DA	36.8				32.0		115	20-150		

LCS (BBL0205-BS1)

Prepared: 12/09/22 14:19 Analyzed: 12/14/22 12:25

ng/L

PFBA	17.4				16.0		109	40-150		
PFPEA	8.75				8.00		109	40-150		
PFHXA	4.39				4.00		110	40-150		
PFHPA	4.63				4.00		116	40-150		
PFOA	4.19				4.00		105	40-150		
PFNA	4.99				4.00		125	40-150		
PFDA	4.14				4.00		103	40-150		
PFUnA	4.07				4.00		102	40-150		
PFDOA	3.94				4.00		98.5	40-150		
PFTRDA	3.74				4.00		93.5	40-150		
PFTEDA	4.30				4.00		108	40-150		
PFBS	4.12				3.54		116	40-150		
PFPEA	4.33				3.76		115	40-150		
PFHXS	3.94				3.66		108	40-150		
PFHPS	3.89				3.82		102	40-150		
PFOS	4.21				3.72		113	40-150		
PFNS	4.70				3.84		122	40-150		
PFDS	3.95				3.86		102	40-150		
PFDOS	3.98				3.88		103	40-150		
4:2FTS	16.9				15.0		113	40-150		
6:2FTS	18.0				15.2		118	40-150		
8:2FTS	18.6				15.4		121	40-150		
PFOA	4.95				4.00		124	40-150		

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Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0205 - 1633 (Continued)

LCS (BBL0205-BS1)

Prepared: 12/09/22 14:19 Analyzed: 12/14/22 12:25

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
	ng/L									
NMeFOSA	19.3				16.0		121	40-150		
NEtFOSA	17.5				16.0		109	40-150		
NMeFOSAA	4.43				4.00		111	40-150		
NEtFOSAA	4.76				4.00		119	40-150		
NMeFOSE	18.1				16.0		113	40-150		
NEtFOSE	16.8				16.0		105	40-150		
HFPO-DA	7.91				8.00		98.8	40-150		
ADONA	8.06				7.56		107	40-150		
PFEESA	7.45				7.12		105	40-150		
PFMPA	8.55				8.00		107	40-150		
PFMBA	8.48				8.00		106	40-150		
NFDHA	8.68				8.00		108	40-150		
9CL-PF3ONS	8.33				7.48		111	40-150		
11CL-PF3OUDS	8.61				7.56		114	40-150		
3:3FTCA	17.5				16.0		109	40-150		
5:3FTCA	18.3				16.0		114	40-150		
7:3FTCA	16.3				16.0		102	40-150		

Surrogates

13C4-PFBA	39.1				32.0		122	20-150		
13C5-PFPEA	21.4				16.0		134	20-150		
13C5-PFHXA	11.3				8.00		141	20-150		
13C4-PFHXA	10.6				8.00		133	20-150		
13C8-PFOA	10.8				8.00		135	20-150		
13C9-PFNA	4.74				4.00		118	20-150		
13C6-PFDA	5.74				4.00		144	20-150		
13C7-PFUnA	7.20 S2				4.00		180	20-150		
13C2-PFDOA	6.38 S2				4.00		159	20-150		
13C2-PFTEDA	5.47				4.00		137	20-150		
13C3-PFBS	10.1				8.00		126	20-150		
13C3-PFHXS	10.5				8.00		132	20-150		
13C8-PFOS	8.62				8.00		108	20-150		
13C2-4:2FTS	20.5				16.0		128	20-150		
13C2-6:2FTS	19.1				16.0		120	20-150		
13C2-8:2FTS	21.1				16.0		132	20-150		
13C8-PFOSA	8.16				8.00		102	20-150		
D5-NETFOSA	4.45				8.00		55.6	20-150		
D3-NMEFOSA	4.37				8.00		54.7	20-150		
D3-NMEFOSAA	17.1				16.0		107	20-150		
D5-NETFOSAA	17.7				16.0		111	20-150		
D7-NMEFOSE	62.1				80.0		77.6	20-150		
D9-NETFOSE	64.7				80.0		80.9	20-150		
13C3-HFPO-DA	45.2				32.0		141	20-150		

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Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0205 - 1633 (Continued)

MRL Check (BBL0205-MRL1)

Prepared: 12/09/22 14:19 Analyzed: 12/14/22 12:37

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
	ng/L									
PFBA	1.63				1.60		102	40-150		
PFPEA	0.858				0.800		107	40-150		
PFHXA	0.464 IR2				0.400		116	40-150		
PFHPA	0.492				0.400		123	40-150		
PFOA	0.599				0.400		150	40-150		
PFNA	0.535				0.400		134	40-150		
PFDA	0.571 IR1				0.400		143	40-150		
PFUnA	0.413 IR2				0.400		103	40-150		
PFDOA	0.388 J IR1,				0.400		96.9	40-150		
PFTRDA	0.509				0.400		127	40-150		
PFTEDA	0.402 IR2				0.400		101	40-150		
PFBS	0.448				0.354		127	40-150		
PFPEs	0.363 J				0.376		96.6	40-150		
PFHXS	0.414 MIS				0.366		113	40-150		
PFHPS	0.337 J				0.382		88.2	40-150		
PFOS	0.544 MIS				0.372		146	40-150		
PFNS	0.388 J				0.384		101	40-150		
PFDS	0.383 J				0.386		99.1	40-150		
PFDOS	0.499				0.388		129	40-150		
4:2FTS	1.73				1.50		115	40-150		
6:2FTS	1.95				1.52		128	40-150		
8:2FTS	1.82				1.54		118	40-150		
PFOSA	0.542				0.400		135	40-150		
NMeFOSA	1.69				1.60		106	40-150		
NEtFOSA	1.63				1.60		102	40-150		
NMeFOSAA	0.446 IR2				0.400		111	40-150		
NEtFOSAA	0.400				0.400		100	40-150		
NMeFOSE	1.74				1.60		109	40-150		
NEtFOSE	2.37				1.60		148	40-150		
HFPO-DA	0.910				0.800		114	40-150		
ADONA	0.884				0.756		117	40-150		
PFEESA	0.718 J				0.712		101	40-150		
PFMPA	0.957				0.800		120	40-150		
PFMBA	0.913				0.800		114	40-150		
NFDHA	0.282 J BS1,				0.800		35.3	40-150		
9CL-PF3ONS	0.879				0.748		118	40-150		
11CL-PF3OUDS	0.917				0.756		121	40-150		
3:3FTCA	1.98				1.60		124	40-150		
5:3FTCA	2.26				1.60		141	40-150		
7:3FTCA	1.62				1.60		101	40-150		

Surrogates

13C4-PFBA	38.0				32.0		119	20-150		
13C5-PFPEA	16.9				16.0		106	20-150		
13C5-PFHXA	9.24				8.00		116	20-150		
13C4-PFHPA	9.70				8.00		121	20-150		
13C8-PFOA	10.6				8.00		132	20-150		

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Quality Control
 (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0205 - 1633 (Continued)

MRL Check (BBL0205-MRL1)

Prepared: 12/09/22 14:19 Analyzed: 12/14/22 12:37

	ng/L							
Surrogates								
13C9-PFNA	5.09			4.00		127		20-150
13C6-PFDA	4.66			4.00		117		20-150
13C7-PFUnA	5.84			4.00		146		20-150
13C2-PFDOA	5.48			4.00		137		20-150
13C2-PFTEDA	4.58			4.00		114		20-150
13C3-PFBS	9.56			8.00		119		20-150
13C3-PFHXS	9.95			8.00		124		20-150
13C8-PFOS	9.09			8.00		114		20-150
13C2-4:2FTS	19.0			16.0		119		20-150
13C2-6:2FTS	19.0			16.0		118		20-150
13C2-8:2FTS	17.3			16.0		108		20-150
13C8-PFOA	8.01			8.00		100		20-150
D5-NETFOA	4.19			8.00		52.4		20-150
D3-NMEFOA	4.26			8.00		53.3		20-150
D3-NMEFOA	17.6			16.0		110		20-150
D5-NETFOA	19.6			16.0		122		20-150
D7-NMEFOA	58.4			80.0		73.1		20-150
D9-NETFOA	60.8			80.0		75.9		20-150
13C3-HFOA-DA	36.8			32.0		115		20-150

Batch: BBL0206 - 1633

Blank (BBL0206-BLK1)

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 00:42

	ug/kg Dry			
PFBA	0.20 U	0.30	0.20	0.15
PFPEA	0.040 U	0.080	0.040	0.022
PFHXA	0.020 U	0.040	0.020	0.015
PFHPA	0.020 U	0.040	0.020	0.015
PFOA	0.0293 J B,	0.040	0.030	0.021
PFNA	0.030 U	0.040	0.030	0.022
PFDA	0.030 U	0.040	0.030	0.022
PFUnA	0.020 U	0.040	0.020	0.020
PFDOA	0.030 U	0.040	0.030	0.023
PFTRDA	0.020 U	0.040	0.020	0.016
PFTEDA	0.030 U	0.040	0.030	0.025
PFBS	0.020 U	0.040	0.020	0.016
PFPEA	0.020 U	0.040	0.020	0.012
PFHXS	0.020 U	0.040	0.020	0.015
PFHPS	0.020 U	0.040	0.020	0.011
PFOS	0.0118 J	0.040	0.020	0.0097
PFNS	0.020 U	0.040	0.020	0.015
PFDS	0.020 U	0.040	0.020	0.014
PFDOS	0.020 U	0.040	0.020	0.013
4:2FTS	0.080 U	0.16	0.080	0.045
6:2FTS	0.080 U	0.16	0.080	0.061

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document. No duplication of this report is allowed, except in its entirety.

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Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0206 - 1633 (Continued)

Blank (BBL0206-BLK1)

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 00:42

	ug/kg Dry	LOQ	LOD	MDL
8:2FTS	0.080 U	0.16	0.080	0.051
PFOSA	0.020 U	0.040	0.020	0.012
NMeFOSA	0.080 U	0.16	0.080	0.066
NETFOSA	0.080 U	0.16	0.080	0.027
NMeFOSAA	0.020 U	0.040	0.020	0.010
NETFOSAA	0.020 U	0.040	0.020	0.018
NMeFOSE	0.080 U	0.16	0.080	0.054
NETFOSE	0.080 U	0.16	0.080	0.047
HFPO-DA	0.040 U	0.080	0.040	0.022
ADONA	0.040 U	0.080	0.040	0.026
PFEESA	0.040 U	0.080	0.040	0.017
PFMPA	0.040 U	0.080	0.040	0.028
PFMBA	0.040 U	0.080	0.040	0.032
NFDHA	0.060 U	0.080	0.060	0.049
9CL-PF3ONS	0.040 U	0.080	0.040	0.024
11CL-PF3OUDS	0.040 U	0.080	0.040	0.027
3:3FTCA	0.080 U	0.16	0.080	0.064
5:3FTCA	0.080 U	0.16	0.080	0.065
7:3FTCA	0.080 U	0.16	0.080	0.050

Surrogates

13C4-PFBA	3.74	3.20	117	20-150
13C5-PFPEA	1.58	1.60	98.4	20-150
13C5-PFHXA	0.776	0.800	97.1	20-150
13C4-PFHFA	0.805	0.800	101	20-150
13C8-PFOA	0.999	0.800	125	20-150
13C9-PFNA	0.428	0.400	107	20-150
13C6-PFDA	0.501	0.400	125	20-150
13C7-PFUnA	0.598	0.400	149	20-150
13C2-PFDOA	0.430	0.400	108	20-150
13C2-PFTEDA	0.485	0.400	121	20-150
13C3-PFBS	0.971	0.800	121	20-150
13C3-PFHXS	0.970	0.800	121	20-150
13C8-PFOS	0.916	0.800	114	20-150
13C2-4:2FTS	1.76	1.60	110	20-150
13C2-6:2FTS	1.87	1.60	117	20-150
13C2-8:2FTS	1.44	1.60	90.3	20-150
13C8-PFOSA	0.765	0.800	95.7	20-150
D5-NETFOSA	0.289	0.800	36.1	20-150
D3-NMEFOSA	0.267	0.800	33.4	20-150
D3-NMEFOSAA	1.64	1.60	102	20-150
D5-NETFOSAA	2.11	1.60	132	20-150
D7-NMEFOSE	4.27	8.00	53.3	20-150
D9-NETFOSE	5.36	8.00	67.0	20-150
13C3-HFPO-DA	3.06	3.20	95.6	20-150

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0206 - 1633 (Continued)

LCS (BBL0206-BS1)

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 00:55

ug/kg Dry

PFBA	1.79				1.60		112	40-150		
PFPEA	0.958				0.800		120	40-150		
PFHXA	0.456				0.400		114	40-150		
PFHPA	0.463				0.400		116	40-150		
PFOA	0.467				0.400		117	40-150		
PFNA	0.431				0.400		108	40-150		
PFDA	0.366				0.400		91.6	40-150		
PFUnA	0.504				0.400		126	40-150		
PFDOA	0.484				0.400		121	40-150		
PFTRDA	0.432				0.400		108	40-150		
PFTEDA	0.481				0.400		120	40-150		
PFBS	0.406				0.354		115	40-150		
PFPEs	0.427				0.376		114	40-150		
PFHXS	0.386				0.366		106	40-150		
PFHPS	0.398				0.382		104	40-150		
PFOS	0.386				0.372		104	40-150		
PFNS	0.420				0.384		109	40-150		
PFDS	0.380				0.386		98.5	40-150		
PFDOS	0.423				0.388		109	40-150		
4:2FTS	1.70				1.50		113	40-150		
6:2FTS	1.86				1.52		122	40-150		
8:2FTS	1.85				1.54		120	40-150		
PFOSA	0.491				0.400		123	40-150		
NMeFOSA	2.09				1.60		131	40-150		
NEtFOSA	1.84				1.60		115	40-150		
NMeFOSAA	0.493				0.400		123	40-150		
NEtFOSAA	0.490				0.400		123	40-150		
NMeFOSE	1.68				1.60		105	40-150		
NEtFOSE	1.72				1.60		108	40-150		
HFPO-DA	0.950				0.800		119	40-150		
ADONA	0.841				0.756		111	40-150		
PFEESA	0.760				0.712		107	40-150		
PFMPA	0.870				0.800		109	40-150		
PFMBA	0.938				0.800		117	40-150		
NFDHA	0.977				0.800		122	40-150		
9CL-PF3ONS	0.884				0.748		118	40-150		
11CL-PF3OUDS	0.881				0.756		117	40-150		
3:3FTCA	1.78				1.60		111	40-150		
5:3FTCA	1.59				1.60		99.5	40-150		
7:3FTCA	1.53				1.60		95.8	40-150		

Surrogates

13C4-PFBA	3.81				3.20		119	20-150		
13C5-PFPEA	1.62				1.60		101	20-150		
13C5-PFHXA	0.867				0.800		108	20-150		
13C4-PFHPA	0.933				0.800		117	20-150		
13C8-PFOA	0.976				0.800		122	20-150		

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0206 - 1633 (Continued)

LCS (BBL0206-BS1)

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 00:55

ug/kg Dry

Surrogates

13C9-PFNA	0.509				0.400		127	20-150		
13C6-PFDA	0.465				0.400		116	20-150		
13C7-PFUnA	0.445				0.400		111	20-150		
13C2-PFDOA	0.430				0.400		107	20-150		
13C2-PFTEDA	0.402				0.400		101	20-150		
13C3-PFBS	0.926				0.800		116	20-150		
13C3-PFHXS	1.00				0.800		125	20-150		
13C8-PFOS	0.963				0.800		120	20-150		
13C2-4:2FTS	2.18				1.60		136	20-150		
13C2-6:2FTS	2.03				1.60		127	20-150		
13C2-8:2FTS	1.89				1.60		118	20-150		
13C8-PFOA	0.723				0.800		90.4	20-150		
D5-NETFOA	0.260				0.800		32.6	20-150		
D3-NMEFOA	0.264				0.800		33.0	20-150		
D3-NMEFOA	1.86				1.60		116	20-150		
D5-NETFOA	1.92				1.60		120	20-150		
D7-NMEFOE	4.76				8.00		59.5	20-150		
D9-NETFOE	4.93				8.00		61.6	20-150		
13C3-HFPO-DA	3.47				3.20		108	20-150		

LCS Dup (BBL0206-BS1)

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 01:07

ug/kg Dry

PFBA	1.82				1.60		114	40-150	1.45	30
PFPEA	0.852				0.800		106	40-150	11.7	30
PFHXA	0.426				0.400		107	40-150	6.63	30
PFHPA	0.424				0.400		106	40-150	8.92	30
PFOA	0.449				0.400		112	40-150	3.97	30
PFNA	0.446				0.400		111	40-150	3.37	30
PFDA	0.459				0.400		115	40-150	22.4	30
PFUnA	0.442				0.400		110	40-150	13.2	30
PFDOA	0.379				0.400		94.8	40-150	24.3	30
PFTRDA	0.429				0.400		107	40-150	0.599	30
PFTEDA	0.443				0.400		111	40-150	8.12	30
PFBS	0.352				0.354		99.4	40-150	14.3	30
PFPEA	0.433				0.376		115	40-150	1.50	30
PFHXS	0.391				0.366		107	40-150	1.22	30
PFHPS	0.392				0.382		103	40-150	1.51	30
PFOS	0.415				0.372		112	40-150	7.26	30
PFNS	0.430				0.384		112	40-150	2.48	30
PFDS	0.395				0.386		102	40-150	3.71	30
PFDOS	0.424				0.388		109	40-150	0.0645	30
4:2FTS	1.80				1.50		120	40-150	5.65	30
6:2FTS	1.57				1.52		103	40-150	16.7	30
8:2FTS	2.22				1.54		144	40-150	18.3	30
PFOA	0.427				0.400		107	40-150	13.9	30

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Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0206 - 1633 (Continued)

LCS Dup (BBL0206-BSD1)

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 01:07

ug/kg Dry

NMeFOSA	1.88				1.60		117	40-150	10.7	30
NEtFOSA	1.78				1.60		111	40-150	3.00	30
NMeFOSAA	0.425				0.400		106	40-150	14.7	30
NEtFOSAA	0.403				0.400		101	40-150	19.4	30
NMeFOSE	1.68				1.60		105	40-150	0.133	30
NEtFOSE	1.68				1.60		105	40-150	2.28	30
HFPO-DA	0.894				0.800		112	40-150	6.11	30
ADONA	0.799				0.756		106	40-150	5.15	30
PFEESA	0.635				0.712		89.1	40-150	18.0	30
PFMPA	0.915				0.800		114	40-150	5.06	30
PFMBA	0.900				0.800		112	40-150	4.13	30
NFDHA	0.846				0.800		106	40-150	14.4	30
9CL-PF3ONS	0.851				0.748		114	40-150	3.83	30
11CL-PF3OUDS	0.786				0.756		104	40-150	11.4	30
3:3FTCA	1.71				1.60		107	40-150	4.05	30
5:3FTCA	1.56				1.60		97.6	40-150	1.91	30
7:3FTCA	1.37				1.60		85.5	40-150	11.4	30

Surrogates

13C4-PFBA	3.98				3.20		124	20-150		
13C5-PFPEA	1.72				1.60		107	20-150		
13C5-PFHXA	1.01				0.800		127	20-150		
13C4-PFHFA	0.991				0.800		124	20-150		
13C8-PFOA	1.04				0.800		130	20-150		
13C9-PFNA	0.519				0.400		130	20-150		
13C6-PFDA	0.486				0.400		122	20-150		
13C7-PFUnA	0.533				0.400		133	20-150		
13C2-PFDOA	0.482				0.400		121	20-150		
13C2-PFTEDA	0.474				0.400		118	20-150		
13C3-PFBS	1.05				0.800		131	20-150		
13C3-PFHXS	0.984				0.800		123	20-150		
13C8-PFOS	1.05				0.800		131	20-150		
13C2-4:2FTS	2.02				1.60		126	20-150		
13C2-6:2FTS	2.08				1.60		130	20-150		
13C2-8:2FTS	1.63				1.60		102	20-150		
13C8-PFOA	0.895				0.800		112	20-150		
D5-NETFOA	0.310				0.800		38.8	20-150		
D3-NMEFOA	0.324				0.800		40.5	20-150		
D3-NMEFOSAA	2.09				1.60		130	20-150		
D5-NETFOSAA	2.15				1.60		135	20-150		
D7-NMEFOSE	5.11				8.00		63.9	20-150		
D9-NETFOSE	5.36				8.00		66.9	20-150		
13C3-HFPO-DA	3.74				3.20		117	20-150		

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Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0206 - 1633 (Continued)

MRL Check (BBL0206-MRL1)

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 01:20

ug/kg Dry

PFBA	0.166 J				0.160		104	40-150		
PFPEA	0.0880				0.0800		110	40-150		
PFHXA	0.0472 IR2				0.0400		118	40-150		
PFHPA	0.0505				0.0400		126	40-150		
PFOA	0.0802 BS2				0.0400		201	40-150		
PFNA	0.0471				0.0400		118	40-150		
PFDA	0.0643 BS2, IR1				0.0400		161	40-150		
PFUnA	0.0401 IR2				0.0400		100	40-150		
PFDOA	0.0487 IR2				0.0400		122	40-150		
PFTRDA	0.0576				0.0400		144	40-150		
PFTEDA	0.0493				0.0400		123	40-150		
PFBS	0.0391 J				0.0354		110	40-150		
PFPEs	0.0389 J				0.0376		103	40-150		
PFHXS	0.0430				0.0366		117	40-150		
PFHPS	0.0347 J				0.0382		90.9	40-150		
PFOS	0.0452				0.0372		122	40-150		
PFNS	0.0336 J				0.0384		87.6	40-150		
PFDS	0.0399 J				0.0386		103	40-150		
PFDOS	0.0319 J				0.0388		82.2	40-150		
4:2FTS	0.200				0.150		133	40-150		
6:2FTS	0.180				0.152		119	40-150		
8:2FTS	0.164				0.154		107	40-150		
PFOSA	0.0490				0.0400		122	40-150		
NMeFOSA	0.184				0.160		115	40-150		
NEtFOSA	0.169				0.160		106	40-150		
NMeFOSAA	0.0503 IR1				0.0400		126	40-150		
NEtFOSAA	0.0539				0.0400		135	40-150		
NMeFOSE	0.144 J				0.160		90.2	40-150		
NEtFOSE	0.224				0.160		140	40-150		
HFPO-DA	0.0930				0.0800		116	40-150		
ADONA	0.0711 J				0.0756		94.0	40-150		
PFEESA	0.0775 J				0.0712		109	40-150		
PFMPA	0.0771 J				0.0800		96.4	40-150		
PFMBA	0.0798 J				0.0800		99.7	40-150		
NFDHA	0.102				0.0800		128	40-150		
9CL-PF3ONS	0.0752 J				0.0748		101	40-150		
11CL-PF3OUDS	0.0705 J				0.0756		93.2	40-150		
3:3FTCA	0.147 J				0.160		91.8	40-150		
5:3FTCA	0.144 J				0.160		89.9	40-150		
7:3FTCA	0.130 J				0.160		81.1	40-150		

Surrogates

13C4-PFBA	3.85				3.20		120	20-150		
13C5-PFPEA	1.87				1.60		117	20-150		
13C5-PFHXA	1.01				0.800		126	20-150		
13C4-PFHPA	0.956				0.800		119	20-150		
13C8-PFOA	0.995				0.800		124	20-150		

AECOM Honolulu 1001 Bishop Street, Suite 1600 Honolulu, HI 96813	Project: Red Hill AFFF Assessment Sampling Project Number: Red Hill AFFF Assessment Sampling Project Manager: Watson Tanji	Reported: 12/27/2022 17:11
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Quality Control
(Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0206 - 1633 (Continued)

MRL Check (BBL0206-MRL1)

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 01:20

ug/kg Dry

Surrogates

13C9-PFNA	0.481				0.400		120	20-150		
13C6-PFDA	0.438				0.400		110	20-150		
13C7-PFUnA	0.510				0.400		128	20-150		
13C2-PFDOA	0.440				0.400		110	20-150		
13C2-PFTEDA	0.505				0.400		126	20-150		
13C3-PFBS	1.05				0.800		132	20-150		
13C3-PFHXS	0.956				0.800		120	20-150		
13C8-PFOS	1.01				0.800		126	20-150		
13C2-4:2FTS	1.80				1.60		113	20-150		
13C2-6:2FTS	2.15				1.60		134	20-150		
13C2-8:2FTS	1.97				1.60		123	20-150		
13C8-PFOA	0.863				0.800		108	20-150		
D5-NETFOA	0.309				0.800		38.7	20-150		
D3-NMEFOA	0.328				0.800		41.0	20-150		
D3-NMEFOA	2.01				1.60		125	20-150		
D5-NETFOA	1.97				1.60		123	20-150		
D7-NMEFOE	5.56				8.00		69.5	20-150		
D9-NETFOE	6.14				8.00		76.7	20-150		
13C3-HFPO-DA	4.15				3.20		130	20-150		

Matrix Spike (BBL0206-MS1)

Source: 22L0057-01

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 01:33

ug/kg Dry

PFBA	2.86				1.56	1.42	92.4	40-150		
PFPEA	1.19				0.780	0.848	44.3	40-150		
PFHXA	2.35 MS1				0.390	8.02	-1450	40-150		
PFHPA	0.481				0.390	0.123	91.8	40-150		
PFOA	0.594				0.390	0.116	123	40-150		
PFNA	0.415				0.390	0.0295 U	107	40-150		
PFDA	0.504				0.390	0.0295 U	129	40-150		
PFUnA	0.393				0.390	0.0196 U	101	40-150		
PFDOA	0.413				0.390	0.0295 U	106	40-150		
PFTRDA	0.370				0.390	0.0196 U	95.0	40-150		
PFTEDA	0.461				0.390	0.0295 U	118	40-150		
PFBS	0.375				0.345	0.0196 U	109	40-150		
PFPEA	0.442				0.366	0.0196 U	121	40-150		
PFHXS	0.409				0.357	0.0196 U	115	40-150		
PFHPS	0.358				0.372	0.0196 U	96.3	40-150		
PFOS	0.438				0.363	0.0507	107	40-150		
PFNS	0.332				0.374	0.0196 U	88.8	40-150		
PFDS	0.367				0.376	0.0196 U	97.4	40-150		
PFDOS	0.402				0.378	0.0196 U	106	40-150		
4:2FTS	1.91				1.46	0.307	110	40-150		
6:2FTS	43.5 MS1				1.48	56.8	-896	40-150		
8:2FTS	1.93				1.50	0.0786 U	129	40-150		
PFOA	0.474				0.390	0.0196 U	122	40-150		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document. No duplication of this report is allowed, except in its entirety.

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Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0206 - 1633 (Continued)

Matrix Spike (BBL0206-MS1)

Source: 22L0057-01

Prepared: 12/09/22 15:06 Analyzed: 12/15/22 01:33

ug/kg Dry

NMeFOSA	1.58				1.56	0.0786 U	101	40-150		
NETFOSA	1.68				1.56	0.0786 U	108	40-150		
NMeFOSAA	0.437				0.390	0.0196 U	112	40-150		
NETFOSAA	0.444				0.390	0.0196 U	114	40-150		
NMeFOSE	1.50				1.56	0.0786 U	96.2	40-150		
NETFOSE	1.60				1.56	0.0786 U	102	40-150		
HFPO-DA	0.984				0.780	0.0393 U	126	40-150		
ADONA	0.854				0.737	0.0393 U	116	40-150		
PFEESA	0.757				0.694	0.0393 U	109	40-150		
PFMPA	0.819				0.780	0.0393 U	105	40-150		
PFMBA	0.872				0.780	0.0393 U	112	40-150		
NFDHA	0.995				0.780	0.0589 U	128	40-150		
9CL-PF3ONS	0.503				0.729	0.0393 U	69.0	40-150		
11CL-PF3OUDS	0.818				0.737	0.0393 U	111	40-150		
3:3FTCA	1.53				1.56	0.0786 U	98.1	40-150		
5:3FTCA	1.98				1.56	0.293	108	40-150		
7:3FTCA	1.65				1.56	0.0786 U	106	40-150		

Surrogates

13C4-PFBA	3.59				3.12		115	20-150		
13C5-PFPEA	1.81				1.56		116	20-150		
13C5-PFHXA	0.892				0.780		114	20-150		
13C4-PFHXA	0.986				0.780		126	20-150		
13C8-PFOA	0.988				0.780		127	20-150		
13C9-PFNA	0.508				0.390		130	20-150		
13C6-PFDA	0.409				0.390		105	20-150		
13C7-PFUnA	0.348				0.390		89.3	20-150		
13C2-PFDOA	0.480				0.390		123	20-150		
13C2-PFTEDA	0.310				0.390		79.6	20-150		
13C3-PFBS	1.18 S2				0.780		152	20-150		
13C3-PFHXS	1.04				0.780		133	20-150		
13C8-PFOS	0.961				0.780		123	20-150		
13C2-4:2FTS	2.08				1.56		134	20-150		
13C2-6:2FTS	2.94 S2				1.56		189	20-150		
13C2-8:2FTS	1.42				1.56		91.0	20-150		
13C8-PFOA	0.777				0.780		99.6	20-150		
D5-NETFOSA	0.884				0.780		113	20-200		
D3-NMEFOSA	0.827				0.780		106	20-200		
D3-NMEFOSAA	1.96				1.56		125	20-150		
D5-NETFOSAA	2.05				1.56		131	20-150		
D7-NMEFOSE	10.0				7.80		128	20-200		
D9-NETFOSE	9.87				7.80		127	20-200		
13C3-HFPO-DA	3.50				3.12		112	20-150		

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Project: Red Hill AFFF Assessment Sampling
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Project Manager: Watson Tanji

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BBL0206 - 1633 (Continued)										
Matrix Spike Dup (BBL0206-MSD1)			Source: 22L0057-01			Prepared: 12/09/22 15:06 Analyzed: 12/15/22 01:45				
	ug/kg Dry									
PFBA	3.10				1.48	1.42	114	40-150	8.10	30
PFPEA	1.44				0.738	0.848	80.9	40-150	19.1	30
PFHXA	3.35 MS1				0.369	8.02	-1270	40-150	35.0	30
PFHPA	0.562				0.369	0.123	119	40-150	15.5	30
PFOA	0.542				0.369	0.116	115	40-150	9.23	30
PFNA	0.396				0.369	0.0295 U	107	40-150	4.82	30
PFDA	0.389				0.369	0.0295 U	105	40-150	25.9	30
PFUnA	0.420				0.369	0.0196 U	114	40-150	6.72	30
PFDOA	0.492				0.369	0.0295 U	133	40-150	17.3	30
PFTRDA	0.518 MS3				0.369	0.0196 U	140	40-150	33.3	30
PFTEDA	0.406				0.369	0.0295 U	110	40-150	12.8	30
PFBS	0.398				0.327	0.0196 U	122	40-150	6.09	30
PFPEs	0.373				0.347	0.0196 U	108	40-150	17.0	30
PFHXS	0.349				0.338	0.0196 U	103	40-150	16.0	30
PFHPS	0.324				0.352	0.0196 U	91.9	40-150	10.1	30
PFOS	0.460				0.343	0.0507	119	40-150	4.93	30
PFNS	0.302				0.354	0.0196 U	85.2	40-150	9.59	30
PFDS	0.360				0.356	0.0196 U	101	40-150	1.71	30
PFDOS	0.388				0.358	0.0196 U	108	40-150	3.57	30
4:2FTS	1.95				1.38	0.307	119	40-150	2.20	30
6:2FTS	51.4 MS1				1.40	56.8	-386	40-150	16.6	30
8:2FTS	1.63				1.42	0.0786 U	115	40-150	17.2	30
PFOSA	0.424				0.369	0.0196 U	115	40-150	11.0	30
NMeFOSA	1.68				1.48	0.0786 U	114	40-150	6.04	30
NETFOSA	1.68				1.48	0.0786 U	114	40-150	0.342	30
NMeFOSAA	0.480				0.369	0.0196 U	130	40-150	9.31	30
NETFOSAA	0.524				0.369	0.0196 U	142	40-150	16.3	30
NMeFOSE	1.52				1.48	0.0786 U	103	40-150	1.60	30
NETFOSE	1.56				1.48	0.0786 U	106	40-150	2.34	30
HFPO-DA	0.839				0.738	0.0393 U	114	40-150	15.9	30
ADONA	0.883				0.697	0.0393 U	127	40-150	3.30	30
PFEESA	0.790				0.657	0.0393 U	120	40-150	4.32	30
PFMPA	0.815				0.738	0.0393 U	110	40-150	0.572	30
PFMBA	0.799				0.738	0.0393 U	108	40-150	8.79	30
NFDHA	0.666 MS3				0.738	0.0589 U	90.3	40-150	39.6	30
9CL-PF3ONS	0.558				0.690	0.0393 U	80.9	40-150	10.4	30
11CL-PF3OUDS	0.855				0.697	0.0393 U	123	40-150	4.33	30
3:3FTCA	1.65				1.48	0.0786 U	112	40-150	7.68	30
5:3FTCA	1.80				1.48	0.293	102	40-150	9.56	30
7:3FTCA	1.50				1.48	0.0786 U	101	40-150	9.87	30
Surrogates										
13C4-PFBA	3.25				2.95		110	20-150		
13C5-PFPEA	1.55				1.48		105	20-150		
13C5-PFHXA	0.826				0.738		112	20-150		
13C4-PFHPA	0.852				0.738		115	20-150		
13C8-PFOA	0.826				0.738		112	20-150		

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Project: Red Hill AFFF Assessment Sampling
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Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BBL0206 - 1633 (Continued)										
Matrix Spike Dup (BBL0206-MSD1)			Source: 22L0057-01			Prepared: 12/09/22 15:06 Analyzed: 12/15/22 01:45				
	ug/kg Dry									
Surrogates										
13C9-PFNA	0.426				0.369		115	20-150		
13C6-PFDA	0.407				0.369		110	20-150		
13C7-PFUnA	0.329				0.369		89.3	20-150		
13C2-PFDOA	0.352				0.369		95.3	20-150		
13C2-PFTEDA	0.315				0.369		85.4	20-150		
13C3-PFBS	0.800				0.738		108	20-150		
13C3-PFHXS	0.850				0.738		115	20-150		
13C8-PFOS	0.803				0.738		109	20-150		
13C2-4:2FTS	1.65				1.48		112	20-150		
13C2-6:2FTS	1.94				1.48		132	20-150		
13C2-8:2FTS	1.28				1.48		87.0	20-150		
13C8-PFOA	0.641				0.738		86.9	20-150		
D5-NETFOA	0.664				0.738		89.9	20-200		
D3-NMEFOA	0.616				0.738		83.4	20-200		
D3-NMEFOA	1.65				1.48		111	20-150		
D5-NETFOA	1.53				1.48		104	20-150		
D7-NMEFOA	7.33				7.38		99.3	20-200		
D9-NETFOA	7.09				7.38		96.0	20-200		
13C3-HFPO-DA	2.90				2.95		98.1	20-150		

Batch: BBL0372 - PFAS Leachates

Blank (BBL0372-BLK1)

Prepared: 12/19/22 12:22 Analyzed: 12/21/22 19:57

	ng/L			
PFBA	4.0 U	8.0	4.0	1.0
PFPEA	4.0 U	4.0	4.0	0.32
PFHXA	2.0 U	2.0	2.0	0.28
PFHPA	1.0 U	2.0	1.0	0.20
PFOA	1.0 U IR2,	2.0	1.0	0.75
PFNA	1.0 U	2.0	1.0	0.41
PFDA	1.0 U	2.0	1.0	0.50
PFUnA	1.0 U	2.0	1.0	0.80
PFDOA	1.0 U	2.0	1.0	0.55
PFTRDA	1.5 U	2.0	1.5	1.0
PFTEDA	1.0 U	2.0	1.0	1.0
PFBS	1.0 U	2.0	1.0	0.18
PFPEA	1.0 U	2.0	1.0	0.32
PFHXS	1.0 U	2.0	1.0	0.16
PFHPS	1.0 U	2.0	1.0	0.26
PFOS	0.604 J	2.0	1.0	0.32
PFNS	1.0 U	2.0	1.0	0.60
PFDS	1.0 U	2.0	1.0	0.75
PFDOS	1.0 U	2.0	1.0	0.60
4:2FTS	4.0 U	8.0	4.0	1.4
6:2FTS	4.0 U	8.0	4.0	1.6

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Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0372 - PFAS Leachates (Continued)

Blank (BBL0372-BLK1)

Prepared: 12/19/22 12:22 Analyzed: 12/21/22 19:57

Analyte	Result/Qual	LOQ	LOD	MDL
	ng/L			
8:2FTS	4.0 U	8.0	4.0	0.41
PFOSA	1.0 U	2.0	1.0	0.50
NMeFOSA	4.0 U	8.0	4.0	2.4
NETFOSA	4.0 U	8.0	4.0	2.0
NMeFOSAA	1.0 U	2.0	1.0	0.55
NETFOSAA	1.0 U	2.0	1.0	0.55
NMeFOSE	6.0 U	8.0	6.0	5.0
NETFOSE	6.0 U	8.0	6.0	5.0
HFPO-DA	2.0 U	4.0	2.0	0.85
ADONA	2.0 U	4.0	2.0	0.60
PFEESA	2.0 U	4.0	2.0	0.55
PFMPA	2.0 U	4.0	2.0	0.27
PFMBA	2.0 U	4.0	2.0	0.46
NFDHA	2.0 U	4.0	2.0	1.5
9CL-PF3ONS	2.0 U	4.0	2.0	1.0
11CL-PF3OUDS	2.0 U	4.0	2.0	1.0
3:3FTCA	4.0 U	8.0	4.0	2.8
5:3FTCA	4.0 U	8.0	4.0	2.2
7:3FTCA	4.0 U	8.0	4.0	2.8

Surrogates

13C4-PFBA	151	160	94.4	20-150
13C5-PFPEA	72.6	80.0	90.8	20-150
13C5-PFHXA	34.9	40.0	87.4	20-150
13C4-PFHFA	34.5	40.0	86.2	20-150
13C8-PFOA	34.3	40.0	85.7	20-150
13C9-PFNA	15.2	20.0	75.8	20-150
13C6-PFDA	17.3	20.0	86.4	20-150
13C7-PFUnA	13.4	20.0	66.8	20-150
13C2-PFDOA	15.4	20.0	76.9	20-150
13C2-PFTEDA	16.5	20.0	82.4	20-150
13C3-PFBS	36.2	40.0	90.5	20-150
13C3-PFHXS	32.8	40.0	82.1	20-150
13C8-PFOS	30.3	40.0	75.7	20-150
13C2-4:2FTS	65.7	80.0	82.2	20-150
13C2-6:2FTS	58.8	80.0	73.6	20-150
13C2-8:2FTS	63.8	80.0	79.8	20-150
13C8-PFOSA	31.1	40.0	77.8	20-150
D5-NETFOSA	8.64	40.0	21.6	20-150
D3-NMEFOSA	9.98	40.0	24.9	20-150
D3-NMEFOSAA	62.9	80.0	78.6	20-150
D5-NETFOSAA	68.1	80.0	85.2	20-150
D7-NMEFOSE	189	400	47.2	20-150
D9-NETFOSE	165	400	41.2	20-150
13C3-HFPO-DA	134	160	83.8	20-150

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0372 - PFAS Leachates (Continued)

LCS (BBL0372-BS1)

Prepared: 12/19/22 12:22 Analyzed: 12/21/22 20:09

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
	ng/L									
PFBA	79.8				80.0		99.7	40-150		
PFPEA	39.7				40.0		99.3	40-150		
PFHXA	20.9				20.0		105	40-150		
PFHPA	19.3				20.0		96.7	40-150		
PFOA	19.6				20.0		98.0	40-150		
PFNA	21.7				20.0		109	40-150		
PFDA	19.3				20.0		96.5	40-150		
PFUnA	19.4				20.0		96.8	40-150		
PFDOA	21.4				20.0		107	40-150		
PFTRDA	20.5				20.0		102	40-150		
PFTEDA	21.9				20.0		109	40-150		
PFBS	18.7				17.7		106	40-150		
PFPEs	20.5				18.8		109	40-150		
PFHXS	19.1				18.3		104	40-150		
PFHPS	21.1				19.1		111	40-150		
PFOS	19.8				18.6		106	40-150		
PFNS	19.3				19.2		100	40-150		
PFDS	19.0				19.3		98.3	40-150		
PFDOS	20.3				19.4		104	40-150		
4:2FTS	76.8				75.0		102	40-150		
6:2FTS	81.0				76.0		107	40-150		
8:2FTS	77.3				76.8		101	40-150		
PFOSA	20.5				20.0		103	40-150		
NMeFOSA	87.1				80.0		109	40-150		
NEtFOSA	91.7				80.0		115	40-150		
NMeFOSAA	23.5				20.0		117	40-150		
NEtFOSAA	23.3				20.0		116	40-150		
NMeFOSE	71.2				80.0		89.0	40-150		
NEtFOSE	58.1				80.0		72.6	40-150		
HFPO-DA	37.4				40.0		93.6	40-150		
ADONA	35.7				37.8		94.4	40-150		
PFEESA	36.6				35.6		103	40-150		
PFMPA	40.7				40.0		102	40-150		
PFMBA	36.6				40.0		91.6	40-150		
NFDHA	44.2				40.0		110	40-150		
9CL-PF3ONS	29.5				37.4		79.0	40-150		
11CL-PF3OUDS	29.1				37.8		76.9	40-150		
3:3FTCA	77.0				80.0		96.2	40-150		
5:3FTCA	80.7				80.0		101	40-150		
7:3FTCA	82.3				80.0		103	40-150		

Surrogates

13C4-PFBA	145				160		90.9	20-150		
13C5-PFPEA	75.6				80.0		94.5	20-150		
13C5-PFHXA	34.4				40.0		86.1	20-150		
13C4-PFHPA	35.6				40.0		89.1	20-150		
13C8-PFOA	34.9				40.0		87.2	20-150		

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Project: Red Hill AFFF Assessment Sampling
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Project Manager: Watson Tanji

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0372 - PFAS Leachates (Continued)

LCS (BBL0372-BS1)

Prepared: 12/19/22 12:22 Analyzed: 12/21/22 20:09

	ng/L							
Surrogates								
13C9-PFNA	18.0			20.0		89.9	20-150	
13C6-PFDA	16.2			20.0		80.8	20-150	
13C7-PFUnA	15.7			20.0		78.6	20-150	
13C2-PFDOA	13.7			20.0		68.7	20-150	
13C2-PFTEDA	13.6			20.0		68.2	20-150	
13C3-PFBS	35.8			40.0		89.4	20-150	
13C3-PFHXS	32.6			40.0		81.4	20-150	
13C8-PFOS	27.9			40.0		69.7	20-150	
13C2-4:2FTS	69.0			80.0		86.3	20-150	
13C2-6:2FTS	64.1			80.0		80.1	20-150	
13C2-8:2FTS	59.1			80.0		73.9	20-150	
13C8-PFOA	30.5			40.0		76.3	20-150	
D5-NETFOA	7.32 S1			40.0		18.3	20-150	
D3-NMEFOA	9.02			40.0		22.5	20-150	
D3-NMEFOA	54.5			80.0		68.1	20-150	
D5-NETFOA	52.9			80.0		66.1	20-150	
D7-NMEFOA	165			400		41.3	20-150	
D9-NETFOA	148			400		37.0	20-150	
13C3-HFOA-DA	147			160		91.9	20-150	

MRL Check (BBL0372-MRL1)

Prepared: 12/19/22 12:22 Analyzed: 12/21/22 20:22

	ng/L						
PFBA	6.93 J			8.00		86.7	0-200
PFPEA	4.18			4.00		104	0-200
PFHXA	2.19			2.00		110	0-200
PFHPA	2.47			2.00		123	0-200
PFOA	2.42			2.00		121	0-200
PFNA	2.24			2.00		112	0-200
PFDA	2.37			2.00		119	0-200
PFUnA	1.90 J IR2,			2.00		94.8	0-200
PFDOA	1.26 J IR2,			2.00		63.0	0-200
PFTRDA	1.57 J IR2,			2.00		78.6	0-200
PFTEDA	1.95 J			2.00		97.3	0-200
PFBS	1.81 J			1.77		102	0-200
PFPEA	1.90 J			1.88		101	0-200
PFHXS	1.90 J			1.83		104	0-200
PFHPS	1.67 J			1.91		87.4	0-200
PFOS	2.00			1.86		108	0-200
PFNS	1.40 J			1.92		72.7	0-200
PFDS	1.52 J			1.93		78.9	0-200
PFDOS	1.36 J			1.94		70.1	0-200
4:2FTS	6.65 J			7.50		88.7	0-200
6:2FTS	8.82			7.60		116	0-200
8:2FTS	6.56 J			7.68		85.4	0-200
PFOA	1.76 J			2.00		88.0	0-200

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Project Manager: Watson Tanji

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Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0372 - PFAS Leachates (Continued)

MRL Check (BBL0372-MRL1)

Prepared: 12/19/22 12:22 Analyzed: 12/21/22 20:22

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
	ng/L									
NMeFOSA	5.78 J				8.00		72.3	0-200		
NEtFOSA	6.02 J				8.00		75.3	0-200		
NMeFOSAA	2.08				2.00		104	0-200		
NEtFOSAA	1.94 J				2.00		96.8	0-200		
NMeFOSE	7.27 J				8.00		90.9	0-200		
NEtFOSE	7.22 J				8.00		90.3	0-200		
HFPO-DA	3.59 J				4.00		89.8	0-200		
ADONA	3.68 J				3.78		97.5	0-200		
PFEESA	3.22 J				3.56		90.4	0-200		
PFMPA	3.78 J				4.00		94.4	0-200		
PFMBA	3.64 J				4.00		90.9	0-200		
NFDHA	3.61 J				4.00		90.1	0-200		
9CL-PF3ONS	2.84 J				3.74		76.0	0-200		
11CL-PF3OUDS	2.80 J				3.78		74.0	0-200		
3:3FTCA	9.01				8.00		113	0-200		
5:3FTCA	7.50 J				8.00		93.8	0-200		
7:3FTCA	7.90 J				8.00		98.8	0-200		

Surrogates

13C4-PFBA	147				160		91.8	20-150		
13C5-PFPEA	72.8				80.0		91.0	20-150		
13C5-PFHXA	35.4				40.0		88.5	20-150		
13C4-PFHXA	36.6				40.0		91.5	20-150		
13C8-PFOA	34.4				40.0		86.0	20-150		
13C9-PFNA	15.2				20.0		76.0	20-150		
13C6-PFDA	14.7				20.0		73.3	20-150		
13C7-PFUnA	14.4				20.0		71.8	20-150		
13C2-PFDOA	16.3				20.0		81.5	20-150		
13C2-PFTEDA	17.0				20.0		85.1	20-150		
13C3-PFBS	31.4				40.0		78.5	20-150		
13C3-PFHXS	31.7				40.0		79.2	20-150		
13C8-PFOS	31.8				40.0		79.5	20-150		
13C2-4:2FTS	69.6				80.0		87.0	20-150		
13C2-6:2FTS	64.8				80.0		81.0	20-150		
13C2-8:2FTS	58.4				80.0		72.9	20-150		
13C8-PFOA	29.4				40.0		73.5	20-150		
D5-NETFOA	9.78				40.0		24.5	20-150		
D3-NMEFOA	11.3				40.0		28.2	20-150		
D3-NMEFOSAA	61.0				80.0		76.3	20-150		
D5-NETFOSAA	59.0				80.0		73.8	20-150		
D7-NMEFOSE	199				400		49.7	20-150		
D9-NETFOSE	189				400		47.2	20-150		
13C3-HFPO-DA	144				160		89.9	20-150		

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Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0400 - 1633

Blank (BBL0400-BLK1)

Prepared: 12/20/22 14:19 Analyzed: 12/22/22 12:17

ug/kg Dry

PFBA	0.20 U	0.30	0.20	0.15						
PFPEA	0.040 U	0.080	0.040	0.022						
PFHXA	0.020 U	0.040	0.020	0.015						
PFHPA	0.020 U	0.040	0.020	0.015						
PFOA	0.0235 J B,	0.040	0.030	0.021						
PFNA	0.030 U	0.040	0.030	0.022						
PFDA	0.030 U	0.040	0.030	0.022						
PFUnA	0.020 U	0.040	0.020	0.020						
PFDOA	0.030 U	0.040	0.030	0.023						
PFTRDA	0.020 U	0.040	0.020	0.016						
PFTEDA	0.030 U	0.040	0.030	0.025						
PFBS	0.020 U	0.040	0.020	0.016						
PFPEs	0.020 U	0.040	0.020	0.012						
PFHXS	0.020 U	0.040	0.020	0.015						
PFHPS	0.020 U	0.040	0.020	0.011						
PFOS	0.0107 J	0.040	0.020	0.0097						
PFNS	0.020 U	0.040	0.020	0.015						
PFDS	0.020 U	0.040	0.020	0.014						
PFDOS	0.020 U	0.040	0.020	0.013						
4:2FTS	0.080 U	0.16	0.080	0.045						
6:2FTS	0.080 U	0.16	0.080	0.061						
8:2FTS	0.080 U	0.16	0.080	0.051						
PFOSA	0.020 U	0.040	0.020	0.012						
NMeFOSA	0.080 U	0.16	0.080	0.066						
NEtFOSA	0.080 U	0.16	0.080	0.027						
NMeFOSAA	0.020 U	0.040	0.020	0.010						
NEtFOSAA	0.020 U	0.040	0.020	0.018						
NMeFOSE	0.080 U	0.16	0.080	0.054						
NEtFOSE	0.080 U	0.16	0.080	0.047						
HFPO-DA	0.040 U	0.080	0.040	0.022						
ADONA	0.040 U	0.080	0.040	0.026						
PFEESA	0.040 U	0.080	0.040	0.017						
PFMPA	0.040 U	0.080	0.040	0.028						
PFMBA	0.040 U	0.080	0.040	0.032						
NFDHA	0.060 U	0.080	0.060	0.049						
9CL-PF3ONS	0.040 U	0.080	0.040	0.024						
11CL-PF3OUDS	0.040 U	0.080	0.040	0.027						
3:3FTCA	0.080 U	0.16	0.080	0.064						
5:3FTCA	0.080 U	0.16	0.080	0.065						
7:3FTCA	0.080 U	0.16	0.080	0.050						

Surrogates

13C4-PFBA	3.24			3.20		101	20-150
13C5-PFPEA	1.64			1.60		102	20-150
13C5-PFHXA	0.782			0.800		97.7	20-150
13C4-PFHPA	0.797			0.800		99.6	20-150
13C8-PFOA	0.776			0.800		97.0	20-150

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Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0400 - 1633 (Continued)

Blank (BBL0400-BLK1)

Prepared: 12/20/22 14:19 Analyzed: 12/22/22 12:17

ug/kg Dry

Surrogates

13C9-PFNA	0.378				0.400		94.6	20-150		
13C6-PFDA	0.457				0.400		114	20-150		
13C7-PFUnA	0.427				0.400		107	20-150		
13C2-PFDOA	0.391				0.400		97.8	20-150		
13C2-PFTEDA	0.403				0.400		101	20-150		
13C3-PFBS	0.723				0.800		90.3	20-150		
13C3-PFHXS	0.731				0.800		91.4	20-150		
13C8-PFOS	0.699				0.800		87.4	20-150		
13C2-4:2FTS	1.66				1.60		104	20-150		
13C2-6:2FTS	1.82				1.60		114	20-150		
13C2-8:2FTS	1.43				1.60		89.2	20-150		
13C8-PFOA	0.630				0.800		78.7	20-150		
D5-NETFOA	0.412				0.800		51.5	20-150		
D3-NMEFOA	0.404				0.800		50.5	20-150		
D3-NMEFOA	1.28				1.60		80.0	20-150		
D5-NETFOA	1.22				1.60		76.4	20-150		
D7-NMEFOA	5.37				8.00		67.1	20-150		
D9-NETFOA	5.38				8.00		67.3	20-150		
13C3-HFPO-DA	3.43				3.20		107	20-150		

LCS (BBL0400-BS1)

Prepared: 12/20/22 14:19 Analyzed: 12/22/22 12:30

ug/kg Dry

PFBA	1.65				1.60		103	40-150		
PFPEA	0.801				0.800		100	40-150		
PFHXA	0.402				0.400		101	40-150		
PFHPA	0.387				0.400		96.9	40-150		
PFOA	0.378				0.400		94.5	40-150		
PFNA	0.388				0.400		96.9	40-150		
PFDA	0.406				0.400		102	40-150		
PFUnA	0.378				0.400		94.6	40-150		
PFDOA	0.345				0.400		86.1	40-150		
PFTRDA	0.361				0.400		90.2	40-150		
PFTEDA	0.374				0.400		93.5	40-150		
PFBS	0.356				0.354		101	40-150		
PFPEA	0.347				0.376		92.2	40-150		
PFHXS	0.333				0.366		91.1	40-150		
PFHPS	0.370				0.382		96.9	40-150		
PFOS	0.348				0.372		93.5	40-150		
PFNS	0.344				0.384		89.5	40-150		
PFDS	0.336				0.386		87.1	40-150		
PFDOS	0.271				0.388		69.8	40-150		
4:2FTS	1.36				1.50		90.8	40-150		
6:2FTS	1.43				1.52		94.2	40-150		
8:2FTS	1.25				1.54		81.7	40-150		
PFOA	0.341				0.400		85.3	40-150		

AECOM Honolulu
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0400 - 1633 (Continued)

LCS (BBL0400-BS1)

Prepared: 12/20/22 14:19 Analyzed: 12/22/22 12:30

ug/kg Dry

NMeFOSA	1.62				1.60		101	40-150		
NETFOSA	1.69				1.60		106	40-150		
NMeFOSAA	0.417				0.400		104	40-150		
NETFOSAA	0.337				0.400		84.3	40-150		
NMeFOSE	1.58				1.60		98.7	40-150		
NETFOSE	1.52				1.60		94.8	40-150		
HFPO-DA	0.714				0.800		89.3	40-150		
ADONA	0.692				0.756		91.5	40-150		
PFEESA	0.647				0.712		90.9	40-150		
PFMPA	0.805				0.800		101	40-150		
PFMBA	0.758				0.800		94.8	40-150		
NFDHA	0.802				0.800		100	40-150		
9CL-PF3ONS	0.597				0.748		79.8	40-150		
11CL-PF3OUDS	0.602				0.756		79.6	40-150		
3:3FTCA	1.63				1.60		102	40-150		
5:3FTCA	1.53				1.60		95.6	40-150		
7:3FTCA	1.60				1.60		99.8	40-150		

Surrogates

13C4-PFBA	3.02				3.20		94.3	20-150		
13C5-PFPEA	1.53				1.60		95.6	20-150		
13C5-PFHXA	0.745				0.800		93.2	20-150		
13C4-PFHXA	0.773				0.800		96.6	20-150		
13C8-PFOA	0.694				0.800		86.7	20-150		
13C9-PFNA	0.344				0.400		86.1	20-150		
13C6-PFDA	0.285				0.400		71.2	20-150		
13C7-PFUnA	0.295				0.400		73.8	20-150		
13C2-PFDOA	0.311				0.400		77.7	20-150		
13C2-PFTEDA	0.303				0.400		75.7	20-150		
13C3-PFBS	0.695				0.800		86.9	20-150		
13C3-PFHXS	0.736				0.800		92.0	20-150		
13C8-PFOS	0.618				0.800		77.2	20-150		
13C2-4:2FTS	1.55				1.60		96.6	20-150		
13C2-6:2FTS	1.72				1.60		107	20-150		
13C2-8:2FTS	1.39				1.60		87.1	20-150		
13C8-PFOA	0.566				0.800		70.8	20-150		
D5-NETFOA	0.376				0.800		47.0	20-150		
D3-NMEFOA	0.418				0.800		52.2	20-150		
D3-NMEFOSAA	1.12				1.60		70.2	20-150		
D5-NETFOSAA	1.15				1.60		71.6	20-150		
D7-NMEFOSE	4.12				8.00		51.6	20-150		
D9-NETFOSE	4.34				8.00		54.2	20-150		
13C3-HFPO-DA	2.97				3.20		92.7	20-150		

AECOM Honolulu
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0400 - 1633 (Continued)

MRL Check (BBL0400-MRL1)

Prepared: 12/20/22 14:19 Analyzed: 12/22/22 12:43

ug/kg Dry

PFBA	0.148 J				0.160		92.4	40-150		
PFPEA	0.0723 J				0.0800		90.4	40-150		
PFHXA	0.0422				0.0400		106	40-150		
PFHPA	0.0389 J				0.0400		97.1	40-150		
PFOA	0.0428				0.0400		107	40-150		
PFNA	0.0376 J				0.0400		94.0	40-150		
PFDA	0.0395 J				0.0400		98.9	40-150		
PFUnA	0.0319 J IR2,				0.0400		79.7	40-150		
PFDOA	0.0314 J				0.0400		78.6	40-150		
PFTRDA	0.0498 IR1				0.0400		125	40-150		
PFTEDA	0.0436				0.0400		109	40-150		
PFBS	0.0301 J				0.0354		84.9	40-150		
PFPEs	0.0332 J				0.0376		88.3	40-150		
PFHXS	0.0353 J				0.0366		96.5	40-150		
PFHPS	0.0349 J				0.0382		91.4	40-150		
PFOS	0.0419				0.0372		113	40-150		
PFNS	0.0324 J				0.0384		84.3	40-150		
PFDS	0.0271 J				0.0386		70.3	40-150		
PFDOS	0.0197 J				0.0388		50.9	40-150		
4:2FTS	0.136 J				0.150		90.6	40-150		
6:2FTS	0.159 J				0.152		105	40-150		
8:2FTS	0.141 J				0.154		91.5	40-150		
PFOSA	0.0369 J				0.0400		92.2	40-150		
NMeFOSA	0.155 J				0.160		97.0	40-150		
NEtFOSA	0.155 J				0.160		96.7	40-150		
NMeFOSAA	0.0403				0.0400		101	40-150		
NEtFOSAA	0.0240 J				0.0400		60.1	40-150		
NMeFOSE	0.148 J				0.160		92.7	40-150		
NEtFOSE	0.109 J				0.160		68.2	40-150		
HFPO-DA	0.0644 J				0.0800		80.5	40-150		
ADONA	0.0677 J				0.0756		89.5	40-150		
PFEESA	0.0667 J				0.0712		93.7	40-150		
PFMPA	0.0673 J				0.0800		84.1	40-150		
PFMBA	0.0659 J				0.0800		82.4	40-150		
NFDHA	0.0793 J				0.0800		99.1	40-150		
9CL-PF3ONS	0.0566 J				0.0748		75.7	40-150		
11CL-PF3OUDS	0.0602 J				0.0756		79.6	40-150		
3:3FTCA	0.155 J				0.160		96.6	40-150		
5:3FTCA	0.155 J				0.160		96.6	40-150		
7:3FTCA	0.166				0.160		104	40-150		

Surrogates

13C4-PFBA	2.81				3.20		87.9	20-150		
13C5-PFPEA	1.49				1.60		92.9	20-150		
13C5-PFHXA	0.712				0.800		89.0	20-150		
13C4-PFHPA	0.657				0.800		82.1	20-150		
13C8-PFOA	0.755				0.800		94.3	20-150		

AECOM Honolulu
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Quality Control (Continued)

Per- and Polyfluoroalkyl Substances (Continued)

Analyte	Result/Qual	LOQ	LOD	MDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BBL0400 - 1633 (Continued)

MRL Check (BBL0400-MRL1)

Prepared: 12/20/22 14:19 Analyzed: 12/22/22 12:43

ug/kg Dry

Surrogates

13C9-PFNA	0.356				0.400		89.0	20-150		
13C6-PFDA	0.376				0.400		94.0	20-150		
13C7-PFUnA	0.374				0.400		93.5	20-150		
13C2-PFDOA	0.323				0.400		80.7	20-150		
13C2-PFTEDA	0.333				0.400		83.2	20-150		
13C3-PFBS	0.696				0.800		87.0	20-150		
13C3-PFHXS	0.717				0.800		89.7	20-150		
13C8-PFOS	0.673				0.800		84.2	20-150		
13C2-4:2FTS	1.55				1.60		97.0	20-150		
13C2-6:2FTS	1.53				1.60		95.9	20-150		
13C2-8:2FTS	1.33				1.60		83.3	20-150		
13C8-PFOA	0.635				0.800		79.3	20-150		
D5-NETFOA	0.370				0.800		46.2	20-150		
D3-NMEFOA	0.394				0.800		49.3	20-150		
D3-NMEFOA	1.11				1.60		69.2	20-150		
D5-NETFOA	1.31				1.60		81.8	20-150		
D7-NMEFOA	5.05				8.00		63.1	20-150		
D9-NETFOA	4.72				8.00		59.0	20-150		
13C3-HFPO-DA	2.88				3.20		90.0	20-150		

AECOM Honolulu
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Watson Tanji

Reported: 12/27/2022 17:11

Notes and Definitions

Item	Definition
B	Blank contamination
BS1	Blank spike recovered below the lower control limit
BS2	Blank spike recovered above the upper control limit
CV2	Calibration verification recovered above the upper control limit
IR1	Ion ratio below the lower control limit
IR2	Ion ratio above the upper control limit
J	Estimated value
MI5	Manual integration, whole peak was not integrated
MS1	Matrix spike recovered below the lower control limit
MS3	MS/MSD recovered with high RPD
S1	Surrogate recovered below the lower control limit
S2	Surrogate recovered above the upper control limit
U	Not detected
Dry	Sample results reported on a dry weight basis.
DL	Dilution Factor
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
*	Value outside control limits
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.



WORK ORDER

22L0057

Printed: 12/27/2022 5:12 pm

Project: Red Hill AFFF Assessment Sampling
Project Number: Red Hill AFFF Assessment Sampling
Project Manager: Gregory Salata
PO Number:

Report To:

AECOM Honolulu
 Watson Tanji
 1001 Bishop Street, Suite 1600
 Honolulu, HI 96813
 Phone: (808) 954-4512
 Fax: (808) 523-8950

Invoice To:

AECOM Honolulu
 Watson Tanji
 1001 Bishop Street, Suite 1600
 Honolulu, HI 96813
 Phone: (808) 954-4512
 Fax: (808) 523-8950

Date Received: 12/08/2022 01:07 PM

Logged In By: Megan Salata

Date Due: 12/15/2022 (5.00 day TAT)

Received By: Megan Horne

Analysis	Comments
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22L0057-01 ADIT6-DU03-SON01MI-22DEC [Solid] Sampled 12/7/2022 1:50:00PM

% Solids	NONE
1633	NONE
1633 SPLP	NONE

22L0057-02 ADIT6-DU03-WQFB01-22DEC [Water] Sampled 12/7/2022 3:05:00PM

1633	NONE
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22L0057-03 AF-RHMW17-WGN01LF-2212W1 [Water] Sampled 12/7/2022 1:25:00PM

1633	NONE
------	------

22L0057 Sample Receipt Log

Default Cooler

Samples Received at: **-0.1°C**

Custody Seals	Yes	Were all containers sealed in separate bags?	Yes
Containers Intact	Yes	Did all containers arrive in good condition?	Yes
COC/Labels Agree	Yes	Correct containers/preserv. for tests indicated?	Yes
Preservation Confirmed	No	Sufficient volume sent for tests requested?	Yes
Received On Ice	Yes	Were bubbles absent in volatile samples?	No
Was a chain of custody received?	Yes	Sufficient remaining holding time for analyses?	Yes
COCs complete/signed in the appropriate places?	Yes	pH of non-VOA preserved containers documented?	No
Sample labels complete? Sample ID, date/time, etc.	Yes	Unpreserved vials received for VOA analysis?	No
Did all container labels agree with COCs?	Yes	If "yes", are unpreserved VOA vials noted on ARF?	No

New Cooler

Samples Received at: **-0.7°C**

Custody Seals	Yes	Were all containers sealed in separate bags?	Yes
Containers Intact	Yes	Did all containers arrive in good condition?	Yes
COC/Labels Agree	Yes	Correct containers/preserv. for tests indicated?	Yes
Preservation Confirmed	No	Sufficient volume sent for tests requested?	Yes
Received On Ice	Yes	Were bubbles absent in volatile samples?	No
Was a chain of custody received?	Yes	Sufficient remaining holding time for analyses?	Yes
COCs complete/signed in the appropriate places?	Yes	pH of non-VOA preserved containers documented?	No
Sample labels complete? Sample ID, date/time, etc.	Yes	Unpreserved vials received for VOA analysis?	No
Did all container labels agree with COCs?	Yes	If "yes", are unpreserved VOA vials noted on ARF?	No

Types of Samples		Types of Preservatives		Requested Information:
		Keep all Samples on Ice		
Liquids		H ₂ SO ₄	Sulfuric Acid	<p>The person responsible for sampling should fill out the section pertaining to the sampler. For each sampling event, the date and time of the sampling should be recorded in the space provided. If there are any additions or changes to the test descriptions indicated, please make the appropriate modifications on this form. The sampler should SIGN and DATE the Chain of Custody prior to the samples being relinquished to the transporter. A responsible party at the sampling site should retain the FIELD copy. The remaining Chain of Custody should be returned to APPL labs with the samples.</p>
		HCl	Hydrochloric Acid	
DW	Drinking Water	NaOH	Sodium Hydroxide	
GW	Ground Water	Na ₂ SO ₃	Sodium Thiosulfate	
MW	Monitoring Water	HNO ₃	Nitric Acid	
SW	Surface Water		Zinc Acetate	
TB	Travel Blank			
WW	Waste Water	Types of Containers		
		A	Amber Glass	
	Solids	C	Clear Glass	
S	Soil	B	Brass Tube	
SLD	Solid	M	Metal Tube	
SL	Sludge	P	Plastic	
Oil	Oil	G	Bag	
M	Miscellaneous	AV	Amber Glass VOA	
W	Wipes	GV	Glass VOA	
SED	Sediment	O	Other _____	

CUSTODY SEAL

AECOM (808) 521-3051

Date

7/7

Initials

OTHER

PFAS

SAMPLE DATA

FORM I
ANALYSIS DATA SHEET
ADIT6-DU03-SON01MI-22DEC

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	22L0057-01
		File ID:	S2022-12-14B (11)
Sampled:	12/07/22 13:50	Prepared:	12/09/22 15:06
		Analyzed:	12/15/22 01:58
Solids:	91.07	Preparation:	1633
		Dilution:	1
Initial/Final:	5.09 g / 2 ml	Instrument:	Saphira
Batch:	BBL0206	Sequence:	SB03845
		Calibration:	2251013

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
PFBA	1.4	0.29	0.20	0.15	
PFPEA	0.85	0.079	0.039	0.021	
PFHXA	8.0	0.039	0.020	0.015	
PFHPA	0.12	0.039	0.020	0.015	
PFOA	0.12	0.039	0.029	0.021	
PFNA	0.029 U	0.039	0.029	0.021	
PFDA	0.029 U	0.039	0.029	0.022	IR2,
PFUnA	0.020 U	0.039	0.020	0.020	
PFDOA	0.029 U	0.039	0.029	0.023	IR2,
PFTRDA	0.020 U	0.039	0.020	0.016	
PFTEDA	0.029 U	0.039	0.029	0.025	IR2,
PFBS	0.020 U	0.039	0.020	0.016	
PFPEs	0.020 U	0.039	0.020	0.012	
PFHXS	0.020 U	0.039	0.020	0.015	
PFHPS	0.020 U	0.039	0.020	0.011	
PFOS	0.051	0.039	0.020	0.0096	
PFNS	0.020 U	0.039	0.020	0.014	
PFDS	0.020 U	0.039	0.020	0.013	
PFDOS	0.020 U	0.039	0.020	0.013	
4:2FTS	0.31	0.16	0.079	0.045	
8:2FTS	0.079 U	0.16	0.079	0.050	
PFOSA	0.020 U	0.039	0.020	0.012	
NMeFOSAA	0.020 U	0.039	0.020	0.0099	
NEtFOSAA	0.020 U	0.039	0.020	0.018	
HFPO-DA	0.039 U	0.079	0.039	0.021	
ADONA	0.039 U	0.079	0.039	0.026	
PFEESA	0.039 U	0.079	0.039	0.017	
PFMPA	0.039 U	0.079	0.039	0.027	
PFMBA	0.039 U	0.079	0.039	0.032	
NFDHA	0.059 U	0.079	0.059	0.048	

FORM I
ANALYSIS DATA SHEET
ADIT6-DU03-SON01MI-22DEC

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	22L0057-01
		File ID:	S2022-12-14B (11)
Sampled:	12/07/22 13:50	Prepared:	12/09/22 15:06
		Analyzed:	12/15/22 01:58
Solids:	91.07	Preparation:	1633
		Dilution:	1
Initial/Final:	5.09 g / 2 ml	Instrument:	Saphira
Batch:	BBL0206	Sequence:	SB03845
		Calibration:	2251013

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
9CL-PF3ONS	0.039 U	0.079	0.039	0.024	
11CL-PF3OUDS	0.039 U	0.079	0.039	0.026	
3:3FTCA	0.079 U	0.16	0.079	0.063	
5:3FTCA	0.29	0.16	0.079	0.064	
7:3FTCA	0.079 U	0.16	0.079	0.049	

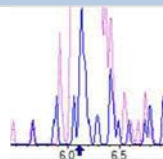
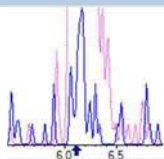
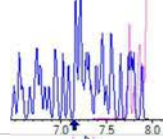
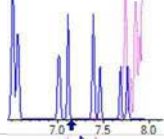
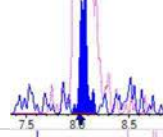
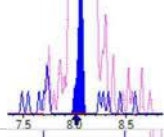
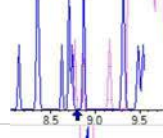
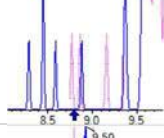
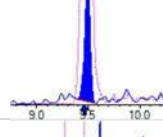
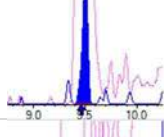
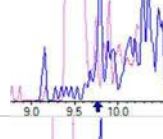
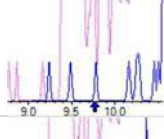
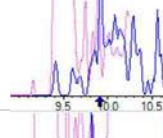
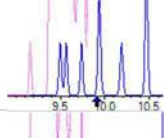
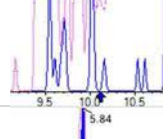
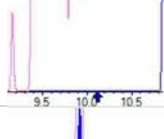
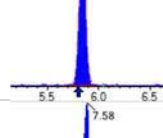
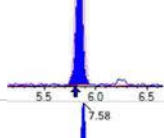
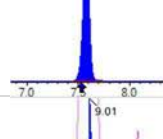
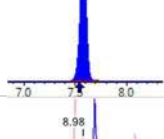
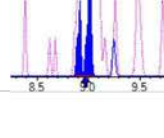
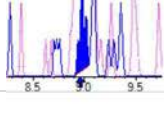


Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (11)
 Acquired: 2022/12/15 - 01:58

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 163077	(3.73, 1.00) (0.00, N/A, 0.0)	64.5	N/A 0.0 0.0	3.6017	N/A			
PFPeA	(262.9 / 219.0) 151137 (262.9 / 69.0) 1871	(5.04, 1.00) (0.00, N/A, 0.5)	618.3 65.2	0.0124 98.6 118.1	2.1574	N/A			
PFHxA	(313.0 / 269.0) 2383689 (313.0 / 119.0) 242960	(6.18, 1.00) (0.00, N/A, 0.1)	812.1 575.2	0.1019 110.1 97.8	20.4189	N/A			
PFHpA	(363.0 / 319.0) 31938 (363.0 / 169.0) 8486	(7.11, 1.00) (0.00, N/A, 0.4)	127.1 99.9	0.2657 85.4 82.5	0.3127	N/A			
PFOA	(413.0 / 369.0) 32529 (413.0 / 169.0) 12994	(7.92, 1.00) (0.00, N/A, 0.2)	98.3 136.1	0.3995 119.0 127.8	0.2963	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) 6121 (513.0 / 169.0) 2485	(9.34, 1.00) (-0.01, N/A, -1.4)	22.3 49.1	0.4060 403.3 432.7	0.0461	N/A			IR2,
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDaA	(613.0 / 569.0) 2234 (613.0 / 169.0) 564	(9.91, 1.00) (0.00, N/A, 0.6)	15.4 26.9	0.2526 197.1 171.6	0.0135	N/A			IR2,
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) 1857 (713.0 / 169.0) 623	(10.15, 1.00) (0.01, N/A, 4.7)	20.2 468.4	0.3357 180.4 159.6	0.0181	N/A			IR2,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) 3413 (399.0 / 99.0) 1143	(8.06, 1.00) (0.00, N/A, -0.1)	82.6 173.7	0.3350 103.8 99.4	0.0124	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 39813 (499.0 / 99.0) 9355	(9.49, 1.00) (0.00, N/A, -0.5)	64.2 63.6	0.2350 102.4 103.7	0.1290	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) 48142 (327.0 / 81.0) 30298	(5.84, 1.00) (0.00, N/A, 0.1)	432.0 164.9	0.6294 103.7 117.9	0.7814	N/A			
6:2FTS	(427.0 / 407.0) 6595377 (427.0 / 81.0) 4426318	(7.58, 1.00) (0.00, N/A, 0.1)	916.0 1260.4	0.6711 103.3 99.7	144.4627	N/A			
8:2FTS	(527.0 / 507.0) 1656 (527.0 / 81.0) 1130	(9.01, 1.00) (0.00, N/A, 1.7)	965.6 11.8	0.6822 108.8 114.1	0.0559	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (11)
 Acquired: 2022/12/15 - 01:58

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

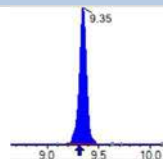
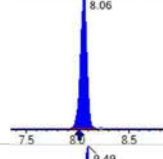
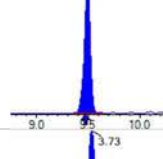
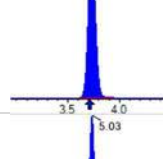
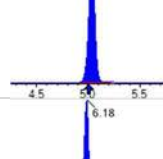
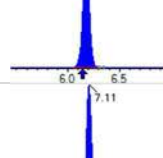
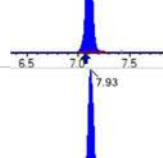
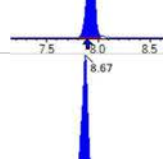
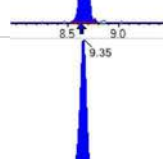
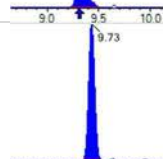
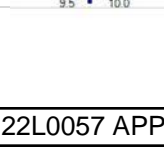


Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (11)
 Acquired: 2022/12/15 - 01:58

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) 17414 (341.0 / 217.0) 21175	(6.82, 1.10) (N/A, 0.03, -0.3)	233.5 88.1	1.2160 77.2 68.1	0.7455	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBa_IIS	(216.0 / 172.0) 75926	(3.73, N/A) (N/A, 0.04, N/A)	594.5	N/A	0.6258 [1.0000]	62.6% { 77.1% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 144954	(6.18, N/A) (N/A, 0.04, N/A)	743.8	N/A	0.7943 [1.0000]	79.4% { 82.2% }			
13C4_PFOA_IIS	(417.0 / 372.0) 120434	(7.93, N/A) (N/A, 0.04, N/A)	609.8	N/A	0.6899 [1.0000]	69.0% { 68.8% }			
13C5_PFNAl_IIS	(468.0 / 423.0) 108361	(8.67, N/A) (N/A, 0.03, N/A)	275.9	N/A	0.7974 [1.0000]	79.7% { 79.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 111498	(9.35, N/A) (N/A, 0.03, N/A)	306.4	N/A	0.8036 [1.0000]	80.4% { 97.6% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 216844	(8.06, N/A) (N/A, 0.04, N/A)	761.4	N/A	0.6719 [1.0000]	67.2% { 73.9% }			
13C4_PFOS_IIS	(502.8 / 79.9) 189965	(9.49, N/A) (N/A, 0.03, N/A)	257.4	N/A	0.7544 [1.0000]	75.4% { 82.1% }			
13C4_PFBA_EIS	(217.0 / 172.0) 515656	(3.73, N/A) (N/A, 0.04, N/A)	914.2	N/A	8.9097 [8.0000]	111.4% { 79.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 315692	(5.03, N/A) (N/A, 0.04, N/A)	678.5	N/A	3.9327 [4.0000]	98.3% { 82.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 263461	(6.18, N/A) (N/A, 0.04, N/A)	416.5	N/A	2.1567 [2.0000]	107.8% { 90.3% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 220691	(7.11, N/A) (N/A, 0.04, N/A)	504.9	N/A	2.0811 [2.0000]	104.1% { 90.3% }			
13C8_PFOA_EIS	(421.0 / 376.0) 219759	(7.93, N/A) (N/A, 0.04, N/A)	641.2	N/A	2.3797 [2.0000]	119.0% { 84.5% }			
13C9_PFNA_EIS	(472.0 / 427.0) 84867	(8.67, N/A) (N/A, 0.04, N/A)	327.9	N/A	1.0165 [1.0000]	101.7% { 85.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 131282	(9.35, N/A) (N/A, 0.03, N/A)	456.5	N/A	1.2277 [1.0000]	122.8% { 95.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 155766	(9.73, N/A) (N/A, 0.02, N/A)	282.9	N/A	1.0606 [1.0000]	106.1% { 85.0% }			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (11)
 Acquired: 2022/12/15 - 01:58

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 191458	(9.90, N/A) (N/A, 0.01, N/A)	478.6	N/A	1.0601 [1.0000]	106.0% { 74.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 112105	(10.14, N/A) (N/A, 0.02, N/A)	398.0	N/A	0.9886 [1.0000]	98.9% { 70.1% }			
13C3_PFBs_EIS	(302.0 / 80.0) 616791	(6.14, N/A) (N/A, 0.04, N/A)	668.6	N/A	2.4721 [2.0000]	123.6% { 79.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 341702	(8.06, N/A) (N/A, 0.04, N/A)	721.0	N/A	2.4335 [2.0000]	121.7% { 82.1% }			
13C8_PFOS_EIS	(507.0 / 80.0) 561348	(9.49, N/A) (N/A, 0.03, N/A)	410.5	N/A	2.3734 [2.0000]	118.7% { 94.2% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 75579	(5.84, N/A) (N/A, 0.03, N/A)	520.3	N/A	5.1829 [4.0000]	129.6% { 85.6% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 112039	(7.58, N/A) (N/A, 0.04, N/A)	540.6	N/A	6.2838 [4.0000]	157.1% { 96.9% }			S2,
13C2_8:2FTS_EIS	(529.0 / 81.0) 83145	(9.00, N/A) (N/A, 0.04, N/A)	229.9	N/A	4.6740 [4.0000]	116.9% { 77.7% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 547085	(10.18, N/A) (N/A, 0.02, N/A)	720.1	N/A	1.5292 [2.0000]	76.5% { 60.8% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A	0.0000 [2.0000]	0.0% { 0.0% }			S1,
D5_NEiFOSA_EIS	(531.1 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A	0.0000 [2.0000]	0.0% { 0.0% }			S1,



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (11)
 Acquired: 2022/12/15 - 01:58

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 286260	(9.53, N/A) (N/A, 0.03, N/A)	653.2	N/A	5.1135 [4.0000]	127.8% { 107.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 303688	(9.70, N/A) (N/A, 0.01, N/A)	298.8	N/A	5.9953 [4.0000]	149.9% { 121.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 18014	(10.58, N/A) (N/A, 0.02, N/A)	128.5	N/A	1.0232 [20.0000]	5.1% { 3.5% }			S1,
D9_NEtFOSE_EIS	(639.2 / 58.9) 14583	(10.68, N/A) (N/A, 0.01, N/A)	161.0	N/A	1.6530 [20.0000]	8.3% { 5.8% }			S1,
13C3_HFPODA_EIS	(287.0 / 169.0) 634646	(6.53, N/A) (N/A, 0.04, N/A)	822.3	N/A	8.4813 [8.0000]	106.0% { 92.2% }			

FORM I
ANALYSIS DATA SHEET
ADIT6-DU03-SON01MI-22DEC

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	22L0057-01RE2
		File ID:	S2022-12-22A (12)
Sampled:	12/07/22 13:50	Prepared:	12/09/22 15:06
		Analyzed:	12/22/22 13:46
Solids:	91.07	Preparation:	1633
		Dilution:	1
Initial/Final:	5.96 g / 2 ml	Instrument:	Saphira
Batch:	BBL0400	Sequence:	SB03951
		Calibration:	2252011

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
6:2FTS	48	0.13	0.067	0.051	
NMeFOSA	0.067 U	0.13	0.067	0.055	
NEtFOSA	0.067 U	0.13	0.067	0.023	
NMeFOSE	0.067 U	0.13	0.067	0.045	
NEtFOSE	0.067 U	0.13	0.067	0.039	



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (12)
 Acquired: 2022/12/22 - 13:46

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 675462	(3.81, 1.00) (0.00, N/A, 0.0)	66.0	N/A 0.0 0.0	5.8602	N/A			
PFPeA	(262.9 / 219.0) 343614 (262.9 / 69.0) 3610	(5.15, 1.00) (0.00, N/A, -0.4)	611.3 80.8	0.0105 93.9 101.1	2.0902	N/A			
PFHxA	(313.0 / 269.0) 2942768 (313.0 / 119.0) 264991	(6.29, 1.00) (0.00, N/A, 0.1)	607.3 668.5	0.0900 92.1 100.8	12.6356	N/A			
PFHpA	(363.0 / 319.0) 96262 (363.0 / 169.0) 26855	(7.21, 1.00) (0.00, N/A, 0.4)	267.0 164.7	0.2790 89.6 90.5	0.4225	N/A			
PFOA	(413.0 / 369.0) 163808 (413.0 / 169.0) 46807	(8.01, 1.00) (0.00, N/A, 0.1)	391.3 222.0	0.2857 87.4 96.6	0.7492	N/A			
PFNA	(463.0 / 419.0) 2084 (463.0 / 169.0) 724	(8.71, 1.00) (-0.03, N/A, -1.8)	28.4 15.8	0.3476 180.3 166.8	0.0124	N/A			IR2,
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

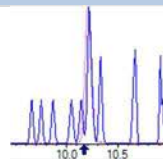
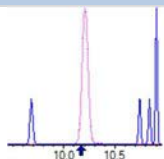
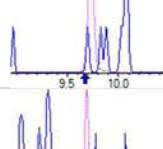
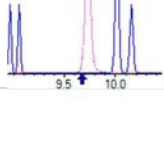
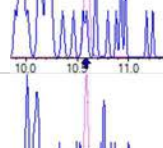
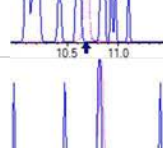
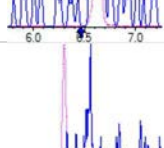
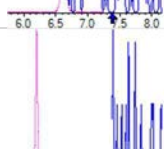
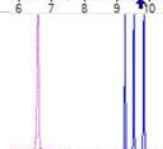
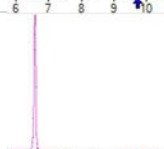
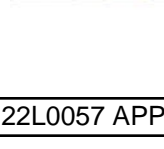
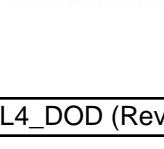


Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (12)
 Acquired: 2022/12/22 - 13:46

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 33518 (499.0 / 99.0) 7938	(9.53, 1.00) (0.00, N/A, -0.4)	30.8 103.4	0.2368 97.4 103.5	0.0712	N/A			MI5-DG 2022-12-22
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) 379506 (327.0 / 81.0) 229461	(5.97, 1.00) (0.00, N/A, 0.3)	602.3 406.9	0.6046 122.4 105.6	1.7160	N/A			
6:2FTS	(427.0 / 407.0) 19032110 (427.0 / 81.0) 14731995	(7.67, 1.00) (0.00, N/A, 0.1)	642.7 704.5	0.7741 99.5 111.0	143.0220	N/A			E,
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT-CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

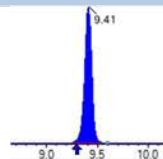
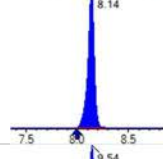
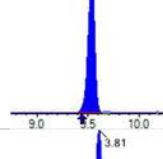
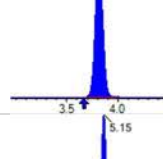
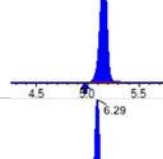
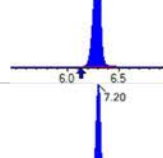
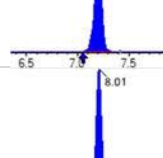
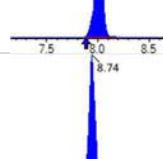
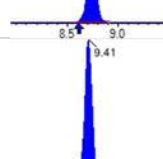
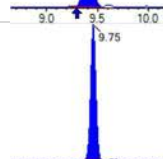



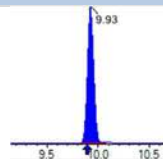
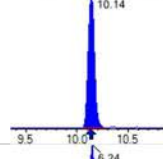
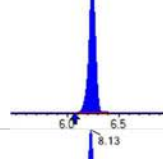
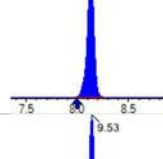
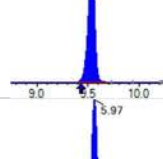
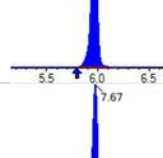
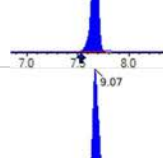
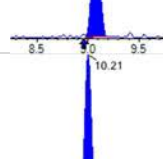
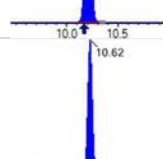
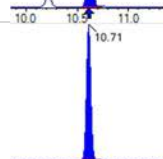

Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (12)
 Acquired: 2022/12/22 - 13:46

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 229230	(3.81, N/A) (N/A, 0.16, N/A)	929.4	N/A	1.6468 [1.0000]	164.7% { 146.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 352062	(6.29, N/A) (N/A, 0.17, N/A)	513.5	N/A	1.5246 [1.0000]	152.5% { 149.2% }			
13C4_PFOA_IIS	(417.0 / 372.0) 291416	(8.01, N/A) (N/A, 0.14, N/A)	758.9	N/A	1.3255 [1.0000]	132.6% { 113.5% }			
13C5_PFNA_IIS	(468.0 / 423.0) 274799	(8.74, N/A) (N/A, 0.13, N/A)	594.4	N/A	1.4839 [1.0000]	148.4% { 117.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 208121	(9.41, N/A) (N/A, 0.12, N/A)	480.7	N/A	1.1261 [1.0000]	112.6% { 111.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 535897	(8.14, N/A) (N/A, 0.14, N/A)	983.2	N/A	1.3274 [1.0000]	132.7% { 120.1% }			
13C4_PFOS_IIS	(502.8 / 79.9) 351558	(9.54, N/A) (N/A, 0.10, N/A)	300.8	N/A	1.1014 [1.0000]	110.1% { 101.4% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1413430	(3.81, N/A) (N/A, 0.16, N/A)	963.1	N/A	5.9910 [8.0000]	74.9% { 112.6% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 748718	(5.15, N/A) (N/A, 0.19, N/A)	782.3	N/A	3.0565 [4.0000]	76.4% { 110.1% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 542357	(6.29, N/A) (N/A, 0.17, N/A)	606.0	N/A	1.3387 [2.0000]	66.9% { 101.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 499862	(7.20, N/A) (N/A, 0.15, N/A)	623.8	N/A	1.4143 [2.0000]	70.7% { 111.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 444679	(8.01, N/A) (N/A, 0.13, N/A)	670.3	N/A	1.3914 [2.0000]	69.6% { 74.7% }			
13C9_PFNA_EIS	(472.0 / 427.0) 195679	(8.74, N/A) (N/A, 0.13, N/A)	309.3	N/A	0.6476 [1.0000]	64.8% { 84.4% }			
13C6_PFDA_EIS	(519.0 / 474.0) 203574	(9.41, N/A) (N/A, 0.12, N/A)	306.0	N/A	0.6878 [1.0000]	68.8% { 74.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 241641	(9.75, N/A) (N/A, 0.04, N/A)	596.6	N/A	0.5739 [1.0000]	57.4% { 64.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 281293	(9.93, N/A) (N/A, 0.03, N/A)	488.4	N/A	0.6694 [1.0000]	66.9% { 76.8% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 150534	(10.14, N/A) (N/A, 0.02, N/A)	304.8	N/A	0.5394 [1.0000]	53.9% { 59.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1375405	(6.24, N/A) (N/A, 0.17, N/A)	650.6	N/A	1.5180 [2.0000]	75.9% { 103.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 648739	(8.13, N/A) (N/A, 0.14, N/A)	942.6	N/A	1.3457 [2.0000]	67.3% { 84.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 866945	(9.53, N/A) (N/A, 0.10, N/A)	414.7	N/A	1.4369 [2.0000]	71.8% { 77.6% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 267538	(5.97, N/A) (N/A, 0.18, N/A)	704.7	N/A	3.4862 [4.0000]	87.2% { 118.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 346193	(7.67, N/A) (N/A, 0.14, N/A)	660.6	N/A	3.7469 [4.0000]	93.7% { 102.9% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 70999	(9.07, N/A) (N/A, 0.13, N/A)	159.8	N/A	0.7676 [4.0000]	19.2% { 22.5% }			S1,
13C8_PFOsa_EIS	(506.0 / 78.0) 790111	(10.21, N/A) (N/A, 0.03, N/A)	797.9	N/A	1.0360 [2.0000]	51.8% { 57.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 207458	(10.62, N/A) (N/A, 0.01, N/A)	408.1	N/A	1.2458 [2.0000]	62.3% { 72.2% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 204422	(10.71, N/A) (N/A, 0.01, N/A)	910.7	N/A	1.3298 [2.0000]	66.5% { 67.3% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (12)
 Acquired: 2022/12/22 - 13:46

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 616245	(9.58 , N/A) (N/A , 0.09 , N/A)	511.6	N/A	4.2951 [4.0000]	107.4% { 116.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 431318	(9.73 , N/A) (N/A , 0.05 , N/A)	564.6	N/A	3.4107 [4.0000]	85.3% { 103.9% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 296892	(10.59 , N/A) (N/A , 0.02 , N/A)	868.3	N/A	12.6977 [20.0000]	63.5% { 68.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 143495	(10.69 , N/A) (N/A , 0.01 , N/A)	1157.5	N/A	13.4806 [20.0000]	67.4% { 72.4% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1279678	(6.63 , N/A) (N/A , 0.16 , N/A)	686.5	N/A	5.9408 [8.0000]	74.3% { 105.1% }			

FORM I
ANALYSIS DATA SHEET
ADIT6-DU03-WQFB01-22DEC

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	22L0057-02
		File ID:	S2022-12-14A (8)
Sampled:	12/07/22 15:05	Prepared:	12/12/22 14:19
		Analyzed:	12/14/22 12:50
Solids:		Preparation:	1633
		Dilution:	1
Initial/Final:	300.98 g / 2 ml	Instrument:	Saphira
Batch:	BBL0205	Sequence:	SB03835
		Calibration:	2251013

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
PFBA	1.3 U	2.7	1.3	0.35	
PFPEA	0.66 U	1.3	0.66	0.11	
PFHXA	0.33 U	0.66	0.33	0.091	
PFHPA	0.33 U	0.66	0.33	0.068	
PFOA	0.33 U	0.66	0.33	0.25	
PFNA	0.33 U	0.66	0.33	0.14	
PFDA	0.33 U	0.66	0.33	0.17	
PFUnA	0.33 U	0.66	0.33	0.27	
PFDOA	0.33 U	0.66	0.33	0.19	
PFTRDA	0.50 U	0.66	0.50	0.34	
PFTEDA	0.33 U	0.66	0.33	0.33	
PFBS	0.33 U	0.66	0.33	0.061	
PFPEs	0.33 U	0.66	0.33	0.10	
PFHXS	0.33 U	0.66	0.33	0.053	
PFHPS	0.33 U	0.66	0.33	0.085	
PFOS	0.33 U	0.66	0.33	0.11	
PFNS	0.33 U	0.66	0.33	0.20	
PFDS	0.33 U	0.66	0.33	0.25	
PFDOS	0.33 U	0.66	0.33	0.20	
4:2FTS	1.3 U	2.7	1.3	0.48	
6:2FTS	1.3 U	2.7	1.3	0.52	
8:2FTS	1.3 U	2.7	1.3	0.14	
PFOSA	0.33 U	0.66	0.33	0.17	
NMeFOSA	1.3 U	2.7	1.3	0.79	
NEtFOSA	1.3 U	2.7	1.3	0.69	
NMeFOSAA	0.33 U	0.66	0.33	0.18	
NEtFOSAA	0.33 U	0.66	0.33	0.19	
NMeFOSE	2.0 U	2.7	2.0	1.7	
NEtFOSE	2.0 U	2.7	2.0	1.7	
HFPO-DA	0.66 U	1.3	0.66	0.29	

FORM I
ANALYSIS DATA SHEET
ADIT6-DU03-WQFB01-22DEC

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	22L0057-02
		File ID:	S2022-12-14A (8)
Sampled:	12/07/22 15:05	Prepared:	12/12/22 14:19
		Analyzed:	12/14/22 12:50
Solids:		Preparation:	1633
		Dilution:	1
Initial/Final:	300.98 g / 2 ml	Instrument:	Saphira
Batch:	BBL0205	Sequence:	SB03835
		Calibration:	2251013

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
ADONA	0.66 U	1.3	0.66	0.20	
PFEESA	0.66 U	1.3	0.66	0.18	
PFMPA	0.66 U	1.3	0.66	0.090	
PFMBA	0.66 U	1.3	0.66	0.15	
NFDHA	0.66 U	1.3	0.66	0.50	
9CL-PF3ONS	0.66 U	1.3	0.66	0.35	
11CL-PF3OUDS	0.66 U	1.3	0.66	0.34	
3:3FTCA	1.3 U	2.7	1.3	0.95	
5:3FTCA	1.3 U	2.7	1.3	0.74	
7:3FTCA	1.3 U	2.7	1.3	0.92	



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-02
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A11.wiff-
 Acquired: 2022/12/14 - 12:50

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 4268 (413.0 / 169.0) 1648	(7.95, 1.00) (0.00, N/A, -0.2)	21.5 33.5	0.3861 115.0 132.5	0.0326	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-02
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A11.wiff-
 Acquired: 2022/12/14 - 12:50

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT-CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 4719 (499.0 / 99.0) 1372	(9.51 , 1.00) (0.00 , N/A , 0.1)	11.8 22.6	0.2907 126.7 114.0	0.0135	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-02
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A11.wiff-
 Acquired: 2022/12/14 - 12:50

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pr3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

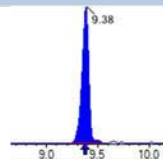
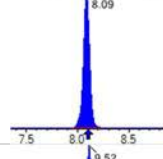
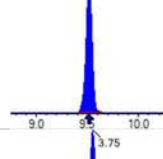
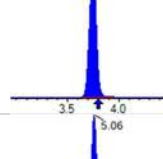
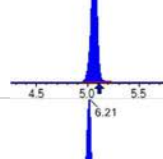
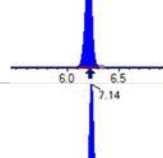
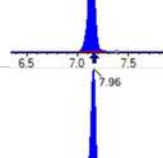
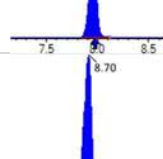
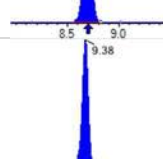
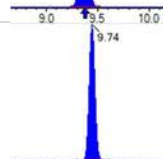



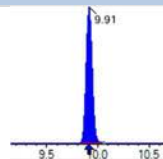
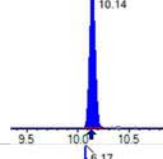
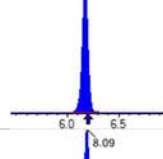
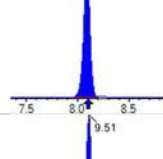
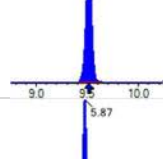
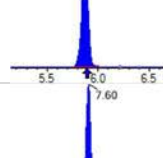
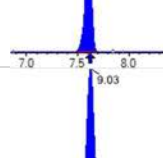
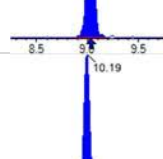
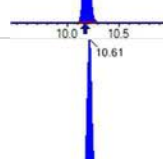
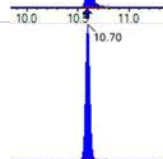

Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-02
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A11.wiff-
 Acquired: 2022/12/14 - 12:50

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT-CV[Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 80602	(3.75, N/A) (N/A, 0.03, N/A)	857.2	N/A	0.6643 [1.0000]	66.4% { 83.7% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 137941	(6.21, N/A) (N/A, 0.03, N/A)	596.1	N/A	0.7559 [1.0000]	75.6% { 78.7% }			
13C4_PFOA_IIS	(417.0 / 372.0) 124670	(7.96, N/A) (N/A, 0.03, N/A)	488.2	N/A	0.7142 [1.0000]	71.4% { 86.0% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 110130	(8.69, N/A) (N/A, 0.02, N/A)	428.9	N/A	0.8105 [1.0000]	81.0% { 94.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 110944	(9.38, N/A) (N/A, 0.04, N/A)	258.2	N/A	0.7996 [1.0000]	80.0% { 84.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 233055	(8.09, N/A) (N/A, 0.03, N/A)	1096.5	N/A	0.7221 [1.0000]	72.2% { 82.3% }			
13C4_PFOS_IIS	(502.8 / 79.9) 202783	(9.52, N/A) (N/A, 0.02, N/A)	711.5	N/A	0.8053 [1.0000]	80.5% { 79.7% }			
13C4_PFBA_EIS	(217.0 / 172.0) 652936	(3.75, N/A) (N/A, 0.03, N/A)	734.9	N/A	10.6272 [8.0000]	132.8% { 101.9% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 344165	(5.06, N/A) (N/A, 0.03, N/A)	779.8	N/A	4.5054 [4.0000]	112.6% { 105.3% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 292263	(6.21, N/A) (N/A, 0.04, N/A)	504.1	N/A	2.5141 [2.0000]	125.7% { 105.6% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 259893	(7.14, N/A) (N/A, 0.03, N/A)	593.5	N/A	2.5754 [2.0000]	128.8% { 111.8% }			
13C8_PFOA_EIS	(421.0 / 376.0) 262271	(7.96, N/A) (N/A, 0.03, N/A)	631.5	N/A	2.7435 [2.0000]	137.2% { 113.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 95259	(8.70, N/A) (N/A, 0.04, N/A)	525.2	N/A	1.1227 [1.0000]	112.3% { 92.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 138059	(9.38, N/A) (N/A, 0.03, N/A)	408.6	N/A	1.2975 [1.0000]	129.8% { 113.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 183338	(9.74, N/A) (N/A, 0.01, N/A)	521.8	N/A	1.2546 [1.0000]	125.5% { 104.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 212270	(9.91, N/A) (N/A, 0.01, N/A)	479.6	N/A	1.1812 [1.0000]	118.1% { 101.5% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 125826	(10.14, N/A) (N/A, 0.01, N/A)	312.3	N/A	1.1151 [1.0000]	111.5% { 93.3% }			
13C3_PFBs_EIS	(302.0 / 80.0) 702771	(6.17, N/A) (N/A, 0.03, N/A)	808.6	N/A	2.6208 [2.0000]	131.0% { 103.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 403189	(8.09, N/A) (N/A, 0.03, N/A)	769.6	N/A	2.6717 [2.0000]	133.6% { 106.8% }			
13C8_PFOS_EIS	(507.0 / 80.0) 636275	(9.51, N/A) (N/A, 0.02, N/A)	467.3	N/A	2.5201 [2.0000]	126.0% { 106.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 81765	(5.87, N/A) (N/A, 0.04, N/A)	608.4	N/A	5.2171 [4.0000]	130.4% { 109.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 104031	(7.60, N/A) (N/A, 0.03, N/A)	559.1	N/A	5.4288 [4.0000]	135.7% { 103.1% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 113296	(9.03, N/A) (N/A, 0.03, N/A)	339.3	N/A	5.9260 [4.0000]	148.1% { 116.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 918406	(10.19, N/A) (N/A, 0.02, N/A)	840.5	N/A	2.4048 [2.0000]	120.2% { 104.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 134276	(10.61, N/A) (N/A, 0.01, N/A)	688.8	N/A	1.3698 [2.0000]	68.5% { 57.4% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 125217	(10.70, N/A) (N/A, 0.01, N/A)	750.4	N/A	1.4723 [2.0000]	73.6% { 66.1% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-02
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A11.wiff-
 n
 Acquired: 2022/12/14 - 12:50

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 287569	(9.55 , N/A) (N/A , 0.02 , N/A)	408.1	N/A	4.8122 [4.0000]	120.3% { 113.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 311676	(9.71 , N/A) (N/A , 0.02 , N/A)	296.9	N/A	5.7640 [4.0000]	144.1% { 126.9% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 365766	(10.58 , N/A) (N/A , 0.01 , N/A)	1083.3	N/A	19.4626 [20.0000]	97.3% { 90.1% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 193736	(10.68 , N/A) (N/A , 0.01 , N/A)	1229.8	N/A	20.5733 [20.0000]	102.9% { 88.8% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 720987	(6.56 , N/A) (N/A , 0.03 , N/A)	968.8	N/A	10.1250 [8.0000]	126.6% { 108.5% }			

FORM I ANALYSIS DATA SHEET

AF-RHMW17-WGN01LF-2212W1

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	22L0057-03
		File ID:	S2022-12-14A (10)
Sampled:	12/07/22 13:25	Prepared:	12/12/22 14:19
		Analyzed:	12/14/22 13:15
Solids:		Preparation:	1633
		Dilution:	1
Initial/Final:	582.1 g / 2 ml	Instrument:	Saphira
Batch:	BBL0205	Sequence:	SB03835
		Calibration:	2251013

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
PFBA	4.6	1.4	0.69	0.18	
PFPEA	7.6	0.69	0.34	0.056	
PFHXA	2.9	0.34	0.17	0.047	
PFHPA	0.98	0.34	0.17	0.035	
PFOA	0.23 J	0.34	0.17	0.13	
PFNA	0.17 U	0.34	0.17	0.070	
PFDA	0.17 U	0.34	0.17	0.087	
PFUnA	0.17 U	0.34	0.17	0.14	
PFDOA	0.17 U	0.34	0.17	0.096	
PFTRDA	0.26 U	0.34	0.26	0.18	
PFTEDA	0.17 U	0.34	0.17	0.17	
PFBS	0.19 J	0.34	0.17	0.032	
PFPEs	0.17 U	0.34	0.17	0.054	
PFHXS	0.053 J	0.34	0.17	0.027	MI5,
PFHPS	0.17 U	0.34	0.17	0.044	
PFOS	0.096 J	0.34	0.17	0.055	MI5,
PFNS	0.17 U	0.34	0.17	0.11	
PFDS	0.17 U	0.34	0.17	0.13	
PFDOS	0.17 U	0.34	0.17	0.11	
4:2FTS	0.69 U	1.4	0.69	0.25	
6:2FTS	13	1.4	0.69	0.27	
8:2FTS	0.69 U	1.4	0.69	0.071	
PFOSA	0.72	0.34	0.17	0.089	
NMeFOSA	0.69 U	1.4	0.69	0.41	
NEtFOSA	0.69 U	1.4	0.69	0.35	
NMeFOSAA	0.17 U	0.34	0.17	0.091	
NEtFOSAA	0.17 U	0.34	0.17	0.099	
NMeFOSE	1.0 U	1.4	1.0	0.87	
NEtFOSE	1.0 U	1.4	1.0	0.90	
HFPO-DA	0.34 U	0.69	0.34	0.15	

FORM I ANALYSIS DATA SHEET

AF-RHMW17-WGN01LF-2212W1

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	22L0057-03
		File ID:	S2022-12-14A (10)
Sampled:	12/07/22 13:25	Prepared:	12/12/22 14:19
		Analyzed:	12/14/22 13:15
Solids:		Preparation:	1633
		Dilution:	1
Initial/Final:	582.1 g / 2 ml	Instrument:	Saphira
Batch:	BBL0205	Sequence:	SB03835
		Calibration:	2251013

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
ADONA	0.34 U	0.69	0.34	0.11	
PFEESA	0.34 U	0.69	0.34	0.094	
PFMPA	0.34 U	0.69	0.34	0.046	
PFMBA	0.34 U	0.69	0.34	0.078	
NFDHA	0.34 U	0.69	0.34	0.26	
9CL-PF3ONS	0.34 U	0.69	0.34	0.18	
11CL-PF3OUDS	0.34 U	0.69	0.34	0.18	
3:3FTCA	0.69 U	1.4	0.69	0.49	
5:3FTCA	0.69 U	1.4	0.69	0.38	IR2,
7:3FTCA	0.69 U	1.4	0.69	0.48	



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A13.wiff-
 Acquired: 2022/12/14 - 13:15

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 66188	(3.73, 1.00) (0.00, N/A, 0.0)	49.7	N/A 0.0 0.0	1.3409	N/A			
PFPeA	(262.9 / 219.0) 194005 (262.9 / 69.0) 2467	(5.06, 1.00) (0.00, N/A, -0.1)	587.2 54.8	0.0127 101.2 108.3	2.2118	N/A			
PFHxA	(313.0 / 269.0) 116372 (313.0 / 119.0) 11271	(6.22, 1.00) (0.00, N/A, 0.0)	296.0 143.5	0.0969 104.6 90.9	0.8380	N/A			
PFHpA	(363.0 / 319.0) 35342 (363.0 / 169.0) 7434	(7.17, 1.00) (0.00, N/A, 0.0)	126.2 94.8	0.2104 67.6 65.0	0.2852	N/A			
PFOA	(413.0 / 369.0) 9788 (413.0 / 169.0) 3295	(7.99, 1.00) (0.00, N/A, 0.0)	51.4 33.1	0.3366 100.3 115.5	0.0661	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) 3631 (613.0 / 169.0) 277	(9.93, 1.00) (0.00, N/A, 4.0)	47.3 4.7	0.0761 59.4 53.5	0.0162	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A13.wiff-
 Acquired: 2022/12/14 - 13:15

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 14090 (298.9 / 99.0) 6990	(6.19 , 1.00) (0.01 , N/A , 1.1)	87.9 52.9	0.4961 68.9 74.6	0.0565	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) 5411 (399.0 / 99.0) 1562	(8.14 , 1.00) (0.01 , N/A , 0.4)	2059.9 157213.7	0.2887 89.5 83.5	0.0155	N/A			MI5 DG 2022-12-14
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 11958 (499.0 / 99.0) 3811	(9.54 , 1.00) (-0.01 , N/A , 0.0)	38.2 94.3	0.3187 138.9 125.0	0.0280	N/A			MI5 DG 2022-12-14
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) 207519 (427.0 / 81.0) 144234	(7.64 , 1.00) (0.00 , N/A , -0.2)	649.1 391.4	0.6950 107.0 93.7	3.6569	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A13.wiff-
 Acquired: 2022/12/14 - 13:15

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 91771 (498.0 / 478.0) 1760	(10.20 , 1.00) (-0.01 , N/A , 0.4)	299.9 40.7	0.0192 84.2 69.4	0.2105	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

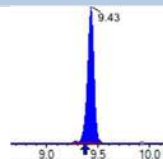
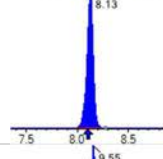
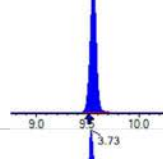
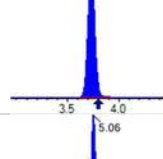
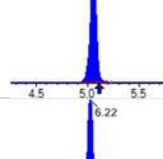
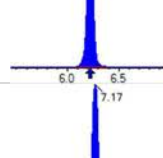
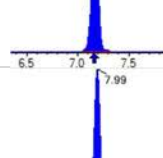
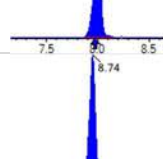
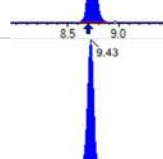
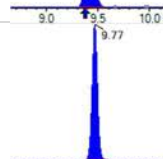



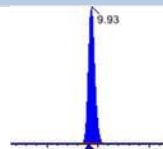
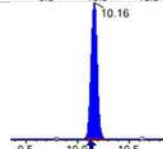
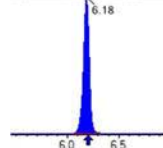
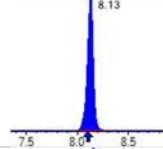
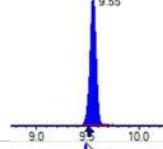
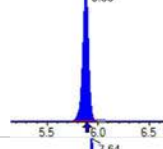
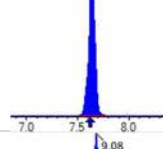
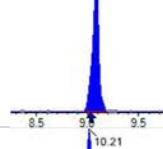
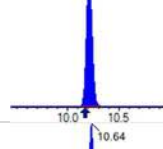
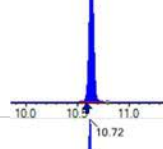
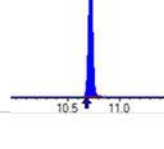
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A13.wiff-
 Acquired: 2022/12/14 - 13:15

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) 1282 (341.0 / 217.0) 3023	(6.87, 1.10) (N/A, 0.06, 6.2)	7.6 8.0	2.3585 149.6 152.5	0.0461	N/A			IR2,
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 84380	(3.73, N/A) (N/A, 0.02, N/A)	749.8	N/A	0.6954 [1.0000]	69.5% { 87.6% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 163409	(6.22, N/A) (N/A, 0.05, N/A)	522.6	N/A	0.8955 [1.0000]	89.5% { 93.3% }			
13C4_PFOA_IIS	(417.0 / 372.0) 148246	(8.00, N/A) (N/A, 0.08, N/A)	544.1	N/A	0.8492 [1.0000]	84.9% { 102.3% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 138815	(8.74, N/A) (N/A, 0.07, N/A)	486.0	N/A	1.0216 [1.0000]	102.2% { 118.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 135506	(9.43, N/A) (N/A, 0.08, N/A)	294.8	N/A	0.9766 [1.0000]	97.7% { 103.5% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 256362	(8.13, N/A) (N/A, 0.07, N/A)	684.8	N/A	0.7943 [1.0000]	79.4% { 90.5% }			
13C4_PFOS_IIS	(502.8 / 79.9) 259293	(9.55, N/A) (N/A, 0.06, N/A)	702.9	N/A	1.0297 [1.0000]	103.0% { 101.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 562137	(3.73, N/A) (N/A, 0.02, N/A)	989.2	N/A	8.7398 [8.0000]	109.2% { 87.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 395267	(5.06, N/A) (N/A, 0.03, N/A)	839.9	N/A	4.3679 [4.0000]	109.2% { 121.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 313400	(6.22, N/A) (N/A, 0.05, N/A)	707.5	N/A	2.2757 [2.0000]	113.8% { 113.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 267763	(7.17, N/A) (N/A, 0.06, N/A)	691.6	N/A	2.2398 [2.0000]	112.0% { 115.2% }			
13C8_PFOA_EIS	(421.0 / 376.0) 296287	(7.99, N/A) (N/A, 0.07, N/A)	806.7	N/A	2.6064 [2.0000]	130.3% { 127.8% }			
13C9_PFNA_EIS	(472.0 / 427.0) 118548	(8.74, N/A) (N/A, 0.08, N/A)	538.6	N/A	1.1085 [1.0000]	110.8% { 115.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 161930	(9.43, N/A) (N/A, 0.08, N/A)	294.1	N/A	1.2460 [1.0000]	124.6% { 132.6% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 260287	(9.77, N/A) (N/A, 0.04, N/A)	402.6	N/A	1.4583 [1.0000]	145.8% { 149.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 258709	(9.93, N/A) (N/A, 0.03, N/A)	491.9	N/A	1.1787 [1.0000]	117.9% { 123.7% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 148141	(10.16, N/A) (N/A, 0.03, N/A)	353.5	N/A	1.0749 [1.0000]	107.5% { 109.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 882838	(6.18, N/A) (N/A, 0.04, N/A)	850.9	N/A	2.9929 [2.0000]	149.6% { 129.8% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 433828	(8.13, N/A) (N/A, 0.07, N/A)	1048.6	N/A	2.6134 [2.0000]	130.7% { 114.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 776513	(9.55, N/A) (N/A, 0.06, N/A)	565.3	N/A	2.4053 [2.0000]	120.3% { 130.4% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 273604	(5.88, N/A) (N/A, 0.04, N/A)	654.0	N/A	15.8703 [4.0000]	396.8% { 365.6% }			S2,
13C2_6:2FTS_EIS	(429.0 / 81.0) 139260	(7.64, N/A) (N/A, 0.06, N/A)	716.6	N/A	6.6065 [4.0000]	165.2% { 138.0% }			S2,
13C2_8:2FTS_EIS	(529.0 / 81.0) 131527	(9.08, N/A) (N/A, 0.08, N/A)	362.6	N/A	6.2541 [4.0000]	156.4% { 135.6% }			S2,
13C8_PFOsa_EIS	(506.0 / 78.0) 888983	(10.21, N/A) (N/A, 0.04, N/A)	1007.4	N/A	1.8205 [2.0000]	91.0% { 100.7% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 147680	(10.64, N/A) (N/A, 0.03, N/A)	604.6	N/A	1.1782 [2.0000]	58.9% { 63.1% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 134564	(10.72, N/A) (N/A, 0.03, N/A)	1120.7	N/A	1.2373 [2.0000]	61.9% { 71.1% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A13.wiff-
 n
 Acquired: 2022/12/14 - 13:15

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 405217	(9.58 , N/A) (N/A , 0.06 , N/A)	245.5	N/A	5.3031 [4.0000]	132.6% { 159.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 453543	(9.74 , N/A) (N/A , 0.05 , N/A)	598.3	N/A	6.5597 [4.0000]	164.0% { 184.6% }			S2,
D7_NMeFOSE_EIS	(623.2 / 58.9) 350439	(10.60 , N/A) (N/A , 0.03 , N/A)	703.6	N/A	14.5832 [20.0000]	72.9% { 86.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 171544	(10.70 , N/A) (N/A , 0.03 , N/A)	908.6	N/A	14.2466 [20.0000]	71.2% { 78.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 715326	(6.58 , N/A) (N/A , 0.06 , N/A)	757.7	N/A	8.4799 [8.0000]	106.0% { 107.6% }			

FORM I
ANALYSIS DATA SHEET

AF-RHMW17-WGN01LF-2212W1

Laboratory:	APPL, LLC	Work Order:	22L0057		
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling		
Matrix:	Water	Laboratory ID:	22L0057-03RE1	File ID:	S2022-12-14A (11)
Sampled:	12/07/22 13:25	Prepared:	12/12/22 14:19	Analyzed:	12/14/22 13:28
Solids:		Preparation:	1633	Dilution:	1
Initial/Final:	582.1 g / 2 ml			Instrument:	Saphira
Batch:	BBL0205	Sequence:	SB03835	Calibration:	2251013



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A14.wiff-
 Acquired: 2022/12/14 - 13:28

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 4834	(3.91, 1.00) (0.01, N/A, 0.0)	18.1	N/A 0.0 0.0	0.1098	N/A			
PFPeA	(262.9 / 219.0) 17820 (262.9 / 69.0) 229	(5.23, 1.00) (0.00, N/A, 0.7)	148.1 17.7	0.0128 102.2 109.3	0.2246	N/A			
PFHxA	(313.0 / 269.0) 10602 (313.0 / 119.0) 684	(6.35, 1.00) (0.00, N/A, 1.2)	49.4 114.4	0.0645 69.7 60.6	0.0856	N/A			
PFHpA	(363.0 / 319.0) 4296 (363.0 / 169.0) 1038	(7.24, 1.00) (-0.01, N/A, 0.1)	21.5 35.9	0.2417 77.7 74.6	0.0362	N/A			
PFOA	(413.0 / 369.0) 780 (413.0 / 169.0) 303	(8.04, 1.00) (0.00, N/A, 0.6)	8.4 40.8	0.3879 115.6 133.2	0.0065	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A14.wiff-
 Acquired: 2022/12/14 - 13:28

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min] , R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1411 (298.9 / 99.0) 705	(6.30 , 1.00) (-0.01 , N/A , 0.8)	38.1 12.3	0.4996 69.4 75.2	0.0077	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) 16006 (427.0 / 81.0) 11146	(7.71 , 1.00) (-0.01 , N/A , 0.0)	109.8 58.7	0.6963 107.2 93.8	0.4228	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A14.wiff-
 Acquired: 2022/12/14 - 13:28

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 9060 (498.0 / 478.0) 614	(10.19 , 1.00) (-0.01 , N/A , 0.1)	159.8 13.4	0.0677 297.5 245.0	0.0210	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

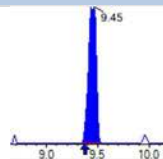
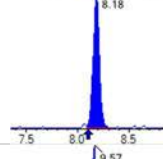
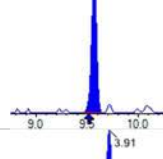
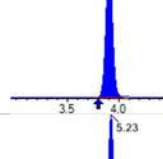
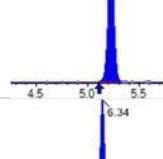
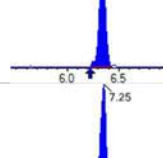
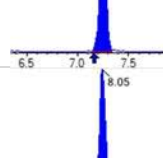
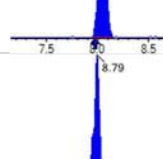
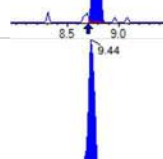
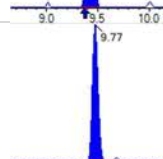



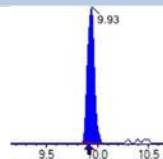
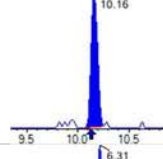
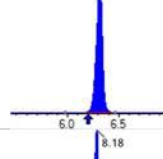
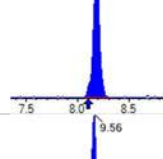
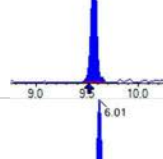
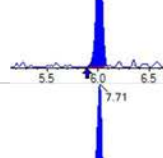
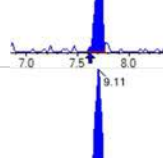
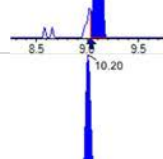
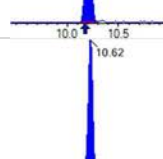
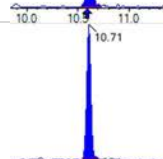

Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A14.wiff-
 Acquired: 2022/12/14 - 13:28

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 7539	(3.91, N/A) (N/A, 0.20, N/A)	192.7	N/A	0.6214 [1.0000]	62.1% { 7.8% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 11150	(6.34, N/A) (N/A, 0.16, N/A)	192.0	N/A	0.6110 [1.0000]	61.1% { 6.4% }			
13C4_PFOA_IIS	(417.0 / 372.0) 14008	(8.05, N/A) (N/A, 0.13, N/A)	261.6	N/A	0.8025 [1.0000]	80.2% { 9.7% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 11469	(8.78, N/A) (N/A, 0.11, N/A)	293.2	N/A	0.8440 [1.0000]	84.4% { 9.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 11449	(9.45, N/A) (N/A, 0.10, N/A)	680.5	N/A	0.8251 [1.0000]	82.5% { 8.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 25527	(8.18, N/A) (N/A, 0.12, N/A)	286.7	N/A	0.7909 [1.0000]	79.1% { 9.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 15860	(9.57, N/A) (N/A, 0.07, N/A)	102.2	N/A	0.6298 [1.0000]	63.0% { 6.2% }			
13C4_PFBA_EIS	(217.0 / 172.0) 50114	(3.91, N/A) (N/A, 0.19, N/A)	886.9	N/A	0.8720 [0.8000]	109.0% { 7.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 35758	(5.23, N/A) (N/A, 0.20, N/A)	562.7	N/A	0.5791 [0.4000]	144.8% { 10.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 27946	(6.34, N/A) (N/A, 0.17, N/A)	917.1	N/A	0.2974 [0.2000]	148.7% { 10.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 25638	(7.25, N/A) (N/A, 0.15, N/A)	253.7	N/A	0.3143 [0.2000]	157.2% { 11.0% }			S2.
13C8_PFOA_EIS	(421.0 / 376.0) 23892	(8.05, N/A) (N/A, 0.12, N/A)	315.5	N/A	0.2224 [0.2000]	111.2% { 10.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 10059	(8.79, N/A) (N/A, 0.12, N/A)	132.5	N/A	0.1138 [0.1000]	113.8% { 9.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 13846	(9.44, N/A) (N/A, 0.09, N/A)	817.7	N/A	0.1261 [0.1000]	126.1% { 11.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 19739	(9.77, N/A) (N/A, 0.04, N/A)	4157.0	N/A	0.1309 [0.1000]	130.9% { 11.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 19162	(9.93, N/A) (N/A, 0.03, N/A)	95.9	N/A	0.1033 [0.1000]	103.3% {9.2%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 12477	(10.16, N/A) (N/A, 0.03, N/A)	94.5	N/A	0.1072 [0.1000]	107.2% {9.3%}			
13C3_PFBs_EIS	(302.0 / 80.0) 65188	(6.31, N/A) (N/A, 0.17, N/A)	508.2	N/A	0.2219 [0.2000]	111.0% {9.6%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 36602	(8.18, N/A) (N/A, 0.12, N/A)	384.3	N/A	0.2214 [0.2000]	110.7% {9.7%}			
13C8_PFOS_EIS	(507.0 / 80.0) 67050	(9.56, N/A) (N/A, 0.07, N/A)	164.6	N/A	0.3396 [0.2000]	169.8% {11.3%}			S2,
13C2_4:2FTS_EIS	(329.0 / 81.0) 9383	(6.01, N/A) (N/A, 0.18, N/A)	114.6	N/A	0.5466 [0.4000]	136.6% {12.5%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 9290	(7.71, N/A) (N/A, 0.14, N/A)	111.1	N/A	0.4426 [0.4000]	110.7% {9.2%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 8424	(9.11, N/A) (N/A, 0.11, N/A)	182.5	N/A	0.4023 [0.4000]	100.6% {8.7%}			
13C8_PFOA_EIS	(506.0 / 78.0) 87892	(10.20, N/A) (N/A, 0.03, N/A)	272.6	N/A	0.2943 [0.2000]	147.1% {10.0%}			
D3_NMeFOA_EIS	(515.0 / 169.0) 14666	(10.62, N/A) (N/A, 0.02, N/A)	218.5	N/A	0.1913 [0.2000]	95.6% {6.3%}			
D5_NEtFOA_EIS	(531.1 / 169.0) 13158	(10.71, N/A) (N/A, 0.02, N/A)	281.6	N/A	0.1978 [0.2000]	98.9% {6.9%}			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-03RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A14.wiff-
 n
 Acquired: 2022/12/14 - 13:28

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 21840	(9.59 , N/A) (N/A , 0.07 , N/A)	122.9	N/A	0.4673 [0.4000]	116.8% { 8.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 30399	(9.74 , N/A) (N/A , 0.04 , N/A)	106.4	N/A	0.7188 [0.4000]	179.7% { 12.4% }			S2,
D7_NMeFOSE_EIS	(623.2 / 58.9) 37274	(10.59 , N/A) (N/A , 0.02 , N/A)	450.2	N/A	2.5359 [2.0000]	126.8% { 9.2% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 15464	(10.68 , N/A) (N/A , 0.02 , N/A)	291.3	N/A	2.0996 [2.0000]	105.0% { 7.1% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 65341	(6.68 , N/A) (N/A , 0.16 , N/A)	403.9	N/A	1.1352 [0.8000]	141.9% { 9.8% }			

QUALITY CONTROL

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
ADIT6-DU03-WQFB01-22DEC (22L0057-02) . ng/L	Lab File ID: S2022-12-14A (8)		Analyzed: 12/14/22 12:50	
13C4-PFBA	53.2	133	20 - 150	
13C5-PFPEA	26.6	113	20 - 150	
13C5-PFHXA	13.3	126	20 - 150	
13C4-PFHPA	13.3	129	20 - 150	
13C8-PFOA	13.3	137	20 - 150	
13C9-PFNA	6.64	112	20 - 150	
13C6-PFDA	6.64	130	20 - 150	
13C7-PFUnA	6.64	125	20 - 150	
13C2-PFDOA	6.64	118	20 - 150	
13C2-PFTEDA	6.64	112	20 - 150	
13C3-PFBS	13.3	131	20 - 150	
13C3-PFHXS	13.3	134	20 - 150	
13C8-PFOS	13.3	126	20 - 150	
13C2-4:2FTS	26.6	130	20 - 150	
13C2-6:2FTS	26.6	136	20 - 150	
13C2-8:2FTS	26.6	148	20 - 150	
13C8-PFOSA	13.3	120	20 - 150	
D5-NETFOSA	13.3	73.6	20 - 150	
D3-NMEFOSA	13.3	68.5	20 - 150	
D3-NMEFOSAA	26.6	120	20 - 150	
D5-NETFOSAA	26.6	144	20 - 150	
D7-NMEFOSE	133	97.3	20 - 150	
D9-NETFOSE	133	103	20 - 150	
13C3-HFPO-DA	53.2	127	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
AF-RHMW17-WGN01LF-2212W1 (22L0057-03) ng/L		Lab File ID: S2022-12-14A (10)		Analyzed: 12/14/22 13:15
13C4-PFBA	27.5	109	20 - 150	
13C5-PFPEA	13.7	109	20 - 150	
13C5-PFHXA	6.87	114	20 - 150	
13C4-PFHPA	6.87	112	20 - 150	
13C8-PFOA	6.87	130	20 - 150	
13C9-PFNA	3.44	111	20 - 150	
13C6-PFDA	3.44	125	20 - 150	
13C7-PFUnA	3.44	146	20 - 150	
13C2-PFDOA	3.44	118	20 - 150	
13C2-PFTEDA	3.44	107	20 - 150	
13C3-PFBS	6.87	150	20 - 150	
13C3-PFHXS	6.87	131	20 - 150	
13C8-PFOS	6.87	120	20 - 150	
13C2-4:2FTS	13.7	397	20 - 150	*
13C2-6:2FTS	13.7	165	20 - 150	*
13C2-8:2FTS	13.7	156	20 - 150	*
13C8-PFOSA	6.87	91.0	20 - 150	
D5-NETFOSA	6.87	61.9	20 - 150	
D3-NMEFOSA	6.87	58.9	20 - 150	
D3-NMEFOSAA	13.7	133	20 - 150	
D5-NETFOSAA	13.7	164	20 - 150	*
D7-NMEFOSE	68.7	72.9	20 - 150	
D9-NETFOSSE	68.7	71.2	20 - 150	
13C3-HFPO-DA	27.5	106	20 - 150	
AF-RHMW17-WGN01LF-2212W1 (22L0057-03RE1) ng/L		Lab File ID: S2022-12-14A (11)		Analyzed: 12/14/22 13:28
13C2-4:2FTS	13.7	137	20 - 150	
13C2-6:2FTS	13.7	111	20 - 150	
13C2-8:2FTS	13.7	101	20 - 150	
D5-NETFOSAA	13.7	180	20 - 150	*

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
Blank (BBL0205-BLK1) . ng/L				
	Lab File ID: S2022-12-14A (5)			Analyzed: 12/14/22 12:12
13C4-PFBA	32.0	132	20 - 150	
13C5-PFPEA	16.0	125	20 - 150	
13C5-PFHXA	8.00	126	20 - 150	
13C4-PFHPA	8.00	120	20 - 150	
13C8-PFOA	8.00	117	20 - 150	
13C9-PFNA	4.00	118	20 - 150	
13C6-PFDA	4.00	152	20 - 150	*
13C7-PFUnA	4.00	145	20 - 150	
13C2-PFDOA	4.00	133	20 - 150	
13C2-PFTEDA	4.00	142	20 - 150	
13C3-PFBS	8.00	125	20 - 150	
13C3-PFHXS	8.00	128	20 - 150	
13C8-PFOS	8.00	99.6	20 - 150	
13C2-4:2FTS	16.0	126	20 - 150	
13C2-6:2FTS	16.0	114	20 - 150	
13C2-8:2FTS	16.0	123	20 - 150	
13C8-PFOSA	8.00	92.4	20 - 150	
D5-NETFOSA	8.00	46.3	20 - 150	
D3-NMEFOSA	8.00	45.4	20 - 150	
D3-NMEFOSAA	16.0	90.5	20 - 150	
D5-NETFOSAA	16.0	101	20 - 150	
D7-NMEFOSE	80.0	61.7	20 - 150	
D9-NETFOSE	80.0	60.9	20 - 150	
13C3-HFPO-DA	32.0	115	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
LCS (BBL0205-BS1) . ng/L				
		Lab File ID: S2022-12-14A (6)		Analyzed: 12/14/22 12:25
13C4-PFBA	32.0	122	20 - 150	
13C5-PFPEA	16.0	134	20 - 150	
13C5-PFHXA	8.00	141	20 - 150	
13C4-PFHPA	8.00	133	20 - 150	
13C8-PFOA	8.00	135	20 - 150	
13C9-PFNA	4.00	118	20 - 150	
13C6-PFDA	4.00	144	20 - 150	
13C7-PFUnA	4.00	180	20 - 150	*
13C2-PFDOA	4.00	159	20 - 150	*
13C2-PFTEDA	4.00	137	20 - 150	
13C3-PFBS	8.00	126	20 - 150	
13C3-PFHXS	8.00	132	20 - 150	
13C8-PFOS	8.00	108	20 - 150	
13C2-4:2FTS	16.0	128	20 - 150	
13C2-6:2FTS	16.0	120	20 - 150	
13C2-8:2FTS	16.0	132	20 - 150	
13C8-PFOSA	8.00	102	20 - 150	
D5-NETFOSA	8.00	55.6	20 - 150	
D3-NMEFOSA	8.00	54.7	20 - 150	
D3-NMEFOSAA	16.0	107	20 - 150	
D5-NETFOSAA	16.0	111	20 - 150	
D7-NMEFOSE	80.0	77.6	20 - 150	
D9-NETFOSSE	80.0	80.9	20 - 150	
13C3-HFPO-DA	32.0	141	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
MRL Check (BBL0205-MRL1) . ng/L				
		Lab File ID: S2022-12-14A (7)		Analyzed: 12/14/22 12:37
13C4-PFBA	32.0	119	20 - 150	
13C5-PFPEA	16.0	106	20 - 150	
13C5-PFHXA	8.00	116	20 - 150	
13C4-PFHPA	8.00	121	20 - 150	
13C8-PFOA	8.00	132	20 - 150	
13C9-PFNA	4.00	127	20 - 150	
13C6-PFDA	4.00	117	20 - 150	
13C7-PFUnA	4.00	146	20 - 150	
13C2-PFDOA	4.00	137	20 - 150	
13C2-PFTEDA	4.00	114	20 - 150	
13C3-PFBS	8.00	119	20 - 150	
13C3-PFHXS	8.00	124	20 - 150	
13C8-PFOS	8.00	114	20 - 150	
13C2-4:2FTS	16.0	119	20 - 150	
13C2-6:2FTS	16.0	118	20 - 150	
13C2-8:2FTS	16.0	108	20 - 150	
13C8-PFOSA	8.00	100	20 - 150	
D5-NETFOSA	8.00	52.4	20 - 150	
D3-NMEFOSA	8.00	53.3	20 - 150	
D3-NMEFOSAA	16.0	110	20 - 150	
D5-NETFOSAA	16.0	122	20 - 150	
D7-NMEFOSE	80.0	73.1	20 - 150	
D9-NETFOSE	80.0	75.9	20 - 150	
13C3-HFPO-DA	32.0	115	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
ADIT6-DU03-SON01MI-22DEC (22L0057-01) ug/kg Dry		Lab File ID: S2022-12-14B (11)		Analyzed: 12/15/22 01:58
13C4-PFBA	3.14	111	20 - 150	
13C5-PFPEA	1.57	98.3	20 - 150	
13C5-PFHXA	0.786	108	20 - 150	
13C4-PFHFA	0.786	104	20 - 150	
13C8-PFOA	0.786	119	20 - 150	
13C9-PFNA	0.393	102	20 - 150	
13C6-PFDA	0.393	123	20 - 150	
13C7-PFUnA	0.393	106	20 - 150	
13C2-PFDOA	0.393	106	20 - 150	
13C2-PFTEDA	0.393	98.9	20 - 150	
13C3-PFBS	0.786	124	20 - 150	
13C3-PFHXS	0.786	122	20 - 150	
13C8-PFOS	0.786	119	20 - 150	
13C2-4:2FTS	1.57	130	20 - 150	
13C2-8:2FTS	1.57	117	20 - 150	
13C8-PFOSA	0.786	76.5	20 - 150	
D3-NMEFOSAA	1.57	128	20 - 150	
D5-NETFOSAA	1.57	150	20 - 150	
13C3-HFPO-DA	3.14	106	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
Blank (BBL0206-BLK1) ug/kg Dry				
	Lab File ID: S2022-12-14B (5)			Analyzed: 12/15/22 00:42
13C4-PFBA	3.20	117	20 - 150	
13C5-PFPEA	1.60	98.4	20 - 150	
13C5-PFHXA	0.800	97.1	20 - 150	
13C4-PFHPA	0.800	101	20 - 150	
13C8-PFOA	0.800	125	20 - 150	
13C9-PFNA	0.400	107	20 - 150	
13C6-PFDA	0.400	125	20 - 150	
13C7-PFUnA	0.400	149	20 - 150	
13C2-PFDOA	0.400	108	20 - 150	
13C2-PFTEDA	0.400	121	20 - 150	
13C3-PFBS	0.800	121	20 - 150	
13C3-PFHXS	0.800	121	20 - 150	
13C8-PFOS	0.800	114	20 - 150	
13C2-4:2FTS	1.60	110	20 - 150	
13C2-6:2FTS	1.60	117	20 - 150	
13C2-8:2FTS	1.60	90.3	20 - 150	
13C8-PFOSA	0.800	95.7	20 - 150	
D5-NETFOSA	0.800	36.1	20 - 150	
D3-NMEFOSA	0.800	33.4	20 - 150	
D3-NMEFOSAA	1.60	102	20 - 150	
D5-NETFOSAA	1.60	132	20 - 150	
D7-NMEFOSE	8.00	53.3	20 - 150	
D9-NETFOSSE	8.00	67.0	20 - 150	
13C3-HFPO-DA	3.20	95.6	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
LCS (BBL0206-BS1) ug/kg Dry				
		Lab File ID: S2022-12-14B (6)		Analyzed: 12/15/22 00:55
13C4-PFBA	3.20	119	20 - 150	
13C5-PFPEA	1.60	101	20 - 150	
13C5-PFHXA	0.800	108	20 - 150	
13C4-PFHPA	0.800	117	20 - 150	
13C8-PFOA	0.800	122	20 - 150	
13C9-PFNA	0.400	127	20 - 150	
13C6-PFDA	0.400	116	20 - 150	
13C7-PFUnA	0.400	111	20 - 150	
13C2-PFDOA	0.400	107	20 - 150	
13C2-PFTEDA	0.400	101	20 - 150	
13C3-PFBS	0.800	116	20 - 150	
13C3-PFHXS	0.800	125	20 - 150	
13C8-PFOS	0.800	120	20 - 150	
13C2-4:2FTS	1.60	136	20 - 150	
13C2-6:2FTS	1.60	127	20 - 150	
13C2-8:2FTS	1.60	118	20 - 150	
13C8-PFOSA	0.800	90.4	20 - 150	
D5-NETFOSA	0.800	32.6	20 - 150	
D3-NMEFOSA	0.800	33.0	20 - 150	
D3-NMEFOSAA	1.60	116	20 - 150	
D5-NETFOSAA	1.60	120	20 - 150	
D7-NMEFOSE	8.00	59.5	20 - 150	
D9-NETFOSE	8.00	61.6	20 - 150	
13C3-HFPO-DA	3.20	108	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
LCS Dup (BBL0206-BSD1) . ug/kg Dry				
		Lab File ID: S2022-12-14B (7)		Analyzed: 12/15/22 01:07
13C4-PFBA	3.20	124	20 - 150	
13C5-PFPEA	1.60	107	20 - 150	
13C5-PFHXA	0.800	127	20 - 150	
13C4-PFHPA	0.800	124	20 - 150	
13C8-PFOA	0.800	130	20 - 150	
13C9-PFNA	0.400	130	20 - 150	
13C6-PFDA	0.400	122	20 - 150	
13C7-PFUnA	0.400	133	20 - 150	
13C2-PFDOA	0.400	121	20 - 150	
13C2-PFTEDA	0.400	118	20 - 150	
13C3-PFBS	0.800	131	20 - 150	
13C3-PFHXS	0.800	123	20 - 150	
13C8-PFOS	0.800	131	20 - 150	
13C2-4:2FTS	1.60	126	20 - 150	
13C2-6:2FTS	1.60	130	20 - 150	
13C2-8:2FTS	1.60	102	20 - 150	
13C8-PFOSA	0.800	112	20 - 150	
D5-NETFOSA	0.800	38.8	20 - 150	
D3-NMEFOSA	0.800	40.5	20 - 150	
D3-NMEFOSAA	1.60	130	20 - 150	
D5-NETFOSAA	1.60	135	20 - 150	
D7-NMEFOSE	8.00	63.9	20 - 150	
D9-NETFOSE	8.00	66.9	20 - 150	
13C3-HFPO-DA	3.20	117	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
MRL Check (BBL0206-MRL1) . ug/kg Dry				
		Lab File ID: S2022-12-14B (8)		Analyzed: 12/15/22 01:20
13C4-PFBA	3.20	120	20 - 150	
13C5-PFPEA	1.60	117	20 - 150	
13C5-PFHXA	0.800	126	20 - 150	
13C4-PFHFA	0.800	119	20 - 150	
13C8-PFOA	0.800	124	20 - 150	
13C9-PFNA	0.400	120	20 - 150	
13C6-PFDA	0.400	110	20 - 150	
13C7-PFUnA	0.400	128	20 - 150	
13C2-PFDOA	0.400	110	20 - 150	
13C2-PFTEDA	0.400	126	20 - 150	
13C3-PFBS	0.800	132	20 - 150	
13C3-PFHXS	0.800	120	20 - 150	
13C8-PFOS	0.800	126	20 - 150	
13C2-4:2FTS	1.60	113	20 - 150	
13C2-6:2FTS	1.60	134	20 - 150	
13C2-8:2FTS	1.60	123	20 - 150	
13C8-PFOSA	0.800	108	20 - 150	
D5-NETFOSA	0.800	38.7	20 - 150	
D3-NMEFOSA	0.800	41.0	20 - 150	
D3-NMEFOSAA	1.60	125	20 - 150	
D5-NETFOSAA	1.60	123	20 - 150	
D7-NMEFOSE	8.00	69.5	20 - 150	
D9-NETFOSSE	8.00	76.7	20 - 150	
13C3-HFPO-DA	3.20	130	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
Matrix Spike (BBL0206-MS1) ug/kg Dry	Lab File ID: S2022-12-14B (9)			Analyzed: 12/15/22 01:33
13C4-PFBA	3.12	115	20 - 150	
13C5-PFPEA	1.56	116	20 - 150	
13C5-PFHXA	0.780	114	20 - 150	
13C4-PFHFA	0.780	126	20 - 150	
13C8-PFOA	0.780	127	20 - 150	
13C9-PFNA	0.390	130	20 - 150	
13C6-PFDA	0.390	105	20 - 150	
13C7-PFUnA	0.390	89.3	20 - 150	
13C2-PFDOA	0.390	123	20 - 150	
13C2-PFTEDA	0.390	79.6	20 - 150	
13C3-PFBS	0.780	152	20 - 150	*
13C3-PFHXS	0.780	133	20 - 150	
13C8-PFOS	0.780	123	20 - 150	
13C2-4:2FTS	1.56	134	20 - 150	
13C2-6:2FTS	1.56	189	20 - 150	*
13C2-8:2FTS	1.56	91.0	20 - 150	
13C8-PFOSA	0.780	99.6	20 - 150	
D5-NETFOSA	0.780	113	20 - 200	
D3-NMEFOSA	0.780	106	20 - 200	
D3-NMEFOSAA	1.56	125	20 - 150	
D5-NETFOSAA	1.56	131	20 - 150	
D7-NMEFOSE	7.80	128	20 - 200	
D9-NETFOSSE	7.80	127	20 - 200	
13C3-HFPO-DA	3.12	112	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
Matrix Spike Dup (BBL0206-MSD1) ug/kg Dry				
		Lab File ID: S2022-12-14B (10)		Analyzed: 12/15/22 01:45
13C4-PFBA	2.95	110	20 - 150	
13C5-PFPEA	1.48	105	20 - 150	
13C5-PFHXA	0.738	112	20 - 150	
13C4-PFHPA	0.738	115	20 - 150	
13C8-PFOA	0.738	112	20 - 150	
13C9-PFNA	0.369	115	20 - 150	
13C6-PFDA	0.369	110	20 - 150	
13C7-PFUnA	0.369	89.3	20 - 150	
13C2-PFDOA	0.369	95.3	20 - 150	
13C2-PFTEDA	0.369	85.4	20 - 150	
13C3-PFBS	0.738	108	20 - 150	
13C3-PFHXS	0.738	115	20 - 150	
13C8-PFOS	0.738	109	20 - 150	
13C2-4:2FTS	1.48	112	20 - 150	
13C2-6:2FTS	1.48	132	20 - 150	
13C2-8:2FTS	1.48	87.0	20 - 150	
13C8-PFOSA	0.738	86.9	20 - 150	
D5-NETFOSA	0.738	89.9	20 - 200	
D3-NMEFOSA	0.738	83.4	20 - 200	
D3-NMEFOSAA	1.48	111	20 - 150	
D5-NETFOSAA	1.48	104	20 - 150	
D7-NMEFOSE	7.38	99.3	20 - 200	
D9-NETFOSE	7.38	96.0	20 - 200	
13C3-HFPO-DA	2.95	98.1	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
ADIT6-DU03-SON01MI-22DEC (22L0057-01RE2) ug/kg D				
Lab File ID: S2022-12-22A (12)				Analyzed: 12/22/22 13:46
13C2-6:2FTS	1.34	93.7	20 - 150	
D5-NETFOSA	0.671	66.5	20 - 150	
D3-NMEFOSA	0.671	62.3	20 - 150	
D7-NMEFOSE	6.71	63.5	20 - 150	
D9-NETFOSE	6.71	67.4	20 - 150	
Blank (BBL0400-BLK1) ug/kg Dry				
Lab File ID: S2022-12-22A (5)				Analyzed: 12/22/22 12:17
13C4-PFBA	3.20	101	20 - 150	
13C5-PFPEA	1.60	102	20 - 150	
13C5-PFHXA	0.800	97.7	20 - 150	
13C4-PFHFA	0.800	99.6	20 - 150	
13C8-PFOA	0.800	97.0	20 - 150	
13C9-PFNA	0.400	94.6	20 - 150	
13C6-PFDA	0.400	114	20 - 150	
13C7-PFUnA	0.400	107	20 - 150	
13C2-PFDOA	0.400	97.8	20 - 150	
13C2-PFTEDA	0.400	101	20 - 150	
13C3-PFBS	0.800	90.3	20 - 150	
13C3-PFHXS	0.800	91.4	20 - 150	
13C8-PFOS	0.800	87.4	20 - 150	
13C2-4:2FTS	1.60	104	20 - 150	
13C2-6:2FTS	1.60	114	20 - 150	
13C2-8:2FTS	1.60	89.2	20 - 150	
13C8-PFOSA	0.800	78.7	20 - 150	
D5-NETFOSA	0.800	51.5	20 - 150	
D3-NMEFOSA	0.800	50.5	20 - 150	
D3-NMEFOSAA	1.60	80.0	20 - 150	
D5-NETFOSAA	1.60	76.4	20 - 150	
D7-NMEFOSE	8.00	67.1	20 - 150	
D9-NETFOSE	8.00	67.3	20 - 150	
13C3-HFPO-DA	3.20	107	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
LCS (BBL0400-BS1) ug/kg Dry				
		Lab File ID: S2022-12-22A (6)		Analyzed: 12/22/22 12:30
13C4-PFBA	3.20	94.3	20 - 150	
13C5-PFPEA	1.60	95.6	20 - 150	
13C5-PFHXA	0.800	93.2	20 - 150	
13C4-PFHPA	0.800	96.6	20 - 150	
13C8-PFOA	0.800	86.7	20 - 150	
13C9-PFNA	0.400	86.1	20 - 150	
13C6-PFDA	0.400	71.2	20 - 150	
13C7-PFUnA	0.400	73.8	20 - 150	
13C2-PFDOA	0.400	77.7	20 - 150	
13C2-PFTEDA	0.400	75.7	20 - 150	
13C3-PFBS	0.800	86.9	20 - 150	
13C3-PFHXS	0.800	92.0	20 - 150	
13C8-PFOS	0.800	77.2	20 - 150	
13C2-4:2FTS	1.60	96.6	20 - 150	
13C2-6:2FTS	1.60	107	20 - 150	
13C2-8:2FTS	1.60	87.1	20 - 150	
13C8-PFOSA	0.800	70.8	20 - 150	
D5-NETFOSA	0.800	47.0	20 - 150	
D3-NMEFOSA	0.800	52.2	20 - 150	
D3-NMEFOSAA	1.60	70.2	20 - 150	
D5-NETFOSAA	1.60	71.6	20 - 150	
D7-NMEFOSE	8.00	51.6	20 - 150	
D9-NETFOSE	8.00	54.2	20 - 150	
13C3-HFPO-DA	3.20	92.7	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
MRL Check (BBL0400-MRL1) . ug/kg Dry				
		Lab File ID: S2022-12-22A (7)		Analyzed: 12/22/22 12:43
13C4-PFBA	3.20	87.9	20 - 150	
13C5-PFPEA	1.60	92.9	20 - 150	
13C5-PFHXA	0.800	89.0	20 - 150	
13C4-PFHPA	0.800	82.1	20 - 150	
13C8-PFOA	0.800	94.3	20 - 150	
13C9-PFNA	0.400	89.0	20 - 150	
13C6-PFDA	0.400	94.0	20 - 150	
13C7-PFUnA	0.400	93.5	20 - 150	
13C2-PFDOA	0.400	80.7	20 - 150	
13C2-PFTEDA	0.400	83.2	20 - 150	
13C3-PFBS	0.800	87.0	20 - 150	
13C3-PFHXS	0.800	89.7	20 - 150	
13C8-PFOS	0.800	84.2	20 - 150	
13C2-4:2FTS	1.60	97.0	20 - 150	
13C2-6:2FTS	1.60	95.9	20 - 150	
13C2-8:2FTS	1.60	83.3	20 - 150	
13C8-PFOSA	0.800	79.3	20 - 150	
D5-NETFOSA	0.800	46.2	20 - 150	
D3-NMEFOSA	0.800	49.3	20 - 150	
D3-NMEFOSAA	1.60	69.2	20 - 150	
D5-NETFOSAA	1.60	81.8	20 - 150	
D7-NMEFOSE	8.00	63.1	20 - 150	
D9-NETFOSE	8.00	59.0	20 - 150	
13C3-HFPO-DA	3.20	90.0	20 - 150	

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	BBL0205-BLK1
Sampled:		Prepared:	12/09/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0205	Sequence:	SB03835
Column:	1	Calibration:	2251013
		Instrument:	Saphira

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
PFBA	0.80 U	1.6	0.80	0.21	U
PFPEA	0.40 U	0.80	0.40	0.065	U
PFHXA	0.20 U	0.40	0.20	0.055	U
PFHPA	0.20 U	0.40	0.20	0.041	U
PFOA	0.20 U	0.40	0.20	0.15	U
PFNA	0.20 U	0.40	0.20	0.082	U
PFDA	0.20 U	0.40	0.20	0.10	U
PFUnA	0.20 U	0.40	0.20	0.16	U
PFDOA	0.20 U	0.40	0.20	0.11	U
PFTRDA	0.30 U	0.40	0.30	0.20	U
PFTEDA	0.20 U	0.40	0.20	0.20	U
PFBS	0.20 U	0.40	0.20	0.037	U
PFPEs	0.20 U	0.40	0.20	0.063	U
PFHXS	0.20 U	0.40	0.20	0.032	U
PFHPS	0.20 U	0.40	0.20	0.051	U
PFOS	0.0893 J	0.40	0.20	0.064	IR2, J
PFNS	0.20 U	0.40	0.20	0.12	U
PFDS	0.20 U	0.40	0.20	0.15	U
PFDOS	0.20 U	0.40	0.20	0.12	U
4:2FTS	0.80 U	1.6	0.80	0.29	U
6:2FTS	0.80 U	1.6	0.80	0.31	U
8:2FTS	0.80 U	1.6	0.80	0.082	U
PFOSA	0.20 U	0.40	0.20	0.10	U
NMeFOSA	0.80 U	1.6	0.80	0.47	U
NEtFOSA	0.80 U	1.6	0.80	0.41	U
NMeFOSAA	0.20 U	0.40	0.20	0.11	U
NEtFOSAA	0.20 U	0.40	0.20	0.11	U
NMeFOSE	1.2 U	1.6	1.2	1.0	U
NEtFOSE	1.2 U	1.6	1.2	1.0	U
HFPO-DA	0.40 U	0.80	0.40	0.17	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	BBL0205-BLK1
Sampled:		Prepared:	12/09/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0205	Sequence:	SB03835
Column:	1	Calibration:	2251013
			Instrument: Saphira
			File ID: S2022-12-14A (5)
			Analyzed: 12/14/22 12:12
			Dilution: 1

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
ADONA	0.40 U	0.80	0.40	0.12	U
PFEESA	0.40 U	0.80	0.40	0.11	U
PFMPA	0.40 U	0.80	0.40	0.054	U
PFMBA	0.40 U	0.80	0.40	0.091	U
NFDHA	0.40 U	0.80	0.40	0.30	U
9CL-PF3ONS	0.40 U	0.80	0.40	0.21	U
11CL-PF3OUDS	0.40 U	0.80	0.40	0.21	U
3:3FTCA	0.80 U	1.6	0.80	0.57	U
5:3FTCA	0.80 U	1.6	0.80	0.44	U
7:3FTCA	0.80 U	1.6	0.80	0.55	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-BLK1
Sampled:		Prepared:	12/09/22 15:06
Solids:		Preparation:	1633
Batch:	BBL0206	Sequence:	SB03845
Column:	1	Calibration:	2251013
		Instrument:	Saphira
		File ID:	S2022-12-14B (5)
		Analyzed:	12/15/22 00:42
		Dilution:	1

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
PFBA	0.20 U	0.30	0.20	0.15	U
PFPEA	0.040 U	0.080	0.040	0.022	U
PFHXA	0.020 U	0.040	0.020	0.015	U
PFHPA	0.020 U	0.040	0.020	0.015	U
PFOA	0.0293 J	0.040	0.030	0.021	B, J
PFNA	0.030 U	0.040	0.030	0.022	U
PFDA	0.030 U	0.040	0.030	0.022	U
PFUnA	0.020 U	0.040	0.020	0.020	U
PFDOA	0.030 U	0.040	0.030	0.023	U
PFTRDA	0.020 U	0.040	0.020	0.016	U
PFTEDA	0.030 U	0.040	0.030	0.025	U
PFBS	0.020 U	0.040	0.020	0.016	U
PFPEs	0.020 U	0.040	0.020	0.012	U
PFHXS	0.020 U	0.040	0.020	0.015	U
PFHPS	0.020 U	0.040	0.020	0.011	U
PFOS	0.0118 J	0.040	0.020	0.0097	J
PFNS	0.020 U	0.040	0.020	0.015	U
PFDS	0.020 U	0.040	0.020	0.014	U
PFDOS	0.020 U	0.040	0.020	0.013	U
4:2FTS	0.080 U	0.16	0.080	0.045	U
6:2FTS	0.080 U	0.16	0.080	0.061	U
8:2FTS	0.080 U	0.16	0.080	0.051	U
PFOSA	0.020 U	0.040	0.020	0.012	U
NMeFOSA	0.080 U	0.16	0.080	0.066	U
NEtFOSA	0.080 U	0.16	0.080	0.027	U
NMeFOSAA	0.020 U	0.040	0.020	0.010	U
NEtFOSAA	0.020 U	0.040	0.020	0.018	U
NMeFOSE	0.080 U	0.16	0.080	0.054	U
NEtFOSE	0.080 U	0.16	0.080	0.047	U
HFPO-DA	0.040 U	0.080	0.040	0.020	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-BLK1
Sampled:		Prepared:	12/09/22 15:06
Solids:		Preparation:	1633
Batch:	BBL0206	Sequence:	SB03845
Column:	1	Calibration:	2251013
			Instrument: Saphira
			File ID: S2022-12-14B (5)
			Analyzed: 12/15/22 00:42
			Dilution: 1

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
ADONA	0.040 U	0.080	0.040	0.026	U
PFEESA	0.040 U	0.080	0.040	0.017	U
PFMPA	0.040 U	0.080	0.040	0.028	U
PFMBA	0.040 U	0.080	0.040	0.032	U
NFDHA	0.060 U	0.080	0.060	0.049	U
9CL-PF3ONS	0.040 U	0.080	0.040	0.024	U
11CL-PF3OUDS	0.040 U	0.080	0.040	0.027	U
3:3FTCA	0.080 U	0.16	0.080	0.064	U
5:3FTCA	0.080 U	0.16	0.080	0.065	U
7:3FTCA	0.080 U	0.16	0.080	0.050	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0400-BLK1
Sampled:		Prepared:	12/20/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0400	Sequence:	SB03951
Column:	1	Calibration:	2252011
		Instrument:	Saphira
		File ID:	S2022-12-22A (5)
		Analyzed:	12/22/22 12:17
		Dilution:	1

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
PFBA	0.20 U	0.30	0.20	0.15	U
PFPEA	0.040 U	0.080	0.040	0.022	U
PFHXA	0.020 U	0.040	0.020	0.015	U
PFHPA	0.020 U	0.040	0.020	0.015	U
PFOA	0.0235 J	0.040	0.030	0.021	B, J
PFNA	0.030 U	0.040	0.030	0.022	U
PFDA	0.030 U	0.040	0.030	0.022	U
PFUnA	0.020 U	0.040	0.020	0.020	U
PFDOA	0.030 U	0.040	0.030	0.023	U
PFTRDA	0.020 U	0.040	0.020	0.016	U
PFTEDA	0.030 U	0.040	0.030	0.025	U
PFBS	0.020 U	0.040	0.020	0.016	U
PFPEs	0.020 U	0.040	0.020	0.012	U
PFHXS	0.020 U	0.040	0.020	0.015	U
PFHPS	0.020 U	0.040	0.020	0.011	U
PFOS	0.0107 J	0.040	0.020	0.0097	J
PFNS	0.020 U	0.040	0.020	0.015	U
PFDS	0.020 U	0.040	0.020	0.014	U
PFDOS	0.020 U	0.040	0.020	0.013	U
4:2FTS	0.080 U	0.16	0.080	0.045	U
6:2FTS	0.080 U	0.16	0.080	0.061	U
8:2FTS	0.080 U	0.16	0.080	0.051	U
PFOSA	0.020 U	0.040	0.020	0.012	U
NMeFOSA	0.080 U	0.16	0.080	0.066	U
NEtFOSA	0.080 U	0.16	0.080	0.027	U
NMeFOSAA	0.020 U	0.040	0.020	0.010	U
NEtFOSAA	0.020 U	0.040	0.020	0.018	U
NMeFOSE	0.080 U	0.16	0.080	0.054	U
NEtFOSE	0.080 U	0.16	0.080	0.047	U
HFPO-DA	0.040 U	0.080	0.040	0.020	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0400-BLK1
Sampled:		Prepared:	12/20/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0400	Sequence:	SB03951
Column:	1	Calibration:	2252011
			Instrument: Saphira
			File ID: S2022-12-22A (5)
			Analyzed: 12/22/22 12:17
			Dilution: 1

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
ADONA	0.040 U	0.080	0.040	0.026	U
PFEESA	0.040 U	0.080	0.040	0.017	U
PFMPA	0.040 U	0.080	0.040	0.028	U
PFMBA	0.040 U	0.080	0.040	0.032	U
NFDHA	0.060 U	0.080	0.060	0.049	U
9CL-PF3ONS	0.040 U	0.080	0.040	0.024	U
11CL-PF3OUDS	0.040 U	0.080	0.040	0.027	U
3:3FTCA	0.080 U	0.16	0.080	0.064	U
5:3FTCA	0.080 U	0.16	0.080	0.065	U
7:3FTCA	0.080 U	0.16	0.080	0.050	U

LCS / LCS DUPLICATE RECOVERY

EPA 1633

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Water

Preparation: 1633

Batch: BBL0205

Laboratory ID: BBL0205-BS1

Column:

ANALYTE	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC.	QC LIMITS REC.
PFBA	16.0	17.4	109	40 - 150
PFPEA	8.00	8.75	109	40 - 150
PFHXA	4.00	4.39	110	40 - 150
PFHPA	4.00	4.63	116	40 - 150
PFOA	4.00	4.19	105	40 - 150
PFNA	4.00	4.99	125	40 - 150
PFDA	4.00	4.14	103	40 - 150
PFUnA	4.00	4.07	102	40 - 150
PFDOA	4.00	3.94	98.5	40 - 150
PFTRDA	4.00	3.74	93.5	40 - 150
PFTEDA	4.00	4.30	108	40 - 150
PFBS	3.54	4.12	116	40 - 150
PFPEs	3.76	4.33	115	40 - 150
PFHXS	3.66	3.94	108	40 - 150
PFHPS	3.82	3.89	102	40 - 150
PFOS	3.72	4.21	113	40 - 150
PFNS	3.84	4.70	122	40 - 150
PFDS	3.86	3.95	102	40 - 150
PFDOS	3.88	3.98	103	40 - 150
4:2FTS	15.0	16.9	113	40 - 150
6:2FTS	15.2	18.0	118	40 - 150
8:2FTS	15.4	18.6	121	40 - 150
PFOSA	4.00	4.95	124	40 - 150
NMeFOSA	16.0	19.3	121	40 - 150
NEtFOSA	16.0	17.5	109	40 - 150
NMeFOSAA	4.00	4.43	111	40 - 150
NEtFOSAA	4.00	4.76	119	40 - 150
NMeFOSE	16.0	18.1	113	40 - 150
NEtFOSE	16.0	16.8	105	40 - 150
HFPO-DA	8.00	7.91	98.8	40 - 150
ADONA	7.56	8.06	107	40 - 150
PFEESA	7.12	7.45	105	40 - 150
PFMPA	8.00	8.55	107	40 - 150
PFMBA	8.00	8.48	106	40 - 150

LCS / LCS DUPLICATE RECOVERY

EPA 1633

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Water

Preparation: 1633

Batch: BBL0205

Laboratory ID: BBL0205-BS1

Column:

ANALYTE	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC.	QC LIMITS REC.
NFDHA	8.00	8.68	108	40 - 150
9CL-PF3ONS	7.48	8.33	111	40 - 150
11CL-PF3OUDS	7.56	8.61	114	40 - 150
3:3FTCA	16.0	17.5	109	40 - 150
5:3FTCA	16.0	18.3	114	40 - 150
7:3FTCA	16.0	16.3	102	40 - 150

LCS / LCS DUPLICATE RECOVERY

EPA 1633

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Preparation: 1633

Batch: BBL0206

Laboratory ID: BBL0206-BS1

Column:

ANALYTE	SPIKE ADDED (ug/kg Dry)	LCS CONCENTRATION (ug/kg Dry)	LCS % REC.	QC LIMITS REC.
PFBA	1.60	1.79	112	40 - 150
PFPEA	0.800	0.958	120	40 - 150
PFHXA	0.400	0.456	114	40 - 150
PFHPA	0.400	0.463	116	40 - 150
PFOA	0.400	0.467	117	40 - 150
PFNA	0.400	0.431	108	40 - 150
PFDA	0.400	0.366	91.6	40 - 150
PFUnA	0.400	0.504	126	40 - 150
PFDOA	0.400	0.484	121	40 - 150
PFTRDA	0.400	0.432	108	40 - 150
PFTEDA	0.400	0.481	120	40 - 150
PFBS	0.354	0.406	115	40 - 150
PFPEs	0.376	0.427	114	40 - 150
PFHXS	0.366	0.386	106	40 - 150
PFHPS	0.382	0.398	104	40 - 150
PFOS	0.372	0.386	104	40 - 150
PFNS	0.384	0.420	109	40 - 150
PFDS	0.386	0.380	98.5	40 - 150
PFDOS	0.388	0.423	109	40 - 150
4:2FTS	1.50	1.70	113	40 - 150
6:2FTS	1.52	1.86	122	40 - 150
8:2FTS	1.54	1.85	120	40 - 150
PFOSA	0.400	0.491	123	40 - 150
NMeFOSA	1.60	2.09	131	40 - 150
NEtFOSA	1.60	1.84	115	40 - 150
NMeFOSAA	0.400	0.493	123	40 - 150
NEtFOSAA	0.400	0.490	123	40 - 150
NMeFOSE	1.60	1.68	105	40 - 150
NEtFOSE	1.60	1.72	108	40 - 150
HFPO-DA	0.800	0.950	119	40 - 150
ADONA	0.756	0.841	111	40 - 150
PFEESA	0.712	0.760	107	40 - 150
PFMPA	0.800	0.870	109	40 - 150
PFMBA	0.800	0.938	117	40 - 150

LCS / LCS DUPLICATE RECOVERY

EPA 1633

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Preparation: 1633

Batch: BBL0206

Laboratory ID: BBL0206-BS1

Column:

ANALYTE	SPIKE ADDED (ug/kg Dry)	LCS CONCENTRATION (ug/kg Dry)	LCS % REC.	QC LIMITS REC.
NFDHA	0.800	0.977	122	40 - 150
9CL-PF3ONS	0.748	0.884	118	40 - 150
11CL-PF3OUDS	0.756	0.881	117	40 - 150
3:3FTCA	1.60	1.78	111	40 - 150
5:3FTCA	1.60	1.59	99.5	40 - 150
7:3FTCA	1.60	1.53	95.8	40 - 150

ANALYTE	SPIKE ADDED (ug/kg Dry)	LCSD CONCENTRATION (ug/kg Dry)	LCSD % REC. #	% RPD #	RPD	QC LIMITS REC.
PFBA	1.60	1.82	114	1.45	30	40 - 150
PFPEA	0.800	0.852	106	11.7	30	40 - 150
PFHXA	0.400	0.426	107	6.63	30	40 - 150
PFHPA	0.400	0.424	106	8.92	30	40 - 150
PFOA	0.400	0.449	112	3.97	30	40 - 150
PFNA	0.400	0.446	111	3.37	30	40 - 150
PFDA	0.400	0.459	115	22.4	30	40 - 150
PFUnA	0.400	0.442	110	13.2	30	40 - 150
PFDOA	0.400	0.379	94.8	24.3	30	40 - 150
PFTRDA	0.400	0.429	107	0.599	30	40 - 150
PFTEDA	0.400	0.443	111	8.12	30	40 - 150
PFBS	0.354	0.352	99.4	14.3	30	40 - 150
PFPEs	0.376	0.433	115	1.50	30	40 - 150
PFHXS	0.366	0.391	107	1.22	30	40 - 150
PFHPS	0.382	0.392	103	1.51	30	40 - 150
PFOS	0.372	0.415	112	7.26	30	40 - 150
PFNS	0.384	0.430	112	2.48	30	40 - 150
PFDS	0.386	0.395	102	3.71	30	40 - 150
PFDOS	0.388	0.424	109	0.0645	30	40 - 150
4:2FTS	1.50	1.80	120	5.65	30	40 - 150
6:2FTS	1.52	1.57	103	16.7	30	40 - 150
8:2FTS	1.54	2.22	144	18.3	30	40 - 150
PFOSA	0.400	0.427	107	13.9	30	40 - 150
NMeFOSA	1.60	1.88	117	10.7	30	40 - 150

LCS / LCS DUPLICATE RECOVERY

EPA 1633

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Preparation: 1633

Batch: BBL0206

Laboratory ID: BBL0206-BSD1

Column:

ANALYTE	SPIKE ADDED (ug/kg Dry)	LCSD CONCENTRATION (ug/kg Dry)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
NEtFOSA	1.60	1.78	111	3.00	30	40 - 150
NMeFOSAA	0.400	0.425	106	14.7	30	40 - 150
NEtFOSAA	0.400	0.403	101	19.4	30	40 - 150
NMeFOSE	1.60	1.68	105	0.133	30	40 - 150
NEtFOSE	1.60	1.68	105	2.28	30	40 - 150
HFPO-DA	0.800	0.894	112	6.11	30	40 - 150
ADONA	0.756	0.799	106	5.15	30	40 - 150
PFEESA	0.712	0.635	89.1	18.0	30	40 - 150
PFMPA	0.800	0.915	114	5.06	30	40 - 150
PFMBA	0.800	0.900	112	4.13	30	40 - 150
NFDHA	0.800	0.846	106	14.4	30	40 - 150
9CL-PF3ONS	0.748	0.851	114	3.83	30	40 - 150
11CL-PF3OUDS	0.756	0.786	104	11.4	30	40 - 150
3:3FTCA	1.60	1.71	107	4.05	30	40 - 150
5:3FTCA	1.60	1.56	97.6	1.91	30	40 - 150
7:3FTCA	1.60	1.37	85.5	11.4	30	40 - 150

LCS / LCS DUPLICATE RECOVERY

EPA 1633

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Preparation: 1633

Batch: BBL0400

Laboratory ID: BBL0400-BS1

Column:

ANALYTE	SPIKE ADDED (ug/kg Dry)	LCS CONCENTRATION (ug/kg Dry)	LCS % REC.	QC LIMITS REC.
PFBA	1.60	1.65	103	40 - 150
PFPEA	0.800	0.801	100	40 - 150
PFHXA	0.400	0.402	101	40 - 150
PFHPA	0.400	0.387	96.9	40 - 150
PFOA	0.400	0.378	94.5	40 - 150
PFNA	0.400	0.388	96.9	40 - 150
PFDA	0.400	0.406	102	40 - 150
PFUnA	0.400	0.378	94.6	40 - 150
PFDOA	0.400	0.345	86.1	40 - 150
PFTRDA	0.400	0.361	90.2	40 - 150
PFTEDA	0.400	0.374	93.5	40 - 150
PFBS	0.354	0.356	101	40 - 150
PFPEs	0.376	0.347	92.2	40 - 150
PFHXS	0.366	0.333	91.1	40 - 150
PFHPS	0.382	0.370	96.9	40 - 150
PFOS	0.372	0.348	93.5	40 - 150
PFNS	0.384	0.344	89.5	40 - 150
PFDS	0.386	0.336	87.1	40 - 150
PFDOS	0.388	0.271	69.8	40 - 150
4:2FTS	1.50	1.36	90.8	40 - 150
6:2FTS	1.52	1.43	94.2	40 - 150
8:2FTS	1.54	1.25	81.7	40 - 150
PFOSA	0.400	0.341	85.3	40 - 150
NMeFOSA	1.60	1.62	101	40 - 150
NEtFOSA	1.60	1.69	106	40 - 150
NMeFOSAA	0.400	0.417	104	40 - 150
NEtFOSAA	0.400	0.337	84.3	40 - 150
NMeFOSE	1.60	1.58	98.7	40 - 150
NEtFOSE	1.60	1.52	94.8	40 - 150
HFPO-DA	0.800	0.714	89.3	40 - 150
ADONA	0.756	0.692	91.5	40 - 150
PFEESA	0.712	0.647	90.9	40 - 150
PFMPA	0.800	0.805	101	40 - 150
PFMBA	0.800	0.758	94.8	40 - 150

LCS / LCS DUPLICATE RECOVERY

EPA 1633

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Preparation: 1633

Batch: BBL0400

Laboratory ID: BBL0400-BS1

Column:

ANALYTE	SPIKE ADDED (ug/kg Dry)	LCS CONCENTRATION (ug/kg Dry)	LCS % REC.	QC LIMITS REC.
NFDHA	0.800	0.802	100	40 - 150
9CL-PF3ONS	0.748	0.597	79.8	40 - 150
11CL-PF3OUDS	0.756	0.602	79.6	40 - 150
3:3FTCA	1.60	1.63	102	40 - 150
5:3FTCA	1.60	1.53	95.6	40 - 150
7:3FTCA	1.60	1.60	99.8	40 - 150

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

ADIT6-DU03-SON01MI-22DEC

Laboratory: APPL, LLC
 Client: AECOM
 Matrix: Solid
 Batch: BBL0206
 % Solids: 91.07
 Column:

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Analysis: EPA 1633
 Preparation: 1633
 Laboratory ID: BBL0206-MS1
 Sample Lab ID: 22L0057-01

ANALYTE	SPIKE ADDED (ug/kg Dry)	SAMPLE CONCENTRATION (ug/kg Dry)	MS CONCENTRATION (ug/kg Dry)	MS % REC.	QC LIMITS REC.
PFBA	1.56	1.42	2.86	92.4	40 - 150
PFPEA	0.780	0.848	1.19	44.3	40 - 150
PFHXA	0.390	8.02	2.35	-1450 *	40 - 150
PFHPA	0.390	0.123	0.481	91.8	40 - 150
PFOA	0.390	0.116	0.594	123	40 - 150
PFNA	0.390	ND	0.415	107	40 - 150
PFDA	0.390	ND	0.504	129	40 - 150
PFUnA	0.390	ND	0.393	101	40 - 150
PFDOA	0.390	ND	0.413	106	40 - 150
PFTRDA	0.390	ND	0.370	95.0	40 - 150
PFTEDA	0.390	ND	0.461	118	40 - 150
PFBS	0.345	ND	0.375	109	40 - 150
PFPEs	0.366	ND	0.442	121	40 - 150
PFHXS	0.357	ND	0.409	115	40 - 150
PFHPS	0.372	ND	0.358	96.3	40 - 150
PFOS	0.363	0.0507	0.438	107	40 - 150
PFNS	0.374	ND	0.332	88.8	40 - 150
PFDS	0.376	ND	0.367	97.4	40 - 150
PFDOS	0.378	ND	0.402	106	40 - 150
4:2FTS	1.46	0.307	1.91	110	40 - 150
6:2FTS	1.48	56.8	43.5	-896 *	40 - 150
8:2FTS	1.50	ND	1.93	129	40 - 150
PFOSA	0.390	ND	0.474	122	40 - 150
NMeFOSA	1.56	ND	1.58	101	40 - 150
NEtFOSA	1.56	ND	1.68	108	40 - 150
NMeFOSAA	0.390	ND	0.437	112	40 - 150
NEtFOSAA	0.390	ND	0.444	114	40 - 150
NMeFOSE	1.56	ND	1.50	96.2	40 - 150
NEtFOSE	1.56	ND	1.60	102	40 - 150
HFPO-DA	0.780	ND	0.984	126	40 - 150
ADONA	0.737	ND	0.854	116	40 - 150

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

ADIT6-DU03-SON01MI-22DEC

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Analysis: EPA 1633

Batch: BBL0206

Preparation: 1633

% Solids: 91.07

Laboratory ID: BBL0206-MS1

Column:

Sample Lab ID: 22L0057-01

ANALYTE	SPIKE ADDED (ug/kg Dry)	SAMPLE CONCENTRATION (ug/kg Dry)	MS CONCENTRATION (ug/kg Dry)	MS % REC.	QC LIMITS REC.
PFEESA	0.694	ND	0.757	109	40 - 150
PFMPA	0.780	ND	0.819	105	40 - 150
PFMBA	0.780	ND	0.872	112	40 - 150
NFDHA	0.780	ND	0.995	128	40 - 150
9CL-PF3ONS	0.729	ND	0.503	69.0	40 - 150
11CL-PF3OUDS	0.737	ND	0.818	111	40 - 150
3:3FTCA	1.56	ND	1.53	98.1	40 - 150
5:3FTCA	1.56	0.293	1.98	108	40 - 150
7:3FTCA	1.56	ND	1.65	106	40 - 150

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

ADIT6-DU03-SON01MI-22DEC

Laboratory: APPL, LLC
 Client: AECOM
 Matrix: Solid
 Batch: BBL0206
 % Solids: 91.07
 Column:

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Analysis: EPA 1633
 Preparation: 1633
 Laboratory ID: BBL0206-MSD1
 Sample Lab ID: 22L0057-01

ANALYTE	SPIKE ADDED (ug/kg Dry)	MSD CONCENTRATION (ug/kg Dry)	MSD % REC. #	QC LIMITS		
				% RPD	RPD	REC.
PFBA	1.48	3.10	114	8.10	30	40 - 150
PFPEA	0.738	1.44	80.9	19.1	30	40 - 150
PFHXA	0.369	3.35	-1270 *	35.0 *	30	40 - 150
PFHPA	0.369	0.562	119	15.5	30	40 - 150
PFOA	0.369	0.542	115	9.23	30	40 - 150
PFNA	0.369	0.396	107	4.82	30	40 - 150
PFDA	0.369	0.389	105	25.9	30	40 - 150
PFUnA	0.369	0.420	114	6.72	30	40 - 150
PFDOA	0.369	0.492	133	17.3	30	40 - 150
PFTRDA	0.369	0.518	140	33.3 *	30	40 - 150
PFTEDA	0.369	0.406	110	12.8	30	40 - 150
PFBS	0.327	0.398	122	6.09	30	40 - 150
PFPEs	0.347	0.373	108	17.0	30	40 - 150
PFHXS	0.338	0.349	103	16.0	30	40 - 150
PFHPS	0.352	0.324	91.9	10.1	30	40 - 150
PFOS	0.343	0.460	119	4.93	30	40 - 150
PFNS	0.354	0.302	85.2	9.59	30	40 - 150
PFDS	0.356	0.360	101	1.71	30	40 - 150
PFDOS	0.358	0.388	108	3.57	30	40 - 150
4:2FTS	1.38	1.95	119	2.20	30	40 - 150
6:2FTS	1.40	51.4	-386 *	16.6	30	40 - 150
8:2FTS	1.42	1.63	115	17.2	30	40 - 150
PFOSA	0.369	0.424	115	11.0	30	40 - 150
NMeFOSA	1.48	1.68	114	6.04	30	40 - 150
NEtFOSA	1.48	1.68	114	0.342	30	40 - 150
NMeFOSAA	0.369	0.480	130	9.31	30	40 - 150
NEtFOSAA	0.369	0.524	142	16.3	30	40 - 150
NMeFOSE	1.48	1.52	103	1.60	30	40 - 150

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

ADIT6-DU03-SON01MI-22DEC

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Analysis: EPA 1633

Batch: BBL0206

Preparation: 1633

% Solids: 91.07

Laboratory ID: BBL0206-MSD1

Column:

Sample Lab ID: 22L0057-01

ANALYTE	SPIKE ADDED (ug/kg Dry)	MSD CONCENTRATION (ug/kg Dry)	MSD % REC. #	% RPD	QC LIMITS	
					RPD	REC.
NEtFOSE	1.48	1.56	106	2.34	30	40 - 150
HFPO-DA	0.738	0.839	114	15.9	30	40 - 150
ADONA	0.697	0.883	127	3.30	30	40 - 150
PFEESA	0.657	0.790	120	4.32	30	40 - 150
PFMPA	0.738	0.815	110	0.572	30	40 - 150
PFMBA	0.738	0.799	108	8.79	30	40 - 150
NFDHA	0.738	0.666	90.3	39.6 *	30	40 - 150
9CL-PF3ONS	0.690	0.558	80.9	10.4	30	40 - 150
11CL-PF3OUDS	0.697	0.855	123	4.33	30	40 - 150
3:3FTCA	1.48	1.65	112	7.68	30	40 - 150
5:3FTCA	1.48	1.80	102	9.56	30	40 - 150
7:3FTCA	1.48	1.50	101	9.87	30	40 - 150

CALIBRATION SUMMARY

Analyte	(Q1 / Q3)	Internal Standard	Multiplier	AcidFactor	Function	Qualifier
PFBA	(212.9 / 169.0)	13C4_PFBA_EIS	4.0000	1.0000	y = 0.35123 x (std. dev. = 0.01656) (weighting: None)	%RSE=4.7
PFPeA	(262.9 / 219.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.44382 x (std. dev. = 0.01874) (weighting: None)	%RSE=4.2
PFHxA	(313.0 / 269.0)	13C5_PFHxA_EIS	1.0000	1.0000	y = 0.44310 x (std. dev. = 0.03853) (weighting: None)	%RSE=8.7
PFHpA	(363.0 / 319.0)	13C4_PFHpA_EIS	1.0000	1.0000	y = 0.46275 x (std. dev. = 0.02306) (weighting: None)	%RSE=5.0
PFOA	(413.0 / 369.0)	13C8_PFOA_EIS	1.0000	1.0000	y = 0.49965 x (std. dev. = 0.04947) (weighting: None)	%RSE=9.9
PFNA	(463.0 / 419.0)	13C9_PFNA_EIS	1.0000	1.0000	y = 0.91166 x (std. dev. = 0.06699) (weighting: None)	%RSE=7.3
PFDA	(513.0 / 469.0)	13C6_PFDA_EIS	1.0000	1.0000	y = 1.01114 x (std. dev. = 0.12432) (weighting: None)	%RSE=12.3
PFUnA	(563.0 / 519.0)	13C7_PFUnA_EIS	1.0000	1.0000	y = 0.86749 x (std. dev. = 0.03616) (weighting: None)	%RSE=4.2
PFDoA	(613.0 / 569.0)	13C2_PFDoA_EIS	1.0000	1.0000	y = 0.86599 x (std. dev. = 0.12682) (weighting: None)	%RSE=14.6
PFTeDA	(663.0 / 619.0)	13C2_PFDoA_EIS	1.0000	1.0000	y = 0.71396 x (std. dev. = 0.08230) (weighting: None)	%RSE=11.5
PFTeDA	(713.0 / 669.0)	13C2_PFTeDA_EIS	1.0000	1.0000	y = 0.91387 x (std. dev. = 0.08684) (weighting: None)	%RSE=9.5
PFBS	(298.9 / 80.0)	13C3_PFBS_EIS	1.0000	0.8847	y = 0.24995 x (std. dev. = 0.01576) (weighting: None)	%RSE=6.3
PFPeS	(349.0 / 80.0)	13C3_PFHxS_EIS	1.0000	0.9384	y = 0.82555 x (std. dev. = 0.07274) (weighting: None)	%RSE=8.8
PFHxS	(399.0 / 80.0)	13C3_PFHxS_EIS	1.0000	0.9110	y = 0.73156 x (std. dev. = 0.07037) (weighting: None)	%RSE=9.6
PFHpS	(449.0 / 80.0)	13C8_PFOS_EIS	1.0000	0.9514	y = 0.43043 x (std. dev. = 0.01521) (weighting: None)	%RSE=3.5
PFOS	(499.0 / 80.0)	13C8_PFOS_EIS	1.0000	0.9275	y = 0.50994 x (std. dev. = 0.04509) (weighting: None)	%RSE=8.8
PFNS	(549.0 / 80.0)	13C8_PFOS_EIS	1.0000	0.9599	y = 0.65025 x (std. dev. = 0.04019) (weighting: None)	%RSE=6.2
PFDS	(599.0 / 80.0)	13C8_PFOS_EIS	1.0000	0.9631	y = 0.85771 x (std. dev. = 0.06851) (weighting: None)	%RSE=8.0
PFDoS	(698.9 / 80.0)	13C8_PFOS_EIS	1.0000	0.9696	y = 0.43679 x (std. dev. = 0.02806) (weighting: None)	%RSE=6.4
4:2FTS	(327.0 / 307.0)	13C2_4:2FTS_EIS	4.0000	0.9345	y = 3.04722 x (std. dev. = 0.18703) (weighting: None)	%RSE=6.1
6:2FTS	(427.0 / 407.0)	13C2_6:2FTS_EIS	4.0000	0.9490	y = 1.54689 x (std. dev. = 0.15681) (weighting: None)	%RSE=10.1
8:2FTS	(527.0 / 507.0)	13C2_8:2FTS_EIS	4.0000	0.9583	y = 1.36477 x (std. dev. = 0.17884) (weighting: None)	%RSE=13.1
PFOSA	(498.0 / 78.0)	13C8_PFOSA_EIS	1.0000	1.0000	y = 0.49045 x (std. dev. = 0.04843) (weighting: None)	%RSE=9.9
NMeFOSA	(511.9 / 219.0)	D3_NMeFOSA_EIS	4.0000	1.0000	y = 1.66390 x (std. dev. = 0.18882) (weighting: None)	%RSE=11.3
NEiFOSA	(526.0 / 219.0)	D5_NEiFOSA_EIS	4.0000	1.0000	y = 1.84874 x (std. dev. = 0.11891) (weighting: None)	%RSE=6.4
NMeFOSAA	(570.0 / 419.0)	D3_MeFOSAA_EIS	1.0000	1.0000	y = 0.19326 x (std. dev. = 0.02299) (weighting: None)	%RSE=11.9
NEiFOSAA	(584.0 / 419.0)	D5_EiFOSAA_EIS	1.0000	1.0000	y = 0.21763 x (std. dev. = 0.01767) (weighting: None)	%RSE=8.1
NMeFOSE	(616.1 / 59.0)	D7_NMeFOSE_EIS	4.0000	1.0000	y = 0.26983 x (std. dev. = 0.03217) (weighting: None)	%RSE=11.9
NEiFOSE	(630.0 / 59.0)	D9_NEiFOSE_EIS	4.0000	1.0000	y = 0.13531 x (std. dev. = 0.01001) (weighting: None)	%RSE=7.4
HFPO-DA	(285.0 / 169.0)	13C3_HFPODA_EIS	2.0000	1.0000	y = 0.15460 x (std. dev. = 0.01149) (weighting: None)	%RSE=7.4
ADONA	(377.0 / 85.0)	13C3_HFPODA_EIS	2.0000	0.9427	y = 0.62152 x (std. dev. = 0.07199) (weighting: None)	%RSE=11.6
9Cl-Pf3ONS	(531.0 / 351.0)	13C3_HFPODA_EIS	2.0000	0.9333	y = 1.74461 x (std. dev. = 0.24485) (weighting: None)	%RSE=14.0
11Cl-Pf3OUDS	(631.0 / 451.0)	13C3_HFPODA_EIS	2.0000	0.9432	y = 1.12997 x (std. dev. = 0.08948) (weighting: None)	%RSE=7.9
3:3FTCA	(241.0 / 177.0)	13C5_PFPeA_EIS	4.0000	1.0000	y = 0.03730 x (std. dev. = 0.00171) (weighting: None)	%RSE=4.6
5:3FTCA	(341.0 / 236.7)	13C5_PFHxA_EIS	4.0000	1.0000	y = 0.35465 x (std. dev. = 0.04429) (weighting: None)	%RSE=12.5
7:3FTCA	(441.0 / 317.0)	13C5_PFHxA_EIS	4.0000	1.0000	y = 0.44373 x (std. dev. = 0.03580) (weighting: None)	%RSE=8.1
PFEESA	(315.0 / 135.0)	13C5_PFHxA_EIS	2.0000	0.8925	y = 0.86126 x (std. dev. = 0.07986) (weighting: None)	%RSE=9.3
PFMPA	(229.0 / 85.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.12048 x (std. dev. = 0.00716) (weighting: None)	%RSE=5.9
PFMBA	(279.0 / 85.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.40320 x (std. dev. = 0.02095) (weighting: None)	%RSE=5.2
NFDHA	(201.0 / 85.0)	13C5_PFHxA_EIS	2.0000	1.0000	y = 0.01797 x + 0.00111 (r = 0.99690) (weighting: 1 / x)	%RSE=12.9
13C3_PFBA_IIS	(216.0 / 172.0)	13C3_PFBA_IIS	1.0000	1.0000	y = 121332.9140 x	%RSD=8.3
13C2_PFHxA_IIS	(315.1 / 270.0)	13C2_PFHxA_IIS	1.0000	1.0000	y = 182484.4821 x	%RSD=5.9
13C4_PFOA_IIS	(417.0 / 372.0)	13C4_PFOA_IIS	1.0000	1.0000	y = 174565.7992 x	%RSD=4.7
13C5_PFNA_IIS	(468.0 / 423.0)	13C5_PFNA_IIS	1.0000	1.0000	y = 135886.7394 x	%RSD=5.9
13C2_PFDA_IIS	(515.1 / 470.1)	13C2_PFDA_IIS	1.0000	1.0000	y = 138756.1877 x	%RSD=4.9
18O2_PFHxS_IIS	(403.0 / 83.9)	18O2_PFHxS_IIS	1.0000	1.0000	y = 322739.0551 x	%RSD=6.5
13C4_PFOS_IIS	(502.8 / 79.9)	13C4_PFOS_IIS	1.0000	1.0000	y = 251821.1425 x	%RSD=7.6

Analyte	(Q1 / Q3)	Internal Standard	Multiplier	AcidFactor	Function	Qualifier
13C4_PFBa_EIS	(217.0 / 172.0)	13C3_PFBa_IIS	8.0000	1.0000	y = 6.0981 x	%RSD=4.4
13C5_PFPaA_EIS	(267.9 / 223.0)	13C2_PFHxA_IIS	4.0000	1.0000	y = 2.2151 x	%RSD=5.5
13C5_PFHxA_EIS	(318.0 / 273.0)	13C2_PFHxA_IIS	2.0000	1.0000	y = 1.6855 x	%RSD=8.9
13C4_PFHpA_EIS	(367.0 / 322.0)	13C2_PFHxA_IIS	2.0000	1.0000	y = 1.4632 x	%RSD=4.8
13C8_PFOA_EIS	(421.0 / 376.0)	13C4_PFOA_IIS	2.0000	1.0000	y = 1.5336 x	%RSD=6.2
13C9_PFNA_EIS	(472.0 / 427.0)	13C5_PFNA_IIS	1.0000	1.0000	y = 0.7704 x	%RSD=10.9
13C6_PFDA_EIS	(519.0 / 474.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 0.9591 x	%RSD=11.7
13C7_PFUaA_EIS	(570.0 / 525.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 1.3172 x	%RSD=11.5
13C2_PFDaA_EIS	(615.0 / 570.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 1.6198 x	%RSD=6.9
13C2_PFTeDA_EIS	(715.0 / 670.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 1.0171 x	%RSD=7.3
13C3_PFBs_EIS	(302.0 / 80.0)	18O2_PFHxS_IIS	2.0000	1.0000	y = 2.3012 x	%RSD=7.7
13C3_PFHxS_EIS	(402.0 / 80.0)	18O2_PFHxS_IIS	2.0000	1.0000	y = 1.2951 x	%RSD=10.0
13C8_PFOs_EIS	(507.0 / 80.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 2.4901 x	%RSD=11.2
13C2_4:2FTS_EIS	(329.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.2690 x	%RSD=10.4
13C2_6:2FTS_EIS	(429.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.3289 x	%RSD=8.3
13C2_8:2FTS_EIS	(529.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.3281 x	%RSD=15.1
13C8_PFOsA_EIS	(506.0 / 78.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 3.7666 x	%RSD=8.2
D3_NMeFOsA_EIS	(515.0 / 169.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 0.9668 x	%RSD=7.1
D5_NeIFOsA_EIS	(531.1 / 169.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 0.8388 x	%RSD=11.7
D3_MeFOsAA_EIS	(573.0 / 419.0)	13C4_PFOs_IIS	4.0000	1.0000	y = 1.1788 x	%RSD=6.9
D5_EiFOsAA_EIS	(589.0 / 419.0)	13C4_PFOs_IIS	4.0000	1.0000	y = 1.0666 x	%RSD=13.7
D7_NMeFOsE_EIS	(623.2 / 58.9)	13C4_PFOs_IIS	20.0000	1.0000	y = 1.8535 x	%RSD=10.3
D9_NeIFOsE_EIS	(639.2 / 58.9)	13C4_PFOs_IIS	20.0000	1.0000	y = 0.9288 x	%RSD=14.1
13C3_HFOpDA_EIS	(287.0 / 169.0)	13C2_PFHxA_IIS	8.0000	1.0000	y = 4.1298 x	%RSD=7.9

x=Concentration Analyte

$$y = \text{Area Ratio} = \frac{\text{Area Analyte}}{\text{Area Internal Standard}}$$

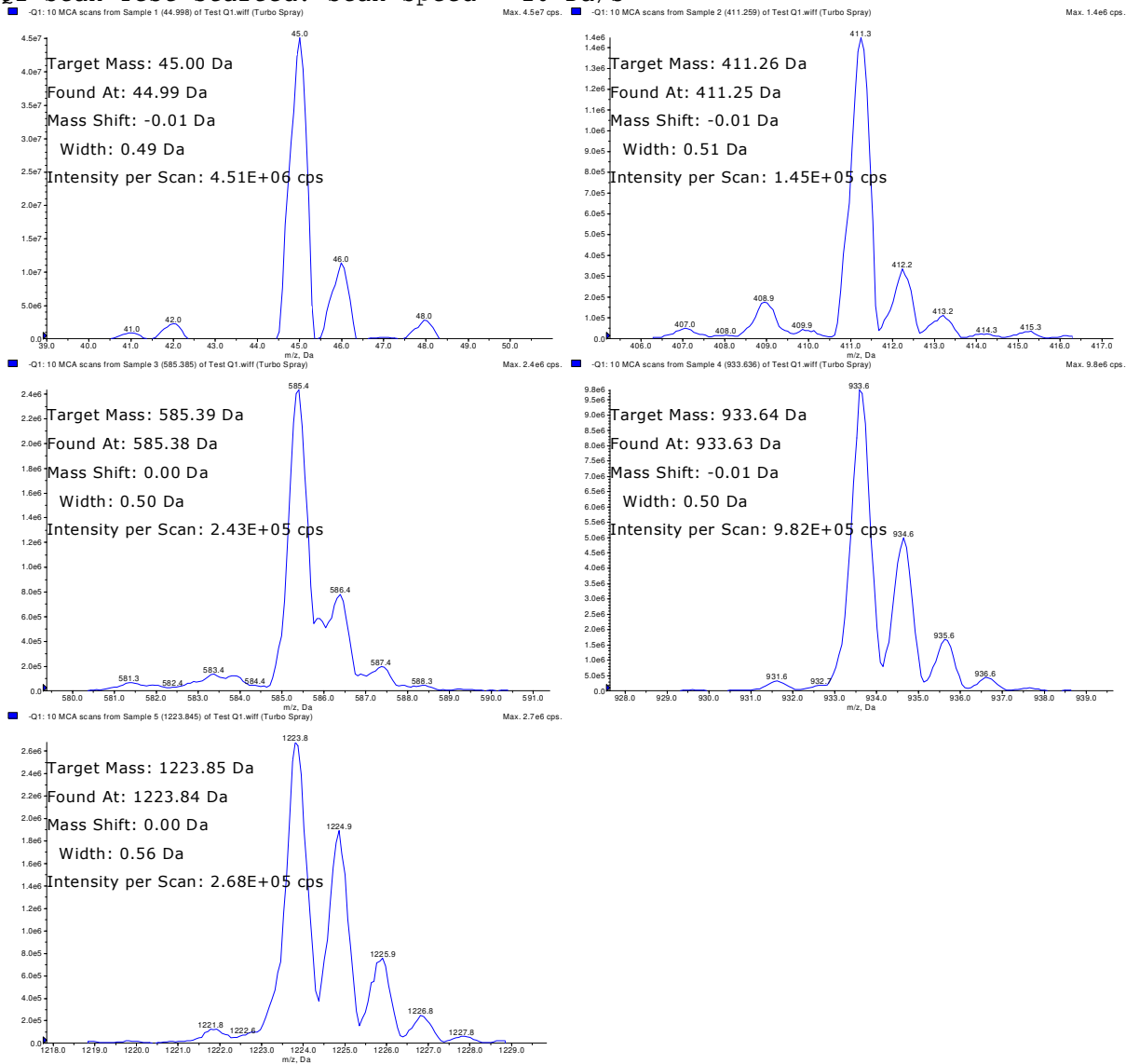
$$\text{Acid Factor} = \frac{\text{Molecular weight Acid}}{\text{Molecular weight Salt}}$$

$$\text{Multiplier} = \frac{\text{Concentration of Analyte}}{\text{Concentration of PFOA}} \text{ in curve standard mix}$$

$$\text{Result} \left(\frac{\text{ng}}{\text{ml}} \right) = x * \text{Multiplier} * \text{Acid Factor}$$

Tune 2021-11-23 Q1 NEG @ 10Da/s

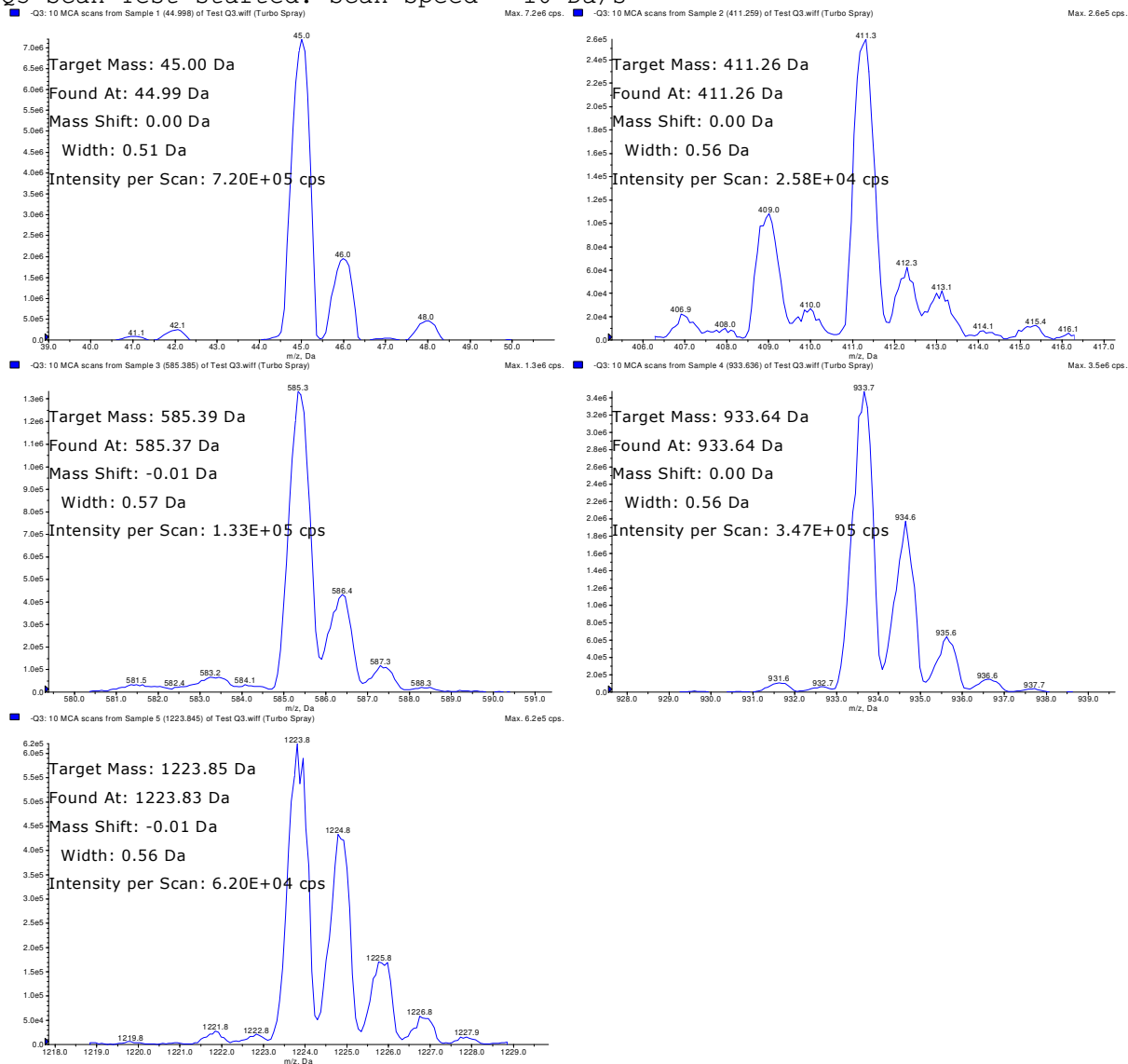
Q1 Scan Test started. Scan Speed = 10 Da/s



Target Mass	Found At	Delta	Width	Intensity	0.4<Width<0.6
45.00	44.99	-0.01	0.49	4.51E+06	PASS
411.26	411.25	-0.01	0.51	1.45E+05	PASS
585.39	585.38	0.00	0.50	2.43E+05	PASS
933.64	933.63	-0.01	0.50	9.82E+05	PASS
1223.85	1223.84	0.00	0.56	2.68E+05	PASS

Tune 2021-11-23 Q3 NEG @ 10Da/s

Q3 Scan Test started. Scan Speed = 10 Da/s



Target Mass	Found At	Delta	Width	Intensity	0.4<Width<0.6
45.00	44.99	0.00	0.51	7.20E+05	PASS
411.26	411.26	0.00	0.56	2.58E+04	PASS
585.39	585.37	-0.01	0.57	1.33E+05	PASS
933.64	933.64	0.00	0.56	3.47E+05	PASS
1223.85	1223.83	-0.01	0.56	6.20E+04	PASS

Analyte	(Q1 / Q3)	Internal Standard	Multiplier	AcidFactor	Function	Qualifier
PFBA	(212.9 / 169.0)	13C4_PFBA_EIS	4.0000	1.0000	y = 0.32619 x (std. dev. = 0.01628) (weighting: None)	%RSE=5.0
PFPeA	(262.9 / 219.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.43913 x (std. dev. = 0.01863) (weighting: None)	%RSE=4.2
PFHxA	(313.0 / 269.0)	13C5_PFHxA_EIS	1.0000	1.0000	y = 0.42941 x (std. dev. = 0.01769) (weighting: None)	%RSE=4.1
PFHpA	(363.0 / 319.0)	13C4_PFHpA_EIS	1.0000	1.0000	y = 0.45577 x (std. dev. = 0.01668) (weighting: None)	%RSE=3.7
PFOA	(413.0 / 369.0)	13C8_PFOA_EIS	1.0000	1.0000	y = 0.49169 x (std. dev. = 0.02929) (weighting: None)	%RSE=6.0
PFNA	(463.0 / 419.0)	13C9_PFNA_EIS	1.0000	1.0000	y = 0.85807 x (std. dev. = 0.06798) (weighting: None)	%RSE=7.9
PFDA	(513.0 / 469.0)	13C6_PFDA_EIS	1.0000	1.0000	y = 0.95185 x (std. dev. = 0.07020) (weighting: None)	%RSE=7.4
PFUnA	(563.0 / 519.0)	13C7_PFUnA_EIS	1.0000	1.0000	y = 0.79028 x (std. dev. = 0.12920) (weighting: None)	%RSE=16.3
PFDoA	(613.0 / 569.0)	13C2_PFDoA_EIS	1.0000	1.0000	y = 0.86208 x (std. dev. = 0.12117) (weighting: None)	%RSE=14.1
PFTTrDA	(663.0 / 619.0)	13C2_PFDoA_EIS	1.0000	1.0000	y = 0.74691 x (std. dev. = 0.10467) (weighting: None)	%RSE=14.0
PFTeDA	(713.0 / 669.0)	13C2_PFTeDA_EIS	1.0000	1.0000	y = 0.88627 x (std. dev. = 0.09361) (weighting: None)	%RSE=10.6
PFBS	(298.9 / 80.0)	13C3_PFBS_EIS	1.0000	0.8847	y = 0.24253 x (std. dev. = 0.01275) (weighting: None)	%RSE=5.3
PFPeS	(349.0 / 80.0)	13C3_PFHxS_EIS	1.0000	0.9384	y = 0.83819 x (std. dev. = 0.04088) (weighting: None)	%RSE=4.9
PFHxS	(399.0 / 80.0)	13C3_PFHxS_EIS	1.0000	0.9110	y = 0.70765 x (std. dev. = 0.03393) (weighting: None)	%RSE=4.8
PFHpS	(449.0 / 80.0)	13C8_PFOS_EIS	1.0000	0.9514	y = 0.41508 x (std. dev. = 0.03452) (weighting: None)	%RSE=8.3
PFOS	(499.0 / 80.0)	13C8_PFOS_EIS	1.0000	0.9275	y = 0.50337 x (std. dev. = 0.03410) (weighting: None)	%RSE=6.8
PFNS	(549.0 / 80.0)	13C8_PFOS_EIS	1.0000	0.9599	y = 0.57789 x (std. dev. = 0.04314) (weighting: None)	%RSE=7.5
PFDS	(599.0 / 80.0)	13C8_PFOS_EIS	1.0000	0.9631	y = 0.64371 x (std. dev. = 0.05256) (weighting: None)	%RSE=8.2
PFDoS	(698.9 / 80.0)	13C8_PFOS_EIS	1.0000	0.9696	y = 0.27084 x (std. dev. = 0.02152) (weighting: None)	%RSE=7.9
4:2FTS	(327.0 / 307.0)	13C2_4:2FTS_EIS	4.0000	0.9345	y = 3.09002 x (std. dev. = 0.26815) (weighting: None)	%RSE=8.7
6:2FTS	(427.0 / 407.0)	13C2_6:2FTS_EIS	4.0000	0.9490	y = 1.45919 x (std. dev. = 0.11873) (weighting: None)	%RSE=8.1
8:2FTS	(527.0 / 507.0)	13C2_8:2FTS_EIS	4.0000	0.9583	y = 1.51823 x (std. dev. = 0.27229) (weighting: None)	%RSE=17.9
PFOSA	(498.0 / 78.0)	13C8_PFOSA_EIS	1.0000	1.0000	y = 0.47254 x (std. dev. = 0.03538) (weighting: None)	%RSE=7.5
NMeFOSA	(511.9 / 219.0)	D3_NMeFOSA_EIS	4.0000	1.0000	y = 1.63031 x (std. dev. = 0.18278) (weighting: None)	%RSE=11.2
NEiFOSA	(526.0 / 219.0)	D5_NEiFOSA_EIS	4.0000	1.0000	y = 1.80404 x (std. dev. = 0.10773) (weighting: None)	%RSE=6.0
NMeFOSAA	(570.0 / 419.0)	D3_MeFOSAA_EIS	1.0000	1.0000	y = 0.19482 x (std. dev. = 0.02187) (weighting: None)	%RSE=11.2
NEiFOSAA	(584.0 / 419.0)	D5_EiFOSAA_EIS	1.0000	1.0000	y = 0.22445 x (std. dev. = 0.03244) (weighting: None)	%RSE=14.5
NMeFOSE	(616.1 / 59.0)	D7_NMeFOSE_EIS	4.0000	1.0000	y = 0.25244 x (std. dev. = 0.02362) (weighting: None)	%RSE=9.4
NEiFOSE	(630.0 / 59.0)	D9_NEiFOSE_EIS	4.0000	1.0000	y = 0.10241 x (std. dev. = 0.01427) (weighting: None)	%RSE=13.9
HFPO-DA	(285.0 / 169.0)	13C3_HFPODA_EIS	2.0000	1.0000	y = 0.15195 x (std. dev. = 0.00913) (weighting: None)	%RSE=6.0
ADONA	(377.0 / 85.0)	13C3_HFPODA_EIS	2.0000	0.9427	y = 0.63625 x (std. dev. = 0.02798) (weighting: None)	%RSE=4.4
9Cl-Pf3ONS	(531.0 / 351.0)	13C3_HFPODA_EIS	2.0000	0.9333	y = -0.01255 x ² + 1.77065 x + 0.01174 (r = 0.99899) (weighting: 1 / x ²)	%RSE=4.6
11Cl-Pf3OUDS	(631.0 / 451.0)	13C3_HFPODA_EIS	2.0000	0.9432	y = 0.88975 x (std. dev. = 0.09345) (weighting: None)	%RSE=10.5
3:3FTCA	(241.0 / 177.0)	13C5_PFPeA_EIS	4.0000	1.0000	y = 0.03031 x (std. dev. = 0.00217) (weighting: None)	%RSE=7.2
5:3FTCA	(341.0 / 236.7)	13C5_PFHxA_EIS	4.0000	1.0000	y = 0.30350 x (std. dev. = 0.02546) (weighting: None)	%RSE=8.4
7:3FTCA	(441.0 / 317.0)	13C5_PFHxA_EIS	4.0000	1.0000	y = 0.34922 x (std. dev. = 0.01514) (weighting: None)	%RSE=4.3
PFEESA	(315.0 / 135.0)	13C5_PFHxA_EIS	2.0000	0.8925	y = 0.83914 x (std. dev. = 0.06120) (weighting: None)	%RSE=7.3
PFMPA	(229.0 / 85.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.12052 x (std. dev. = 0.00587) (weighting: None)	%RSE=4.9
PFMBA	(279.0 / 85.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.41658 x (std. dev. = 0.00844) (weighting: None)	%RSE=2.0
NFDHA	(295.0 / 201.0)	13C5_PFHxA_EIS	2.0000	1.0000	y = 0.43305 x (std. dev. = 0.01639) (weighting: None)	%RSE=3.8
13C3_PFBA_IIS	(216.0 / 172.0)	13C3_PFBA_IIS	1.0000	1.0000	y = 139193.5476 x	%RSD=8.2
13C2_PFHxA_IIS	(315.1 / 270.0)	13C2_PFHxA_IIS	1.0000	1.0000	y = 230918.4261 x	%RSD=8.2
13C4_PFOA_IIS	(417.0 / 372.0)	13C4_PFOA_IIS	1.0000	1.0000	y = 219848.0773 x	%RSD=7.7
13C5_PFNA_IIS	(468.0 / 423.0)	13C5_PFNA_IIS	1.0000	1.0000	y = 185181.4072 x	%RSD=9.2
13C2_PFDA_IIS	(515.1 / 470.1)	13C2_PFDA_IIS	1.0000	1.0000	y = 184809.0456 x	%RSD=11.0
18O2_PFHxS_IIS	(403.0 / 83.9)	18O2_PFHxS_IIS	1.0000	1.0000	y = 403709.6695 x	%RSD=4.9
13C4_PFOS_IIS	(502.8 / 79.9)	13C4_PFOS_IIS	1.0000	1.0000	y = 319178.8209 x	%RSD=6.9

Analyte	(Q1 / Q3)	Internal Standard	Multiplier	AcidFactor	Function	Qualifier
13C4_PFBa_EIS	(217.0 / 172.0)	13C3_PFBa_IIS	8.0000	1.0000	y = 8.2337 x	%RSD=3.2
13C5_PFPaA_EIS	(267.9 / 223.0)	13C2_PFHxA_IIS	4.0000	1.0000	y = 2.7832 x	%RSD=7.7
13C5_PFHxA_EIS	(318.0 / 273.0)	13C2_PFHxA_IIS	2.0000	1.0000	y = 2.3015 x	%RSD=6.9
13C4_PFHpA_EIS	(367.0 / 322.0)	13C2_PFHxA_IIS	2.0000	1.0000	y = 2.0078 x	%RSD=6.4
13C8_PFOA_EIS	(421.0 / 376.0)	13C4_PFOA_IIS	2.0000	1.0000	y = 2.1933 x	%RSD=5.9
13C9_PFNA_EIS	(472.0 / 427.0)	13C5_PFNA_IIS	1.0000	1.0000	y = 1.0996 x	%RSD=3.4
13C6_PFDA_EIS	(519.0 / 474.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 1.4222 x	%RSD=14.3
13C7_PFUaA_EIS	(570.0 / 525.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 2.0230 x	%RSD=15.9
13C2_PFDaA_EIS	(615.0 / 570.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 2.0192 x	%RSD=15.8
13C2_PFTeDA_EIS	(715.0 / 670.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 1.3410 x	%RSD=16.6
13C3_PFBs_EIS	(302.0 / 80.0)	18O2_PFHxS_IIS	2.0000	1.0000	y = 3.3815 x	%RSD=8.1
13C3_PFHxS_EIS	(402.0 / 80.0)	18O2_PFHxS_IIS	2.0000	1.0000	y = 1.7992 x	%RSD=5.5
13C8_PFOs_EIS	(507.0 / 80.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 3.4325 x	%RSD=6.1
13C2_4:2FTS_EIS	(329.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.5728 x	%RSD=7.1
13C2_6:2FTS_EIS	(429.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.6896 x	%RSD=7.7
13C2_8:2FTS_EIS	(529.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.6904 x	%RSD=7.1
13C8_PFOsA_EIS	(506.0 / 78.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 4.3389 x	%RSD=5.1
D3_NMeFOsA_EIS	(515.0 / 169.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 0.9473 x	%RSD=12.5
D5_NEtFOsA_EIS	(531.1 / 169.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 0.8745 x	%RSD=6.8
D3_MeFOsAA_EIS	(573.0 / 419.0)	13C4_PFOs_IIS	4.0000	1.0000	y = 1.6324 x	%RSD=5.4
D5_EtFOsAA_EIS	(589.0 / 419.0)	13C4_PFOs_IIS	4.0000	1.0000	y = 1.4389 x	%RSD=12.4
D7_NMeFOsE_EIS	(623.2 / 58.9)	13C4_PFOs_IIS	20.0000	1.0000	y = 1.3302 x	%RSD=9.0
D9_NEtFOsE_EIS	(639.2 / 58.9)	13C4_PFOs_IIS	20.0000	1.0000	y = 0.6056 x	%RSD=7.0
13C3_HFPODA_EIS	(287.0 / 169.0)	13C2_PFHxA_IIS	8.0000	1.0000	y = 4.8947 x	%RSD=6.9

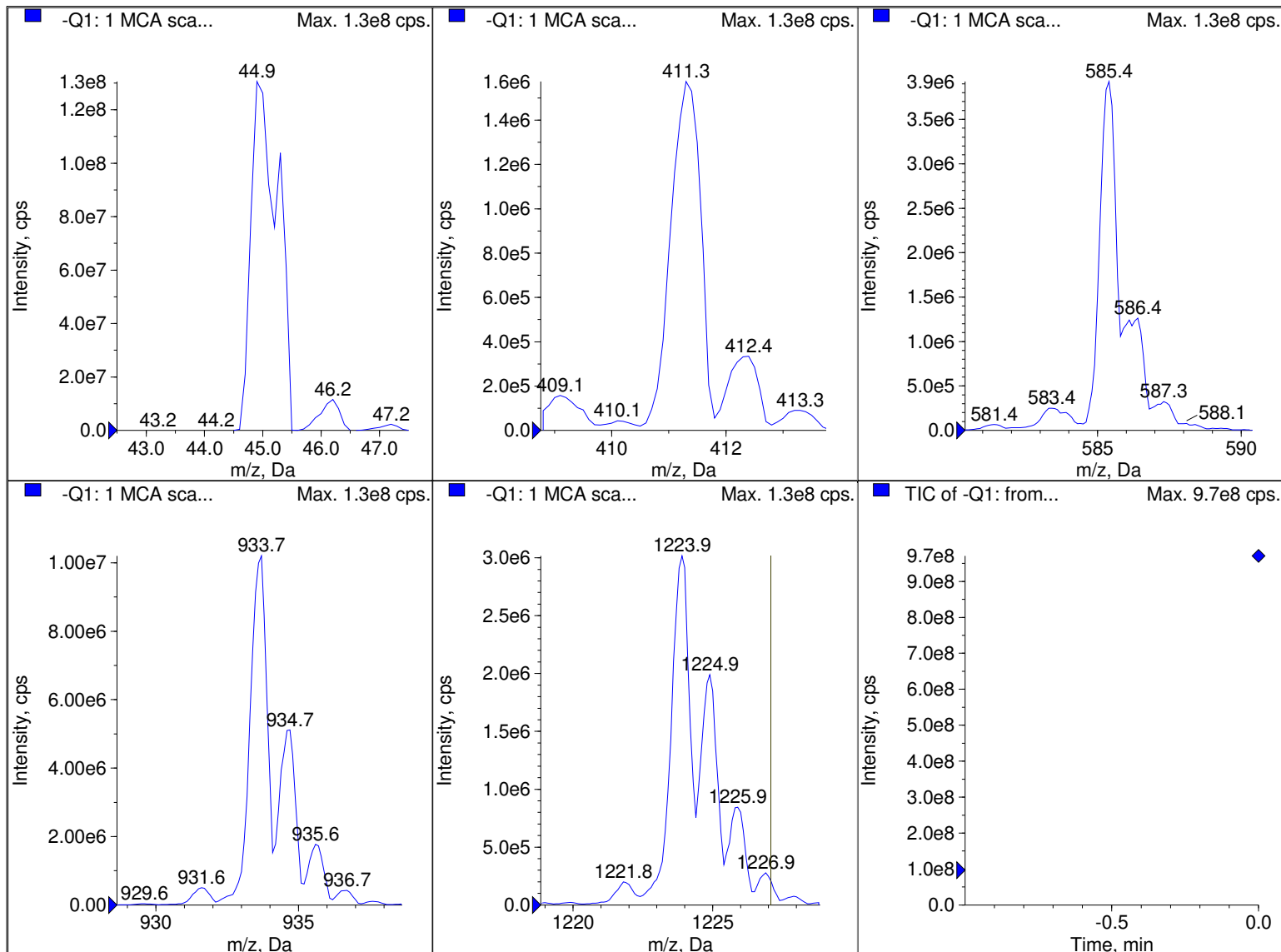
x= Concentration Analyte

$$y = \text{Area Ratio} = \frac{\text{Area Analyte}}{\text{Area Internal Standard}}$$

$$\text{Acid Factor} = \frac{\text{Molecular weight Acid}}{\text{Molecular weight Salt}}$$

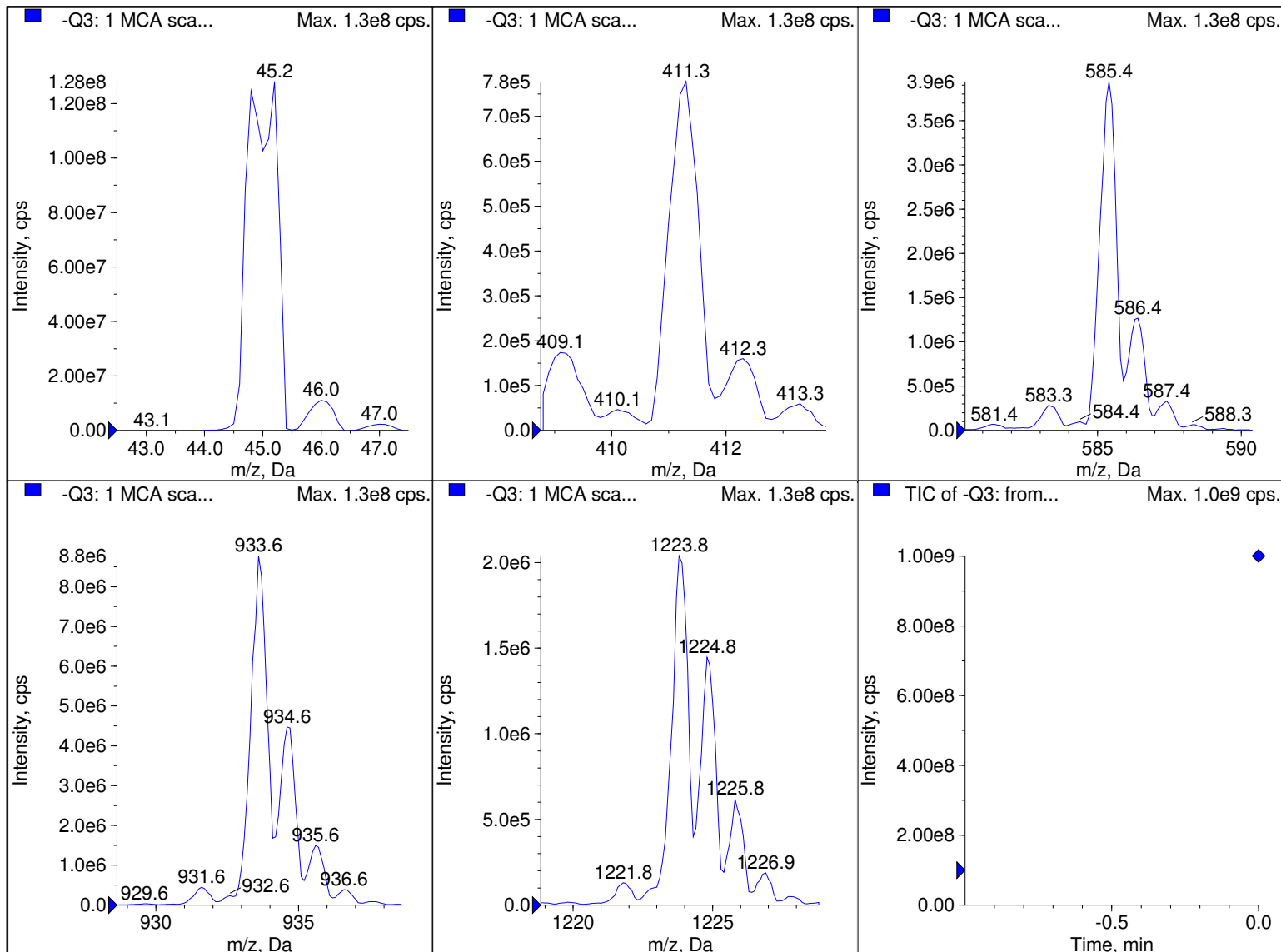
$$\text{Multiplier} = \frac{\text{Concentration of Analyte}}{\text{Concentration of PFOA}} \text{ in curve standard mix}$$

$$\text{Result} \left(\frac{\text{ng}}{\text{ml}} \right) = x * \text{Multiplier} * \text{Acid Factor}$$



Peak List for "-Q1: 1 MCA scans from Sample 1 (TuneSampleID) of MT20221111142838.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	45.0305	1.3061e8	0.6158	-0.0325
2	411.2590	411.3148	1.5745e6	0.6085	-0.0558
3	585.3850	585.3651	3.9270e6	0.6307	0.0199
4	933.6360	933.6197	1.0205e7	0.6552	0.0163
5	1223.8450	1223.8627	3.0170e6	0.6967	-0.0177
6	1572.0970	n/a	n/a	n/a	n/a
7	1863.3060	n/a	n/a	n/a	n/a
8	1979.3890	n/a	n/a	n/a	n/a

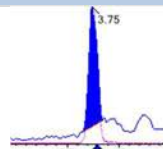
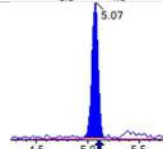
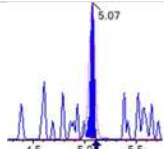
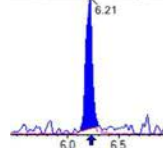
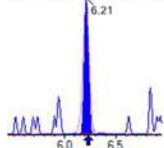
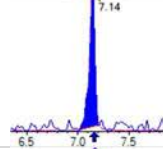
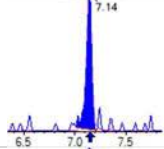
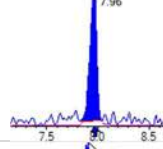
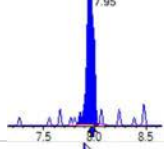
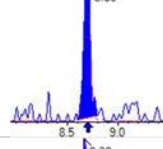
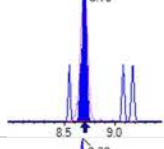
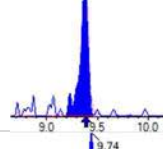
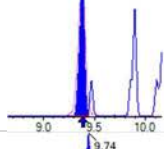
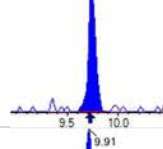
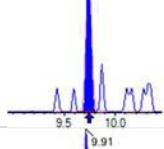
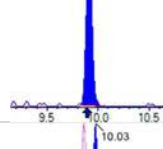
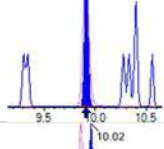
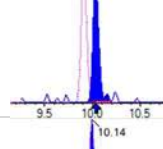
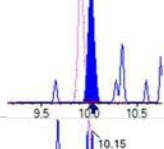
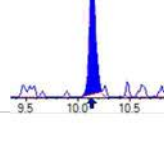
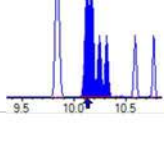


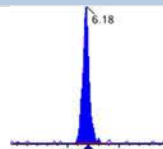
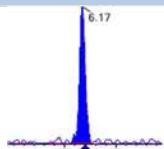
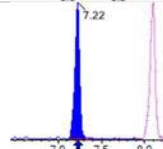
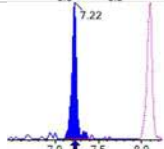
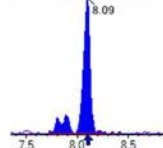
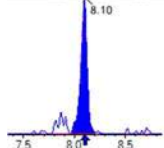
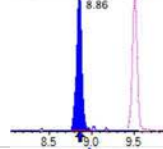
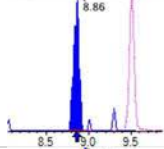
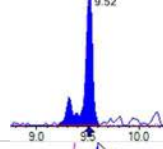
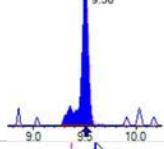
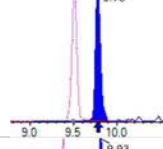
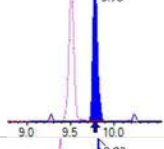
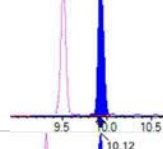
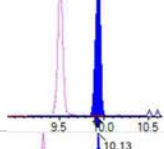
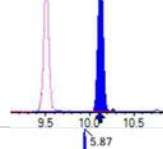
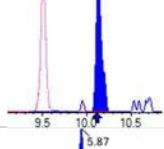
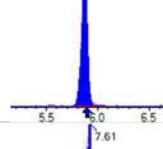
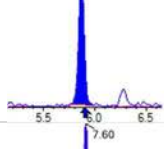
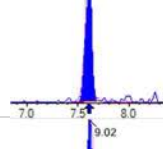
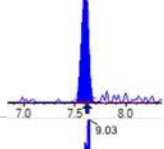
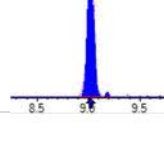
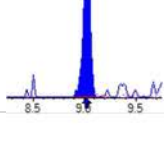
Peak List for "-Q3: 1 MCA scans from Sample 1 (TuneSampleID) of MT20221111142403.wiff (Turbo Spray)"

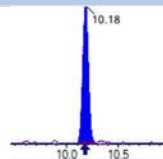
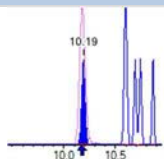
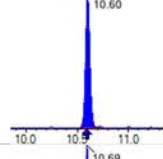
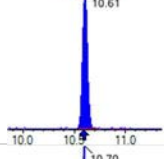
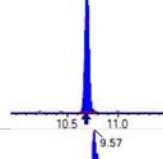
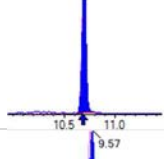
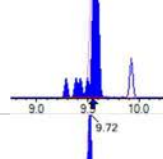
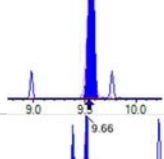
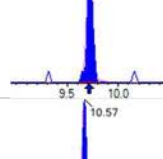
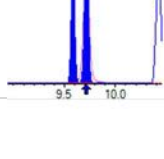
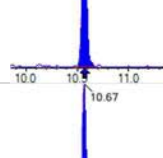
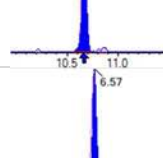
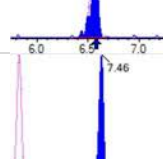
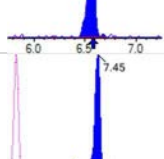
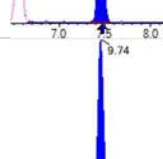
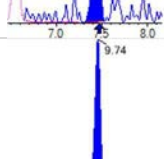
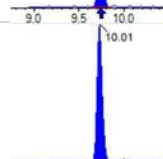
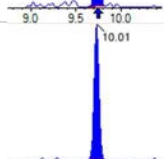
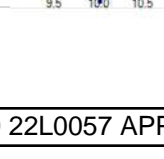
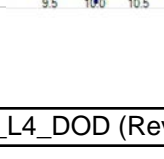
	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9799	1.2814e8	0.6414	0.0181
2	411.2590	411.2677	7.7810e5	0.6076	-8.6898e-3
3	585.3850	585.3784	3.9438e6	0.6511	6.5868e-3
4	933.6360	933.6279	8.7759e6	0.6302	8.0526e-3
5	1223.8450	1223.8609	2.0397e6	0.6225	-0.0159
6	1572.0970	n/a	n/a	n/a	n/a
7	1863.3060	n/a	n/a	n/a	n/a
8	1979.3890	n/a	n/a	n/a	n/a

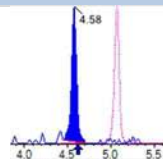
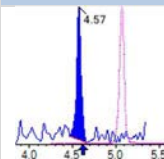
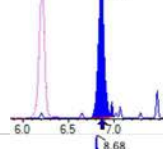
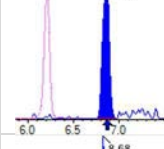
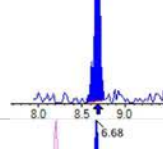
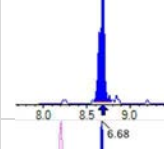
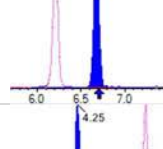
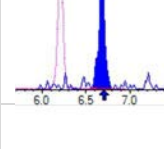
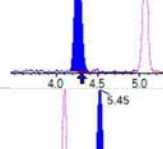
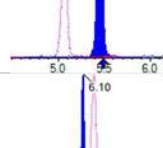
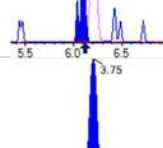
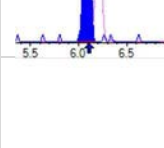
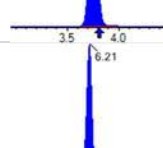
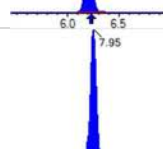
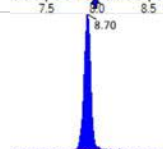
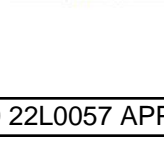
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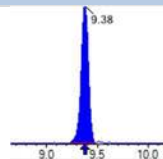
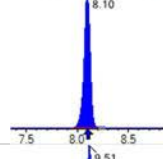
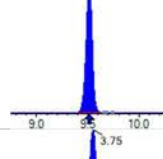
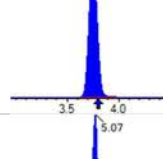
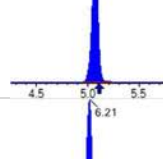
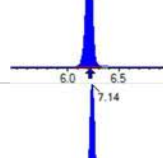
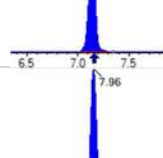
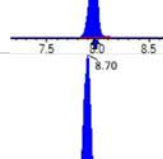
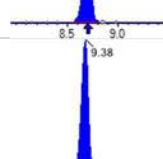
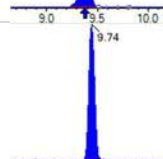
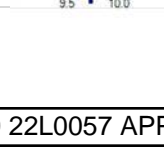
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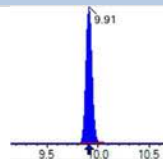
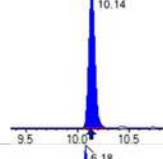
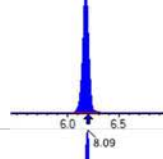
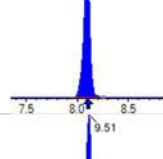
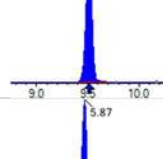
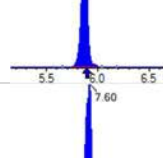
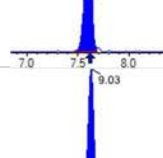
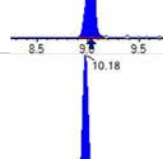
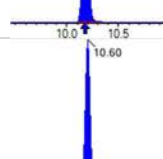
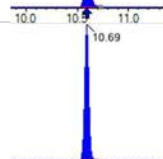
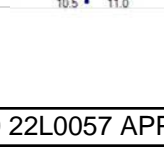
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 25183	(3.75, 1.00) (0.00, N/A, 0.0)	41.1	N/A 0.0 0.0	0.3677 [0.4000]	91.9%			
PFPeA	(262.9 / 219.0) 18029 (262.9 / 69.0) 230	(5.07, 1.00) (0.00, N/A, -0.2)	124.6 17.2	0.0128 101.7 101.7	0.1906 [0.2000]	95.3%			
PFHxA	(313.0 / 269.0) 12152 (313.0 / 119.0) 1158	(6.21, 1.00) (0.00, N/A, -0.1)	52.8 35.7	0.0953 102.9 102.9	0.0983 [0.1000]	98.3%			
PFHpA	(363.0 / 319.0) 12762 (363.0 / 169.0) 4000	(7.14, 1.00) (0.00, N/A, 0.1)	61.2 45.0	0.3134 100.7 100.7	0.1041 [0.1000]	104.1%			
PFOA	(413.0 / 369.0) 14795 (413.0 / 169.0) 4480	(7.96, 1.00) (0.00, N/A, 0.2)	52.3 54.5	0.3028 90.2 90.2	0.1177 [0.1000]	117.7%			
PFNA	(463.0 / 419.0) 8653 (463.0 / 169.0) 813	(8.69, 1.00) (0.00, N/A, -0.2)	26.6 15.3	0.0939 53.5 53.5	0.1003 [0.1000]	100.3%			
PFDA	(513.0 / 469.0) 13877 (513.0 / 169.0) 1718	(9.38, 1.00) (0.00, N/A, -0.2)	42.4 44.0	0.1238 123.0 123.0	0.1086 [0.1000]	108.6%			
PFUnA	(563.0 / 519.0) 16947 (563.0 / 169.0) 2361	(9.74, 1.00) (0.00, N/A, 0.1)	64.0 23.5	0.1393 152.2 152.2	0.0980 [0.1000]	98.0%			IR2,
PFDoA	(613.0 / 569.0) 26307 (613.0 / 169.0) 847	(9.91, 1.00) (0.00, N/A, -0.2)	108.8 20.6	0.0322 25.1 25.1	0.1247 [0.1000]	124.7%			IR1,
PFTrDA	(663.0 / 619.0) 18722 (663.0 / 169.0) 3175	(10.03, 1.01) (N/A, 0.00, 0.9)	82.0 30.4	0.1696 77.2 77.2	0.1077 [0.1000]	107.7%			
PFTeDA	(713.0 / 669.0) 11378 (713.0 / 169.0) 1807	(10.14, 1.00) (0.00, N/A, -0.5)	51.6 15.8	0.1588 85.4 85.4	0.0881 [0.1000]	88.1%			

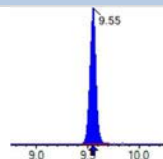
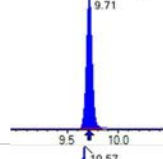
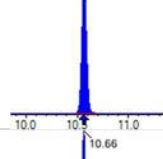
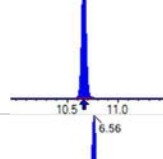
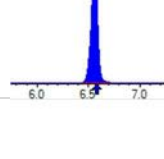
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 17579 (298.9 / 99.0) 14460	(6.18, 1.00) (0.00, N/A, 0.4)	194.9 100.3	0.8226 114.2 114.2	0.0859 [0.0885]	97.1%			
PFPeS	(349.0 / 80.0) 36034 (349.0 / 99.0) 12916	(7.22, 0.89) (N/A, -0.01, 0.1)	275.1 99.8	0.3584 95.7 95.7	0.1097 [0.0938]	116.9%			
PFHxS	(399.0 / 80.0) 32817 (399.0 / 99.0) 9746	(8.09, 1.00) (0.00, N/A, -0.1)	1919.4 144.2	0.2970 92.1 92.1	0.1094 [0.0911]	120.1%			
PFHpS	(449.0 / 80.0) 26025 (449.0 / 99.0) 6379	(8.86, 0.93) (N/A, -0.01, -0.2)	224.9 141.2	0.2451 79.8 79.8	0.0925 [0.0951]	97.2%			
PFOS	(499.0 / 80.0) 34591 (499.0 / 99.0) 10202	(9.52, 1.00) (0.01, N/A, 0.8)	49.7 49.6	0.2949 128.5 128.5	0.1011 [0.0927]	109.0%			
PFNS	(549.0 / 80.0) 44071 (549.0 / 99.0) 9647	(9.78, 1.03) (N/A, 0.00, -0.2)	161.6 487.5	0.2189 84.4 84.4	0.1046 [0.0960]	108.9%			
PFDS	(599.0 / 80.0) 62240 (599.0 / 99.0) 12765	(9.93, 1.04) (N/A, 0.01, -0.3)	237.6 630.7	0.2051 91.1 91.1	0.1123 [0.0963]	116.6%			
PFDoS	(698.9 / 80.0) 27460 (698.9 / 99.0) 6869	(10.12, 1.06) (N/A, 0.01, -0.7)	1199.3 49.0	0.2502 123.6 123.6	0.0980 [0.0970]	101.0%			
4:2FTS	(327.0 / 307.0) 27490 (327.0 / 81.0) 15432	(5.87, 1.00) (0.00, N/A, 0.1)	380.3 119.7	0.5614 92.5 92.5	0.4086 [0.3738]	109.3%			
6:2FTS	(427.0 / 407.0) 17427 (427.0 / 81.0) 10767	(7.61, 1.00) (0.01, N/A, 0.5)	123.1 75.7	0.6178 95.1 95.1	0.4356 [0.3796]	114.8%			
8:2FTS	(527.0 / 507.0) 13776 (527.0 / 81.0) 11937	(9.02, 1.00) (-0.01, N/A, -0.5)	3683.6 57.8	0.8665 138.2 138.2	0.3782 [0.3833]	98.7%			

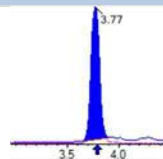
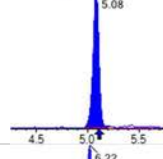
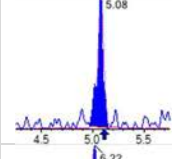
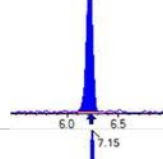
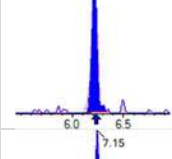
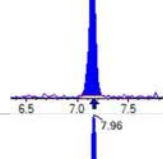
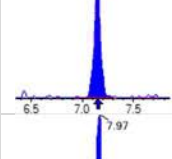
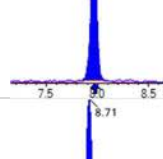
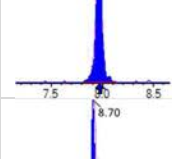
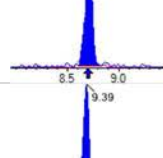
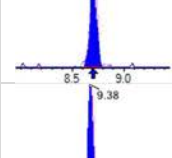
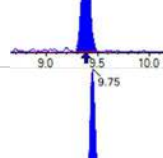
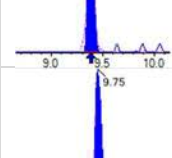
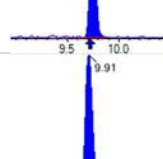
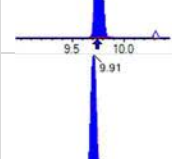
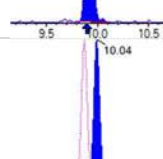
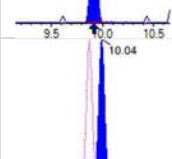
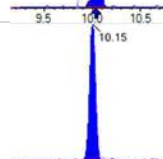
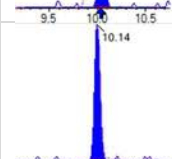
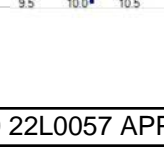
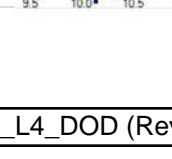
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 44867 (498.0 / 478.0) 301	(10.18, 1.00) (0.00, N/A, -0.4)	214.1 12.9	0.0067 29.4 29.4	0.0924 [0.1000]	92.4%			
NMeFOSA	(511.9 / 219.0) 39410 (511.9 / 169.0) 30750	(10.60, 1.00) (0.00, N/A, -0.2)	581.2 318.6	0.7803 122.3 122.3	0.4101 [0.4000]	102.5%			
NEIFOSA	(526.0 / 219.0) 46753 (526.0 / 169.0) 48270	(10.69, 1.00) (0.00, N/A, -0.1)	531.5 373.7	1.0324 96.7 96.7	0.4561 [0.4000]	114.0%			
NMeFOSAA	(570.0 / 419.0) 4860 (570.0 / 483.0) 2687	(9.57, 1.00) (0.02, N/A, 0.4)	151391.4 263.3	0.5529 96.3 96.3	0.0932 [0.1000]	93.2%			
NEIFOSAA	(584.0 / 419.0) 5808 (584.0 / 526.0) 1859	(9.72, 1.00) (0.01, N/A, 3.3)	459270.3 103.6	0.3201 56.5 56.5	0.1054 [0.1000]	105.4%			
NMeFOSE	(616.1 / 59.0) 15497	(10.57, 1.00) (0.01, N/A, 0.0)	268.1	N/A 0.0 0.0	0.5065 [0.4000]	126.6%			
NEtFOSE	(630.0 / 59.0) 3877	(10.67, 1.00) (0.00, N/A, 0.0)	347.9	N/A 0.0 0.0	0.4431 [0.4000]	110.8%			
HFPO-DA	(285.0 / 169.0) 10512 (285.0 / 185.0) 33665	(6.57, 1.00) (0.01, N/A, 0.1)	202.6 222.9	3.2026 121.8 121.8	0.1904 [0.2000]	95.2%			
ADONA	(377.0 / 85.0) 55727 (377.0 / 251.0) 6768	(7.46, 1.14) (N/A, -0.01, 0.5)	495.5 26.2	0.1214 103.0 103.0	0.2367 [0.1885]	125.5%			
9CI-Pf3ONS	(531.0 / 351.0) 150836 (533.0 / 353.0) 45137	(9.74, 1.48) (N/A, 0.01, -0.1)	318.9 105.2	0.2992 103.2 103.2	0.2259 [0.1867]	121.0%			
11CI-PF3OUDS	(631.0 / 451.0) 82897 (633.0 / 453.0) 20945	(10.01, 1.53) (N/A, 0.00, 0.0)	7339.7 376.4	0.2527 80.1 80.1	0.1937 [0.1886]	102.7%			

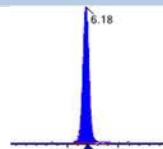
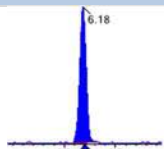
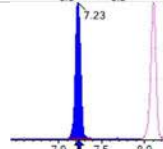
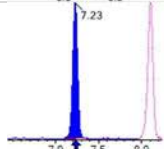
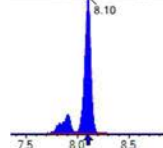
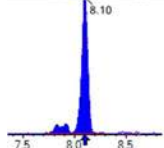
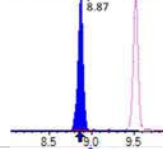
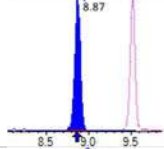
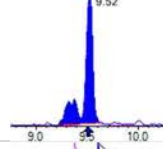
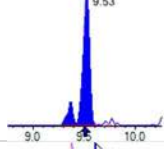
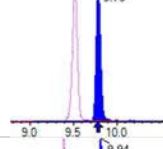
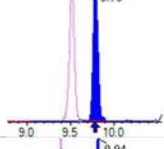
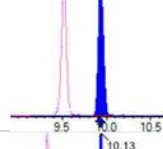
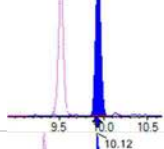
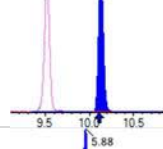
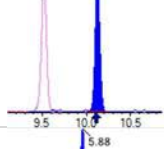
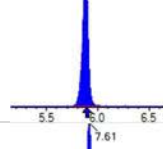
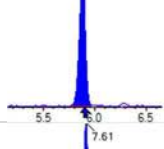
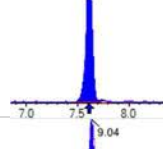
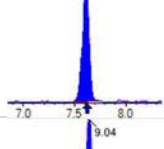
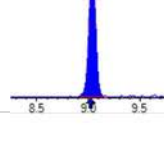
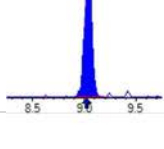
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 1526 (241.0 / 117.0) 2205	(4.58, 0.90) (N/A, -0.04, 0.2)	70.6 37.3	1.4448 88.1 88.1	0.3839 [0.4000]	96.0%			
5:3FTCA	(341.0 / 236.7) 7391 (341.0 / 217.0) 18515	(6.86, 1.10) (N/A, -0.01, 0.1)	90.8 79.3	2.5050 158.9 158.9	0.2988 [0.4000]	74.7%			IR2,
7:3FTCA	(441.0 / 317.0) 14583 (441.0 / 337.0) 10740	(8.68, 1.40) (N/A, 0.00, -0.2)	46.6 146.0	0.7365 87.9 87.9	0.4712 [0.4000]	117.8%			
PFEESA	(315.0 / 135.0) 28437 (315.0 / 83.0) 9057	(6.68, 1.07) (N/A, -0.02, -0.3)	419.0 55.5	0.3185 103.9 103.9	0.2113 [0.1785]	118.4%			
PFMPA	(229.0 / 85.0) 5012	(4.25, 0.84) (N/A, -0.05, 0.0)	186.2	N/A 0.0 0.0	0.1952 [0.2000]	97.6%			
PFMBA	(279.0 / 85.0) 17280	(5.45, 1.08) (N/A, -0.04, 0.0)	384.0	N/A 0.0 0.0	0.2011 [0.2000]	100.5%			
NFDHA	(201.0 / 85.0) 863 (295.0 / 201.0) 4745	(6.10, 0.98) (N/A, -0.02, 0.7)	59.6 92.8	5.4985 83.5 83.5	0.2203 [0.2000]	110.2%			
13C3_PFBa_IIS	(216.0 / 172.0) 134732	(3.75, N/A) (N/A, -0.05, N/A)	641.4	N/A	1.1104 [1.0000]	111.0% {106.4%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 182961	(6.21, N/A) (N/A, -0.02, N/A)	723.3	N/A	1.0026 [1.0000]	100.3% {93.5%}			
13C4_PFOA_IIS	(417.0 / 372.0) 180399	(7.95, N/A) (N/A, -0.01, N/A)	410.1	N/A	1.0334 [1.0000]	103.3% {102.4%}			
13C5_PFNAl_IIS	(468.0 / 423.0) 140050	(8.70, N/A) (N/A, -0.01, N/A)	373.3	N/A	1.0306 [1.0000]	103.1% {106.1%}			

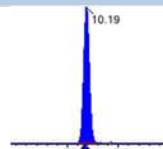
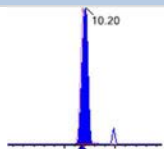
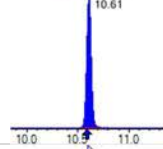
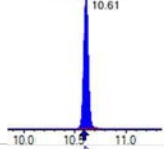
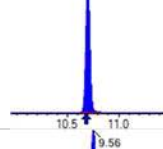
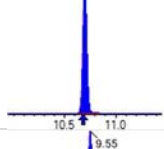
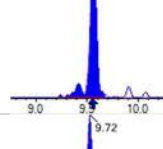
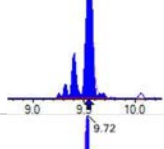
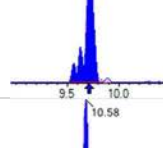
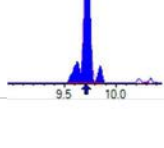
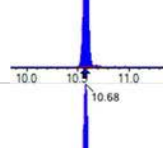
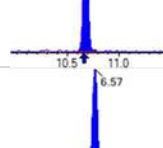
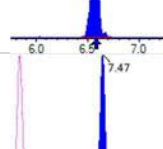
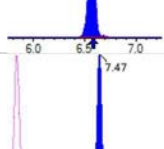
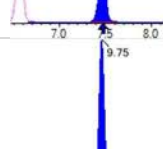
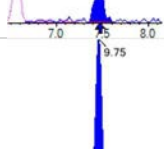
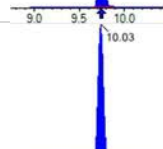
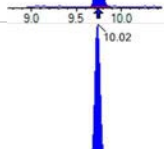
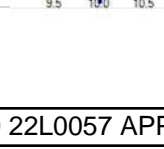
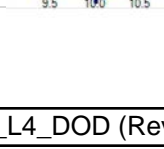
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 139697	(9.38, N/A) (N/A, 0.00, N/A)	335.5	N/A	1.0068 [1.0000]	100.7% {98.9%}			
18O2_PFHxS_IIS	(403.0 / 83.9) 346170	(8.10, N/A) (N/A, -0.01, N/A)	624.9	N/A	1.0726 [1.0000]	107.3% {103.2%}			
13C4_PFOS_IIS	(502.8 / 79.9) 250661	(9.51, N/A) (N/A, 0.01, N/A)	441.5	N/A	0.9954 [1.0000]	99.5% {90.9%}			
13C4_PFBA_EIS	(217.0 / 172.0) 780047	(3.75, N/A) (N/A, -0.05, N/A)	896.0	N/A	7.5953 [8.0000]	94.9% {98.1%}			
13C5_PFPeA_EIS	(267.9 / 223.0) 426306	(5.07, N/A) (N/A, -0.04, N/A)	756.0	N/A	4.2075 [4.0000]	105.2% {100.0%}			
13C5_PFHxA_EIS	(318.0 / 273.0) 278975	(6.21, N/A) (N/A, -0.02, N/A)	729.4	N/A	1.8093 [2.0000]	90.5% {88.1%}			
13C4_PFHpA_EIS	(367.0 / 322.0) 264919	(7.14, N/A) (N/A, -0.01, N/A)	540.4	N/A	1.9792 [2.0000]	99.0% {91.8%}			
13C8_PFOA_EIS	(421.0 / 376.0) 251573	(7.96, N/A) (N/A, -0.01, N/A)	747.0	N/A	1.8187 [2.0000]	90.9% {92.8%}			
13C9_PFNA_EIS	(472.0 / 427.0) 94634	(8.70, N/A) (N/A, -0.01, N/A)	355.9	N/A	0.8770 [1.0000]	87.7% {87.8%}			
13C6_PFDA_EIS	(519.0 / 474.0) 126355	(9.38, N/A) (N/A, 0.00, N/A)	333.7	N/A	0.9431 [1.0000]	94.3% {103.8%}			
13C7_PFUnA_EIS	(570.0 / 525.0) 199353	(9.74, N/A) (N/A, 0.01, N/A)	539.4	N/A	1.0834 [1.0000]	108.3% {107.3%}			

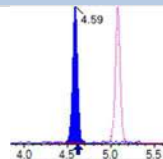
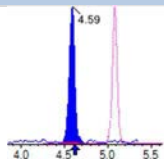
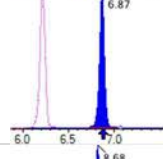
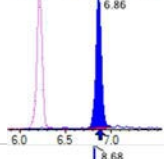
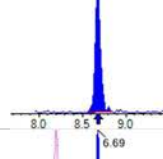
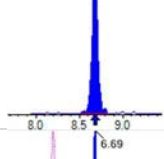
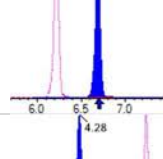
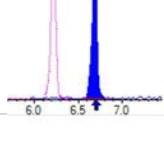
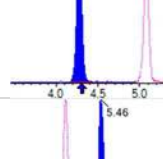
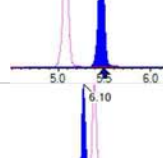
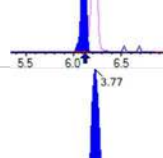
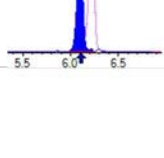
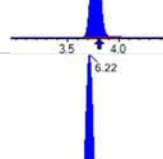
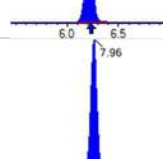
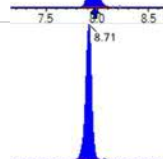
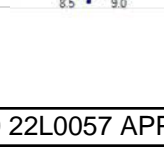
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 243530	(9.91, N/A) (N/A, 0.01, N/A)	674.0	N/A	1.0762 [1.0000]	107.6% {99.6%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 141363	(10.14, N/A) (N/A, 0.01, N/A)	269.4	N/A	0.9949 [1.0000]	99.5% {95.0%}			
13C3_PFBs_EIS	(302.0 / 80.0) 724657	(6.18, N/A) (N/A, -0.03, N/A)	867.3	N/A	1.8193 [2.0000]	91.0% {93.9%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 373506	(8.09, N/A) (N/A, -0.01, N/A)	649.8	N/A	1.6663 [2.0000]	83.3% {83.4%}			
13C8_PFOS_EIS	(507.0 / 80.0) 622191	(9.51, N/A) (N/A, 0.00, N/A)	468.7	N/A	1.9936 [2.0000]	99.7% {97.3%}			
13C2_4:2FTS_EIS	(329.0 / 81.0) 82535	(5.87, N/A) (N/A, -0.03, N/A)	489.7	N/A	3.5454 [4.0000]	88.6% {88.4%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 98175	(7.60, N/A) (N/A, -0.01, N/A)	442.8	N/A	3.4491 [4.0000]	86.2% {88.2%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 102316	(9.03, N/A) (N/A, 0.00, N/A)	231.1	N/A	3.6030 [4.0000]	90.1% {92.5%}			
13C8_PFOsa_EIS	(506.0 / 78.0) 990177	(10.18, N/A) (N/A, 0.01, N/A)	752.4	N/A	2.0975 [2.0000]	104.9% {95.7%}			
D3_NMeFOSA_EIS	(515.0 / 169.0) 231043	(10.60, N/A) (N/A, 0.01, N/A)	1160.0	N/A	1.9067 [2.0000]	95.3% {98.7%}			
D5_NEiFOSA_EIS	(531.1 / 169.0) 221799	(10.69, N/A) (N/A, 0.01, N/A)	1422.5	N/A	2.1097 [2.0000]	105.5% {103.4%}			

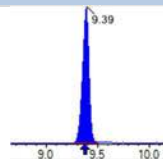
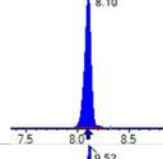
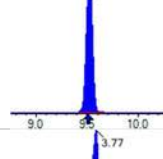
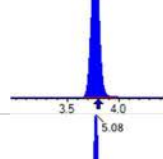
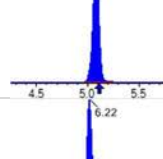
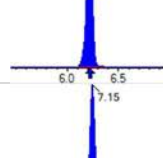
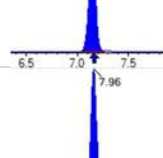
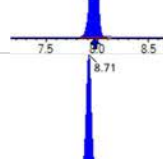
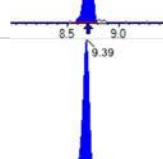
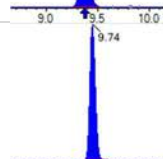
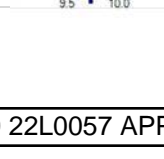
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 269808	(9.55, N/A) (N/A, 0.00, N/A)	429.2	N/A	3.6526 [4.0000]	91.3% {85.4%}			
D5_EtFOSAA_EIS	(589.0 / 419.0) 253220	(9.71, N/A) (N/A, 0.01, N/A)	307.0	N/A	3.7885 [4.0000]	94.7% {85.5%}			
D7_NMeFOSE_EIS	(623.2 / 58.9) 453584	(10.57, N/A) (N/A, 0.01, N/A)	1336.4	N/A	19.5254 [20.0000]	97.6% {100.0%}			
D9_NEtFOSE_EIS	(639.2 / 58.9) 258639	(10.66, N/A) (N/A, 0.01, N/A)	1148.8	N/A	22.2194 [20.0000]	111.1% {107.8%}			
13C3_HFPODA_EIS	(287.0 / 169.0) 714285	(6.56, N/A) (N/A, -0.02, N/A)	1151.0	N/A	7.5627 [8.0000]	94.5% {95.4%}			

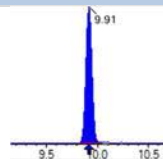
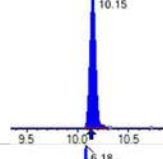
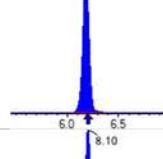
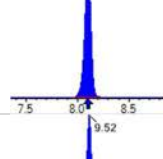
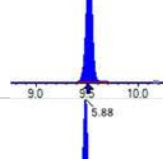
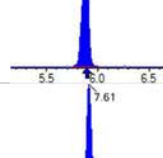
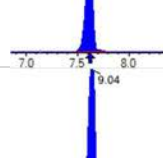
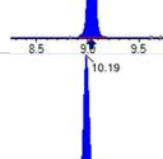
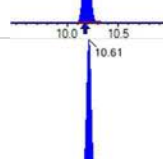
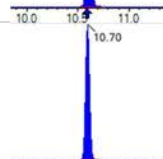
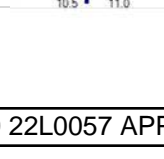
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 138158	(3.77, 1.00) (0.00, N/A, 0.0)	60.2	N/A 0.0 0.0	2.0992 [2.0000]	105.0%			
PFPeA	(262.9 / 219.0) 85520 (262.9 / 69.0) 1117	(5.08, 1.00) (0.00, N/A, 0.3)	326.7 39.0	0.0131 104.0 104.0	1.0030 [1.0000]	100.3%			
PFHxA	(313.0 / 269.0) 66974 (313.0 / 119.0) 7067	(6.22, 1.00) (0.00, N/A, 0.0)	216.8 98.6	0.1055 114.0 114.0	0.4734 [0.5000]	94.7%			
PFHpA	(363.0 / 319.0) 57407 (363.0 / 169.0) 17976	(7.15, 1.00) (0.00, N/A, 0.1)	165.5 165.3	0.3131 100.6 100.6	0.4907 [0.5000]	98.1%			
PFOA	(413.0 / 369.0) 69895 (413.0 / 169.0) 22658	(7.96, 1.00) (0.00, N/A, -0.1)	252.1 285.6	0.3242 96.6 96.6	0.5320 [0.5000]	106.4%			
PFNA	(463.0 / 419.0) 43265 (463.0 / 169.0) 11688	(8.71, 1.00) (0.00, N/A, 0.6)	136.3 98.4	0.2702 153.9 153.9	0.4874 [0.5000]	97.5%			IR2,
PFDA	(513.0 / 469.0) 65847 (513.0 / 169.0) 7781	(9.39, 1.00) (0.00, N/A, 0.6)	157.1 165.9	0.1182 117.4 117.4	0.5254 [0.5000]	105.1%			
PFUnA	(563.0 / 519.0) 85629 (563.0 / 169.0) 10386	(9.75, 1.00) (0.00, N/A, -0.4)	215.8 2396.2	0.1213 132.5 132.5	0.4859 [0.5000]	97.2%			
PFDoA	(613.0 / 569.0) 78710 (613.0 / 169.0) 10824	(9.91, 1.00) (0.00, N/A, 0.2)	195.1 202.6	0.1375 107.3 107.3	0.4220 [0.5000]	84.4%			
PFTrDA	(663.0 / 619.0) 84117 (663.0 / 169.0) 19701	(10.04, 1.01) (N/A, 0.02, 0.0)	364.0 122.2	0.2342 106.6 106.6	0.5470 [0.5000]	109.4%			
PFTeDA	(713.0 / 669.0) 68930 (713.0 / 169.0) 14007	(10.15, 1.00) (0.00, N/A, 0.2)	263.1 108.2	0.2032 109.2 109.2	0.5699 [0.5000]	114.0%			

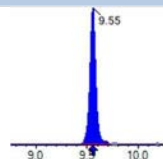
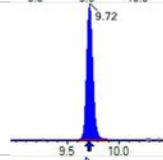
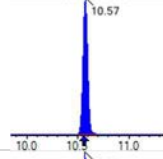
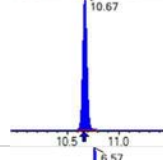
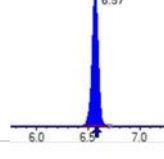
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 98385 (298.9 / 99.0) 60169	(6.18, 1.00) (0.00, N/A, 0.0)	490.6 352.1	0.6116 84.9 84.9	0.4839 [0.4424]	109.4%			
PFPeS	(349.0 / 80.0) 169046 (349.0 / 99.0) 57603	(7.23, 0.89) (N/A, -0.01, -0.1)	667.5 352.4	0.3408 91.0 91.0	0.4608 [0.4692]	98.2%			
PFHxS	(399.0 / 80.0) 142232 (399.0 / 99.0) 50715	(8.10, 1.00) (0.00, N/A, 0.1)	6375.6 2152097.3	0.3566 110.5 110.5	0.4248 [0.4555]	93.3%			
PFHpS	(449.0 / 80.0) 138527 (449.0 / 99.0) 39330	(8.87, 0.93) (N/A, 0.01, -0.1)	383.3 375.6	0.2839 92.5 92.5	0.4749 [0.4757]	99.8%			
PFOS	(499.0 / 80.0) 146815 (499.0 / 99.0) 36640	(9.52, 1.00) (0.00, N/A, 0.0)	90.2 90.6	0.2496 108.7 108.7	0.4141 [0.4637]	89.3%			
PFNS	(549.0 / 80.0) 216862 (549.0 / 99.0) 50903	(9.79, 1.03) (N/A, 0.01, -0.1)	446.7 280.2	0.2347 90.5 90.5	0.4965 [0.4799]	103.4%			
PFDS	(599.0 / 80.0) 267784 (599.0 / 99.0) 63365	(9.94, 1.04) (N/A, 0.02, -0.2)	591.3 288.4	0.2366 105.1 105.1	0.4663 [0.4816]	96.8%			
PFDoS	(698.9 / 80.0) 137114 (698.9 / 99.0) 33776	(10.13, 1.06) (N/A, 0.01, 0.3)	1423.5 241.0	0.2463 121.7 121.7	0.4720 [0.4848]	97.4%			
4:2FTS	(327.0 / 307.0) 136149 (327.0 / 81.0) 75810	(5.88, 1.00) (0.00, N/A, 0.0)	862.4 342.4	0.5568 91.8 91.8	1.8271 [1.8691]	97.8%			
6:2FTS	(427.0 / 407.0) 77294 (427.0 / 81.0) 53012	(7.61, 1.00) (0.00, N/A, 0.1)	305.1 285.3	0.6859 105.6 105.6	1.8411 [1.8981]	97.0%			
8:2FTS	(527.0 / 507.0) 70607 (527.0 / 81.0) 43798	(9.04, 1.00) (0.00, N/A, -0.2)	200.6 242.3	0.6203 98.9 98.9	2.2137 [1.9166]	115.5%			

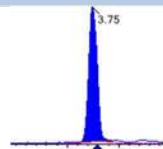
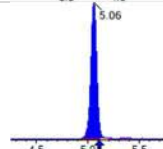
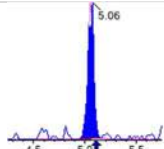
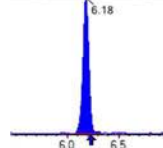
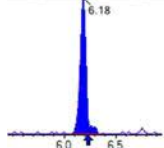
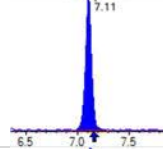
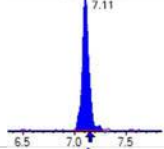
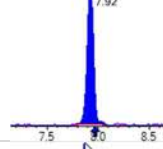
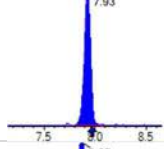
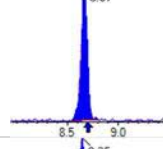
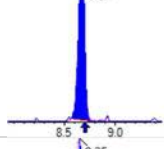
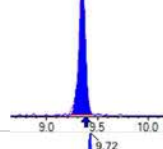
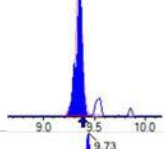
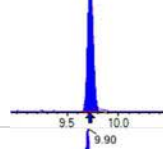
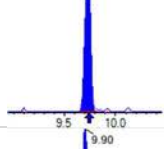
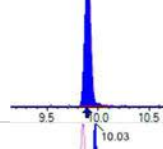
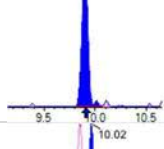
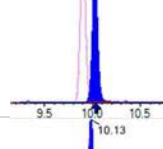
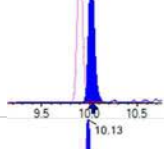
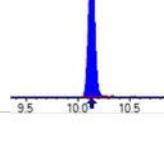
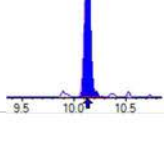
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 215890 (498.0 / 478.0) 4512	(10.19, 1.00) (0.00, N/A, -1.0)	703.7 17801.1	0.0209 91.8 91.8	0.4636 [0.5000]	92.7%			
NMeFOSA	(511.9 / 219.0) 207832 (511.9 / 169.0) 143371	(10.61, 1.00) (0.00, N/A, -0.1)	914.4 1293.0	0.6898 108.1 108.1	2.1814 [2.0000]	109.1%			
NEIFOSA	(526.0 / 219.0) 196493 (526.0 / 169.0) 206219	(10.70, 1.00) (0.00, N/A, 0.0)	1262.4 705.4	1.0495 98.3 98.3	1.9873 [2.0000]	99.4%			
NMeFOSAA	(570.0 / 419.0) 30368 (570.0 / 483.0) 18050	(9.56, 1.00) (0.01, N/A, 0.6)	633.8 3449.2	0.5944 103.5 103.5	0.5402 [0.5000]	108.0%			
NEIFOSAA	(584.0 / 419.0) 29876 (584.0 / 526.0) 18031	(9.72, 1.00) (0.00, N/A, -0.2)	78.7 178.8	0.6035 106.5 106.5	0.5285 [0.5000]	105.7%			
NMeFOSE	(616.1 / 59.0) 61840	(10.58, 1.00) (0.01, N/A, 0.0)	470.9	N/A 0.0 0.0	1.8757 [2.0000]	93.8%			
NEtFOSE	(630.0 / 59.0) 17222	(10.68, 1.00) (0.01, N/A, 0.0)	330.9	N/A 0.0 0.0	2.1596 [2.0000]	108.0%			
HFPO-DA	(285.0 / 169.0) 61395 (285.0 / 185.0) 177748	(6.57, 1.00) (0.00, N/A, 0.0)	596.1 656.2	2.8951 110.1 110.1	1.0369 [1.0000]	103.7%			
ADONA	(377.0 / 85.0) 220809 (377.0 / 251.0) 27327	(7.47, 1.14) (N/A, 0.00, 0.1)	974.2 126.3	0.1238 105.0 105.0	0.8745 [0.9427]	92.8%			
9CI-Pf3ONS	(531.0 / 351.0) 682603 (533.0 / 353.0) 189730	(9.75, 1.48) (N/A, 0.01, 0.0)	943.6 335.9	0.2780 95.9 95.9	0.9534 [0.9333]	102.2%			
11CI-PF3OUDS	(631.0 / 451.0) 426891 (633.0 / 453.0) 127367	(10.03, 1.53) (N/A, 0.02, 0.2)	942.2 856.0	0.2984 94.6 94.6	0.9304 [0.9432]	98.6%			

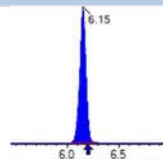
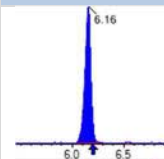
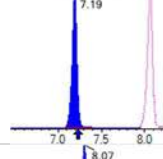
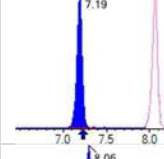
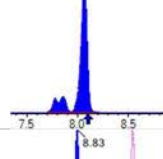
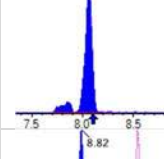
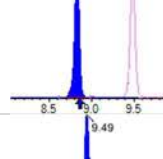
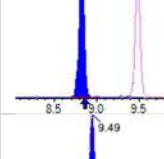
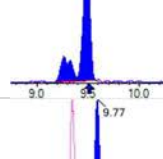
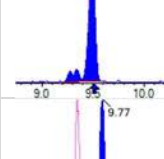
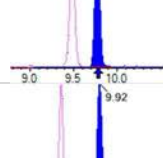
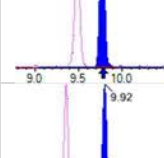
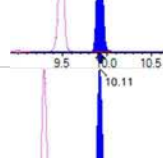
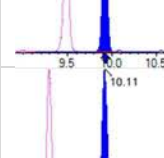
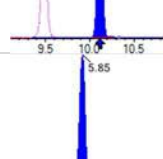
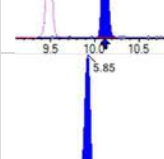
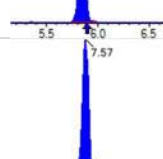
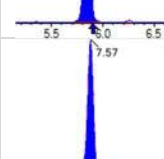
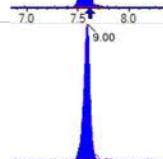
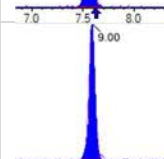
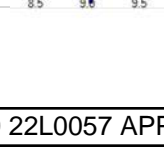
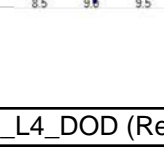
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 6890 (241.0 / 117.0) 12819	(4.59, 0.90) (N/A, -0.03, 0.1)	210.0 158.3	1.8605 113.5 113.5	1.9227 [2.0000]	96.1%			
5:3FTCA	(341.0 / 236.7) 59766 (341.0 / 217.0) 87049	(6.87, 1.10) (N/A, -0.01, 0.3)	298.2 272.3	1.4565 92.4 92.4	2.1111 [2.0000]	105.6%			
7:3FTCA	(441.0 / 317.0) 68377 (441.0 / 337.0) 45837	(8.68, 1.40) (N/A, 0.00, -0.2)	179.9 215.3	0.6704 80.0 80.0	1.9304 [2.0000]	96.5%			
PFEESA	(315.0 / 135.0) 136464 (315.0 / 83.0) 41101	(6.69, 1.08) (N/A, -0.01, 0.0)	576.0 207.3	0.3012 98.2 98.2	0.8857 [0.8925]	99.2%			
PFMPA	(229.0 / 85.0) 22934	(4.28, 0.84) (N/A, -0.03, 0.0)	486.7	N/A 0.0 0.0	0.9909 [1.0000]	99.1%			
PFMBA	(279.0 / 85.0) 77847	(5.46, 1.08) (N/A, -0.03, 0.0)	742.1	N/A 0.0 0.0	1.0050 [1.0000]	100.5%			
NFDHA	(201.0 / 85.0) 3540 (295.0 / 201.0) 16051	(6.10, 0.98) (N/A, -0.01, 0.4)	910.7 225.1	4.5335 68.8 68.8	1.1102 [1.0000]	111.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 119009	(3.77, N/A) (N/A, -0.03, N/A)	739.0	N/A	0.9808 [1.0000]	98.1% {94.0%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 161021	(6.22, N/A) (N/A, -0.01, N/A)	719.3	N/A	0.8824 [1.0000]	88.2% {82.3%}			
13C4_PFOA_IIS	(417.0 / 372.0) 167040	(7.96, N/A) (N/A, 0.00, N/A)	708.2	N/A	0.9569 [1.0000]	95.7% {94.8%}			
13C5_PFNxA_IIS	(468.0 / 423.0) 140805	(8.71, N/A) (N/A, 0.00, N/A)	441.9	N/A	1.0362 [1.0000]	103.6% {106.7%}			

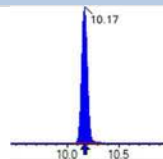
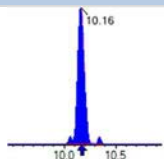
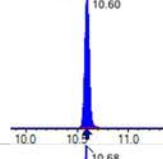
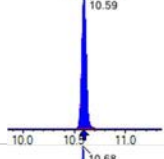
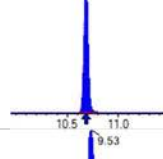
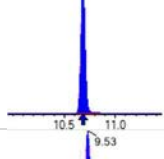
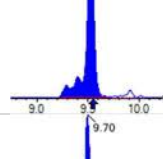
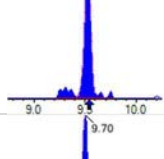
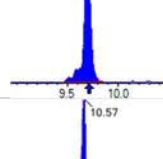
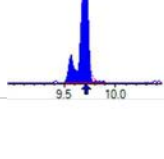
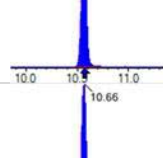
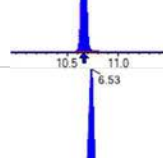
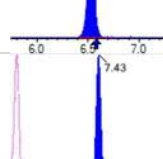
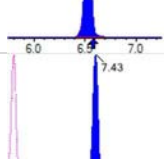
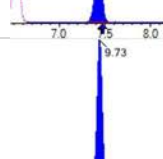
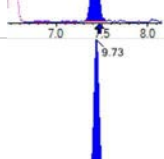
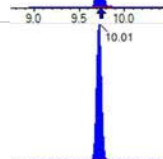
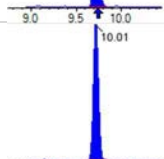
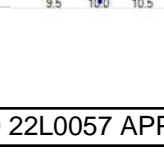
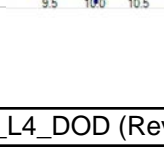
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 131343	(9.39, N/A) (N/A, 0.01, N/A)	303.6	N/A	0.9466 [1.0000]	94.7% { 93.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 325843	(8.10, N/A) (N/A, 0.00, N/A)	633.1	N/A	1.0096 [1.0000]	101.0% { 97.2% }			
13C4_PFOS_IIS	(502.8 / 79.9) 220313	(9.52, N/A) (N/A, 0.01, N/A)	576.1	N/A	0.8749 [1.0000]	87.5% { 79.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 749557	(3.77, N/A) (N/A, -0.03, N/A)	907.4	N/A	8.2627 [8.0000]	103.3% { 94.2% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 384230	(5.08, N/A) (N/A, -0.03, N/A)	746.2	N/A	4.3089 [4.0000]	107.7% { 90.1% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 319308	(6.22, N/A) (N/A, -0.01, N/A)	530.2	N/A	2.3530 [2.0000]	117.7% { 100.8% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 252836	(7.15, N/A) (N/A, -0.01, N/A)	580.7	N/A	2.1463 [2.0000]	107.3% { 87.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 262957	(7.96, N/A) (N/A, 0.00, N/A)	661.6	N/A	2.0530 [2.0000]	102.6% { 97.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 97363	(8.71, N/A) (N/A, 0.01, N/A)	292.3	N/A	0.8975 [1.0000]	89.8% { 90.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 123952	(9.39, N/A) (N/A, 0.01, N/A)	403.9	N/A	0.9840 [1.0000]	98.4% { 101.9% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 203167	(9.74, N/A) (N/A, 0.01, N/A)	438.5	N/A	1.1743 [1.0000]	117.4% { 109.4% }			

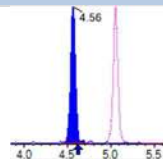
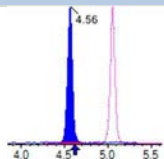
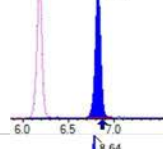
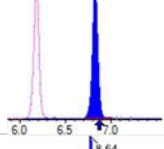
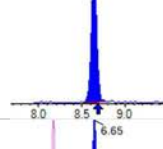
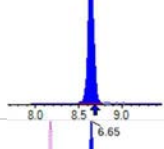
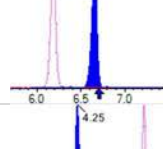
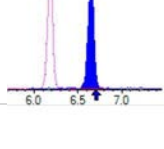
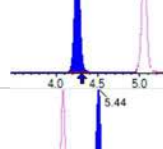
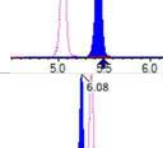
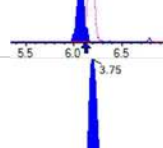
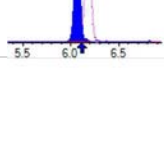
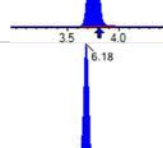
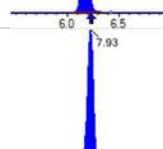
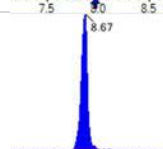
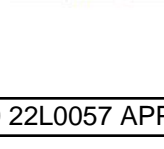
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 215396	(9.91, N/A) (N/A, 0.01, N/A)	405.5	N/A	1.0124 [1.0000]	101.2% { 88.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 132346	(10.15, N/A) (N/A, 0.02, N/A)	330.5	N/A	0.9907 [1.0000]	99.1% { 88.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 719638	(6.18, N/A) (N/A, -0.02, N/A)	872.8	N/A	1.9194 [2.0000]	96.0% { 93.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 416949	(8.10, N/A) (N/A, 0.00, N/A)	931.5	N/A	1.9761 [2.0000]	98.8% { 93.1% }			
13C8_PFOS_EIS	(507.0 / 80.0) 644812	(9.52, N/A) (N/A, 0.01, N/A)	456.6	N/A	2.3507 [2.0000]	117.5% { 100.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 91413	(5.88, N/A) (N/A, -0.02, N/A)	640.5	N/A	4.1717 [4.0000]	104.3% { 97.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 103029	(7.61, N/A) (N/A, -0.01, N/A)	610.4	N/A	3.8455 [4.0000]	96.1% { 92.6% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 89583	(9.04, N/A) (N/A, 0.01, N/A)	407.8	N/A	3.3514 [4.0000]	83.8% { 81.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 949565	(10.19, N/A) (N/A, 0.01, N/A)	791.6	N/A	2.2886 [2.0000]	114.4% { 91.7% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 229035	(10.61, N/A) (N/A, 0.01, N/A)	844.2	N/A	2.1505 [2.0000]	107.5% { 97.9% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 213925	(10.70, N/A) (N/A, 0.01, N/A)	1550.4	N/A	2.3151 [2.0000]	115.8% { 99.7% }			

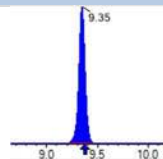
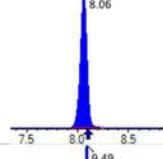
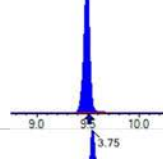
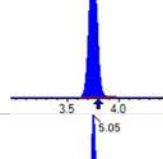
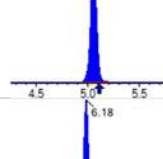
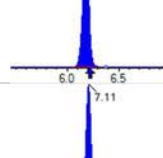
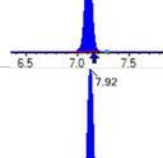
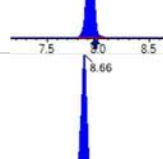
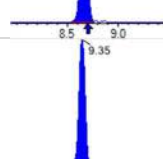
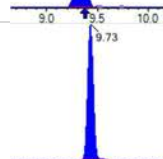
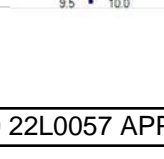
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 290884	(9.55, N/A) (N/A, 0.01, N/A)	371.3	N/A	4.4803 [4.0000]	112.0% { 92.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 259771	(9.72, N/A) (N/A, 0.01, N/A)	320.8	N/A	4.4219 [4.0000]	110.5% { 87.7% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 488729	(10.57, N/A) (N/A, 0.01, N/A)	1066.9	N/A	23.9364 [20.0000]	119.7% { 107.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 235750	(10.67, N/A) (N/A, 0.01, N/A)	1081.5	N/A	23.0429 [20.0000]	115.2% { 98.3% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 765965	(6.57, N/A) (N/A, -0.01, N/A)	870.3	N/A	9.2149 [8.0000]	115.2% { 102.3% }			

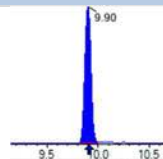
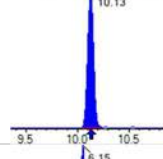
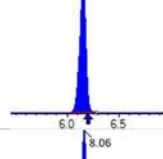
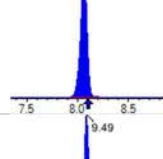
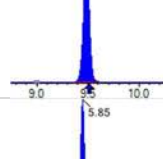
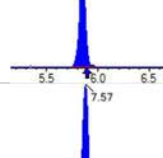
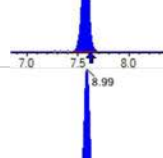
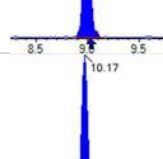
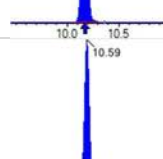
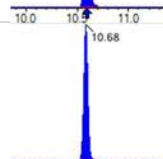
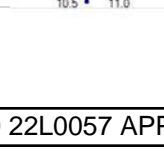
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 286089	(3.75, 1.00) (0.00, N/A, 0.0)	57.3	N/A 0.0 0.0	4.1304 [4.0000]	103.3%			
PFPeA	(262.9 / 219.0) 202602 (262.9 / 69.0) 2175	(5.06, 1.00) (0.00, N/A, -0.2)	639.3 74.9	0.0107 85.5 85.5	2.1827 [2.0000]	109.1%			
PFHxA	(313.0 / 269.0) 153870 (313.0 / 119.0) 14085	(6.18, 1.00) (0.00, N/A, -0.1)	400.2 151.8	0.0915 98.9 98.9	1.1157 [1.0000]	111.6%			
PFHpA	(363.0 / 319.0) 126404 (363.0 / 169.0) 40384	(7.11, 1.00) (0.00, N/A, 0.1)	329.5 335.9	0.3195 102.7 102.7	1.0045 [1.0000]	100.5%			
PFOA	(413.0 / 369.0) 136637 (413.0 / 169.0) 46925	(7.92, 1.00) (0.00, N/A, -0.1)	265.4 347.5	0.3434 102.3 102.3	0.9025 [1.0000]	90.2%			
PFNA	(463.0 / 419.0) 96070 (463.0 / 169.0) 21110	(8.67, 1.00) (0.00, N/A, -0.1)	182.5 96.9	0.2197 125.2 125.2	0.9503 [1.0000]	95.0%			
PFDA	(513.0 / 469.0) 153540 (513.0 / 169.0) 8560	(9.35, 1.00) (0.00, N/A, -0.3)	220.9 151.7	0.0557 55.4 55.4	1.2215 [1.0000]	122.1%			
PFUnA	(563.0 / 519.0) 184875 (563.0 / 169.0) 18703	(9.72, 1.00) (0.00, N/A, -0.4)	469.5 333.6	0.1012 110.5 110.5	1.0643 [1.0000]	106.4%			
PFDoA	(613.0 / 569.0) 199772 (613.0 / 169.0) 25044	(9.90, 1.00) (0.00, N/A, -0.2)	529.1 171.9	0.1254 97.8 97.8	1.0717 [1.0000]	107.2%			
PFTrDA	(663.0 / 619.0) 168594 (663.0 / 169.0) 32392	(10.03, 1.01) (N/A, 0.00, 0.4)	488.0 158.2	0.1921 87.5 87.5	1.0970 [1.0000]	109.7%			
PFTeDA	(713.0 / 669.0) 139003 (713.0 / 169.0) 24209	(10.13, 1.00) (0.00, N/A, 0.0)	416.2 121.0	0.1742 93.6 93.6	0.9438 [1.0000]	94.4%			

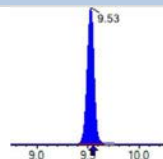
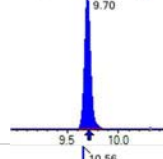
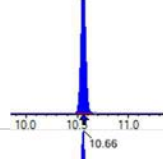
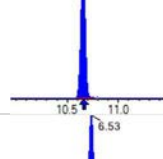
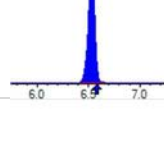
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 191673 (298.9 / 99.0) 128553	(6.15, 1.00) (0.00, N/A, -0.1)	576.5 459.4	0.6707 93.1 93.1	0.9529 [0.8847]	107.7%			
PFPeS	(349.0 / 80.0) 358754 (349.0 / 99.0) 141868	(7.19, 0.89) (N/A, -0.05, 0.0)	462.5 578.8	0.3954 105.6 105.6	0.9428 [0.9384]	100.5%			
PFHxS	(399.0 / 80.0) 313682 (399.0 / 99.0) 108173	(8.07, 1.00) (0.00, N/A, 0.3)	7447.6 551.2	0.3448 106.9 106.9	0.9031 [0.9110]	99.1%			
PFHpS	(449.0 / 80.0) 300689 (449.0 / 99.0) 77253	(8.83, 0.93) (N/A, -0.03, 0.3)	634.4 403.9	0.2569 83.7 83.7	0.9323 [0.9514]	98.0%			
PFOS	(499.0 / 80.0) 306402 (499.0 / 99.0) 79702	(9.49, 1.00) (0.00, N/A, -0.2)	118.3 173.3	0.2601 113.3 113.3	0.7817 [0.9275]	84.3%			
PFNS	(549.0 / 80.0) 426081 (549.0 / 99.0) 110896	(9.77, 1.03) (N/A, -0.01, 0.0)	688.6 455.9	0.2603 100.4 100.4	0.8823 [0.9599]	91.9%			
PFDS	(599.0 / 80.0) 562719 (599.0 / 99.0) 118496	(9.92, 1.05) (N/A, 0.00, -0.1)	654.0 350.3	0.2106 93.6 93.6	0.8864 [0.9631]	92.0%			
PFDoS	(698.9 / 80.0) 287677 (698.9 / 99.0) 54881	(10.11, 1.07) (N/A, 0.00, 0.1)	490.6 316.2	0.1908 94.2 94.2	0.8957 [0.9696]	92.4%			
4:2FTS	(327.0 / 307.0) 285704 (327.0 / 81.0) 161593	(5.85, 1.00) (0.00, N/A, -0.1)	925.4 521.9	0.5656 93.2 93.2	4.0397 [3.7381]	108.1%			
6:2FTS	(427.0 / 407.0) 163918 (427.0 / 81.0) 131103	(7.57, 1.00) (0.00, N/A, 0.0)	548.4 562.5	0.7998 123.1 123.1	3.8539 [3.7962]	101.5%			
8:2FTS	(527.0 / 507.0) 155355 (527.0 / 81.0) 99865	(9.00, 1.00) (0.00, N/A, 0.0)	370.4 521.9	0.6428 102.5 102.5	4.2665 [3.8332]	111.3%			

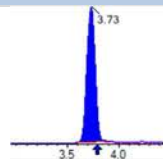
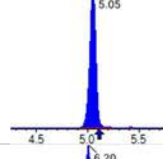
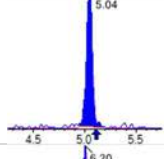
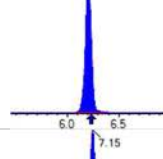
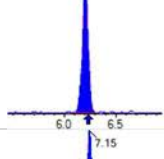
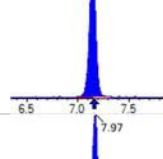
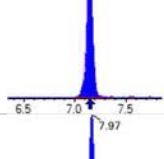
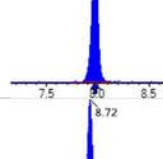
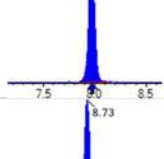
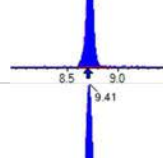
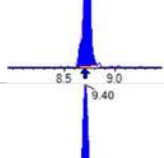
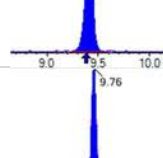
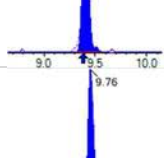
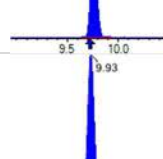
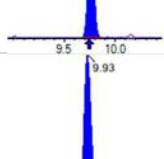
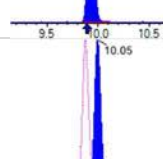
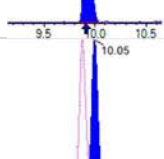
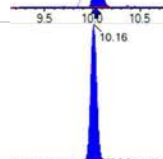
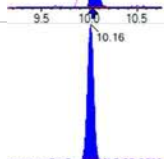
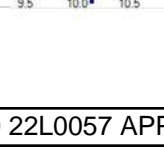
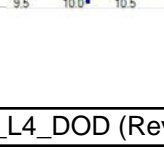
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 520801 (498.0 / 478.0) 10727	(10.17, 1.00) (0.00, N/A, 0.4)	685.9 2230.8	0.0206 90.5 90.5	1.2232 [1.0000]	122.3%			
NMeFOSA	(511.9 / 219.0) 439602 (511.9 / 169.0) 301983	(10.60, 1.00) (0.00, N/A, 0.0)	1177.9 909.9	0.6869 107.7 107.7	4.0451 [4.0000]	101.1%			
NEIFOSA	(526.0 / 219.0) 392794 (526.0 / 169.0) 416279	(10.68, 1.00) (0.00, N/A, 0.1)	1033.5 1009.7	1.0598 99.3 99.3	3.8802 [4.0000]	97.0%			
NMeFOSAA	(570.0 / 419.0) 56144 (570.0 / 483.0) 35133	(9.53, 1.00) (0.00, N/A, 0.0)	196.0 687.8	0.6258 109.0 109.0	0.9356 [1.0000]	93.6%			
NEIFOSAA	(584.0 / 419.0) 67385 (584.0 / 526.0) 44915	(9.70, 1.00) (0.00, N/A, -0.4)	2242.8 199.9	0.6665 117.6 117.6	1.0604 [1.0000]	106.0%			
NMeFOSE	(616.1 / 59.0) 135458	(10.57, 1.00) (0.01, N/A, 0.0)	540.1	N/A 0.0 0.0	4.2377 [4.0000]	105.9%			
NEIFOSE	(630.0 / 59.0) 31631	(10.66, 1.00) (0.01, N/A, 0.0)	839.9	N/A 0.0 0.0	3.6463 [4.0000]	91.2%			
HFPO-DA	(285.0 / 169.0) 134273 (285.0 / 185.0) 358772	(6.53, 1.00) (0.00, N/A, 0.1)	528.2 789.7	2.6720 101.6 101.6	2.1807 [2.0000]	109.0%			
ADONA	(377.0 / 85.0) 493581 (377.0 / 251.0) 63026	(7.43, 1.14) (N/A, -0.04, 0.1)	917.9 253.3	0.1277 108.3 108.3	1.8797 [1.8854]	99.7%			
9CI-PI3ONS	(531.0 / 351.0) 1496463 (533.0 / 353.0) 437182	(9.73, 1.49) (N/A, -0.01, 0.1)	837.0 467.1	0.2921 100.8 100.8	2.0100 [1.8665]	107.7%			
11CI-PF3OUDS	(631.0 / 451.0) 985277 (633.0 / 453.0) 294025	(10.01, 1.53) (N/A, 0.00, 0.1)	789.7 773.3	0.2984 94.6 94.6	2.0650 [1.8864]	109.5%			

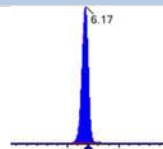
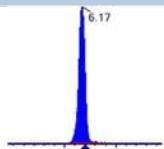
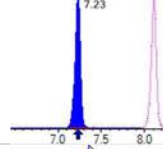
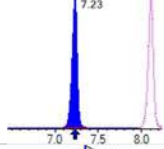
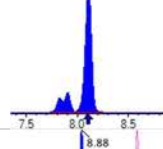
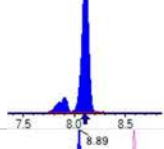
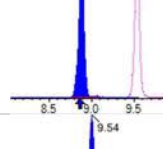
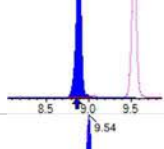
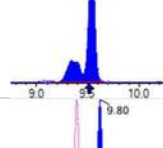
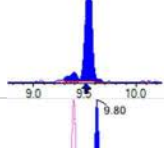
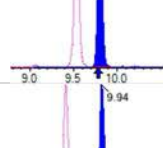
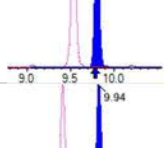
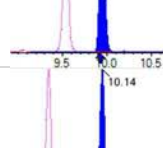
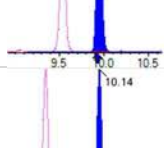
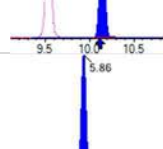
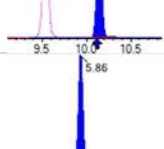
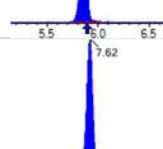
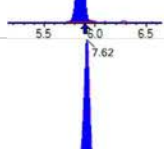
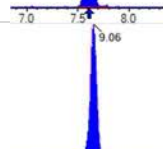
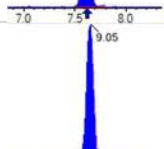
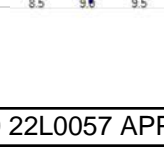
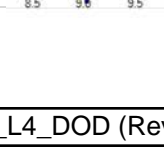
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 15864 (241.0 / 117.0) 25929	(4.56, 0.90) (N/A, -0.06, 0.0)	269.3 352.9	1.6345 99.7 99.7	4.0668 [4.0000]	101.7%			
5:3FTCA	(341.0 / 236.7) 129323 (341.0 / 217.0) 197212	(6.82, 1.10) (N/A, -0.05, -0.1)	544.0 535.9	1.5250 96.8 96.8	4.6862 [4.0000]	117.2%			
7:3FTCA	(441.0 / 317.0) 142868 (441.0 / 337.0) 120048	(8.64, 1.40) (N/A, -0.04, 0.2)	295.9 276.8	0.8403 100.3 100.3	4.1377 [4.0000]	103.4%			
PFEESA	(315.0 / 135.0) 268946 (315.0 / 83.0) 76675	(6.65, 1.08) (N/A, -0.05, 0.1)	700.7 361.7	0.2851 93.0 93.0	1.7907 [1.7849]	100.3%			
PFMPA	(229.0 / 85.0) 56395	(4.25, 0.84) (N/A, -0.05, 0.0)	1073.5	N/A 0.0 0.0	2.2383 [2.0000]	111.9%			
PFMBA	(279.0 / 85.0) 170354	(5.44, 1.08) (N/A, -0.05, 0.0)	1011.5	N/A 0.0 0.0	2.0202 [2.0000]	101.0%			
NFDHA	(201.0 / 85.0) 5239 (295.0 / 201.0) 43731	(6.08, 0.98) (N/A, -0.04, 0.7)	4322.4 409.9	8.3466 126.7 126.7	1.7496 [2.0000]	87.5%			
13C3_PFBA_IIS	(216.0 / 172.0) 123217	(3.75, N/A) (N/A, -0.05, N/A)	664.9	N/A	1.0155 [1.0000]	101.6% {97.3%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 180863	(6.18, N/A) (N/A, -0.05, N/A)	639.2	N/A	0.9911 [1.0000]	99.1% {92.4%}			
13C4_PFOA_IIS	(417.0 / 372.0) 178855	(7.93, N/A) (N/A, -0.04, N/A)	693.3	N/A	1.0246 [1.0000]	102.5% {101.5%}			
13C5_PFNA_IIS	(468.0 / 423.0) 124477	(8.67, N/A) (N/A, -0.04, N/A)	361.1	N/A	0.9160 [1.0000]	91.6% {94.3%}			

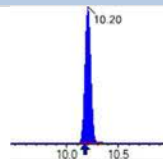
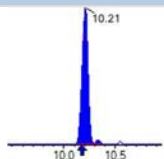
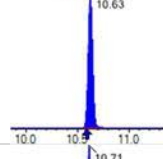
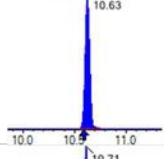
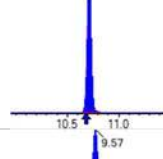
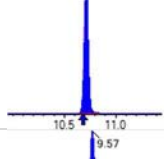
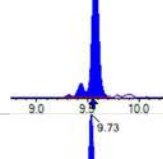
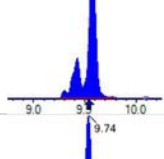
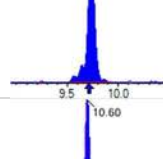
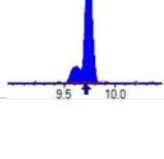
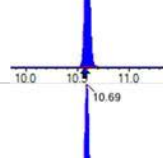
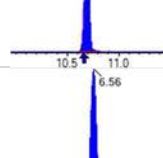
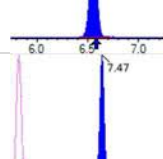
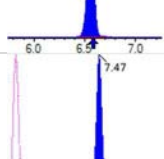
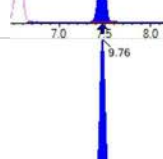
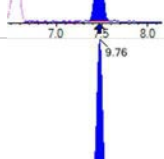
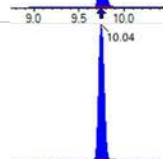
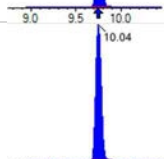
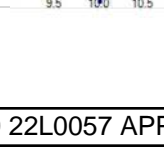
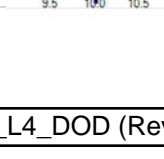
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 145971	(9.35, N/A) (N/A, -0.03, N/A)	439.8	N/A	1.0520 [1.0000]	105.2% { 103.3% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 280404	(8.06, N/A) (N/A, -0.04, N/A)	601.9	N/A	0.8688 [1.0000]	86.9% { 83.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 247940	(9.49, N/A) (N/A, -0.02, N/A)	508.0	N/A	0.9846 [1.0000]	98.5% { 89.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 788825	(3.75, N/A) (N/A, -0.05, N/A)	844.2	N/A	8.3986 [8.0000]	105.0% { 99.2% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 418273	(5.05, N/A) (N/A, -0.05, N/A)	968.1	N/A	4.1761 [4.0000]	104.4% { 98.1% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 311255	(6.18, N/A) (N/A, -0.04, N/A)	797.6	N/A	2.0420 [2.0000]	102.1% { 98.3% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 271930	(7.11, N/A) (N/A, -0.05, N/A)	747.8	N/A	2.0552 [2.0000]	102.8% { 94.2% }			
13C8_PFOA_EIS	(421.0 / 376.0) 303011	(7.92, N/A) (N/A, -0.04, N/A)	739.1	N/A	2.2094 [2.0000]	110.5% { 111.7% }			
13C9_PFNA_EIS	(472.0 / 427.0) 110892	(8.66, N/A) (N/A, -0.04, N/A)	451.7	N/A	1.1563 [1.0000]	115.6% { 102.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 124317	(9.35, N/A) (N/A, -0.03, N/A)	356.0	N/A	0.8880 [1.0000]	88.8% { 102.2% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 200241	(9.73, N/A) (N/A, -0.01, N/A)	559.9	N/A	1.0414 [1.0000]	104.1% { 107.8% }			

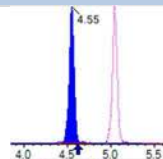
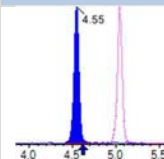
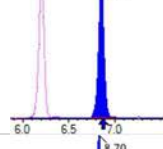
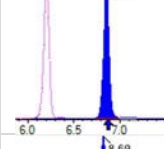
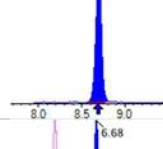
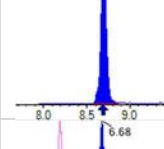
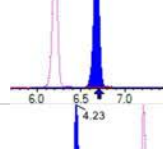
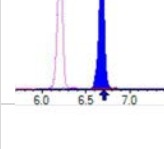
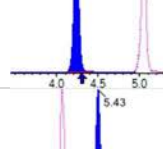
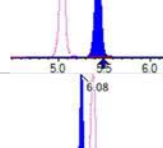
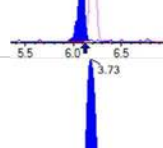
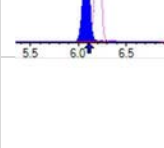
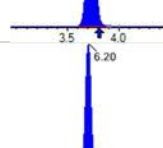
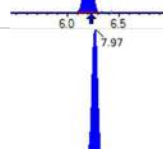
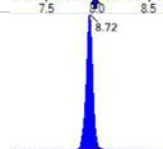
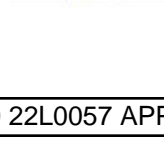
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 215256	(9.90, N/A) (N/A, 0.00, N/A)	270.0	N/A	0.9104 [1.0000]	91.0% { 88.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 161157	(10.13, N/A) (N/A, 0.00, N/A)	471.6	N/A	1.0855 [1.0000]	108.5% { 108.3% }			
13C3_PFBs_EIS	(302.0 / 80.0) 712022	(6.15, N/A) (N/A, -0.05, N/A)	814.1	N/A	2.2069 [2.0000]	110.3% { 92.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 432539	(8.06, N/A) (N/A, -0.04, N/A)	792.2	N/A	2.3822 [2.0000]	119.1% { 96.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 712886	(9.49, N/A) (N/A, -0.02, N/A)	614.2	N/A	2.3093 [2.0000]	115.5% { 111.5% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 86760	(5.85, N/A) (N/A, -0.05, N/A)	552.9	N/A	4.6010 [4.0000]	115.0% { 92.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 104379	(7.57, N/A) (N/A, -0.05, N/A)	579.1	N/A	4.5272 [4.0000]	113.2% { 93.8% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 102270	(8.99, N/A) (N/A, -0.03, N/A)	334.2	N/A	4.4460 [4.0000]	111.1% { 92.4% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 868083	(10.17, N/A) (N/A, 0.00, N/A)	752.1	N/A	1.8591 [2.0000]	93.0% { 83.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 261253	(10.59, N/A) (N/A, 0.00, N/A)	1332.1	N/A	2.1797 [2.0000]	109.0% { 111.7% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 219027	(10.68, N/A) (N/A, 0.00, N/A)	1514.2	N/A	2.1062 [2.0000]	105.3% { 102.1% }			

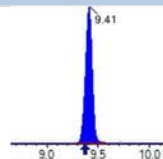
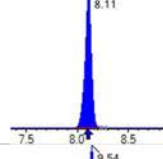
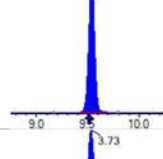
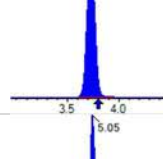
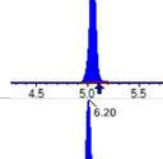
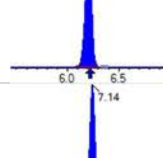
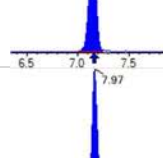
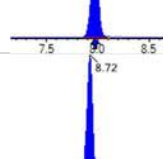
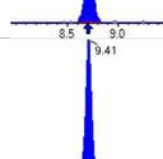
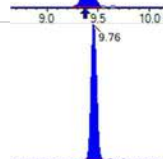
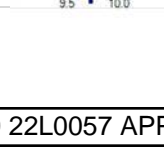
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 310510	(9.53, N/A) (N/A, -0.02, N/A)	387.9	N/A	4.2497 [4.0000]	106.2% { 98.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 291996	(9.70, N/A) (N/A, -0.01, N/A)	468.5	N/A	4.4166 [4.0000]	110.4% { 98.6% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 473858	(10.56, N/A) (N/A, 0.00, N/A)	1209.3	N/A	20.6221 [20.0000]	103.1% { 104.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 256439	(10.66, N/A) (N/A, 0.00, N/A)	1119.3	N/A	22.2722 [20.0000]	111.4% { 106.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 796536	(6.53, N/A) (N/A, -0.04, N/A)	723.5	N/A	8.5313 [8.0000]	106.6% { 106.3% }			

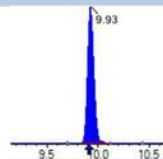
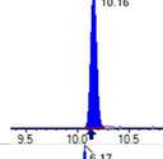
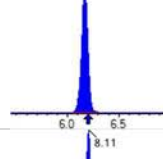
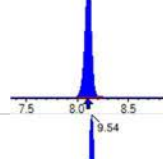
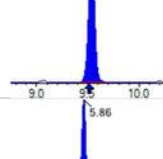
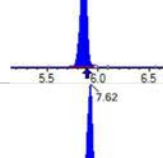
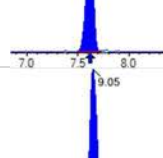
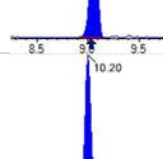
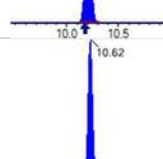
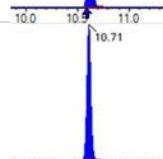
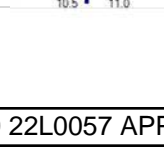
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 550373	(3.73, 1.00) (0.00, N/A, 0.0)	58.9	N/A 0.0 0.0	7.5900 [8.0000]	94.9%			
PFPeA	(262.9 / 219.0) 383100 (262.9 / 69.0) 4305	(5.05, 1.00) (0.00, N/A, 0.3)	709.0 112.5	0.0112 89.5 89.5	4.0729 [4.0000]	101.8%			
PFHxA	(313.0 / 269.0) 324173 (313.0 / 119.0) 27576	(6.20, 1.00) (0.00, N/A, 0.1)	667.7 266.6	0.0851 91.9 91.9	2.2752 [2.0000]	113.8%			
PFHpA	(363.0 / 319.0) 256354 (363.0 / 169.0) 78391	(7.15, 1.00) (0.00, N/A, -0.1)	399.5 489.1	0.3058 98.3 98.3	2.0746 [2.0000]	103.7%			
PFOA	(413.0 / 369.0) 281677 (413.0 / 169.0) 81439	(7.97, 1.00) (0.00, N/A, 0.2)	513.6 615.7	0.2891 86.1 86.1	2.1612 [2.0000]	108.1%			
PFNA	(463.0 / 419.0) 216490 (463.0 / 169.0) 38771	(8.72, 1.00) (0.00, N/A, -0.1)	461.9 58.9	0.1791 102.0 102.0	2.0787 [2.0000]	103.9%			
PFDA	(513.0 / 469.0) 268294 (513.0 / 169.0) 27057	(9.41, 1.00) (0.00, N/A, 0.4)	272.9 488.7	0.1008 100.2 100.2	1.8135 [2.0000]	90.7%			
PFUnA	(563.0 / 519.0) 346382 (563.0 / 169.0) 34030	(9.76, 1.00) (0.00, N/A, 0.1)	569.8 448.9	0.0982 107.3 107.3	2.0159 [2.0000]	100.8%			
PFDoA	(613.0 / 569.0) 411487 (613.0 / 169.0) 64177	(9.93, 1.00) (0.00, N/A, 0.3)	574.0 365.1	0.1560 121.7 121.7	2.1263 [2.0000]	106.3%			
PFTTrDA	(663.0 / 619.0) 334895 (663.0 / 169.0) 61327	(10.05, 1.01) (N/A, 0.03, 0.0)	593.0 689.7	0.1831 83.4 83.4	2.0990 [2.0000]	105.0%			
PFTTeDA	(713.0 / 669.0) 272344 (713.0 / 169.0) 47627	(10.16, 1.00) (0.00, N/A, 0.0)	456.3 203.3	0.1749 94.0 94.0	1.8884 [2.0000]	94.4%			

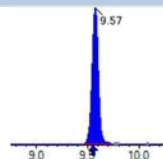
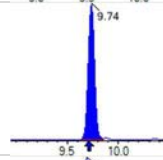
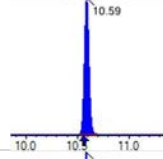
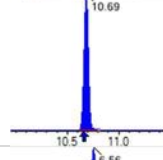
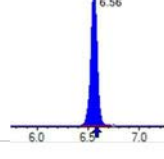
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 394838 (298.9 / 99.0) 255282	(6.17, 1.00) (0.00, N/A, 0.2)	894.8 608.3	0.6465 89.8 89.8	1.7849 [1.7695]	100.9%			
PFPeS	(349.0 / 80.0) 735475 (349.0 / 99.0) 258656	(7.23, 0.89) (N/A, -0.01, 0.1)	728.3 789.1	0.3517 93.9 93.9	2.0314 [1.8768]	108.2%			
PFHxS	(399.0 / 80.0) 647267 (399.0 / 99.0) 210842	(8.11, 1.00) (0.00, N/A, 0.1)	3082.7 7097017.9	0.3257 101.0 101.0	1.9585 [1.8220]	107.5%			
PFHpS	(449.0 / 80.0) 557426 (449.0 / 99.0) 166159	(8.88, 0.93) (N/A, 0.02, -0.3)	619.2 584.9	0.2981 97.1 97.1	1.9512 [1.9028]	102.5%			
PFOS	(499.0 / 80.0) 679722 (499.0 / 99.0) 147898	(9.54, 1.00) (0.00, N/A, -0.1)	133.9 224.2	0.2176 94.8 94.8	1.9578 [1.8550]	105.5%			
PFNS	(549.0 / 80.0) 874769 (549.0 / 99.0) 233196	(9.80, 1.03) (N/A, 0.03, 0.0)	588.8 563.9	0.2666 102.8 102.8	2.0449 [1.9198]	106.5%			
PFDS	(599.0 / 80.0) 1132238 (599.0 / 99.0) 261904	(9.94, 1.04) (N/A, 0.03, 0.0)	833.0 372.5	0.2313 102.8 102.8	2.0133 [1.9262]	104.5%			
PFDoS	(698.9 / 80.0) 620326 (698.9 / 99.0) 134667	(10.14, 1.06) (N/A, 0.03, 0.0)	909.9 589.1	0.2171 107.2 107.2	2.1805 [1.9391]	112.4%			
4:2FTS	(327.0 / 307.0) 583713 (327.0 / 81.0) 342931	(5.86, 1.00) (0.00, N/A, 0.0)	554.4 569.1	0.5875 96.8 96.8	7.6540 [7.4762]	102.4%			
6:2FTS	(427.0 / 407.0) 346947 (427.0 / 81.0) 249994	(7.62, 1.00) (0.00, N/A, -0.1)	799.8 699.0	0.7206 110.9 110.9	8.2249 [7.5923]	108.3%			
8:2FTS	(527.0 / 507.0) 272160 (527.0 / 81.0) 184884	(9.06, 1.00) (0.00, N/A, 0.5)	443.7 417.4	0.6793 108.4 108.4	8.1586 [7.6663]	106.4%			

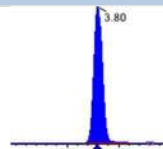
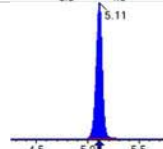
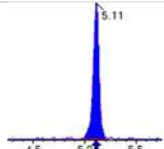
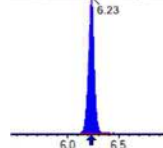
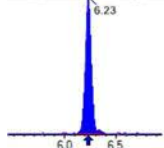
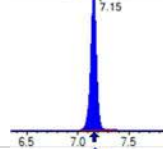
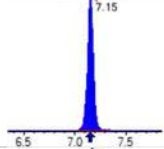
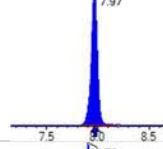
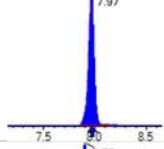
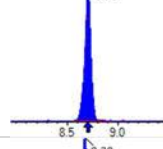
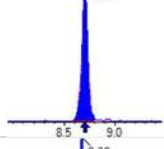
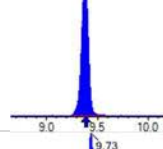
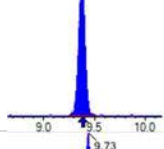
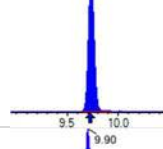
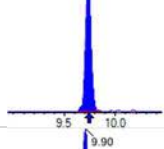
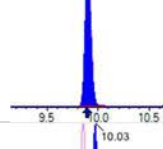
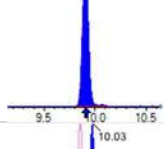
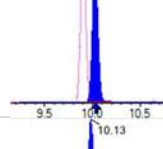
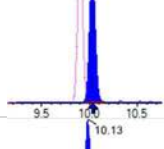
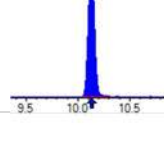
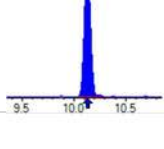
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 1055355 (498.0 / 478.0) 23717	(10.20 , 1.00) (0.00 , N/A , -0.2)	1740.9 915.3	0.0225 98.7 98.7	2.0546 [2.0000]	102.7%			
NMeFOSA	(511.9 / 219.0) 941469 (511.9 / 169.0) 600724	(10.63 , 1.00) (0.00 , N/A , 0.0)	1442.5 1273.9	0.6381 100.0 100.0	9.0831 [8.0000]	113.5%			
NEIFOSA	(526.0 / 219.0) 832227 (526.0 / 169.0) 857007	(10.71 , 1.00) (0.00 , N/A , 0.0)	1232.2 1584.6	1.0298 96.5 96.5	8.3617 [8.0000]	104.5%			
NMeFOSAA	(570.0 / 419.0) 142744 (570.0 / 483.0) 67173	(9.57 , 1.00) (0.00 , N/A , -0.1)	392.8 1469.6	0.4706 82.0 82.0	2.4171 [2.0000]	120.9%			
NEIFOSAA	(584.0 / 419.0) 129386 (584.0 / 526.0) 81840	(9.73 , 1.00) (0.00 , N/A , -0.1)	885.2 141670.6	0.6325 111.6 111.6	2.0121 [2.0000]	100.6%			
NMeFOSE	(616.1 / 59.0) 274757	(10.60 , 1.00) (0.01 , N/A , 0.0)	1125.9	N/A 0.0 0.0	8.1002 [8.0000]	101.3%			
NEIFOSE	(630.0 / 59.0) 70326	(10.69 , 1.00) (0.01 , N/A , 0.0)	1118.0	N/A 0.0 0.0	7.9166 [8.0000]	99.0%			
HFPO-DA	(285.0 / 169.0) 233541 (285.0 / 185.0) 742104	(6.56 , 1.00) (0.00 , N/A , -0.1)	585.7 1161.5	3.1776 120.8 120.8	3.9237 [4.0000]	98.1%			
ADONA	(377.0 / 85.0) 992581 (377.0 / 251.0) 114079	(7.47 , 1.14) (N/A , 0.00 , -0.1)	771.3 344.3	0.1149 97.5 97.5	3.9105 [3.7708]	103.7%			
9CI-Pf3ONS	(531.0 / 351.0) 2944974 (533.0 / 353.0) 963571	(9.76 , 1.49) (N/A , 0.03 , -0.1)	1153.7 611.1	0.3272 112.9 112.9	4.0920 [3.7330]	109.6%			
11CI-PF3OUDS	(631.0 / 451.0) 1815586 (633.0 / 453.0) 570123	(10.04 , 1.53) (N/A , 0.03 , -0.1)	920.5 823.1	0.3140 99.5 99.5	3.9365 [3.7728]	104.3%			

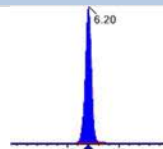
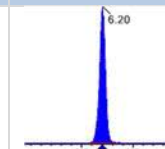
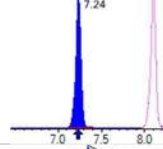
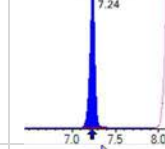
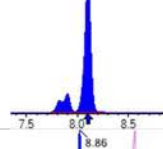
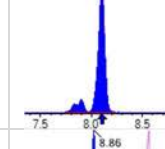
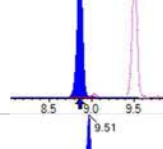
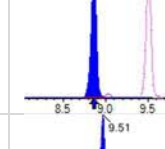
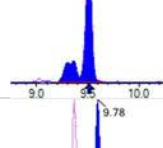
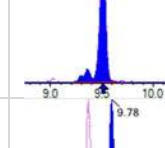
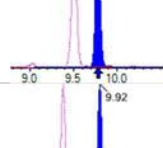
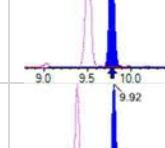
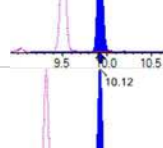
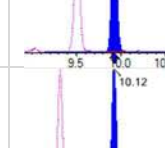
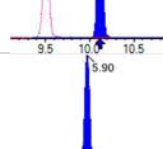
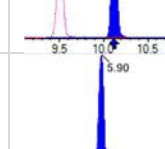
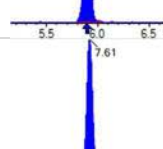
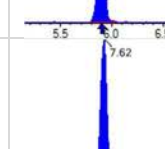
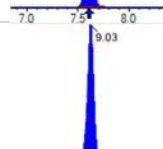
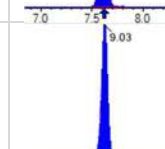
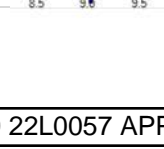
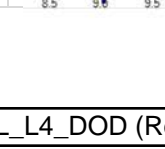
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 33053 (241.0 / 117.0) 55388	(4.55, 0.90) (N/A, -0.07, 0.1)	462.3 524.5	1.6757 102.2 102.2	8.3616 [8.0000]	104.5%			
5:3FTCA	(341.0 / 236.7) 240504 (341.0 / 217.0) 380811	(6.86, 1.11) (N/A, -0.02, -0.1)	505.8 525.4	1.5834 100.5 100.5	8.4360 [8.0000]	105.4%			
7:3FTCA	(441.0 / 317.0) 270458 (441.0 / 337.0) 228342	(8.70, 1.40) (N/A, 0.02, 0.2)	386.2 381.4	0.8443 100.8 100.8	7.5821 [8.0000]	94.8%			
PFEESA	(315.0 / 135.0) 555840 (315.0 / 83.0) 163848	(6.68, 1.08) (N/A, -0.02, -0.2)	908.1 583.9	0.2948 96.1 96.1	3.5824 [3.5698]	100.4%			
PFMPA	(229.0 / 85.0) 108229	(4.23, 0.84) (N/A, -0.07, 0.0)	1043.4	N/A 0.0 0.0	4.2388 [4.0000]	106.0%			
PFMBA	(279.0 / 85.0) 378453	(5.43, 1.08) (N/A, -0.06, 0.0)	1072.8	N/A 0.0 0.0	4.4289 [4.0000]	110.7%			
NFDHA	(201.0 / 85.0) 9685 (295.0 / 201.0) 80182	(6.08, 0.98) (N/A, -0.03, -0.1)	177.7 476.3	8.2791 125.7 125.7	3.2283 [4.0000]	80.7%			
13C3_PFBA_IIS	(216.0 / 172.0) 132728	(3.73, N/A) (N/A, -0.07, N/A)	604.4	N/A	1.0939 [1.0000]	109.4% { 104.8% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 193801	(6.20, N/A) (N/A, -0.03, N/A)	791.7	N/A	1.0620 [1.0000]	106.2% { 99.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 178666	(7.97, N/A) (N/A, 0.01, N/A)	514.6	N/A	1.0235 [1.0000]	102.3% { 101.4% }			
13C5_PFNA_IIS	(468.0 / 423.0) 148350	(8.72, N/A) (N/A, 0.02, N/A)	576.2	N/A	1.0917 [1.0000]	109.2% { 112.4% }			

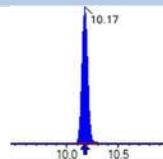
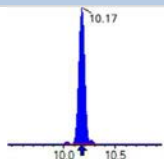
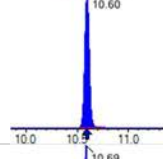
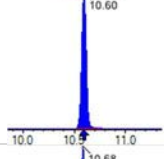
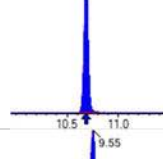
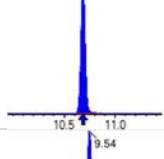
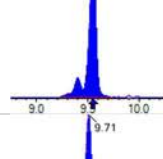
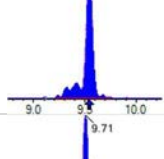
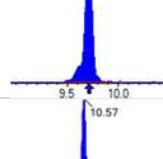
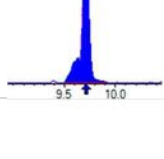
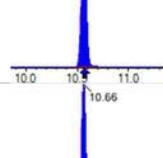
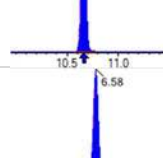
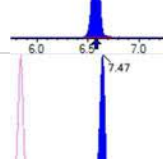
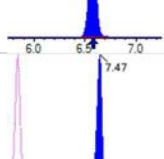
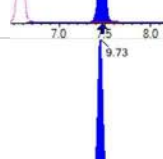
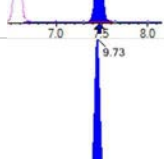
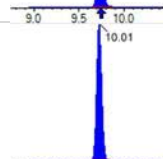
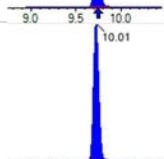
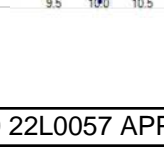
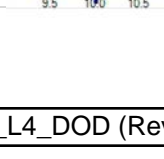
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 140731	(9.41, N/A) (N/A, 0.03, N/A)	607.4	N/A	1.0142 [1.0000]	101.4% { 99.6% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 317973	(8.11, N/A) (N/A, 0.01, N/A)	699.8	N/A	0.9852 [1.0000]	98.5% { 94.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 260978	(9.54, N/A) (N/A, 0.03, N/A)	472.4	N/A	1.0364 [1.0000]	103.6% { 94.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 825826	(3.73, N/A) (N/A, -0.07, N/A)	762.6	N/A	8.1624 [8.0000]	102.0% { 103.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 423866	(5.05, N/A) (N/A, -0.06, N/A)	782.6	N/A	3.9494 [4.0000]	98.7% { 99.4% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 321554	(6.20, N/A) (N/A, -0.02, N/A)	734.6	N/A	1.9688 [2.0000]	98.4% { 101.6% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 267032	(7.14, N/A) (N/A, -0.01, N/A)	685.9	N/A	1.8834 [2.0000]	94.2% { 92.5% }			
13C8_PFOA_EIS	(421.0 / 376.0) 260844	(7.97, N/A) (N/A, 0.00, N/A)	728.6	N/A	1.9040 [2.0000]	95.2% { 96.2% }			
13C9_PFNA_EIS	(472.0 / 427.0) 114240	(8.72, N/A) (N/A, 0.02, N/A)	417.2	N/A	0.9995 [1.0000]	100.0% { 106.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 146316	(9.41, N/A) (N/A, 0.03, N/A)	279.9	N/A	1.0841 [1.0000]	108.4% { 120.2% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 198071	(9.76, N/A) (N/A, 0.03, N/A)	536.8	N/A	1.0685 [1.0000]	106.9% { 106.6% }			

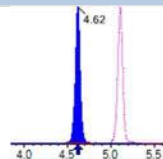
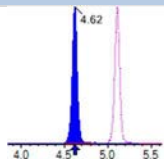
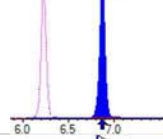
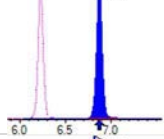
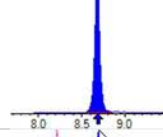
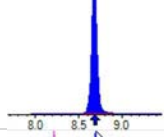
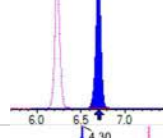
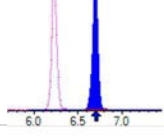
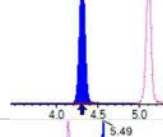
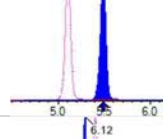
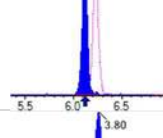
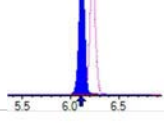
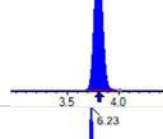
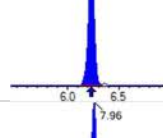
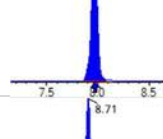
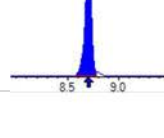
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 223471	(9.93, N/A) (N/A, 0.02, N/A)	410.5	N/A	0.9803 [1.0000]	98.0% { 91.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 157812	(10.16, N/A) (N/A, 0.03, N/A)	324.7	N/A	1.1025 [1.0000]	110.3% { 106.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 783023	(6.17, N/A) (N/A, -0.04, N/A)	950.5	N/A	2.1402 [2.0000]	107.0% { 101.4% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 411539	(8.11, N/A) (N/A, 0.01, N/A)	820.4	N/A	1.9987 [2.0000]	99.9% { 91.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 631472	(9.54, N/A) (N/A, 0.03, N/A)	405.0	N/A	1.9434 [2.0000]	97.2% { 98.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 93554	(5.86, N/A) (N/A, -0.04, N/A)	499.4	N/A	4.3751 [4.0000]	109.4% { 100.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 103518	(7.62, N/A) (N/A, 0.00, N/A)	386.5	N/A	3.9594 [4.0000]	99.0% { 93.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 93693	(9.05, N/A) (N/A, 0.02, N/A)	296.0	N/A	3.5919 [4.0000]	89.8% { 84.7% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1047288	(10.20, N/A) (N/A, 0.03, N/A)	857.5	N/A	2.1308 [2.0000]	106.5% { 101.2% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 249176	(10.62, N/A) (N/A, 0.03, N/A)	1028.5	N/A	1.9751 [2.0000]	98.8% { 106.5% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 215343	(10.71, N/A) (N/A, 0.03, N/A)	867.1	N/A	1.9673 [2.0000]	98.4% { 100.4% }			

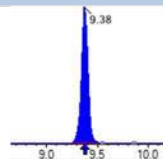
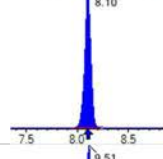
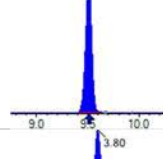
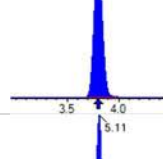
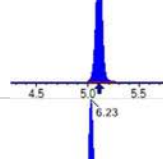
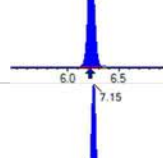
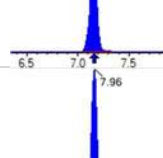
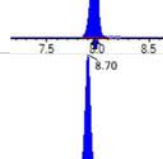
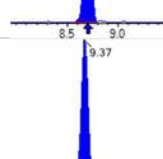
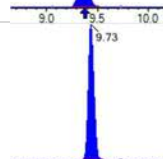
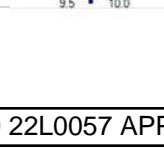
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 305589	(9.57, N/A) (N/A, 0.03, N/A)	480.9	N/A	3.9734 [4.0000]	99.3% { 96.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 295476	(9.74, N/A) (N/A, 0.03, N/A)	370.1	N/A	4.2460 [4.0000]	106.1% { 99.7% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 502830	(10.59, N/A) (N/A, 0.03, N/A)	951.3	N/A	20.7897 [20.0000]	103.9% { 110.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 262607	(10.69, N/A) (N/A, 0.03, N/A)	1646.4	N/A	21.6685 [20.0000]	108.3% { 109.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 769972	(6.56, N/A) (N/A, -0.02, N/A)	619.2	N/A	7.6963 [8.0000]	96.2% { 102.8% }			

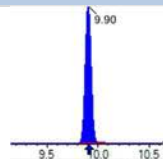
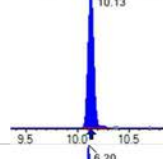
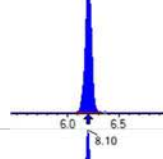
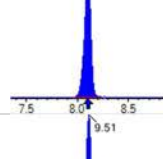
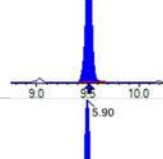
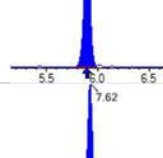
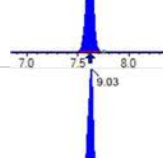
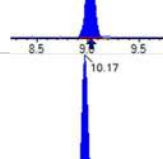
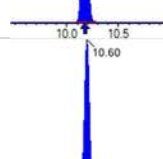
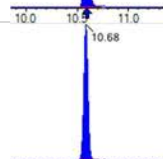
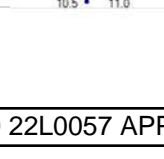
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 1451784	(3.80, 1.00) (0.00, N/A, 0.0)	57.0	N/A 0.0 0.0	20.7860 [20.0000]	103.9%			
PFPeA	(262.9 / 219.0) 942069 (262.9 / 69.0) 11831	(5.11, 1.00) (0.00, N/A, 0.0)	830.6 265.1	0.0126 100.0 100.0	9.9553 [10.0000]	99.6%			
PFHxA	(313.0 / 269.0) 717827 (313.0 / 119.0) 66458	(6.23, 1.00) (0.01, N/A, 0.1)	649.6 312.3	0.0926 100.0 100.0	5.1165 [5.0000]	102.3%			
PFHpA	(363.0 / 319.0) 677249 (363.0 / 169.0) 210739	(7.15, 1.00) (0.00, N/A, 0.1)	614.0 698.2	0.3112 100.0 100.0	5.0703 [5.0000]	101.4%			
PFOA	(413.0 / 369.0) 677870 (413.0 / 169.0) 227509	(7.97, 1.00) (0.00, N/A, 0.0)	649.5 813.0	0.3356 100.0 100.0	5.0029 [5.0000]	100.1%			
PFNA	(463.0 / 419.0) 540194 (463.0 / 169.0) 94807	(8.70, 1.00) (0.00, N/A, 0.1)	536.7 97.0	0.1755 100.0 100.0	5.4955 [5.0000]	109.9%			
PFDA	(513.0 / 469.0) 641896 (513.0 / 169.0) 64612	(9.38, 1.00) (0.00, N/A, 0.0)	540.7 425.7	0.1007 100.0 100.0	5.2169 [5.0000]	104.3%			
PFUnA	(563.0 / 519.0) 842655 (563.0 / 169.0) 77130	(9.73, 1.00) (0.00, N/A, -0.1)	701.7 256.2	0.0915 100.0 100.0	5.2291 [5.0000]	104.6%			
PFDoA	(613.0 / 569.0) 999990 (613.0 / 169.0) 128182	(9.90, 1.00) (0.00, N/A, -0.3)	784.8 320.7	0.1282 100.0 100.0	4.7241 [5.0000]	94.5%			
PFTrDA	(663.0 / 619.0) 802825 (663.0 / 169.0) 176312	(10.03, 1.01) (N/A, 0.00, -0.1)	1200.6 326.8	0.2196 100.0 100.0	4.6003 [5.0000]	92.0%			
PFTeDA	(713.0 / 669.0) 763866 (713.0 / 169.0) 142124	(10.13, 1.00) (0.00, N/A, 0.0)	715.6 493.4	0.1861 100.0 100.0	5.6164 [5.0000]	112.3%			

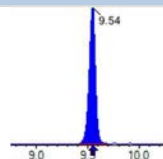
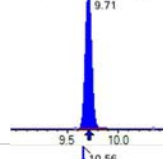
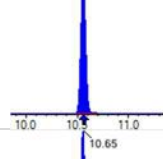
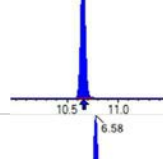
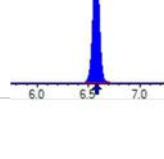
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 952464 (298.9 / 99.0) 686132	(6.20, 1.00) (0.00, N/A, -0.1)	750.9 758.0	0.7204 100.0 100.0	4.3675 [4.4237]	98.7%			
PFPeS	(349.0 / 80.0) 1815723 (349.0 / 99.0) 679968	(7.24, 0.89) (N/A, 0.00, 0.0)	677.6 813.0	0.3745 100.0 100.0	4.6068 [4.6919]	98.2%			
PFHxS	(399.0 / 80.0) 1603418 (399.0 / 99.0) 517182	(8.10, 1.00) (0.00, N/A, 0.1)	3494.2 4342.9	0.3225 100.0 100.0	4.4568 [4.5549]	97.8%			
PFHpS	(449.0 / 80.0) 1304754 (449.0 / 99.0) 400571	(8.86, 0.93) (N/A, 0.00, 0.0)	401.8 688.7	0.3070 100.0 100.0	4.5104 [4.7570]	94.8%			
PFOS	(499.0 / 80.0) 1736074 (499.0 / 99.0) 398421	(9.51, 1.00) (0.00, N/A, 0.0)	134.4 219.1	0.2295 100.0 100.0	4.9384 [4.6375]	106.5%			
PFNS	(549.0 / 80.0) 2036861 (549.0 / 99.0) 528136	(9.78, 1.03) (N/A, 0.00, 0.1)	997.0 467.0	0.2593 100.0 100.0	4.7025 [4.7994]	98.0%			
PFDS	(599.0 / 80.0) 2788383 (599.0 / 99.0) 627639	(9.92, 1.04) (N/A, 0.00, -0.1)	1395.7 794.1	0.2251 100.0 100.0	4.8968 [4.8155]	101.7%			
PFDoS	(698.9 / 80.0) 1481972 (698.9 / 99.0) 300054	(10.12, 1.06) (N/A, 0.00, 0.0)	968.3 505.0	0.2025 100.0 100.0	5.1448 [4.8478]	106.1%			
4:2FTS	(327.0 / 307.0) 1320032 (327.0 / 81.0) 801073	(5.90, 1.00) (0.00, N/A, -0.1)	1102.0 831.3	0.6069 100.0 100.0	17.3428 [18.6906]	92.8%			
6:2FTS	(427.0 / 407.0) 943886 (427.0 / 81.0) 613244	(7.61, 1.00) (0.00, N/A, -0.1)	945.7 770.7	0.6497 100.0 100.0	20.8171 [18.9808]	109.7%			
8:2FTS	(527.0 / 507.0) 758649 (527.0 / 81.0) 475612	(9.03, 1.00) (0.00, N/A, 0.0)	493.4 413.1	0.6269 100.0 100.0	19.2556 [19.1658]	100.5%			

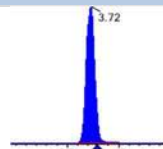
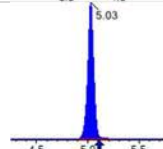
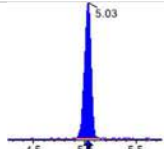
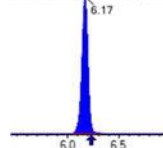
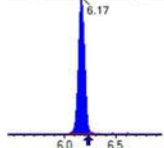
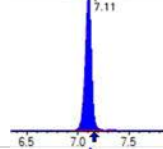
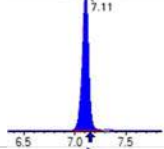
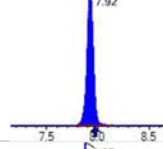
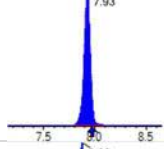
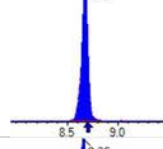
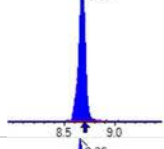
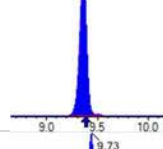
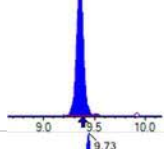
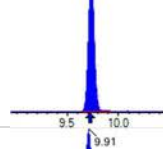
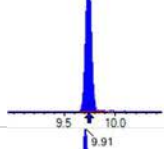
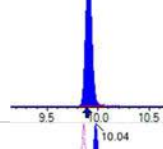
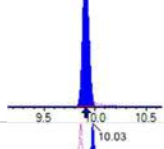
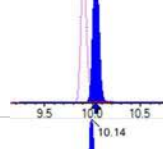
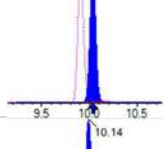
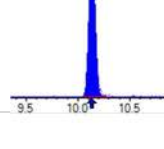
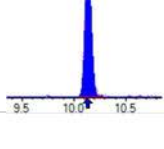
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 2357744 (498.0 / 478.0) 53675	(10.17, 1.00) (0.00, N/A, 0.0)	812.6 5518.1	0.0228 100.0 100.0	4.6447 [5.0000]	92.9%			
NMeFOSA	(511.9 / 219.0) 2010184 (511.9 / 169.0) 1282524	(10.60, 1.00) (0.00, N/A, 0.0)	1292.0 963.8	0.6380 100.0 100.0	20.6539 [20.0000]	103.3%			
NEIFOSA	(526.0 / 219.0) 1944163 (526.0 / 169.0) 2075464	(10.69, 1.00) (0.00, N/A, 0.0)	1416.4 1380.3	1.0675 100.0 100.0	19.6094 [20.0000]	98.0%			
NMeFOSAA	(570.0 / 419.0) 266213 (570.0 / 483.0) 152810	(9.55, 1.00) (0.00, N/A, 0.3)	377.0 709.6	0.5740 100.0 100.0	4.3576 [5.0000]	87.2%			
NEIFOSAA	(584.0 / 419.0) 293472 (584.0 / 526.0) 166369	(9.71, 1.00) (0.00, N/A, 0.1)	922.5 237323.0	0.5669 100.0 100.0	4.5514 [5.0000]	91.0%			
NMeFOSE	(616.1 / 59.0) 584126	(10.57, 1.00) (0.01, N/A, 0.0)	880.5	N/A 0.0 0.0	19.0837 [20.0000]	95.4%			
NEtFOSE	(630.0 / 59.0) 168571	(10.66, 1.00) (0.01, N/A, 0.0)	1330.5	N/A 0.0 0.0	20.7711 [20.0000]	103.9%			
HFPO-DA	(285.0 / 169.0) 628393 (285.0 / 185.0) 1652722	(6.58, 1.00) (0.00, N/A, 0.0)	743.4 920.7	2.6301 100.0 100.0	10.8519 [10.0000]	108.5%			
ADONA	(377.0 / 85.0) 2362618 (377.0 / 251.0) 278551	(7.47, 1.14) (N/A, 0.00, -0.1)	570.1 578.8	0.1179 100.0 100.0	9.5676 [9.4270]	101.5%			
9CI-Pf3ONS	(531.0 / 351.0) 6695345 (533.0 / 353.0) 1941166	(9.73, 1.48) (N/A, 0.00, 0.0)	1062.1 870.7	0.2899 100.0 100.0	9.5624 [9.3325]	102.5%			
11CI-PF3OUDS	(631.0 / 451.0) 4524705 (633.0 / 453.0) 1427390	(10.01, 1.52) (N/A, 0.00, 0.1)	1298.5 892.1	0.3155 100.0 100.0	10.0839 [9.4321]	106.9%			

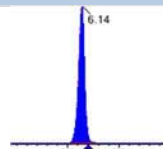
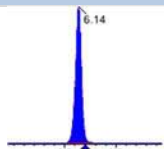
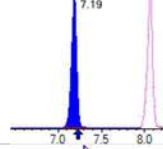
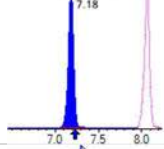
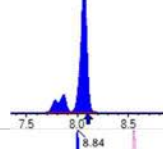
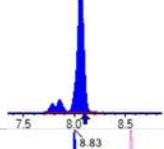
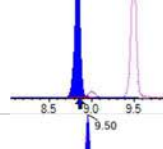
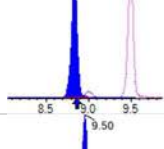
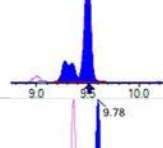
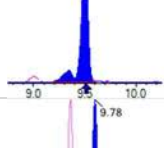
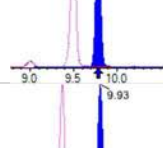
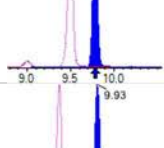
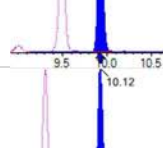
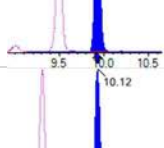
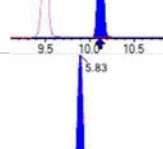
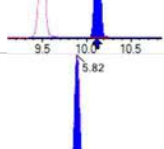
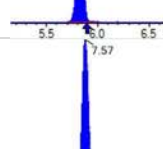
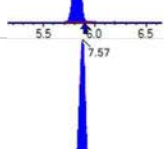
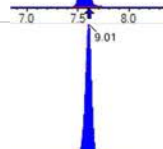
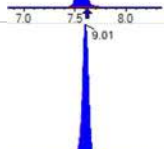


Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 80109 (241.0 / 117.0) 131321	(4.62, 0.90) (N/A, 0.00, 0.1)	591.4 636.7	1.6393 100.0 100.0	20.1433 [20.0000]	100.7%			
5:3FTCA	(341.0 / 236.7) 600052 (341.0 / 217.0) 945748	(6.87, 1.10) (N/A, 0.00, 0.0)	592.3 683.0	1.5761 100.0 100.0	21.3749 [20.0000]	106.9%			
7:3FTCA	(441.0 / 317.0) 673505 (441.0 / 337.0) 564266	(8.68, 1.39) (N/A, 0.00, 0.0)	432.5 523.9	0.8378 100.0 100.0	19.1749 [20.0000]	95.9%			
PFEESA	(315.0 / 135.0) 1361458 (315.0 / 83.0) 417468	(6.70, 1.08) (N/A, 0.00, 0.1)	951.6 861.7	0.3066 100.0 100.0	8.9112 [8.9246]	99.9%			
PFMPA	(229.0 / 85.0) 245313	(4.30, 0.84) (N/A, 0.00, 0.0)	975.6	N/A 0.0 0.0	9.5500 [10.0000]	95.5%			
PFMBA	(279.0 / 85.0) 842570	(5.49, 1.07) (N/A, 0.00, 0.0)	982.5	N/A 0.0 0.0	9.8010 [10.0000]	98.0%			
NFDHA	(201.0 / 85.0) 30832 (295.0 / 201.0) 203076	(6.12, 0.98) (N/A, 0.00, 0.1)	467.9 756.9	6.5866 100.0 100.0	10.7140 [10.0000]	107.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 126651	(3.80, N/A) (N/A, 0.00, N/A)	763.9	N/A	1.0438 [1.0000]	104.4% { 100.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 195743	(6.23, N/A) (N/A, 0.00, N/A)	630.0	N/A	1.0727 [1.0000]	107.3% { 100.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 176199	(7.96, N/A) (N/A, 0.00, N/A)	745.3	N/A	1.0094 [1.0000]	100.9% { 100.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 131943	(8.71, N/A) (N/A, 0.00, N/A)	501.0	N/A	0.9710 [1.0000]	97.1% { 100.0% }			

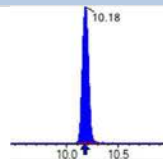
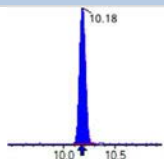
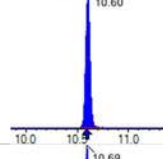
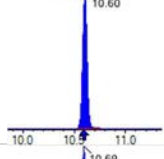
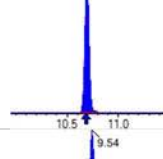
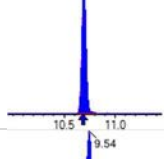
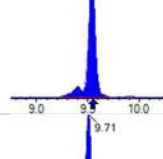
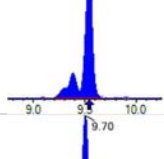
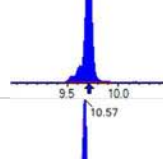
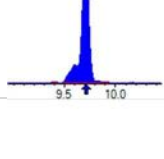
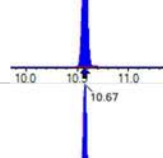
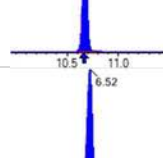
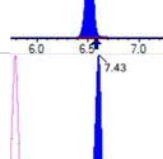
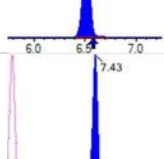
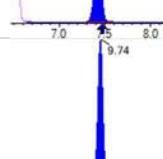
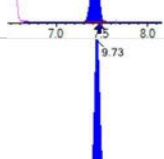
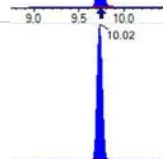
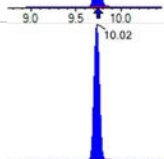
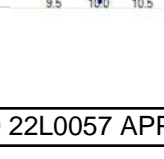
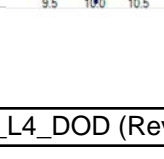
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 141296	(9.38, N/A) (N/A, 0.00, N/A)	430.2	N/A	1.0183 [1.0000]	101.8% { 100.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 335317	(8.10, N/A) (N/A, 0.00, N/A)	642.8	N/A	1.0390 [1.0000]	103.9% { 100.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 275762	(9.51, N/A) (N/A, 0.00, N/A)	510.8	N/A	1.0951 [1.0000]	109.5% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 795432	(3.80, N/A) (N/A, 0.00, N/A)	876.6	N/A	8.2393 [8.0000]	103.0% { 100.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 426431	(5.11, N/A) (N/A, 0.00, N/A)	776.3	N/A	3.9339 [4.0000]	98.3% { 100.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 316628	(6.23, N/A) (N/A, 0.00, N/A)	866.6	N/A	1.9194 [2.0000]	96.0% { 100.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 288649	(7.15, N/A) (N/A, 0.00, N/A)	667.7	N/A	2.0157 [2.0000]	100.8% { 100.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 271182	(7.96, N/A) (N/A, 0.00, N/A)	568.6	N/A	2.0071 [2.0000]	100.4% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 107823	(8.70, N/A) (N/A, 0.00, N/A)	378.0	N/A	1.0607 [1.0000]	106.1% { 100.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 121687	(9.37, N/A) (N/A, 0.00, N/A)	496.1	N/A	0.8980 [1.0000]	89.8% { 100.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 185762	(9.73, N/A) (N/A, 0.00, N/A)	533.5	N/A	0.9981 [1.0000]	99.8% { 100.0% }			

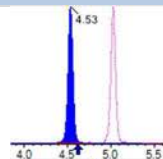
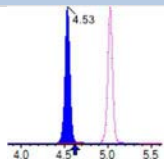
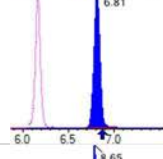
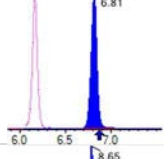
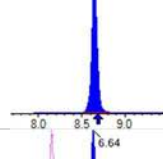
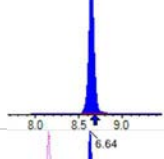
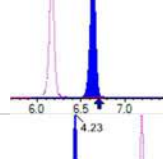
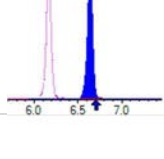
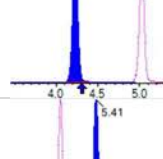
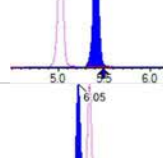
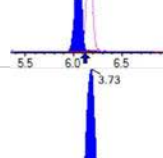
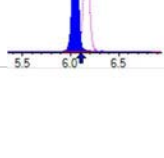
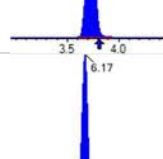
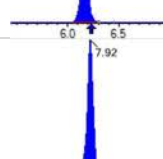
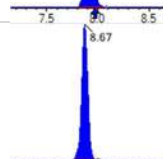
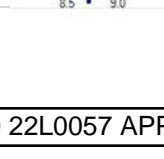
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 244436	(9.90, N/A) (N/A, 0.00, N/A)	623.8	N/A	1.0680 [1.0000]	106.8% { 100.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 148824	(10.13, N/A) (N/A, 0.00, N/A)	364.1	N/A	1.0356 [1.0000]	103.6% { 100.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 771923	(6.20, N/A) (N/A, 0.00, N/A)	601.6	N/A	2.0007 [2.0000]	100.0% { 100.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 448007	(8.10, N/A) (N/A, 0.00, N/A)	532.3	N/A	2.0633 [2.0000]	103.2% { 100.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 639399	(9.51, N/A) (N/A, 0.00, N/A)	339.4	N/A	1.8623 [2.0000]	93.1% { 100.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 93371	(5.90, N/A) (N/A, 0.00, N/A)	458.5	N/A	4.1407 [4.0000]	103.5% { 100.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 111272	(7.62, N/A) (N/A, 0.00, N/A)	603.4	N/A	4.0358 [4.0000]	100.9% { 100.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 110658	(9.03, N/A) (N/A, 0.00, N/A)	462.6	N/A	4.0228 [4.0000]	100.6% { 100.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1035004	(10.17, N/A) (N/A, 0.00, N/A)	660.5	N/A	1.9929 [2.0000]	99.6% { 100.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 233974	(10.60, N/A) (N/A, 0.00, N/A)	965.9	N/A	1.7551 [2.0000]	87.8% { 100.0% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 214512	(10.68, N/A) (N/A, 0.00, N/A)	1046.8	N/A	1.8547 [2.0000]	92.7% { 100.0% }			

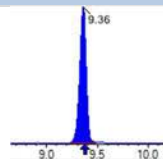
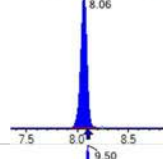
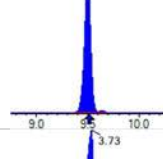
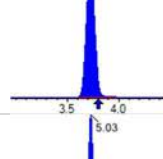
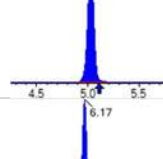
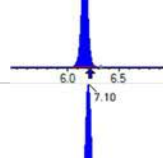
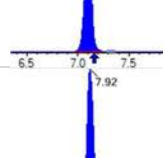
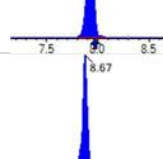
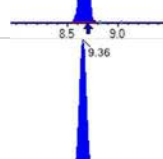
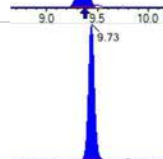
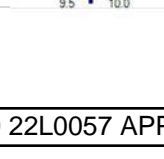
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 316119	(9.54, N/A) (N/A, 0.00, N/A)	357.6	N/A	3.8900 [4.0000]	97.2% { 100.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 296285	(9.71, N/A) (N/A, 0.00, N/A)	472.0	N/A	4.0293 [4.0000]	100.7% { 100.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 453746	(10.56, N/A) (N/A, 0.00, N/A)	1063.2	N/A	17.7545 [20.0000]	88.8% { 100.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 239914	(10.65, N/A) (N/A, 0.00, N/A)	1165.4	N/A	18.7347 [20.0000]	93.7% { 100.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 749093	(6.58, N/A) (N/A, 0.00, N/A)	929.1	N/A	7.4133 [8.0000]	92.7% { 100.0% }			

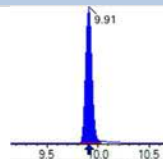
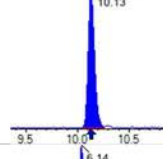
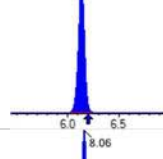
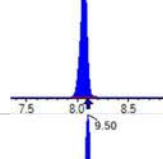
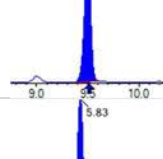
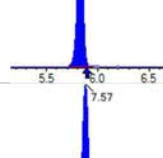
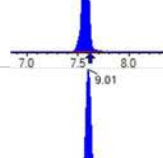
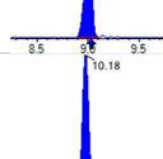
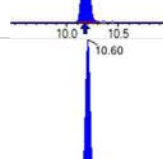
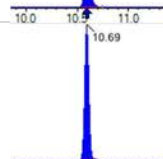
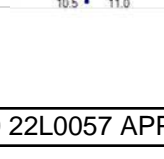
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 2337677	(3.72, 1.00) (0.00, N/A, 0.0)	55.7	N/A 0.0 0.0	40.9154 [40.0000]	102.3%			
PFPeA	(262.9 / 219.0) 1668692 (262.9 / 69.0) 19523	(5.03, 1.00) (0.00, N/A, -0.1)	669.4 371.1	0.0117 93.2 93.2	19.3173 [20.0000]	96.6%			
PFHxA	(313.0 / 269.0) 1188875 (313.0 / 119.0) 124144	(6.17, 1.00) (0.00, N/A, 0.3)	773.0 531.6	0.1044 112.8 112.8	8.8842 [10.0000]	88.8%			
PFHpA	(363.0 / 319.0) 1160429 (363.0 / 169.0) 345118	(7.11, 1.00) (0.00, N/A, -0.1)	752.3 516.0	0.2974 95.6 95.6	10.1137 [10.0000]	101.1%			
PFOA	(413.0 / 369.0) 1210538 (413.0 / 169.0) 370946	(7.92, 1.00) (0.00, N/A, -0.1)	807.1 677.3	0.3064 91.3 91.3	9.2348 [10.0000]	92.3%			
PFNA	(463.0 / 419.0) 857915 (463.0 / 169.0) 186842	(8.67, 1.00) (0.00, N/A, -0.1)	579.6 98.3	0.2178 124.1 124.1	8.8482 [10.0000]	88.5%			
PFDA	(513.0 / 469.0) 1229650 (513.0 / 169.0) 124733	(9.36, 1.00) (0.00, N/A, 0.1)	627.2 241.2	0.1014 100.8 100.8	8.9189 [10.0000]	89.2%			
PFUnA	(563.0 / 519.0) 1410409 (563.0 / 169.0) 132017	(9.73, 1.00) (0.00, N/A, -0.1)	973.1 349.9	0.0936 102.3 102.3	10.2072 [10.0000]	102.1%			
PFDoA	(613.0 / 569.0) 1764232 (613.0 / 169.0) 225054	(9.91, 1.00) (0.00, N/A, 0.0)	604.6 572.6	0.1276 99.5 99.5	10.2356 [10.0000]	102.4%			
PFTrDA	(663.0 / 619.0) 1531523 (663.0 / 169.0) 330928	(10.04, 1.01) (N/A, 0.01, 0.1)	787.5 531.0	0.2161 98.4 98.4	10.7776 [10.0000]	107.8%			
PFTeDA	(713.0 / 669.0) 1178307 (713.0 / 169.0) 243064	(10.14, 1.00) (0.00, N/A, -0.1)	590.0 559.6	0.2063 110.9 110.9	10.4557 [10.0000]	104.6%			

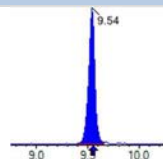
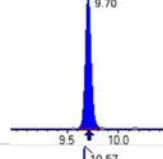
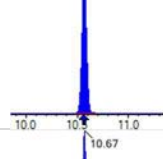
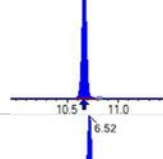
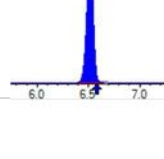
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1675540 (298.9 / 99.0) 1260061	(6.14, 1.00) (0.00, N/A, 0.1)	947.8 979.8	0.7520 104.4 104.4	8.4994 [8.8473]	96.1%			
PFPeS	(349.0 / 80.0) 3144087 (349.0 / 99.0) 1141879	(7.19, 0.89) (N/A, -0.05, 0.1)	834.8 632.0	0.3632 97.0 97.0	8.3386 [9.3838]	88.9%			
PFHxS	(399.0 / 80.0) 2810264 (399.0 / 99.0) 928918	(8.06, 1.00) (0.00, N/A, 0.1)	3050.5 5508.4	0.3305 102.5 102.5	8.1653 [9.1098]	89.6%			
PFHpS	(449.0 / 80.0) 2456086 (449.0 / 99.0) 659707	(8.84, 0.93) (N/A, -0.03, 0.1)	558.6 411.7	0.2686 87.5 87.5	9.4958 [9.5141]	99.8%			
PFOS	(499.0 / 80.0) 3066551 (499.0 / 99.0) 616306	(9.50, 1.00) (0.00, N/A, -0.1)	148.9 177.2	0.2010 87.6 87.6	9.7559 [9.2749]	105.2%			
PFNS	(549.0 / 80.0) 3441021 (549.0 / 99.0) 957772	(9.78, 1.03) (N/A, 0.00, 0.1)	1114.9 839.0	0.2783 107.3 107.3	8.8850 [9.5989]	92.6%			
PFDS	(599.0 / 80.0) 4633325 (599.0 / 99.0) 1017900	(9.93, 1.05) (N/A, 0.01, -0.1)	1484.5 977.3	0.2197 97.6 97.6	9.1003 [9.6311]	94.5%			
PFDoS	(698.9 / 80.0) 2400355 (698.9 / 99.0) 577282	(10.12, 1.07) (N/A, 0.00, -0.1)	1207.9 1221.4	0.2405 118.8 118.8	9.3197 [9.6956]	96.1%			
4:2FTS	(327.0 / 307.0) 2387923 (327.0 / 81.0) 1413546	(5.83, 1.00) (0.00, N/A, 0.2)	862.8 721.8	0.5920 97.5 97.5	37.1103 [37.3811]	99.3%			
6:2FTS	(427.0 / 407.0) 1471616 (427.0 / 81.0) 1031892	(7.57, 1.00) (0.00, N/A, -0.1)	1087.7 1212.1	0.7012 107.9 107.9	34.1066 [37.9617]	89.8%			
8:2FTS	(527.0 / 507.0) 1384250 (527.0 / 81.0) 896542	(9.01, 1.00) (0.00, N/A, 0.0)	698.8 812.0	0.6477 103.3 103.3	40.4838 [38.3315]	105.6%			

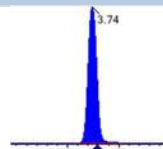
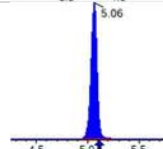
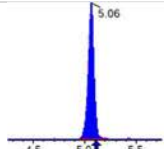
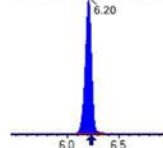
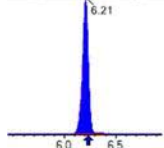
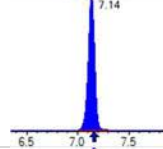
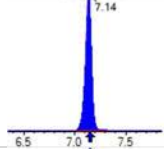
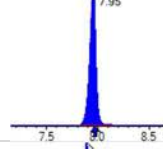
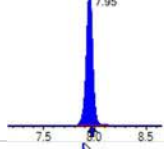
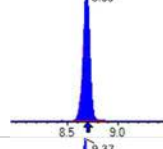
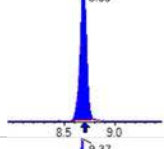
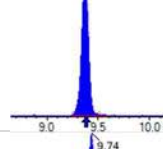
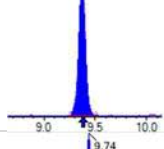
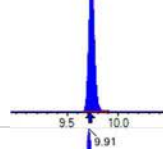
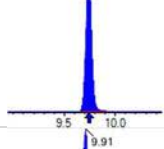
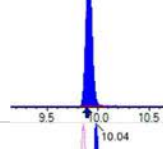
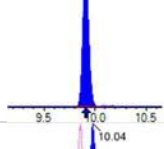
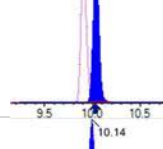
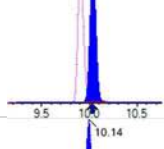
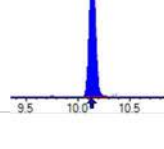
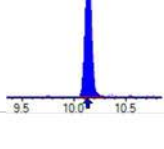
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 404569 (498.0 / 478.0) 105573	(10.18 , 1.00) (0.00 , N/A , 0.0)	1114.7 407.5	0.0261 114.6 114.6	9.7275 [10.0000]	97.3%			
NMeFOSA	(511.9 / 219.0) 3917623 (511.9 / 169.0) 2563217	(10.60 , 1.00) (0.00 , N/A , 0.0)	1227.7 1882.0	0.6543 102.5 102.5	40.8457 [40.0000]	102.1%			
NEIFOSA	(526.0 / 219.0) 3435791 (526.0 / 169.0) 3555832	(10.69 , 1.00) (0.00 , N/A , 0.0)	1369.6 1351.9	1.0349 96.9 96.9	37.8293 [40.0000]	94.6%			
NMeFOSAA	(570.0 / 419.0) 545721 (570.0 / 483.0) 279754	(9.54 , 1.00) (0.00 , N/A , 0.0)	673.7 505.5	0.5126 89.3 89.3	10.8406 [10.0000]	108.4%			
NEIFOSAA	(584.0 / 419.0) 516508 (584.0 / 526.0) 331380	(9.71 , 1.00) (0.00 , N/A , 0.1)	1107.1 1922.9	0.6416 113.2 113.2	8.7043 [10.0000]	87.0%			
NMeFOSE	(616.1 / 59.0) 1069812	(10.57 , 1.00) (0.01 , N/A , 0.0)	883.3	N/A 0.0 0.0	37.9073 [40.0000]	94.8%			
NEIFOSE	(630.0 / 59.0) 245532	(10.67 , 1.00) (0.01 , N/A , 0.0)	922.8	N/A 0.0 0.0	40.5982 [40.0000]	101.5%			
HFPO-DA	(285.0 / 169.0) 1075122 (285.0 / 185.0) 3138717	(6.52 , 1.00) (0.00 , N/A , 0.2)	762.0 947.8	2.9194 111.0 111.0	18.9601 [20.0000]	94.8%			
ADONA	(377.0 / 85.0) 4306774 (377.0 / 251.0) 525258	(7.43 , 1.14) (N/A , -0.04 , 0.1)	742.3 796.9	0.1220 103.4 103.4	17.8103 [18.8540]	94.5%			
9CI-PI3ONS	(531.0 / 351.0) 12260687 (533.0 / 353.0) 3846868	(9.74 , 1.49) (N/A , 0.00 , 0.2)	877.4 665.7	0.3138 108.2 108.2	17.8821 [18.6651]	95.8%			
11CI-PF3OUDS	(631.0 / 451.0) 8373522 (633.0 / 453.0) 2581634	(10.02 , 1.54) (N/A , 0.01 , -0.1)	949.2 994.5	0.3083 97.7 97.7	19.0569 [18.8642]	101.0%			

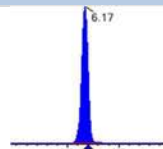
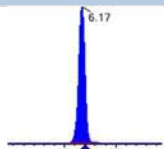
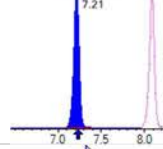
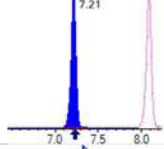
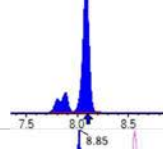
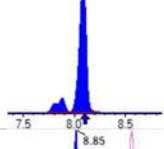
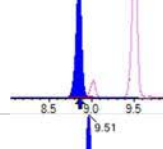
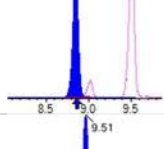
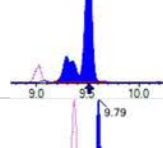
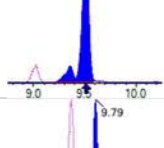
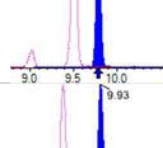
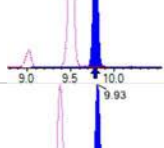
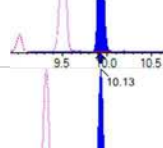
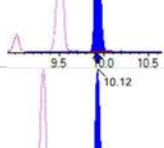
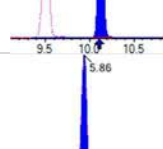
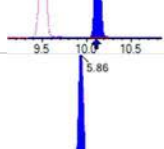
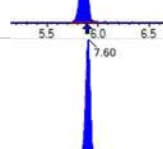
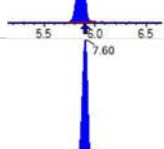
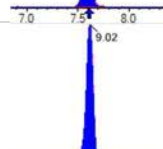
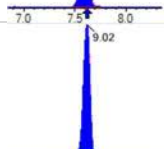
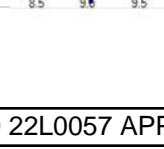
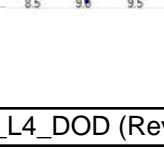
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 135780 (241.0 / 117.0) 239145	(4.53, 0.90) (N/A, -0.08, 0.0)	666.2 675.2	1.7613 107.4 107.4	37.4012 [40.0000]	93.5%			
5:3FTCA	(341.0 / 236.7) 999247 (341.0 / 217.0) 1603778	(6.81, 1.11) (N/A, -0.06, 0.0)	514.3 752.5	1.6050 101.8 101.8	37.3182 [40.0000]	93.3%			
7:3FTCA	(441.0 / 317.0) 1252819 (441.0 / 337.0) 1024151	(8.65, 1.40) (N/A, -0.03, 0.0)	643.1 633.8	0.8175 97.6 97.6	37.3949 [40.0000]	93.5%			
PFEESA	(315.0 / 135.0) 2568418 (315.0 / 83.0) 737772	(6.64, 1.08) (N/A, -0.06, 0.0)	915.5 802.9	0.2872 93.7 93.7	17.6250 [17.8492]	98.7%			
PFMPA	(229.0 / 85.0) 464712	(4.23, 0.84) (N/A, -0.08, 0.0)	998.3	N/A 0.0 0.0	19.8182 [20.0000]	99.1%			
PFMBA	(279.0 / 85.0) 1502382	(5.41, 1.08) (N/A, -0.08, 0.0)	947.1	N/A 0.0 0.0	19.1444 [20.0000]	95.7%			
NFDHA	(201.0 / 85.0) 51832 (295.0 / 201.0) 361133	(6.05, 0.98) (N/A, -0.07, 0.0)	496.7 706.1	6.9673 105.8 105.8	18.9782 [20.0000]	94.9%			
13C3_PFBA_IIS	(216.0 / 172.0) 115291	(3.73, N/A) (N/A, -0.07, N/A)	724.0	N/A	0.9502 [1.0000]	95.0% { 91.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 176615	(6.17, N/A) (N/A, -0.06, N/A)	716.3	N/A	0.9678 [1.0000]	96.8% { 90.2% }			
13C4_PFOA_IIS	(417.0 / 372.0) 166035	(7.92, N/A) (N/A, -0.04, N/A)	642.7	N/A	0.9511 [1.0000]	95.1% { 94.2% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 126360	(8.67, N/A) (N/A, -0.03, N/A)	544.8	N/A	0.9299 [1.0000]	93.0% { 95.8% }			

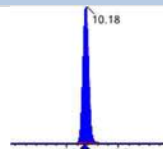
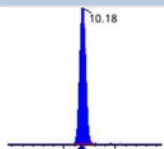
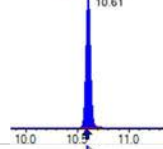
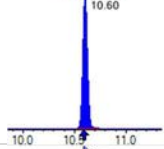
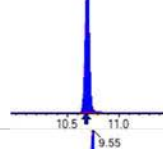
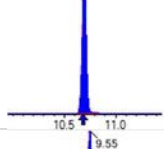
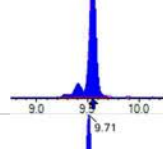
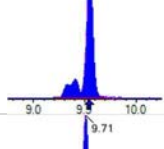
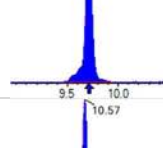
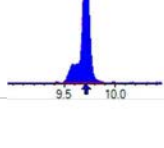
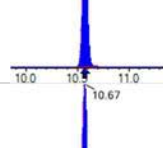
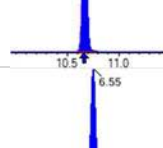
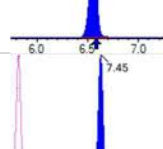
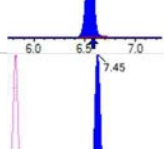
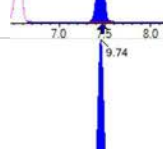
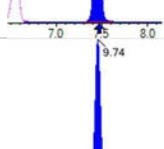
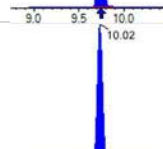
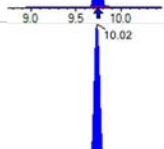
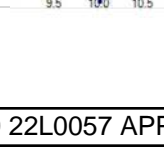
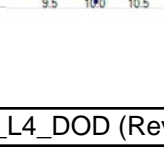
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 134817	(9.36, N/A) (N/A, -0.02, N/A)	423.3	N/A	0.9716 [1.0000]	97.2% { 95.4% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 343070	(8.06, N/A) (N/A, -0.04, N/A)	728.9	N/A	1.0630 [1.0000]	106.3% { 102.3% }			
13C4_PFOS_IIS	(502.8 / 79.9) 232276	(9.50, N/A) (N/A, -0.01, N/A)	548.9	N/A	0.9224 [1.0000]	92.2% { 84.2% }			
13C4_PFBA_EIS	(217.0 / 172.0) 650684	(3.73, N/A) (N/A, -0.07, N/A)	683.7	N/A	7.4041 [8.0000]	92.6% { 81.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 389269	(5.03, N/A) (N/A, -0.08, N/A)	788.5	N/A	3.9800 [4.0000]	99.5% { 91.3% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 302007	(6.17, N/A) (N/A, -0.06, N/A)	848.2	N/A	2.0290 [2.0000]	101.5% { 95.4% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 247951	(7.10, N/A) (N/A, -0.05, N/A)	432.7	N/A	1.9190 [2.0000]	96.0% { 85.9% }			
13C8_PFOA_EIS	(421.0 / 376.0) 262353	(7.92, N/A) (N/A, -0.04, N/A)	580.4	N/A	2.0607 [2.0000]	103.0% { 96.7% }			
13C9_PFNA_EIS	(472.0 / 427.0) 106355	(8.67, N/A) (N/A, -0.03, N/A)	485.6	N/A	1.0925 [1.0000]	109.2% { 98.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 136351	(9.36, N/A) (N/A, -0.02, N/A)	409.5	N/A	1.0545 [1.0000]	105.5% { 112.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 159285	(9.73, N/A) (N/A, 0.00, N/A)	301.9	N/A	0.8970 [1.0000]	89.7% { 85.7% }			

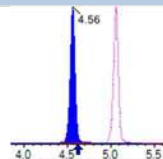
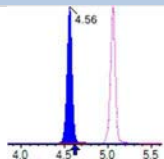
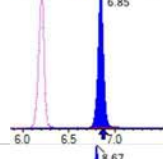
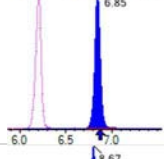
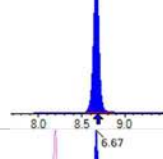
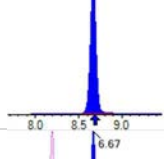
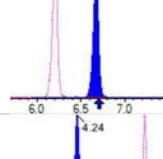
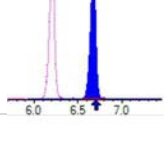
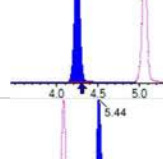
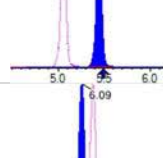
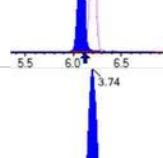
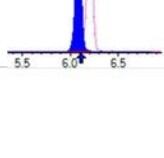
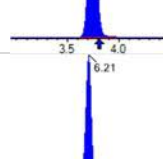
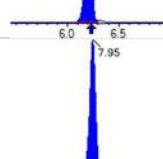
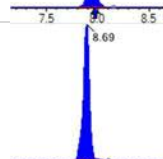
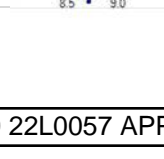
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 199035	(9.91, N/A) (N/A, 0.00, N/A)	291.2	N/A	0.9114 [1.0000]	91.1% { 81.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 123317	(10.13, N/A) (N/A, 0.00, N/A)	330.2	N/A	0.8993 [1.0000]	89.9% { 82.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 697796	(6.14, N/A) (N/A, -0.07, N/A)	951.6	N/A	1.7677 [2.0000]	88.4% { 90.4% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 428584	(8.06, N/A) (N/A, -0.04, N/A)	994.4	N/A	1.9293 [2.0000]	96.5% { 95.7% }			
13C8_PFOS_EIS	(507.0 / 80.0) 571705	(9.50, N/A) (N/A, -0.01, N/A)	260.8	N/A	1.9769 [2.0000]	98.8% { 89.4% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 78936	(5.83, N/A) (N/A, -0.07, N/A)	478.1	N/A	3.4214 [4.0000]	85.5% { 84.5% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 105887	(7.57, N/A) (N/A, -0.05, N/A)	691.7	N/A	3.7537 [4.0000]	93.8% { 95.2% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 96036	(9.01, N/A) (N/A, -0.02, N/A)	421.4	N/A	3.4124 [4.0000]	85.3% { 86.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 847968	(10.18, N/A) (N/A, 0.01, N/A)	719.4	N/A	1.9385 [2.0000]	96.9% { 81.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 230574	(10.60, N/A) (N/A, 0.01, N/A)	1171.6	N/A	2.0534 [2.0000]	102.7% { 98.5% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 196509	(10.69, N/A) (N/A, 0.01, N/A)	1161.0	N/A	2.0171 [2.0000]	100.9% { 91.6% }			

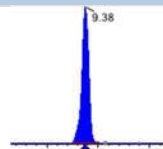
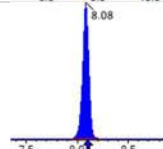
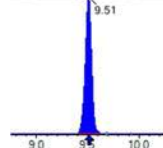
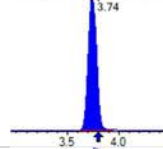
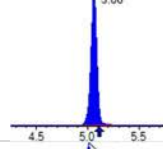
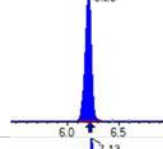
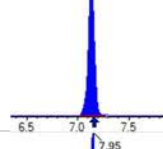
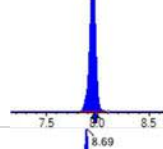
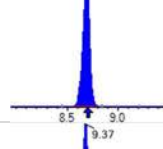
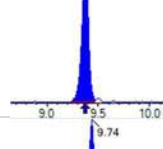
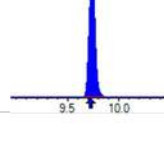
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 260484	(9.54, N/A) (N/A, -0.01, N/A)	386.9	N/A	3.8055 [4.0000]	95.1% { 82.4% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 272663	(9.70, N/A) (N/A, 0.00, N/A)	417.6	N/A	4.4023 [4.0000]	110.1% { 92.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 418364	(10.57, N/A) (N/A, 0.01, N/A)	1173.5	N/A	19.4348 [20.0000]	97.2% { 92.2% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 178785	(10.67, N/A) (N/A, 0.01, N/A)	1185.1	N/A	16.5750 [20.0000]	82.9% { 74.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 733546	(6.52, N/A) (N/A, -0.06, N/A)	866.9	N/A	8.0456 [8.0000]	100.6% { 97.9% }			

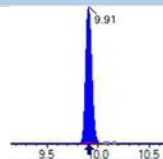
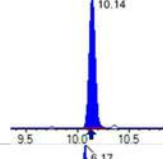
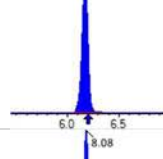
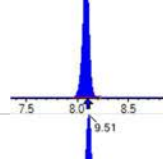
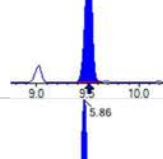
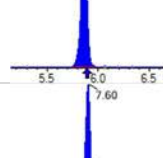
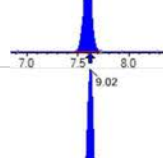
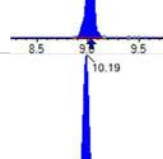
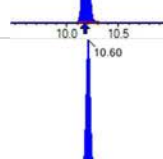
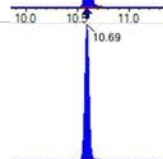
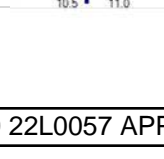
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 4688692	(3.74, 1.00) (0.00, N/A, 0.0)	67.7	N/A 0.0 0.0	77.9723 [80.0000]	97.5%			
PFPeA	(262.9 / 219.0) 3330388 (262.9 / 69.0) 38980	(5.06, 1.00) (0.00, N/A, -0.1)	804.8 523.8	0.0117 93.2 93.2	39.5875 [40.0000]	99.0%			
PFHxA	(313.0 / 269.0) 2377175 (313.0 / 119.0) 241227	(6.20, 1.00) (0.00, N/A, 0.0)	790.4 570.9	0.1015 109.6 109.6	19.0281 [20.0000]	95.1%			
PFHpA	(363.0 / 319.0) 2357674 (363.0 / 169.0) 748333	(7.14, 1.00) (0.00, N/A, -0.1)	675.2 652.6	0.3174 102.0 102.0	17.7184 [20.0000]	88.6%			
PFOA	(413.0 / 369.0) 2459526 (413.0 / 169.0) 826096	(7.95, 1.00) (0.00, N/A, 0.3)	628.7 788.4	0.3359 100.1 100.1	18.2471 [20.0000]	91.2%			
PFNA	(463.0 / 419.0) 1926887 (463.0 / 169.0) 412565	(8.69, 1.00) (0.00, N/A, 0.1)	634.4 132.5	0.2141 122.0 122.0	19.1543 [20.0000]	95.8%			
PFDA	(513.0 / 469.0) 2498676 (513.0 / 169.0) 235821	(9.37, 1.00) (0.00, N/A, 0.0)	446.1 344.2	0.0944 93.8 93.8	18.9370 [20.0000]	94.7%			
PFUnA	(563.0 / 519.0) 2929676 (563.0 / 169.0) 287215	(9.74, 1.00) (0.00, N/A, -0.2)	681.9 610.3	0.0980 107.1 107.1	18.9269 [20.0000]	94.6%			
PFDoA	(613.0 / 569.0) 3453314 (613.0 / 169.0) 494929	(9.91, 1.00) (0.00, N/A, 0.2)	849.9 599.3	0.1433 111.8 111.8	15.4888 [20.0000]	77.4%			
PFTTrDA	(663.0 / 619.0) 2925245 (663.0 / 169.0) 645894	(10.04, 1.01) (N/A, 0.01, 0.1)	743.2 712.8	0.2208 100.5 100.5	15.9142 [20.0000]	79.6%			
PFTTeDA	(713.0 / 669.0) 2499545 (713.0 / 169.0) 456882	(10.14, 1.00) (0.00, N/A, 0.0)	951.8 574.6	0.1828 98.2 98.2	19.9843 [20.0000]	99.9%			

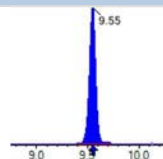
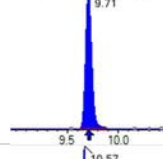
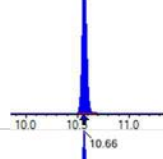
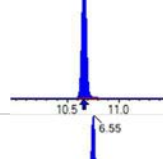
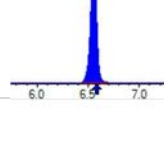
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 3757655 (298.9 / 99.0) 2441386	(6.17, 1.00) (0.00, N/A, 0.0)	602.3 832.3	0.6497 90.2 90.2	17.7624 [17.6947]	100.4%			
PFPeS	(349.0 / 80.0) 6568422 (349.0 / 99.0) 2617264	(7.21, 0.89) (N/A, -0.02, 0.0)	818.7 825.9	0.3985 106.4 106.4	17.9340 [18.7676]	95.6%			
PFHxS	(399.0 / 80.0) 5911094 (399.0 / 99.0) 1946919	(8.08, 1.00) (0.00, N/A, 0.0)	3565.9 3747.2	0.3294 102.1 102.1	17.6811 [18.2197]	97.0%			
PFHpS	(449.0 / 80.0) 5159277 (449.0 / 99.0) 1482433	(8.85, 0.93) (N/A, -0.01, 0.2)	592.5 492.7	0.2873 93.6 93.6	19.3240 [19.0281]	101.6%			
PFOS	(499.0 / 80.0) 5931805 (499.0 / 99.0) 1295228	(9.51, 1.00) (0.00, N/A, 0.0)	163.6 212.8	0.2184 95.1 95.1	18.2821 [18.5499]	98.6%			
PFNS	(549.0 / 80.0) 7772658 (549.0 / 99.0) 1843168	(9.79, 1.03) (N/A, 0.01, -0.1)	808.0 907.0	0.2371 91.5 91.5	19.4428 [19.1977]	101.3%			
PFDS	(599.0 / 80.0) 10158197 (599.0 / 99.0) 2355451	(9.93, 1.04) (N/A, 0.01, 0.0)	1102.2 819.7	0.2319 103.0 103.0	19.3285 [19.2621]	100.3%			
PFDoS	(698.9 / 80.0) 5031216 (698.9 / 99.0) 1167238	(10.13, 1.06) (N/A, 0.01, 0.2)	1431.9 1021.9	0.2320 114.6 114.6	18.9243 [19.3913]	97.6%			
4:2FTS	(327.0 / 307.0) 4897098 (327.0 / 81.0) 2772558	(5.86, 1.00) (0.00, N/A, 0.2)	829.2 946.7	0.5662 93.3 93.3	70.2511 [74.7622]	94.0%			
6:2FTS	(427.0 / 407.0) 2972329 (427.0 / 81.0) 2115496	(7.60, 1.00) (0.00, N/A, 0.0)	856.3 760.9	0.7117 109.5 109.5	68.4540 [75.9234]	90.2%			
8:2FTS	(527.0 / 507.0) 2782909 (527.0 / 81.0) 1808883	(9.02, 1.00) (-0.01, N/A, 0.0)	461.3 671.7	0.6500 103.7 103.7	65.4599 [76.6631]	85.4%			

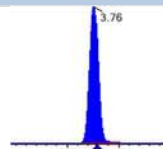
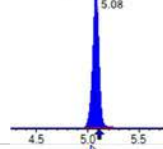
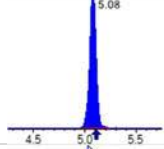
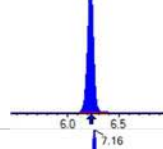
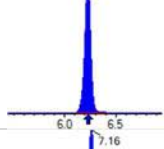
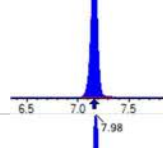
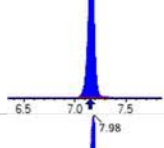
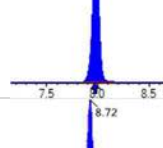
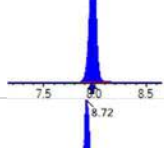
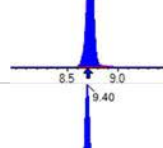
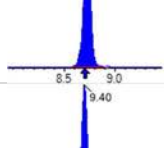
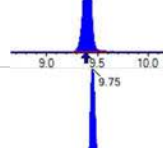
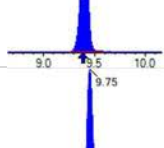
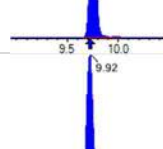
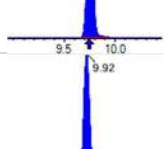
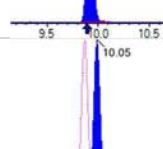
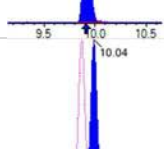
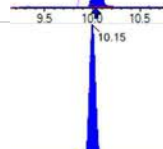
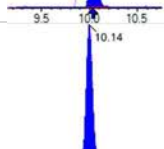
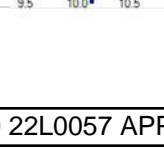
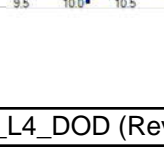
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 9069182 (498.0 / 478.0) 207569	(10.18 , 1.00) (0.00 , N/A , 0.0)	1135.9 345.4	0.0229 100.5 100.5	20.3605 [20.0000]	101.8%			
NMeFOSA	(511.9 / 219.0) 7740990 (511.9 / 169.0) 4998695	(10.61 , 1.00) (0.00 , N/A , 0.1)	1679.8 1340.5	0.6457 101.2 101.2	73.3469 [80.0000]	91.7%			
NEIFOSA	(526.0 / 219.0) 7877111 (526.0 / 169.0) 8539100	(10.70 , 1.00) (0.00 , N/A , 0.0)	1376.3 1523.9	1.0840 101.5 101.5	76.2663 [80.0000]	95.3%			
NMeFOSAA	(570.0 / 419.0) 1042920 (570.0 / 483.0) 540188	(9.55 , 1.00) (0.00 , N/A , -0.1)	585.0 419.3	0.5180 90.2 90.2	17.4314 [20.0000]	87.2%			
NEIFOSAA	(584.0 / 419.0) 1088468 (584.0 / 526.0) 663346	(9.71 , 1.00) (0.00 , N/A , -0.1)	848.7 1105.0	0.6094 107.5 107.5	18.9644 [20.0000]	94.8%			
NMeFOSE	(616.1 / 59.0) 2335585	(10.57 , 1.00) (0.01 , N/A , 0.0)	1246.3	N/A 0.0 0.0	71.7068 [80.0000]	89.6%			
NEtFOSE	(630.0 / 59.0) 578959	(10.67 , 1.00) (0.01 , N/A , 0.0)	1413.1	N/A 0.0 0.0	72.9246 [80.0000]	91.2%			
HFPO-DA	(285.0 / 169.0) 2133847 (285.0 / 185.0) 6265840	(6.55 , 1.00) (0.00 , N/A , 0.1)	927.0 919.7	2.9364 111.6 111.6	35.0205 [40.0000]	87.6%			
ADONA	(377.0 / 85.0) 8536816 (377.0 / 251.0) 1082323	(7.45 , 1.14) (N/A , -0.02 , 0.1)	1013.5 795.1	0.1268 107.5 107.5	32.8542 [37.7080]	87.1%			
9CI-Pf3ONS	(531.0 / 351.0) 22576070 (533.0 / 353.0) 7647544	(9.74 , 1.49) (N/A , 0.01 , 0.0)	783.3 820.4	0.3387 116.8 116.8	30.6427 [37.3302]	82.1%			
11CI-PF3OUDS	(631.0 / 451.0) 16063589 (633.0 / 453.0) 5234603	(10.02 , 1.53) (N/A , 0.01 , -0.1)	1165.9 983.2	0.3259 103.3 103.3	34.0222 [37.7283]	90.2%			

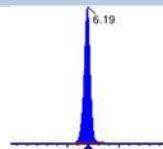
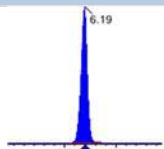
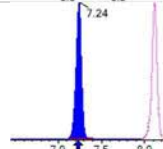
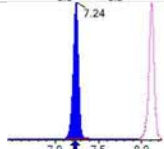
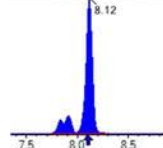
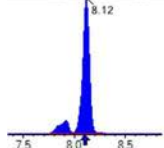
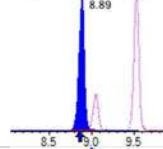
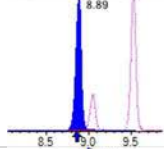
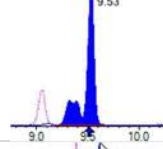
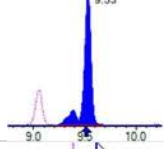
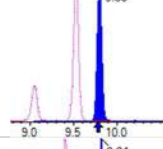
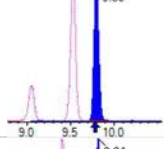
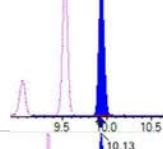
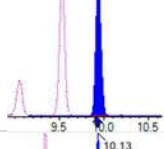
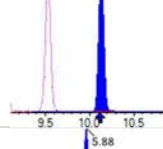
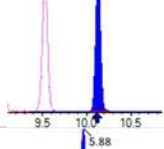
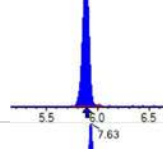
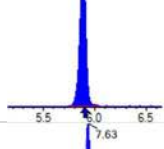
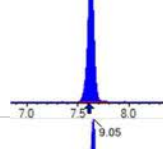
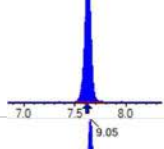
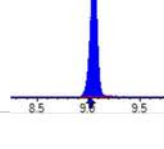
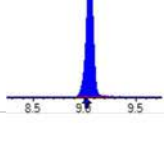
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 283938 (241.0 / 117.0) 495694	(4.56, 0.90) (N/A, -0.06, 0.0)	665.5 702.3	1.7458 106.5 106.5	80.3094 [80.0000]	100.4%			
5:3FTCA	(341.0 / 236.7) 1975368 (341.0 / 217.0) 3470127	(6.85, 1.10) (N/A, -0.02, 0.1)	677.0 551.1	1.7567 111.5 111.5	79.0218 [80.0000]	98.8%			
7:3FTCA	(441.0 / 317.0) 2568686 (441.0 / 337.0) 2111982	(8.67, 1.40) (N/A, -0.01, 0.1)	566.7 681.6	0.8222 98.1 98.1	82.1271 [80.0000]	102.7%			
PFEESA	(315.0 / 135.0) 4823528 (315.0 / 83.0) 1507646	(6.67, 1.08) (N/A, -0.03, 0.0)	1007.0 779.3	0.3126 101.9 101.9	35.4552 [35.6984]	99.3%			
PFMPA	(229.0 / 85.0) 871640	(4.24, 0.84) (N/A, -0.06, 0.0)	1146.3	N/A 0.0 0.0	38.1689 [40.0000]	95.4%			
PFMBA	(279.0 / 85.0) 3074062	(5.44, 1.08) (N/A, -0.05, 0.0)	1031.4	N/A 0.0 0.0	40.2223 [40.0000]	100.6%			
NFDHA	(201.0 / 85.0) 114145 (295.0 / 201.0) 780887	(6.09, 0.98) (N/A, -0.03, 0.1)	567.7 566.6	6.8412 103.9 103.9	44.9359 [40.0000]	112.3%			
13C3_PFBA_IIS	(216.0 / 172.0) 114493	(3.74, N/A) (N/A, -0.06, N/A)	635.4	N/A	0.9436 [1.0000]	94.4% { 90.4% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 187062	(6.21, N/A) (N/A, -0.03, N/A)	592.0	N/A	1.0251 [1.0000]	102.5% { 95.6% }			
13C4_PFOA_IIS	(417.0 / 372.0) 186291	(7.95, N/A) (N/A, -0.01, N/A)	605.0	N/A	1.0672 [1.0000]	106.7% { 105.7% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 135981	(8.69, N/A) (N/A, -0.01, N/A)	247.7	N/A	1.0007 [1.0000]	100.1% { 103.1% }			

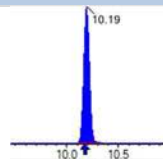
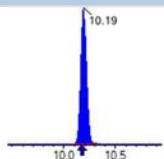
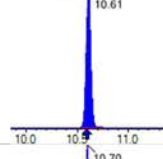
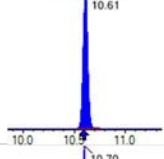
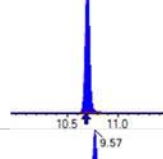
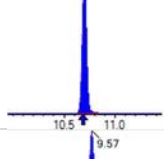
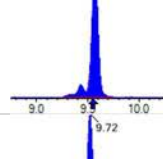
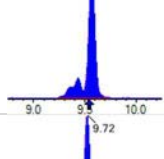
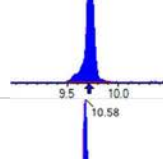
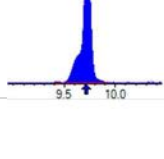
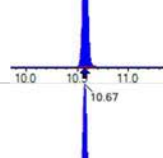
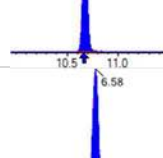
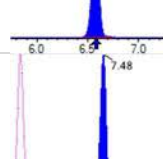
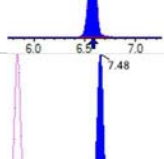
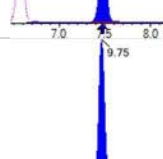
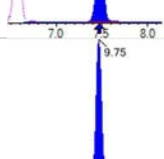
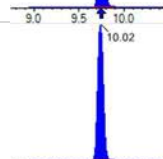
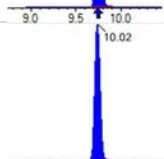
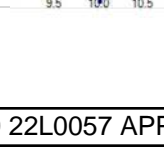
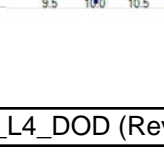
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 147905	(9.38, N/A) (N/A, 0.00, N/A)	431.1	N/A	1.0659 [1.0000]	106.6% { 104.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 311645	(8.08, N/A) (N/A, -0.02, N/A)	686.7	N/A	0.9656 [1.0000]	96.6% { 92.9% }			
13C4_PFOS_IIS	(502.8 / 79.9) 252700	(9.51, N/A) (N/A, 0.00, N/A)	337.3	N/A	1.0035 [1.0000]	100.3% { 91.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 684831	(3.74, N/A) (N/A, -0.06, N/A)	845.1	N/A	7.8470 [8.0000]	98.1% { 86.1% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 379103	(5.06, N/A) (N/A, -0.05, N/A)	741.2	N/A	3.6596 [4.0000]	91.5% { 88.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 281946	(6.20, N/A) (N/A, -0.02, N/A)	610.9	N/A	1.7885 [2.0000]	89.4% { 89.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 287552	(7.13, N/A) (N/A, -0.02, N/A)	873.7	N/A	2.1012 [2.0000]	105.1% { 99.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 269768	(7.95, N/A) (N/A, -0.01, N/A)	663.6	N/A	1.8885 [2.0000]	94.4% { 99.5% }			
13C9_PFNA_EIS	(472.0 / 427.0) 110346	(8.69, N/A) (N/A, -0.01, N/A)	452.2	N/A	1.0533 [1.0000]	105.3% { 102.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 130493	(9.37, N/A) (N/A, 0.00, N/A)	305.9	N/A	0.9199 [1.0000]	92.0% { 107.2% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 178434	(9.74, N/A) (N/A, 0.01, N/A)	464.0	N/A	0.9159 [1.0000]	91.6% { 96.1% }			

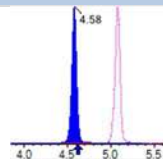
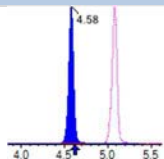
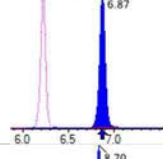
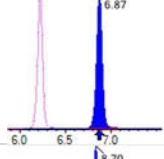
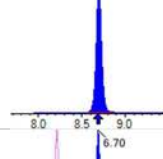
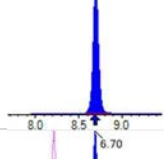
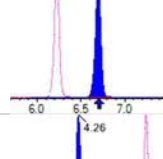
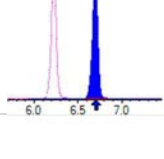
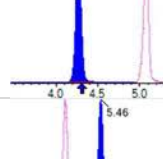
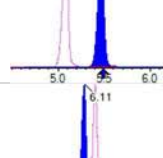
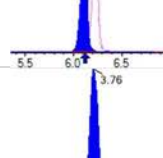
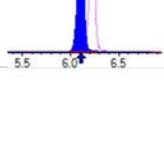
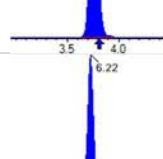
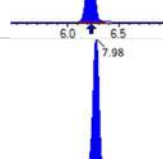
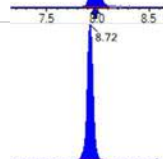
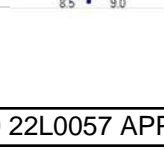
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 257456	(9.91, N/A) (N/A, 0.01, N/A)	391.4	N/A	1.0746 [1.0000]	107.5% { 105.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 136863	(10.14, N/A) (N/A, 0.01, N/A)	378.5	N/A	0.9098 [1.0000]	91.0% { 92.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 748814	(6.17, N/A) (N/A, -0.03, N/A)	711.0	N/A	2.0883 [2.0000]	104.4% { 97.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 416312	(8.08, N/A) (N/A, -0.02, N/A)	731.6	N/A	2.0630 [2.0000]	103.1% { 92.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 590136	(9.51, N/A) (N/A, 0.00, N/A)	170.7	N/A	1.8757 [2.0000]	93.8% { 92.3% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 85514	(5.86, N/A) (N/A, -0.03, N/A)	560.8	N/A	4.0803 [4.0000]	102.0% { 91.6% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 106557	(7.60, N/A) (N/A, -0.02, N/A)	569.5	N/A	4.1584 [4.0000]	104.0% { 95.8% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 119405	(9.02, N/A) (N/A, 0.00, N/A)	289.6	N/A	4.6705 [4.0000]	116.8% { 107.9% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 908197	(10.19, N/A) (N/A, 0.01, N/A)	1146.9	N/A	1.9084 [2.0000]	95.4% { 87.7% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 253716	(10.60, N/A) (N/A, 0.01, N/A)	1340.9	N/A	2.0769 [2.0000]	103.8% { 108.4% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 223470	(10.69, N/A) (N/A, 0.01, N/A)	1517.1	N/A	2.1085 [2.0000]	105.4% { 104.2% }			

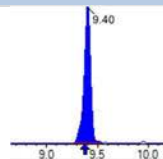
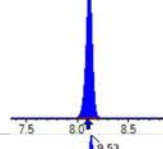
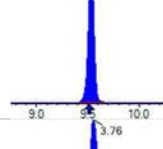
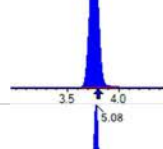
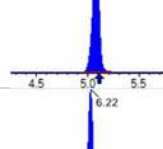
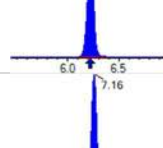
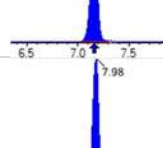
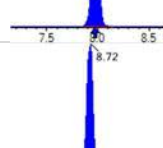
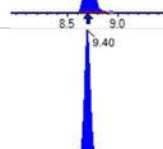
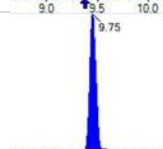
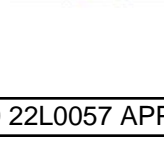
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 309586	(9.55, N/A) (N/A, 0.00, N/A)	419.4	N/A	4.1573 [4.0000]	103.9% { 97.9% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 263732	(9.71, N/A) (N/A, 0.00, N/A)	317.3	N/A	3.9139 [4.0000]	97.8% { 89.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 482842	(10.57, N/A) (N/A, 0.01, N/A)	1191.7	N/A	20.6172 [20.0000]	103.1% { 106.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 234695	(10.66, N/A) (N/A, 0.01, N/A)	1522.8	N/A	19.9997 [20.0000]	100.0% { 97.8% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 788228	(6.55, N/A) (N/A, -0.02, N/A)	964.4	N/A	8.1626 [8.0000]	102.0% { 105.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 11470362	(3.76, 1.00) (0.00, N/A, 0.0)	66.5	N/A 0.0 0.0	202.6105 [200.0000]	101.3%			
PFPeA	(262.9 / 219.0) 8315567 (262.9 / 69.0) 91389	(5.08, 1.00) (0.00, N/A, 0.0)	723.9 723.5	0.0110 87.5 87.5	98.3425 [100.0000]	98.3%			
PFHxA	(313.0 / 269.0) 6767310 (313.0 / 119.0) 650518	(6.22, 1.00) (0.00, N/A, -0.1)	715.1 701.7	0.0961 103.8 103.8	47.6913 [50.0000]	95.4%			
PFHpA	(363.0 / 319.0) 5990106 (363.0 / 169.0) 1833124	(7.16, 1.00) (0.00, N/A, 0.0)	680.0 785.5	0.3060 98.3 98.3	51.2223 [50.0000]	102.4%			
PFOA	(413.0 / 369.0) 6041032 (413.0 / 169.0) 1990367	(7.98, 1.00) (0.00, N/A, -0.2)	703.7 824.1	0.3295 98.2 98.2	46.9755 [50.0000]	94.0%			
PFNA	(463.0 / 419.0) 4600977 (463.0 / 169.0) 910948	(8.72, 1.00) (0.00, N/A, 0.1)	760.0 104.5	0.1980 112.8 112.8	54.5440 [50.0000]	109.1%			
PFDA	(513.0 / 469.0) 6516009 (513.0 / 169.0) 654510	(9.40, 1.00) (0.00, N/A, -0.1)	529.6 381.3	0.1004 99.8 99.8	42.6385 [50.0000]	85.3%			
PFUnA	(563.0 / 519.0) 5799044 (563.0 / 169.0) 591475	(9.75, 1.00) (0.00, N/A, -0.1)	575.4 543.5	0.1020 111.4 111.4	48.1603 [50.0000]	96.3%			
PFDoA	(613.0 / 569.0) 8967714 (613.0 / 169.0) 982033	(9.92, 1.00) (0.00, N/A, 0.0)	1540.9 455.5	0.1095 85.4 85.4	51.5513 [50.0000]	103.1%			
PFTTrDA	(663.0 / 619.0) 6376637 (663.0 / 169.0) 1321177	(10.05, 1.01) (N/A, 0.02, 0.0)	1119.7 848.5	0.2072 94.3 94.3	44.4621 [50.0000]	88.9%			
PFTTeDA	(713.0 / 669.0) 5403890 (713.0 / 169.0) 1098990	(10.15, 1.00) (0.00, N/A, 0.1)	758.0 757.7	0.2034 109.3 109.3	46.1686 [50.0000]	92.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 8541359 (298.9 / 99.0) 5686555	(6.19, 1.00) (0.00, N/A, 0.0)	934.8 766.6	0.6658 92.4 92.4	39.7256 [44.2367]	89.8%			
PFPeS	(349.0 / 80.0) 15452970 (349.0 / 99.0) 6191428	(7.24, 0.89) (N/A, 0.00, -0.1)	995.9 852.0	0.4007 107.0 107.0	43.9187 [46.9191]	93.6%			
PFHxS	(399.0 / 80.0) 13968968 (399.0 / 99.0) 4931016	(8.12, 1.00) (0.00, N/A, 0.0)	3622.1 4468.3	0.3530 109.4 109.4	43.4937 [45.5491]	95.5%			
PFHpS	(449.0 / 80.0) 13170515 (449.0 / 99.0) 3561220	(8.89, 0.93) (N/A, 0.02, 0.1)	692.2 785.4	0.2704 88.1 88.1	50.5623 [47.5703]	106.3%			
PFOS	(499.0 / 80.0) 14917353 (499.0 / 99.0) 3248846	(9.53, 1.00) (0.00, N/A, 0.1)	140.8 192.3	0.2178 94.9 94.9	47.1245 [46.3746]	101.6%			
PFNS	(549.0 / 80.0) 18226440 (549.0 / 99.0) 4379313	(9.80, 1.03) (N/A, 0.02, 0.1)	1740.0 1149.3	0.2403 92.7 92.7	46.7313 [47.9943]	97.4%			
PFDS	(599.0 / 80.0) 23076288 (599.0 / 99.0) 5772636	(9.94, 1.04) (N/A, 0.02, 0.1)	1279.5 795.7	0.2502 111.1 111.1	45.0053 [48.1553]	93.5%			
PFDoS	(698.9 / 80.0) 12186331 (698.9 / 99.0) 2982624	(10.13, 1.06) (N/A, 0.01, 0.2)	1053.8 1139.4	0.2448 120.9 120.9	46.9825 [48.4781]	96.9%			
4:2FTS	(327.0 / 307.0) 11644393 (327.0 / 81.0) 6324342	(5.88, 1.00) (0.00, N/A, -0.1)	786.8 696.4	0.5431 89.5 89.5	180.3049 [186.9055]	96.5%			
6:2FTS	(427.0 / 407.0) 7746824 (427.0 / 81.0) 5184764	(7.63, 1.00) (0.00, N/A, 0.0)	956.4 944.1	0.6693 103.0 103.0	168.3875 [189.8085]	88.7%			
8:2FTS	(527.0 / 507.0) 6761796 (527.0 / 81.0) 4489667	(9.05, 1.00) (0.00, N/A, 0.0)	525.4 582.4	0.6640 105.9 105.9	146.8970 [191.6577]	76.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 22092580 (498.0 / 478.0) 454296	(10.19 , 1.00) (0.00 , N/A , 0.0)	1270.8 861.7	0.0206 90.3 90.3	48.9364 [50.0000]	97.9%			
NMeFOSA	(511.9 / 219.0) 16072494 (511.9 / 169.0) 11262982	(10.61 , 1.00) (0.00 , N/A , 0.1)	1047.8 1240.4	0.7008 109.8 109.8	153.3555 [200.0000]	76.7%			
NEIFOSA	(526.0 / 219.0) 15694478 (526.0 / 169.0) 17174561	(10.70 , 1.00) (0.00 , N/A , 0.0)	1348.6 1422.8	1.0943 102.5 102.5	194.2715 [200.0000]	97.1%			
NMeFOSAA	(570.0 / 419.0) 3005200 (570.0 / 483.0) 1479949	(9.57 , 1.00) (0.00 , N/A , 0.1)	852.9 828.7	0.4925 85.8 85.8	50.8089 [50.0000]	101.6%			
NEIFOSAA	(584.0 / 419.0) 2418120 (584.0 / 526.0) 1556640	(9.72 , 1.00) (0.00 , N/A , -0.1)	1119.8 1415.0	0.6437 113.6 113.6	54.6864 [50.0000]	109.4%			
NMeFOSE	(616.1 / 59.0) 5492001	(10.58 , 1.00) (0.01 , N/A , 0.0)	1238.2	N/A 0.0 0.0	185.1525 [200.0000]	92.6%			
NEIFOSE	(630.0 / 59.0) 1261205	(10.67 , 1.00) (0.01 , N/A , 0.0)	1481.8	N/A 0.0 0.0	189.2354 [200.0000]	94.6%			
HFPO-DA	(285.0 / 169.0) 5516478 (285.0 / 185.0) 15676308	(6.58 , 1.00) (0.00 , N/A , -0.2)	960.9 806.1	2.8417 108.0 108.0	103.1225 [100.0000]	103.1%			
ADONA	(377.0 / 85.0) 20477129 (377.0 / 251.0) 2497987	(7.48 , 1.14) (N/A , 0.01 , 0.0)	948.9 878.0	0.1220 103.5 103.5	89.7628 [94.2700]	95.2%			
9CI-Pf3ONS	(531.0 / 351.0) 47772779 (533.0 / 353.0) 16446558	(9.75 , 1.48) (N/A , 0.02 , -0.1)	678.9 678.9	0.3443 118.7 118.7	73.8570 [93.3254]	79.1%			
11CI-PF3OUDS	(631.0 / 451.0) 33910798 (633.0 / 453.0) 12404060	(10.02 , 1.52) (N/A , 0.01 , 0.0)	943.3 1236.0	0.3658 116.0 116.0	81.8070 [94.3208]	86.7%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min] , R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 761112 (241.0 / 117.0) 1282860	(4.58, 0.90) (N/A, -0.04, 0.0)	705.6 770.3	1.6855 102.8 102.8	214.1791 [200.0000]	107.1%			
5:3FTCA	(341.0 / 236.7) 5575829 (341.0 / 217.0) 9233021	(6.87, 1.10) (N/A, 0.00, 0.0)	728.8 822.4	1.6559 105.1 105.1	196.3804 [200.0000]	98.2%			
7:3FTCA	(441.0 / 317.0) 6780790 (441.0 / 337.0) 5662108	(8.70, 1.40) (N/A, 0.02, 0.0)	704.1 693.4	0.8350 99.7 99.7	190.8734 [200.0000]	95.4%			
PFEESA	(315.0 / 135.0) 11558055 (315.0 / 83.0) 3704955	(6.70, 1.08) (N/A, 0.00, 0.0)	1032.2 1133.1	0.3206 104.5 104.5	74.7980 [89.2459]	83.8%			
PFMPA	(229.0 / 85.0) 2190560	(4.26, 0.84) (N/A, -0.04, 0.0)	1016.4	N/A 0.0 0.0	95.4364 [100.0000]	95.4%			
PFMBA	(279.0 / 85.0) 7139668	(5.46, 1.08) (N/A, -0.03, 0.0)	768.5	N/A 0.0 0.0	92.9435 [100.0000]	92.9%			
NFDHA	(201.0 / 85.0) 277330 (295.0 / 201.0) 1807093	(6.11, 0.98) (N/A, -0.01, 0.2)	795.4 744.3	6.5160 98.9 98.9	96.2635 [100.0000]	96.3%			
13C3_PFBA_IIS	(216.0 / 172.0) 104543	(3.76, N/A) (N/A, -0.04, N/A)	645.3	N/A	0.8616 [1.0000]	86.2% {82.5%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 181809	(6.22, N/A) (N/A, -0.01, N/A)	454.1	N/A	0.9963 [1.0000]	99.6% {92.9%}			
13C4_PFOA_IIS	(417.0 / 372.0) 163041	(7.98, N/A) (N/A, 0.02, N/A)	640.6	N/A	0.9340 [1.0000]	93.4% {92.5%}			
13C5_PFNA_IIS	(468.0 / 423.0) 139127	(8.72, N/A) (N/A, 0.02, N/A)	693.7	N/A	1.0238 [1.0000]	102.4% {105.4%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 128290	(9.40, N/A) (N/A, 0.03, N/A)	340.7	N/A	0.9246 [1.0000]	92.5% { 90.8% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 321490	(8.12, N/A) (N/A, 0.01, N/A)	974.0	N/A	0.9961 [1.0000]	99.6% { 95.9% }			
13C4_PFOS_IIS	(502.8 / 79.9) 273939	(9.53, N/A) (N/A, 0.02, N/A)	312.2	N/A	1.0878 [1.0000]	108.8% { 99.3% }			
13C4_PFBA_EIS	(217.0 / 172.0) 644745	(3.76, N/A) (N/A, -0.04, N/A)	795.5	N/A	8.0907 [8.0000]	101.1% { 81.1% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 381041	(5.08, N/A) (N/A, -0.03, N/A)	724.3	N/A	3.7846 [4.0000]	94.6% { 89.4% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 320241	(6.22, N/A) (N/A, 0.00, N/A)	776.8	N/A	2.0901 [2.0000]	104.5% { 101.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 252716	(7.16, N/A) (N/A, 0.00, N/A)	542.6	N/A	1.9000 [2.0000]	95.0% { 87.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 257379	(7.98, N/A) (N/A, 0.02, N/A)	708.6	N/A	2.0587 [2.0000]	102.9% { 94.9% }			
13C9_PFNA_EIS	(472.0 / 427.0) 92528	(8.72, N/A) (N/A, 0.02, N/A)	251.4	N/A	0.8632 [1.0000]	86.3% { 85.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 151137	(9.40, N/A) (N/A, 0.03, N/A)	419.3	N/A	1.2284 [1.0000]	122.8% { 124.2% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 138805	(9.75, N/A) (N/A, 0.02, N/A)	316.1	N/A	0.8214 [1.0000]	82.1% { 74.7% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03823-CAL8
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-13B012.wiff-0
 Acquired: 2022/12/13 - 21:32

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 200876	(9.92, N/A) (N/A, 0.02, N/A)	471.6	N/A	0.9666 [1.0000]	96.7% { 82.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 128078	(10.15, N/A) (N/A, 0.02, N/A)	316.1	N/A	0.9816 [1.0000]	98.2% { 86.1% }			
13C3_PFBs_EIS	(302.0 / 80.0) 761055	(6.19, N/A) (N/A, -0.01, N/A)	1156.7	N/A	2.0574 [2.0000]	102.9% { 98.6% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 399943	(8.11, N/A) (N/A, 0.01, N/A)	910.5	N/A	1.9212 [2.0000]	96.1% { 89.3% }			
13C8_PFOS_EIS	(507.0 / 80.0) 575753	(9.53, N/A) (N/A, 0.02, N/A)	125.7	N/A	1.6881 [2.0000]	84.4% { 90.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 79224	(5.88, N/A) (N/A, -0.01, N/A)	509.6	N/A	3.6644 [4.0000]	91.6% { 84.8% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 112902	(7.62, N/A) (N/A, 0.01, N/A)	537.4	N/A	4.2710 [4.0000]	106.8% { 101.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 129285	(9.05, N/A) (N/A, 0.02, N/A)	546.8	N/A	4.9021 [4.0000]	122.6% { 116.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 920482	(10.19, N/A) (N/A, 0.02, N/A)	997.6	N/A	1.7842 [2.0000]	89.2% { 88.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 251952	(10.61, N/A) (N/A, 0.01, N/A)	739.2	N/A	1.9026 [2.0000]	95.1% { 107.7% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 174792	(10.70, N/A) (N/A, 0.01, N/A)	753.0	N/A	1.5213 [2.0000]	76.1% { 81.5% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

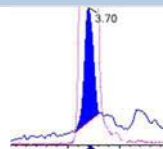
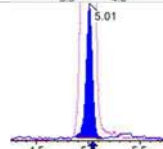
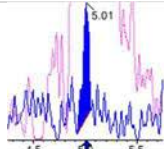
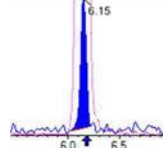
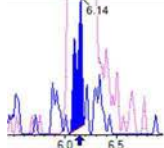
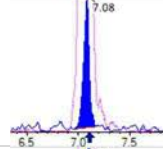
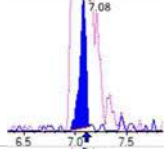
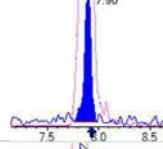
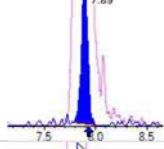
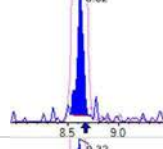
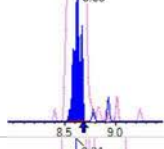
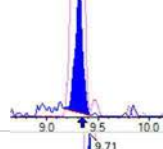
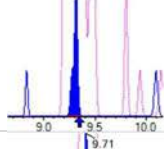
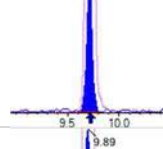
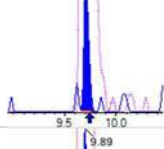
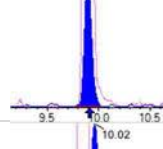
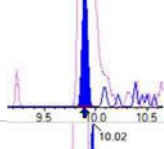
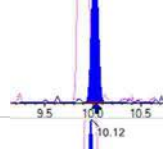
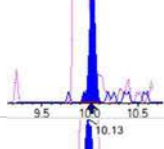
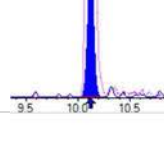
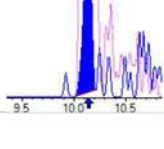
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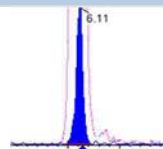
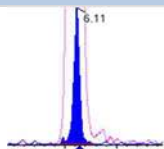
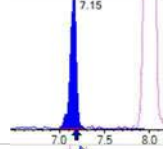
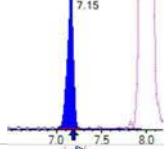
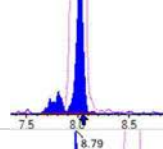
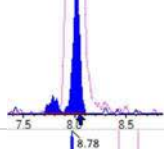
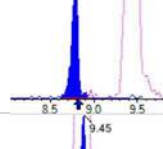
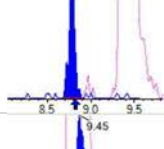
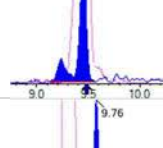
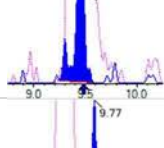
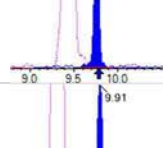
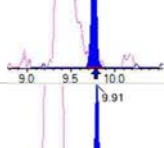
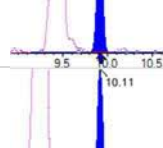
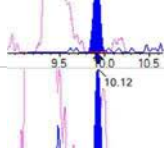
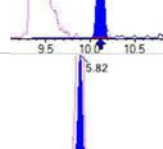
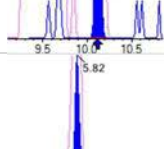
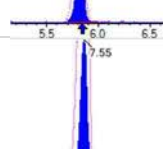
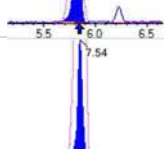
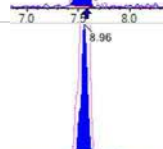
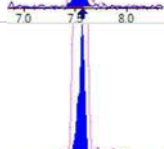
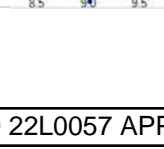
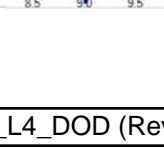
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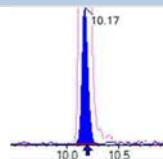
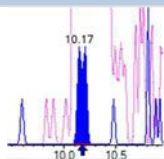
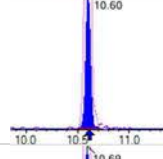
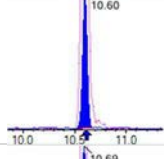
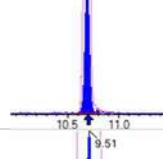
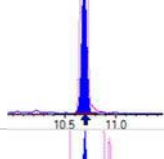
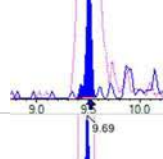
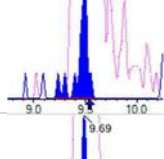
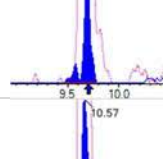
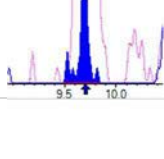
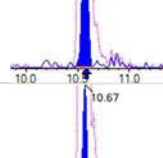
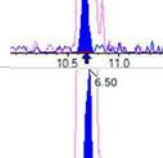
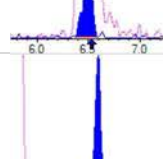
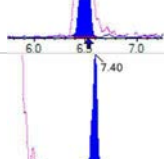
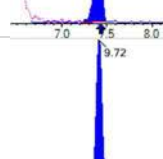
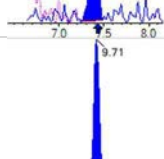
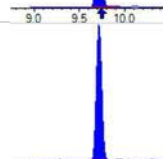
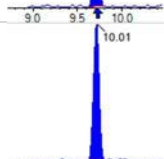
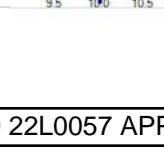
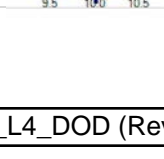
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 306054	(9.57, N/A) (N/A, 0.02, N/A)	360.1	N/A	3.7912 [4.0000]	94.8% { 96.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 203181	(9.72, N/A) (N/A, 0.01, N/A)	228.8	N/A	2.7816 [4.0000]	69.5% { 68.6% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 439714	(10.57, N/A) (N/A, 0.01, N/A)	1053.2	N/A	17.3200 [20.0000]	86.6% { 96.9% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 197021	(10.67, N/A) (N/A, 0.01, N/A)	1107.7	N/A	15.4877 [20.0000]	77.4% { 82.1% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 692021	(6.57, N/A) (N/A, 0.00, N/A)	808.8	N/A	7.3734 [8.0000]	92.2% { 92.4% }			

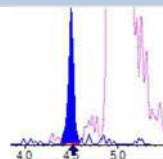
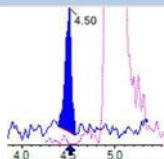
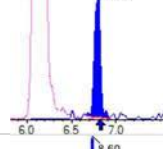
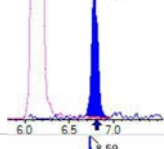
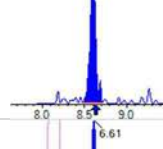
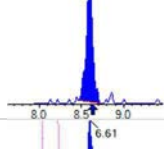
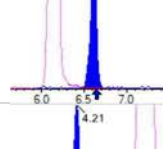
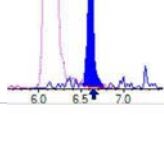
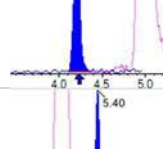
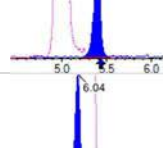
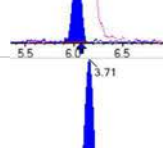
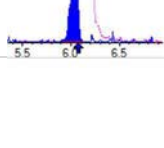
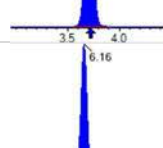
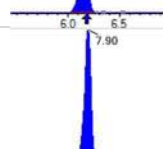
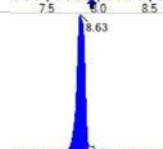
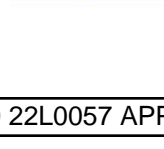
EPA 1633

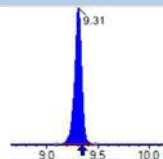
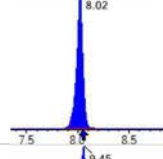
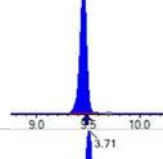
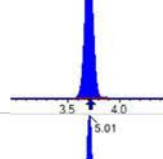
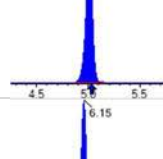
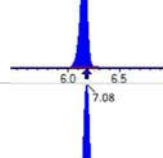
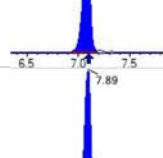
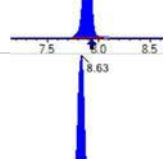
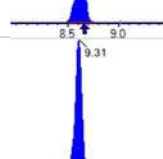
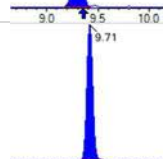
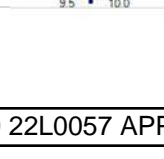
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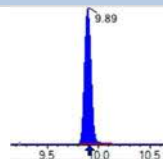
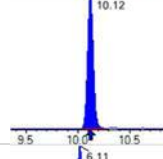
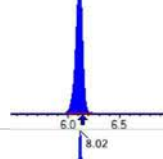
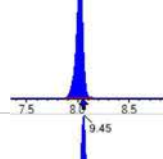
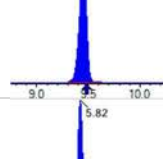
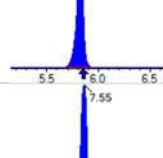
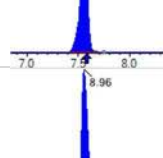
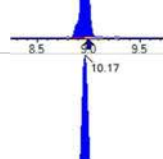
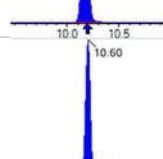
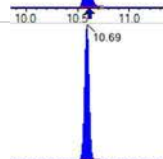
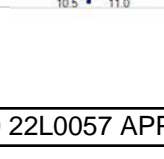
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 33232	(3.70, 1.00) (0.00, N/A, 0.0)	38.7	N/A 0.0 0.0	0.3669 [0.4000]	91.7%			
PFPeA	(262.9 / 219.0) 29292 (262.9 / 69.0) 400	(5.01, 1.00) (0.00, N/A, 0.0)	185.1 11.6	0.0136 121.9 121.9	0.2148 [0.2000]	107.4%			
PFHxA	(313.0 / 269.0) 21402 (313.0 / 119.0) 1522	(6.15, 1.00) (0.00, N/A, 0.9)	65.5 16.5	0.0711 72.7 72.7	0.0985 [0.1000]	98.5%			
PFHpA	(363.0 / 319.0) 20982 (363.0 / 169.0) 6156	(7.08, 1.00) (0.00, N/A, 0.1)	90.6 69.9	0.2934 94.2 94.2	0.1029 [0.1000]	102.9%			
PFOA	(413.0 / 369.0) 24265 (413.0 / 169.0) 8577	(7.90, 1.00) (0.00, N/A, 0.2)	63.6 78.4	0.3535 108.2 108.2	0.1081 [0.1000]	108.1%			
PFNA	(463.0 / 419.0) 12946 (463.0 / 169.0) 4470	(8.62, 1.00) (-0.01, N/A, -0.3)	48.4 29.7	0.3453 179.1 179.1	0.0879 [0.1000]	87.9%			IR2,
PFDA	(513.0 / 469.0) 23366 (513.0 / 169.0) 1070	(9.32, 1.00) (0.00, N/A, 0.1)	57.7 566.2	0.0458 47.9 47.9	0.1078 [0.1000]	107.8%			IR1,
PFUnA	(563.0 / 519.0) 38565 (563.0 / 169.0) 3911	(9.71, 1.00) (0.00, N/A, 0.1)	137.9 44.4	0.1014 116.8 116.8	0.1273 [0.1000]	127.3%			
PFDoA	(613.0 / 569.0) 35780 (613.0 / 169.0) 5060	(9.89, 1.00) (0.00, N/A, -0.1)	145.7 35.8	0.1414 101.6 101.6	0.1293 [0.1000]	129.3%			
PFTrDA	(663.0 / 619.0) 31090 (663.0 / 169.0) 6638	(10.02, 1.01) (N/A, -0.01, -0.4)	110.4 53.1	0.2135 104.3 104.3	0.1296 [0.1000]	129.6%			
PFTeDA	(713.0 / 669.0) 25589 (713.0 / 169.0) 4161	(10.12, 1.00) (0.00, N/A, -0.5)	94.3 12.4	0.1626 79.9 79.9	0.1029 [0.1000]	102.9%			

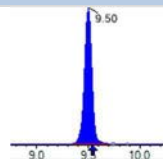
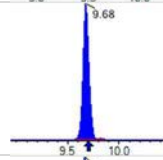
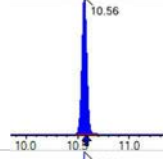
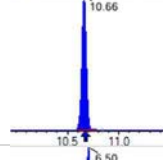
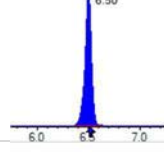
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 31824 (298.9 / 99.0) 25667	(6.11, 1.00) (0.00, N/A, -0.1)	228.6 158.1	0.8066 131.1 131.1	0.0899 [0.0885]	101.6%			
PFPeS	(349.0 / 80.0) 61392 (349.0 / 99.0) 26354	(7.15, 0.89) (N/A, -0.03, -0.1)	200.8 251.0	0.4293 120.6 120.6	0.0959 [0.0938]	102.2%			
PFHxS	(399.0 / 80.0) 54752 (399.0 / 99.0) 16706	(8.02, 1.00) (0.00, N/A, 0.2)	16908.1 6180.4	0.3051 90.8 90.8	0.0983 [0.0911]	107.9%			
PFHpS	(449.0 / 80.0) 40149 (449.0 / 99.0) 13981	(8.79, 0.93) (N/A, -0.03, 0.3)	153.7 102.5	0.3482 127.2 127.2	0.0837 [0.0951]	88.0%			
PFOS	(499.0 / 80.0) 63112 (499.0 / 99.0) 14475	(9.45, 1.00) (0.00, N/A, -0.1)	158.9 43.2	0.2294 94.3 94.3	0.1057 [0.0927]	114.0%			
PFNS	(549.0 / 80.0) 63295 (549.0 / 99.0) 15388	(9.76, 1.03) (N/A, -0.02, -0.6)	172.2 304.3	0.2431 99.6 99.6	0.0956 [0.0960]	99.6%			
PFDS	(599.0 / 80.0) 66751 (599.0 / 99.0) 15205	(9.91, 1.05) (N/A, -0.01, 0.0)	278.7 65.1	0.2278 101.2 101.2	0.0908 [0.0963]	94.3%			
PFDoS	(698.9 / 80.0) 32302 (698.9 / 99.0) 2212	(10.11, 1.07) (N/A, -0.01, -0.4)	151.2 18.9	0.0685 28.0 28.0	0.1051 [0.0970]	108.4%			IR1,
4:2FTS	(327.0 / 307.0) 73840 (327.0 / 81.0) 44310	(5.82, 1.00) (0.00, N/A, 0.1)	398.1 178.0	0.6001 121.5 121.5	0.3917 [0.3738]	104.8%			
6:2FTS	(427.0 / 407.0) 37991 (427.0 / 81.0) 30069	(7.55, 1.00) (0.00, N/A, 0.6)	171.3 166.4	0.7915 101.7 101.7	0.3927 [0.3796]	103.4%			
8:2FTS	(527.0 / 507.0) 54208 (527.0 / 81.0) 22387	(8.96, 1.00) (0.00, N/A, -0.5)	239.2 132.1	0.4130 73.0 73.0	0.5390 [0.3833]	140.6%			QC,

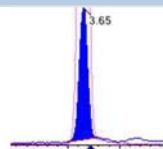
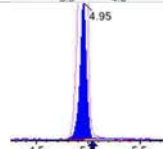
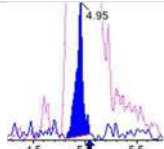
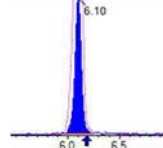
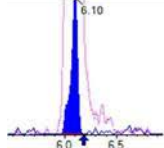
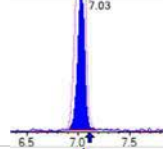
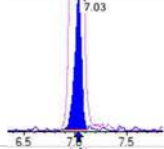
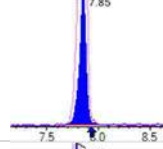
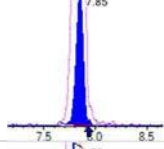
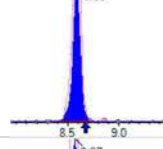
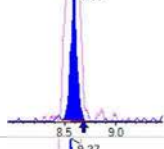
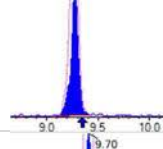
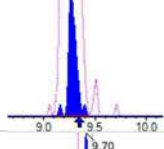
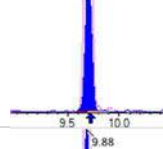
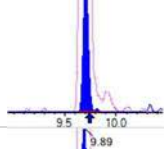
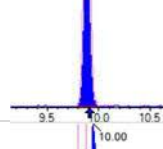
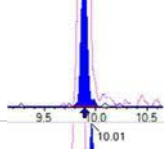
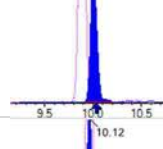
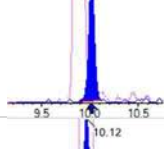
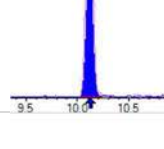
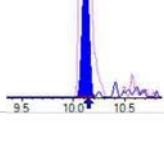
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 58943 (498.0 / 478.0) 1534	(10.17, 1.00) (0.00, N/A, -0.2)	160.7 16.7	0.0260 124.9 124.9	0.1005 [0.1000]	100.5%			
NMeFOSA	(511.9 / 219.0) 43872 (511.9 / 169.0) 26519	(10.60, 1.00) (0.00, N/A, 0.1)	298.9 244.3	0.6045 83.9 83.9	0.4219 [0.4000]	105.5%			
NEFOSA	(526.0 / 219.0) 44346 (526.0 / 169.0) 51516	(10.69, 1.00) (0.00, N/A, 0.0)	466.2 369.0	1.1617 109.8 109.8	0.3771 [0.4000]	94.3%			
NMeFOSAA	(570.0 / 419.0) 8400 (570.0 / 483.0) 3567	(9.51, 1.00) (0.01, N/A, 0.9)	51.6 212.6	0.4247 69.1 69.1	0.0791 [0.1000]	79.1%			
NEIFOSAA	(584.0 / 419.0) 14604 (584.0 / 526.0) 5838	(9.69, 1.00) (0.01, N/A, 0.0)	4382.3 108.5	0.3998 54.5 54.5	0.1309 [0.1000]	130.9%			QC,
NMeFOSE	(616.1 / 59.0) 9057	(10.57, 1.00) (0.00, N/A, 0.0)	71.0	N/A 0.0 0.0	0.3368 [0.4000]	84.2%			
NEtFOSE	(630.0 / 59.0) 2592	(10.67, 1.00) (0.01, N/A, 0.0)	55.9	N/A 0.0 0.0	0.5290 [0.4000]	132.3%			QC,
HFPO-DA	(285.0 / 169.0) 18333 (285.0 / 185.0) 52126	(6.50, 1.00) (0.00, N/A, 0.2)	196.1 229.6	2.8433 103.6 103.6	0.2191 [0.2000]	109.5%			
ADONA	(377.0 / 85.0) 66900 (377.0 / 251.0) 10886	(7.40, 1.14) (N/A, -0.03, 0.0)	225.5 39.2	0.1627 130.7 130.7	0.1800 [0.1885]	95.5%			
9CI-Pf3ONS	(531.0 / 351.0) 210135 (533.0 / 353.0) 57347	(9.72, 1.49) (N/A, -0.01, 0.2)	525.6 173.1	0.2729 92.2 92.2	0.1889 [0.1867]	101.2%			
11CI-PF3OUDS	(631.0 / 451.0) 110528 (633.0 / 453.0) 41123	(10.00, 1.54) (N/A, -0.01, -0.3)	422.1 246.1	0.3721 112.5 112.5	0.2127 [0.1886]	112.8%			

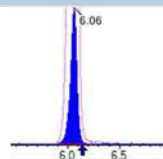
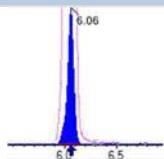
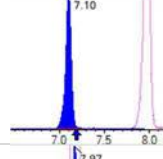
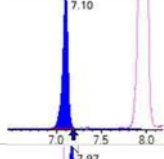
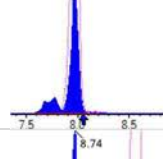
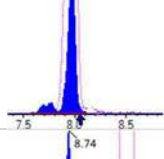
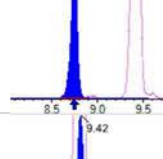
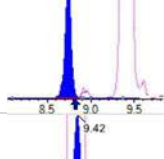
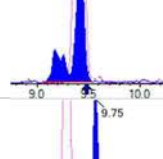
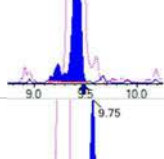
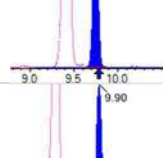
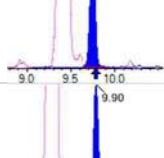
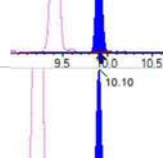
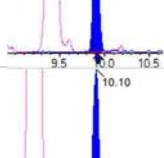
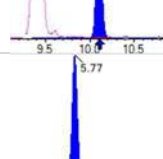
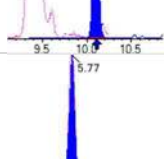
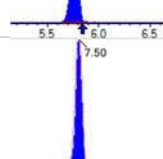
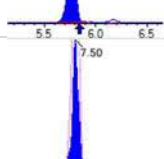
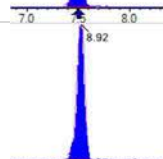
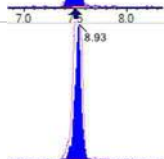
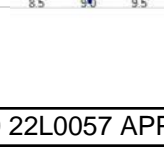
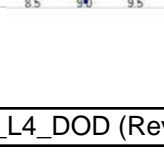
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 1752 (241.0 / 117.0) 3522	(4.50, 0.90) (N/A, -0.02, -0.1)	83.0 47.1	2.0106 120.1 120.1	0.3722 [0.4000]	93.0%			
5:3FTCA	(341.0 / 236.7) 13037 (341.0 / 217.0) 28648	(6.79, 1.10) (N/A, -0.03, 0.1)	86.9 98.3	2.1975 150.1 150.1	0.3394 [0.4000]	84.9%			IR2,
7:3FTCA	(441.0 / 317.0) 16935 (441.0 / 337.0) 16853	(8.60, 1.40) (N/A, -0.03, 0.2)	63.0 96.2	0.9952 118.8 118.8	0.3832 [0.4000]	95.8%			
PFEESA	(315.0 / 135.0) 48752 (315.0 / 83.0) 14590	(6.61, 1.07) (N/A, -0.03, 0.3)	297.4 57.3	0.2993 97.5 97.5	0.2049 [0.1785]	114.8%			
PFMPA	(229.0 / 85.0) 8084	(4.21, 0.84) (N/A, -0.02, 0.0)	159.7	N/A 0.0 0.0	0.2160 [0.2000]	108.0%			
PFMBA	(279.0 / 85.0) 26278	(5.40, 1.08) (N/A, -0.03, 0.0)	279.2	N/A 0.0 0.0	0.2031 [0.2000]	101.6%			
NFDHA	(295.0 / 201.0) 22691 (295.0 / 85.0) 23611	(6.04, 0.98) (N/A, -0.03, 0.3)	161.6 125.5	1.0405 117.9 117.9	0.2070 [0.2000]	103.5%			
13C3_PFBA_IIS	(216.0 / 172.0) 129665	(3.71, N/A) (N/A, -0.01, N/A)	734.9	N/A	0.9315 [1.0000]	93.2% {85.4%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 201573	(6.16, N/A) (N/A, -0.03, N/A)	556.3	N/A	0.8729 [1.0000]	87.3% {86.2%}			
13C4_PFOA_IIS	(417.0 / 372.0) 188558	(7.90, N/A) (N/A, -0.03, N/A)	449.6	N/A	0.8577 [1.0000]	85.8% {79.2%}			
13C5_PFNA_IIS	(468.0 / 423.0) 150014	(8.63, N/A) (N/A, -0.04, N/A)	351.9	N/A	0.8101 [1.0000]	81.0% {74.2%}			

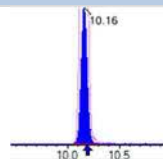
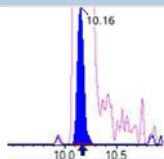
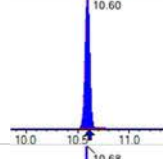
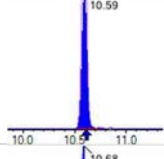
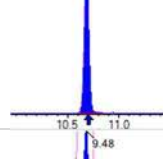
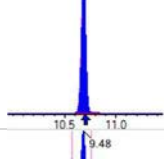
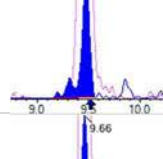
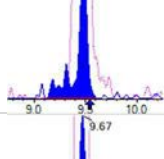
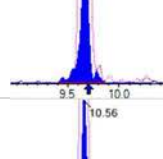
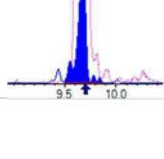
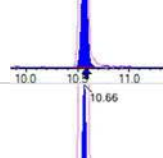
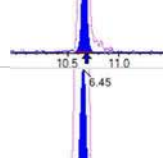
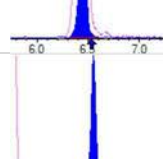
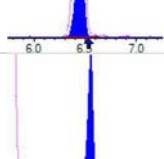
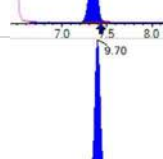
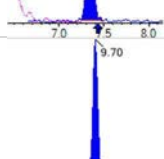
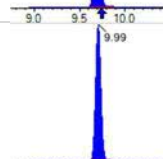
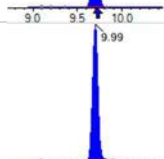
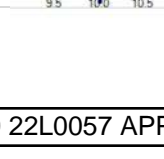
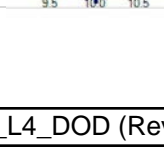
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 182339	(9.31, N/A) (N/A, -0.03, N/A)	393.6	N/A	0.9866 [1.0000]	98.7% {104.9%}			
18O2_PFHxS_IIS	(403.0 / 83.9) 376592	(8.02, N/A) (N/A, -0.03, N/A)	863.0	N/A	0.9328 [1.0000]	93.3% {89.1%}			
13C4_PFOS_IIS	(502.8 / 79.9) 319349	(9.45, N/A) (N/A, -0.03, N/A)	441.2	N/A	1.0005 [1.0000]	100.1% {97.4%}			
13C4_PFBA_EIS	(217.0 / 172.0) 1110686	(3.71, N/A) (N/A, -0.01, N/A)	922.4	N/A	8.3227 [8.0000]	104.0% {93.3%}			
13C5_PFPeA_EIS	(267.9 / 223.0) 621129	(5.01, N/A) (N/A, -0.03, N/A)	742.0	N/A	4.4287 [4.0000]	110.7% {89.2%}			
13C5_PFHxA_EIS	(318.0 / 273.0) 506172	(6.15, N/A) (N/A, -0.03, N/A)	648.4	N/A	2.1821 [2.0000]	109.1% {93.9%}			
13C4_PFHpA_EIS	(367.0 / 322.0) 447320	(7.08, N/A) (N/A, -0.03, N/A)	438.8	N/A	2.2105 [2.0000]	110.5% {91.1%}			
13C8_PFOA_EIS	(421.0 / 376.0) 456439	(7.89, N/A) (N/A, -0.03, N/A)	477.0	N/A	2.2073 [2.0000]	110.4% {91.7%}			
13C9_PFNA_EIS	(472.0 / 427.0) 171585	(8.63, N/A) (N/A, -0.04, N/A)	503.1	N/A	1.0402 [1.0000]	104.0% {78.4%}			
13C6_PFDA_EIS	(519.0 / 474.0) 227812	(9.31, N/A) (N/A, -0.03, N/A)	316.3	N/A	0.8785 [1.0000]	87.8% {81.0%}			
13C7_PFUnA_EIS	(570.0 / 525.0) 383307	(9.71, N/A) (N/A, -0.01, N/A)	510.8	N/A	1.0391 [1.0000]	103.9% {96.2%}			

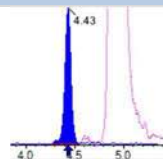
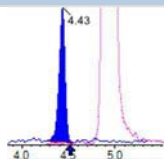
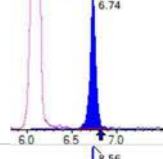
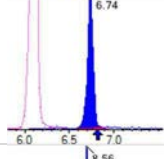
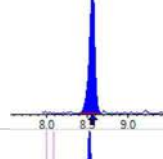
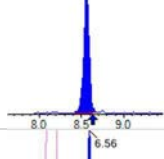
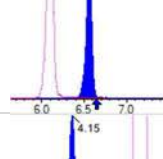
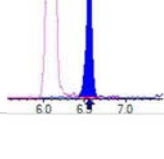
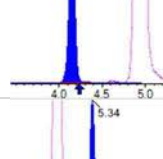
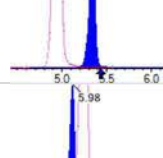
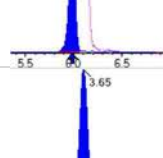
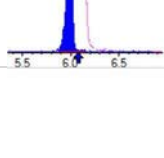
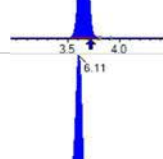
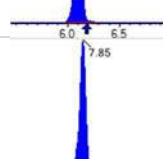
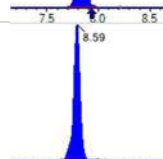
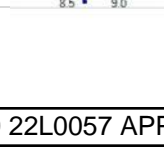
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 321089	(9.89, N/A) (N/A, -0.01, N/A)	437.4	N/A	0.8721 [1.0000]	87.2% {82.8%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 280643	(10.12, N/A) (N/A, -0.01, N/A)	381.3	N/A	1.1478 [1.0000]	114.8% {116.0%}			
13C3_PFBs_EIS	(302.0 / 80.0) 1291973	(6.11, N/A) (N/A, -0.03, N/A)	870.8	N/A	2.0291 [2.0000]	101.5% {94.1%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 716988	(8.02, N/A) (N/A, -0.03, N/A)	976.1	N/A	2.1164 [2.0000]	105.8% {95.1%}			
13C8_PFOS_EIS	(507.0 / 80.0) 1099756	(9.45, N/A) (N/A, -0.03, N/A)	492.9	N/A	2.0065 [2.0000]	100.3% {92.4%}			
13C2_4:2FTS_EIS	(329.0 / 81.0) 228032	(5.82, N/A) (N/A, -0.03, N/A)	818.1	N/A	4.2284 [4.0000]	105.7% {101.7%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 251709	(7.55, N/A) (N/A, -0.03, N/A)	625.3	N/A	3.8767 [4.0000]	96.9% {91.7%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 253898	(8.96, N/A) (N/A, -0.04, N/A)	403.4	N/A	3.9063 [4.0000]	97.7% {85.8%}			
13C8_PFOsa_EIS	(506.0 / 78.0) 1240858	(10.17, N/A) (N/A, -0.01, N/A)	815.5	N/A	1.7911 [2.0000]	89.6% {84.7%}			
D3_NMeFOSA_EIS	(515.0 / 169.0) 255122	(10.60, N/A) (N/A, -0.01, N/A)	937.9	N/A	1.6866 [2.0000]	84.3% {77.3%}			
D5_NEiFOSA_EIS	(531.1 / 169.0) 260767	(10.69, N/A) (N/A, -0.01, N/A)	1231.1	N/A	1.8675 [2.0000]	93.4% {91.6%}			

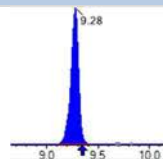
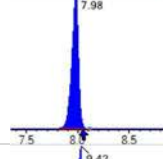
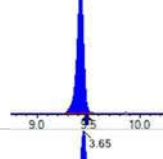
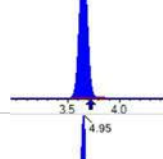
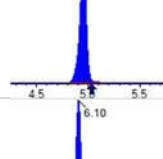
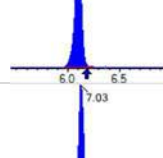
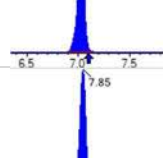
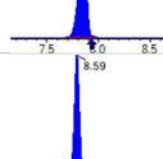
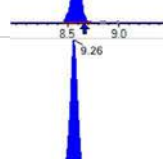
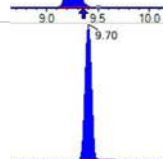
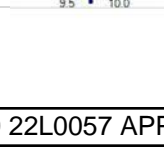
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 544985	(9.50, N/A) (N/A, -0.03, N/A)	407.2	N/A	4.1816 [4.0000]	104.5% {106.7%}			
D5_EtFOSAA_EIS	(589.0 / 419.0) 497176	(9.68, N/A) (N/A, -0.02, N/A)	540.1	N/A	4.3280 [4.0000]	108.2% {105.5%}			
D7_NMeFOSE_EIS	(623.2 / 58.9) 426059	(10.56, N/A) (N/A, -0.01, N/A)	1224.8	N/A	20.0598 [20.0000]	100.3% {98.7%}			
D9_NEtFOSE_EIS	(639.2 / 58.9) 191338	(10.66, N/A) (N/A, -0.01, N/A)	1253.8	N/A	19.7881 [20.0000]	98.9% {104.9%}			
13C3_HFPODA_EIS	(287.0 / 169.0) 1101544	(6.50, N/A) (N/A, -0.03, N/A)	840.6	N/A	8.9317 [8.0000]	111.6% {93.8%}			

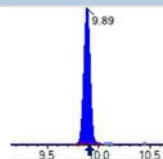
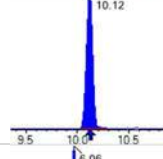
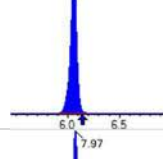
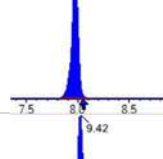
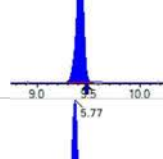
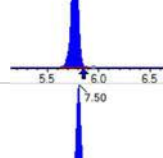
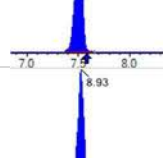
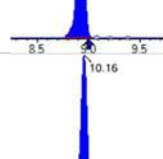
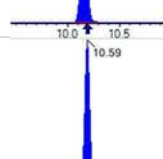
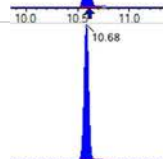
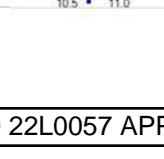
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 188421	(3.65, 1.00) (0.00, N/A, 0.0)	60.5	N/A 0.0 0.0	1.9028 [2.0000]	95.1%			
PFPeA	(262.9 / 219.0) 139219 (262.9 / 69.0) 1694	(4.95, 1.00) (0.00, N/A, 0.1)	388.4 40.0	0.0122 108.7 108.7	0.9614 [1.0000]	96.1%			
PFHxA	(313.0 / 269.0) 115909 (313.0 / 119.0) 10897	(6.10, 1.00) (0.00, N/A, 0.2)	310.0 98.6	0.0940 96.2 96.2	0.4941 [0.5000]	98.8%			
PFHpA	(363.0 / 319.0) 110782 (363.0 / 169.0) 29592	(7.03, 1.00) (0.00, N/A, 0.0)	210.6 163.1	0.2671 85.8 85.8	0.5195 [0.5000]	103.9%			
PFOA	(413.0 / 369.0) 131268 (413.0 / 169.0) 45112	(7.85, 1.00) (0.00, N/A, 0.2)	272.1 247.3	0.3437 105.2 105.2	0.5483 [0.5000]	109.7%			
PFNA	(463.0 / 419.0) 93190 (463.0 / 169.0) 19066	(8.59, 1.00) (0.00, N/A, -0.1)	270.2 71.5	0.2046 106.2 106.2	0.4982 [0.5000]	99.6%			
PFDA	(513.0 / 469.0) 116985 (513.0 / 169.0) 7443	(9.27, 1.00) (0.01, N/A, 0.2)	179.0 455.7	0.0636 66.6 66.6	0.4923 [0.5000]	98.5%			
PFUnA	(563.0 / 519.0) 112638 (563.0 / 169.0) 16433	(9.70, 1.00) (0.00, N/A, -0.2)	261.9 192.3	0.1459 168.0 168.0	0.3772 [0.5000]	75.4%			IR2,
PFDoA	(613.0 / 569.0) 170817 (613.0 / 169.0) 22966	(9.88, 1.00) (0.00, N/A, -0.1)	386.2 148.3	0.1344 96.6 96.6	0.5314 [0.5000]	106.3%			
PFTrDA	(663.0 / 619.0) 139394 (663.0 / 169.0) 23330	(10.00, 1.01) (N/A, -0.02, -0.6)	293.8 128.9	0.1674 81.8 81.8	0.5005 [0.5000]	100.1%			
PFTeDA	(713.0 / 669.0) 107548 (713.0 / 169.0) 13556	(10.12, 1.00) (0.00, N/A, 0.0)	266.4 52.5	0.1260 62.0 62.0	0.5082 [0.5000]	101.6%			

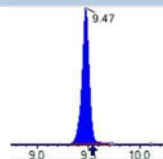
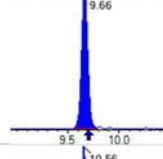
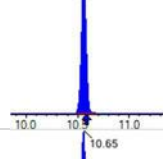
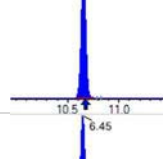
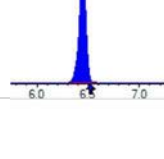
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 169308 (298.9 / 99.0) 116887	(6.06, 1.00) (0.00, N/A, 0.1)	532.3 438.0	0.6904 112.2 112.2	0.4218 [0.4424]	95.4%			
PFPeS	(349.0 / 80.0) 303756 (349.0 / 99.0) 113877	(7.10, 0.89) (N/A, -0.08, 0.0)	643.5 533.0	0.3749 105.3 105.3	0.4401 [0.4692]	93.8%			
PFHxS	(399.0 / 80.0) 254653 (399.0 / 99.0) 87687	(7.97, 1.00) (0.00, N/A, 0.0)	2864.9 16565.2	0.3443 102.4 102.4	0.4242 [0.4555]	93.1%			
PFHpS	(449.0 / 80.0) 232130 (449.0 / 99.0) 63281	(8.74, 0.93) (N/A, -0.07, 0.2)	720.8 355.5	0.2726 99.6 99.6	0.4831 [0.4757]	101.5%			
PFOS	(499.0 / 80.0) 271232 (499.0 / 99.0) 55582	(9.42, 1.00) (0.00, N/A, 0.2)	71.7 84.7	0.2049 84.3 84.3	0.4537 [0.4637]	97.8%			
PFNS	(549.0 / 80.0) 326430 (549.0 / 99.0) 76899	(9.75, 1.03) (N/A, -0.03, 0.0)	700.8 332.3	0.2356 96.5 96.5	0.4923 [0.4799]	102.6%			
PFDS	(599.0 / 80.0) 361311 (599.0 / 99.0) 88020	(9.90, 1.05) (N/A, -0.02, 0.0)	528.4 257.7	0.2436 108.2 108.2	0.4908 [0.4816]	101.9%			
PFDoS	(698.9 / 80.0) 143379 (698.9 / 99.0) 39342	(10.10, 1.07) (N/A, -0.01, 0.0)	394.0 390.0	0.2744 112.1 112.1	0.4660 [0.4848]	96.1%			
4:2FTS	(327.0 / 307.0) 369834 (327.0 / 81.0) 206873	(5.77, 1.00) (0.00, N/A, -0.2)	740.7 453.5	0.5594 113.2 113.2	1.8624 [1.8691]	99.6%			
6:2FTS	(427.0 / 407.0) 212400 (427.0 / 81.0) 133719	(7.50, 1.00) (0.00, N/A, 0.2)	557.0 426.3	0.6296 80.9 80.9	1.8471 [1.8981]	97.3%			
8:2FTS	(527.0 / 507.0) 187570 (527.0 / 81.0) 119060	(8.92, 1.00) (0.00, N/A, -0.3)	288.9 320.4	0.6348 112.1 112.1	1.8629 [1.9166]	97.2%			

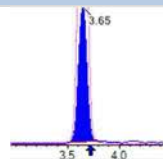
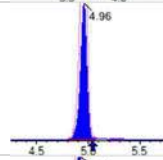
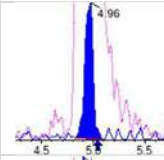
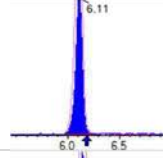
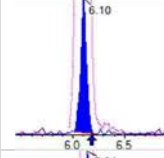
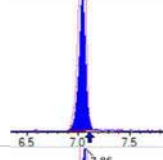
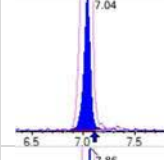
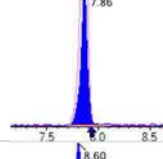
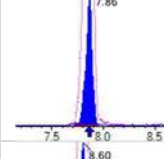
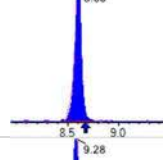
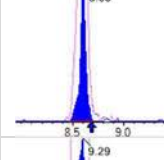
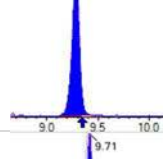
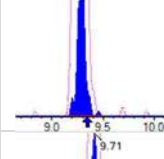
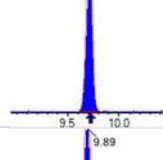
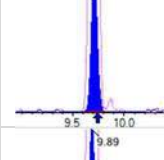
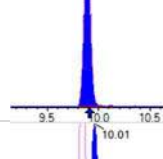
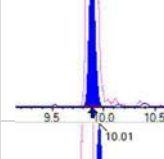
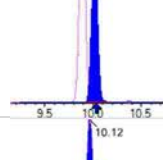
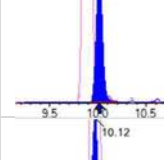
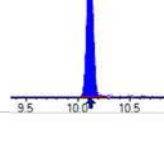
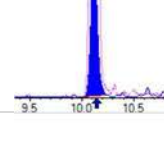
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 352198 (498.0 / 478.0) 8651	(10.16, 1.00) (0.00, N/A, 0.4)	513.9 157.2	0.0246 117.8 117.8	0.4906 [0.5000]	98.1%			
NMeFOSA	(511.9 / 219.0) 263260 (511.9 / 169.0) 153613	(10.60, 1.00) (0.00, N/A, 0.0)	638.7 672.6	0.5835 81.0 81.0	2.2704 [2.0000]	113.5%			
NEIFOSA	(526.0 / 219.0) 251838 (526.0 / 169.0) 278757	(10.68, 1.00) (0.00, N/A, 0.0)	1012.6 877.2	1.1069 104.7 104.7	1.9774 [2.0000]	98.9%			
NMeFOSAA	(570.0 / 419.0) 51544 (570.0 / 483.0) 33073	(9.48, 1.00) (0.00, N/A, -0.3)	116.9 95.9	0.6416 104.4 104.4	0.5096 [0.5000]	101.9%			
NEIFOSAA	(584.0 / 419.0) 57365 (584.0 / 526.0) 31030	(9.66, 1.00) (0.00, N/A, -0.4)	562.4 124.4	0.5409 73.8 73.8	0.5544 [0.5000]	110.9%			
NMeFOSE	(616.1 / 59.0) 54315	(10.56, 1.00) (0.00, N/A, 0.0)	454.0	N/A 0.0 0.0	1.8098 [2.0000]	90.5%			
NEtFOSE	(630.0 / 59.0) 10545	(10.66, 1.00) (0.01, N/A, 0.0)	298.7	N/A 0.0 0.0	1.8678 [2.0000]	93.4%			
HFPO-DA	(285.0 / 169.0) 90628 (285.0 / 185.0) 244184	(6.45, 1.00) (0.00, N/A, 0.3)	355.2 511.8	2.6944 98.2 98.2	1.0286 [1.0000]	102.9%			
ADONA	(377.0 / 85.0) 360241 (377.0 / 251.0) 45845	(7.35, 1.14) (N/A, -0.08, 0.0)	653.3 198.6	0.1273 102.2 102.2	0.9205 [0.9427]	97.6%			
9CI-Pf3ONS	(531.0 / 351.0) 951547 (533.0 / 353.0) 308143	(9.70, 1.50) (N/A, -0.03, 0.0)	461.5 485.9	0.3238 109.4 109.4	0.8553 [0.9333]	91.7%			
11CI-PF3OUDS	(631.0 / 451.0) 560809 (633.0 / 453.0) 162858	(9.99, 1.55) (N/A, -0.02, 0.0)	818.9 500.2	0.2904 87.8 87.8	1.0253 [0.9432]	108.7%			

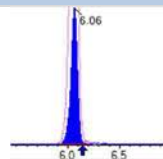
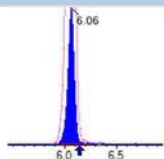
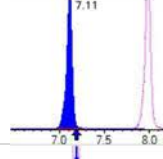
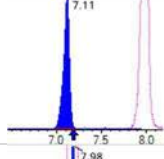
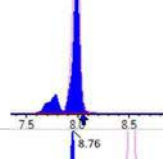
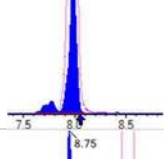
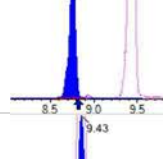
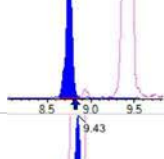
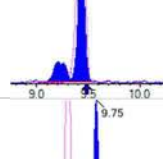
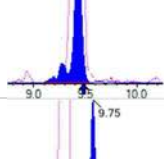
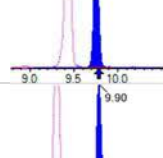
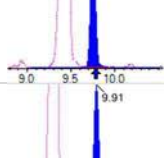
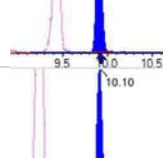
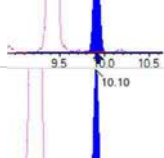
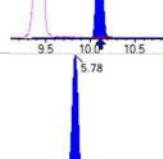
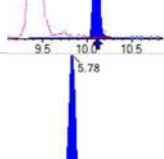
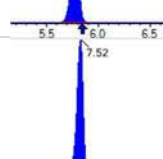
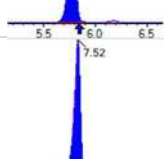
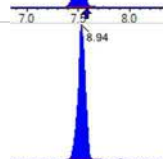
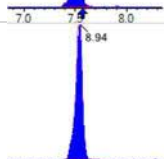
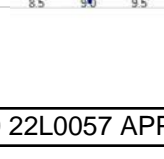
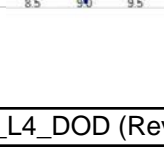
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 8941 (241.0 / 117.0) 17863	(4.43, 0.89) (N/A, -0.08, -0.1)	270.0 173.3	1.9979 119.4 119.4	1.7890 [2.0000]	89.5%			
5:3FTCA	(341.0 / 236.7) 83112 (341.0 / 217.0) 121575	(6.74, 1.10) (N/A, -0.08, 0.0)	282.1 320.5	1.4628 99.9 99.9	2.0050 [2.0000]	100.2%			
7:3FTCA	(441.0 / 317.0) 94595 (441.0 / 337.0) 73967	(8.56, 1.40) (N/A, -0.07, 0.0)	212.2 275.3	0.7819 93.4 93.4	1.9833 [2.0000]	99.2%			
PFEESA	(315.0 / 135.0) 227230 (315.0 / 83.0) 64514	(6.56, 1.07) (N/A, -0.08, 0.1)	666.6 216.3	0.2839 92.5 92.5	0.8847 [0.8925]	99.1%			
PFMPA	(229.0 / 85.0) 38716	(4.15, 0.84) (N/A, -0.08, 0.0)	651.7	N/A 0.0 0.0	0.9742 [1.0000]	97.4%			
PFMBA	(279.0 / 85.0) 138545	(5.34, 1.08) (N/A, -0.09, 0.0)	716.8	N/A 0.0 0.0	1.0085 [1.0000]	100.9%			
NFDHA	(295.0 / 201.0) 109976 (295.0 / 85.0) 101086	(5.98, 0.98) (N/A, -0.08, 0.0)	530.5 312.3	0.9192 104.1 104.1	0.9297 [1.0000]	93.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 145032	(3.65, N/A) (N/A, -0.07, N/A)	748.9	N/A	1.0419 [1.0000]	104.2% {95.6%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 249645	(6.11, N/A) (N/A, -0.08, N/A)	617.2	N/A	1.0811 [1.0000]	108.1% {106.7%}			
13C4_PFOA_IIS	(417.0 / 372.0) 223206	(7.85, N/A) (N/A, -0.08, N/A)	653.2	N/A	1.0153 [1.0000]	101.5% {93.8%}			
13C5_PFNA_IIS	(468.0 / 423.0) 192740	(8.59, N/A) (N/A, -0.08, N/A)	339.0	N/A	1.0408 [1.0000]	104.1% {95.3%}			

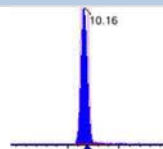
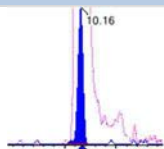
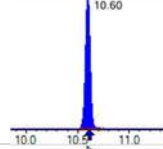
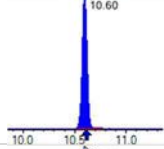
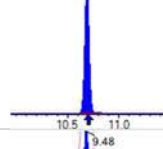
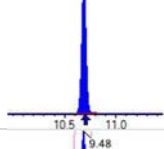
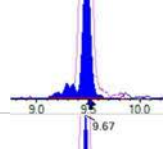
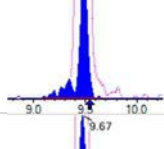
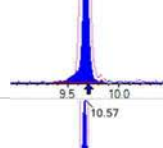
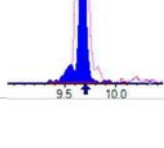
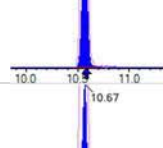
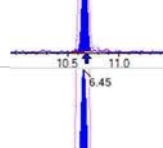
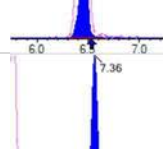
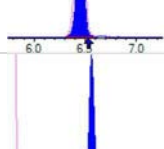
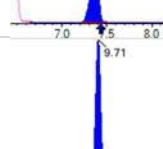
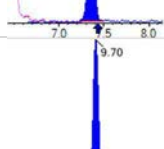
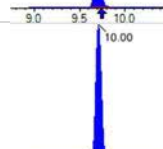
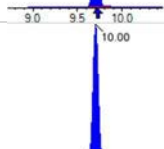
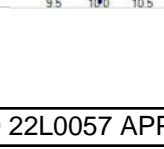
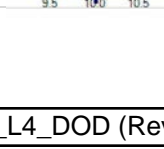
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 201200	(9.28, N/A) (N/A, -0.07, N/A)	450.6	N/A	1.0887 [1.0000]	108.9% { 115.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 391808	(7.98, N/A) (N/A, -0.07, N/A)	810.8	N/A	0.9705 [1.0000]	97.1% { 92.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 350992	(9.42, N/A) (N/A, -0.06, N/A)	464.9	N/A	1.0997 [1.0000]	110.0% { 107.1% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1214259	(3.65, N/A) (N/A, -0.07, N/A)	905.9	N/A	8.1347 [8.0000]	101.7% { 102.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 659529	(4.95, N/A) (N/A, -0.08, N/A)	789.0	N/A	3.7969 [4.0000]	94.9% { 94.8% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 546323	(6.10, N/A) (N/A, -0.08, N/A)	742.9	N/A	1.9017 [2.0000]	95.1% { 101.4% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 467878	(7.03, N/A) (N/A, -0.08, N/A)	943.4	N/A	1.8669 [2.0000]	93.3% { 95.3% }			
13C8_PFOA_EIS	(421.0 / 376.0) 486948	(7.85, N/A) (N/A, -0.08, N/A)	788.4	N/A	1.9893 [2.0000]	99.5% { 97.9% }			
13C9_PFNA_EIS	(472.0 / 427.0) 217999	(8.59, N/A) (N/A, -0.08, N/A)	418.4	N/A	1.0286 [1.0000]	102.9% { 99.7% }			
13C6_PFDA_EIS	(519.0 / 474.0) 249666	(9.26, N/A) (N/A, -0.08, N/A)	346.2	N/A	0.8725 [1.0000]	87.2% { 88.8% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 377869	(9.70, N/A) (N/A, -0.03, N/A)	445.6	N/A	0.9284 [1.0000]	92.8% { 94.9% }			

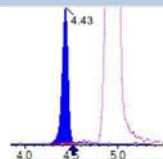
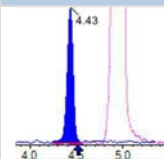
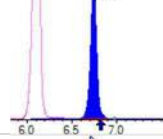
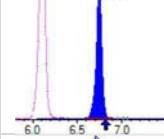
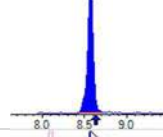
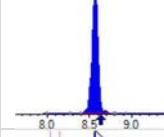
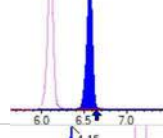
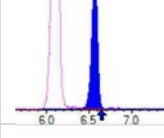
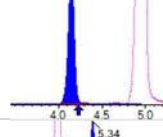
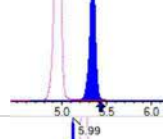
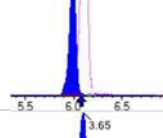
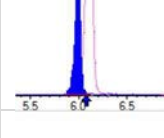
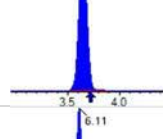
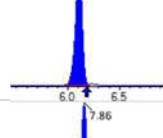
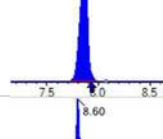
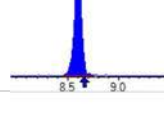
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 372869	(9.89, N/A) (N/A, -0.02, N/A)	424.9	N/A	0.9178 [1.0000]	91.8% { 96.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 238784	(10.12, N/A) (N/A, -0.01, N/A)	386.9	N/A	0.8850 [1.0000]	88.5% { 98.7% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1464188	(6.06, N/A) (N/A, -0.08, N/A)	862.0	N/A	2.2103 [2.0000]	110.5% { 106.6% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 772747	(7.97, N/A) (N/A, -0.08, N/A)	946.5	N/A	2.1924 [2.0000]	109.6% { 102.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1101471	(9.42, N/A) (N/A, -0.06, N/A)	400.8	N/A	1.8285 [2.0000]	91.4% { 92.5% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 240226	(5.77, N/A) (N/A, -0.08, N/A)	728.1	N/A	4.2815 [4.0000]	107.0% { 107.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 299151	(7.50, N/A) (N/A, -0.08, N/A)	829.8	N/A	4.4285 [4.0000]	110.7% { 109.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 254209	(8.93, N/A) (N/A, -0.07, N/A)	387.1	N/A	3.7592 [4.0000]	94.0% { 85.9% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1519271	(10.16, N/A) (N/A, -0.02, N/A)	650.9	N/A	1.9952 [2.0000]	99.8% { 103.7% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 284500	(10.59, N/A) (N/A, -0.02, N/A)	1128.4	N/A	1.7113 [2.0000]	85.6% { 86.2% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 282389	(10.68, N/A) (N/A, -0.01, N/A)	1021.0	N/A	1.8400 [2.0000]	92.0% { 99.2% }			

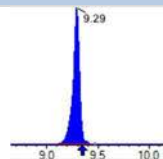
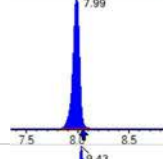
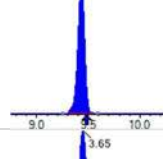
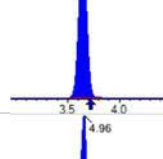
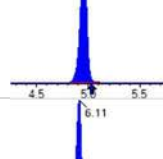
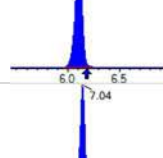
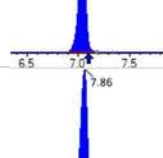
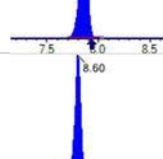
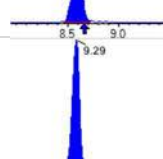
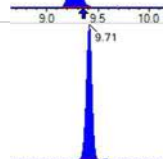
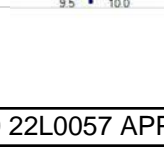
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 519161	(9.47, N/A) (N/A, -0.06, N/A)	335.3	N/A	3.6243 [4.0000]	90.6% { 101.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 461032	(9.66, N/A) (N/A, -0.03, N/A)	492.8	N/A	3.6515 [4.0000]	91.3% { 97.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 475546	(10.56, N/A) (N/A, -0.02, N/A)	945.0	N/A	20.3712 [20.0000]	101.9% { 110.2% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 220531	(10.65, N/A) (N/A, -0.02, N/A)	1126.5	N/A	20.7511 [20.0000]	103.8% { 120.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1159691	(6.45, N/A) (N/A, -0.08, N/A)	900.5	N/A	7.5925 [8.0000]	94.9% { 98.7% }			

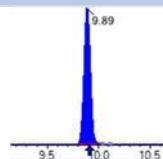
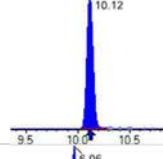
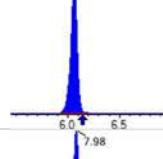
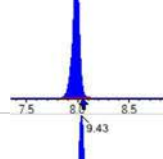
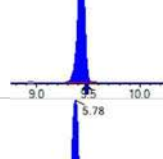
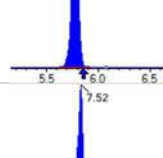
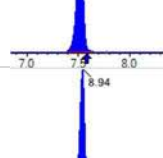
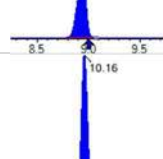
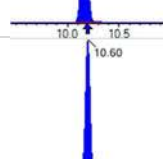
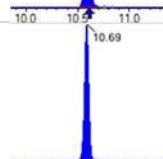
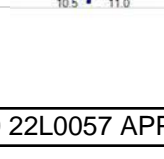
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 364131	(3.65, 1.00) (0.00, N/A, 0.0)	70.2	N/A 0.0 0.0	3.8803 [4.0000]	97.0%			
PFPeA	(262.9 / 219.0) 278554 (262.9 / 69.0) 3213	(4.96, 1.00) (0.00, N/A, -0.1)	617.6 57.0	0.0115 103.0 103.0	1.9980 [2.0000]	99.9%			
PFHxA	(313.0 / 269.0) 230736 (313.0 / 119.0) 17813	(6.11, 1.00) (0.00, N/A, 0.3)	411.0 127.8	0.0772 79.0 79.0	1.0595 [1.0000]	106.0%			
PFHpA	(363.0 / 319.0) 200810 (363.0 / 169.0) 53734	(7.04, 1.00) (0.00, N/A, 0.1)	368.9 203.8	0.2676 85.9 85.9	0.9983 [1.0000]	99.8%			
PFOA	(413.0 / 369.0) 205143 (413.0 / 169.0) 72948	(7.86, 1.00) (0.00, N/A, 0.0)	303.6 404.0	0.3556 108.8 108.8	0.9507 [1.0000]	95.1%			
PFNA	(463.0 / 419.0) 167406 (463.0 / 169.0) 35020	(8.60, 1.00) (0.00, N/A, 0.2)	279.7 86.6	0.2092 108.5 108.5	1.0679 [1.0000]	106.8%			
PFDA	(513.0 / 469.0) 260310 (513.0 / 169.0) 19191	(9.28, 1.00) (0.00, N/A, -0.3)	246.9 388.3	0.0737 77.1 77.1	0.9614 [1.0000]	96.1%			
PFUnA	(563.0 / 519.0) 242766 (563.0 / 169.0) 29112	(9.71, 1.00) (0.00, N/A, 0.0)	470.3 179.8	0.1199 138.1 138.1	0.8605 [1.0000]	86.1%			
PFDoA	(613.0 / 569.0) 276870 (613.0 / 169.0) 37204	(9.89, 1.00) (0.00, N/A, 0.1)	510.1 202.8	0.1344 96.5 96.5	0.8423 [1.0000]	84.2%			
PFTrDA	(663.0 / 619.0) 272310 (663.0 / 169.0) 51052	(10.01, 1.01) (N/A, -0.01, 0.2)	518.4 210.4	0.1875 91.6 91.6	0.9561 [1.0000]	95.6%			
PFTeDA	(713.0 / 669.0) 202539 (713.0 / 169.0) 35837	(10.12, 1.00) (0.00, N/A, -0.1)	464.6 111.3	0.1769 87.0 87.0	0.9914 [1.0000]	99.1%			

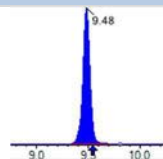
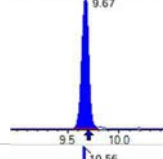
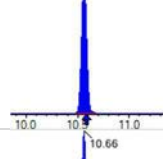
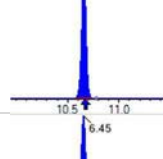
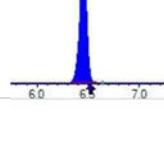
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 319512 (298.9 / 99.0) 214428	(6.06, 1.00) (0.00, N/A, 0.1)	552.7 573.6	0.6711 109.0 109.0	0.8374 [0.8847]	94.7%			
PFPeS	(349.0 / 80.0) 558156 (349.0 / 99.0) 204172	(7.11, 0.89) (N/A, -0.07, -0.2)	726.6 707.2	0.3658 102.8 102.8	0.9319 [0.9384]	99.3%			
PFHxS	(399.0 / 80.0) 460645 (399.0 / 99.0) 168480	(7.99, 1.00) (0.00, N/A, 0.2)	4071.9 6022.7	0.3657 108.8 108.8	0.8844 [0.9110]	97.1%			
PFHpS	(449.0 / 80.0) 399999 (449.0 / 99.0) 119983	(8.76, 0.93) (N/A, -0.06, -0.2)	473.2 390.9	0.3000 109.6 109.6	0.8477 [0.9514]	89.1%			
PFOS	(499.0 / 80.0) 510216 (499.0 / 99.0) 119134	(9.43, 1.00) (0.00, N/A, 0.3)	371.9 120.6	0.2335 96.0 96.0	0.8692 [0.9275]	93.7%			
PFNS	(549.0 / 80.0) 600745 (549.0 / 99.0) 129442	(9.75, 1.03) (N/A, -0.02, 0.2)	640.1 539.0	0.2155 88.3 88.3	0.9226 [0.9599]	96.1%			
PFDS	(599.0 / 80.0) 650063 (599.0 / 99.0) 165992	(9.90, 1.05) (N/A, -0.02, -0.4)	597.2 555.1	0.2553 113.4 113.4	0.8993 [0.9631]	93.4%			
PFDoS	(698.9 / 80.0) 310556 (698.9 / 99.0) 62440	(10.10, 1.07) (N/A, -0.01, 0.2)	612.5 270.2	0.2011 82.2 82.2	1.0279 [0.9696]	106.0%			
4:2FTS	(327.0 / 307.0) 734838 (327.0 / 81.0) 391330	(5.78, 1.00) (0.00, N/A, 0.0)	955.1 537.9	0.5325 107.8 107.8	3.8805 [3.7381]	103.8%			
6:2FTS	(427.0 / 407.0) 417365 (427.0 / 81.0) 267446	(7.52, 1.00) (0.00, N/A, -0.3)	653.9 548.6	0.6408 82.3 82.3	3.6814 [3.7962]	97.0%			
8:2FTS	(527.0 / 507.0) 398366 (527.0 / 81.0) 261360	(8.94, 1.00) (0.00, N/A, -0.3)	438.4 397.1	0.6561 115.9 115.9	3.3122 [3.8332]	86.4%			

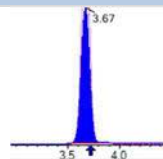
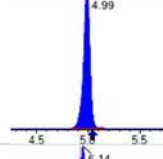
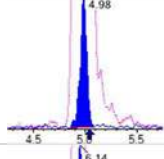
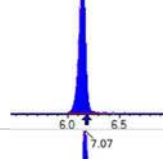
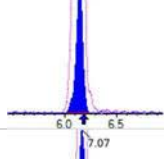
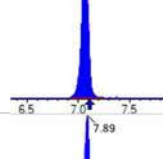
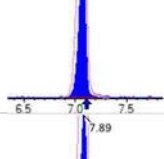
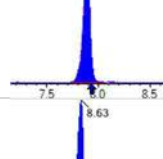
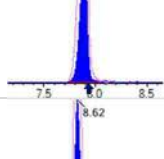
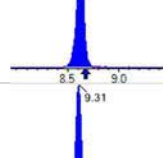
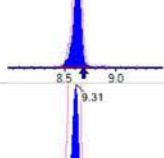
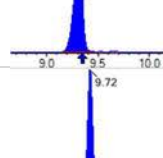
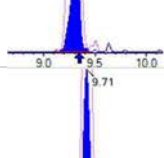
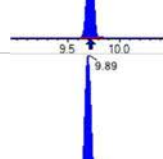
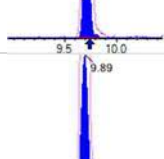
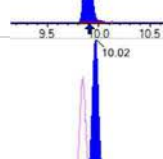
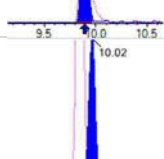
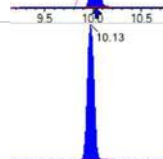
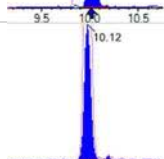
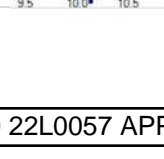
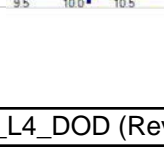
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 634394 (498.0 / 478.0) 14236	(10.16, 1.00) (0.00, N/A, 0.3)	672.1 142.6	0.0224 107.7 107.7	1.0186 [1.0000]	101.9%			
NMeFOFA	(511.9 / 219.0) 481844 (511.9 / 169.0) 311400	(10.60, 1.00) (0.00, N/A, 0.1)	1243.8 1242.2	0.6463 89.7 89.7	3.9784 [4.0000]	99.5%			
NEtFOFA	(526.0 / 219.0) 509457 (526.0 / 169.0) 556544	(10.69, 1.00) (0.00, N/A, 0.0)	1029.5 1040.4	1.0924 103.3 103.3	3.8752 [4.0000]	96.9%			
NMeFOSAA	(570.0 / 419.0) 98460 (570.0 / 483.0) 45291	(9.48, 1.00) (0.00, N/A, -0.2)	201.1 368.1	0.4600 74.8 74.8	0.9589 [1.0000]	95.9%			
NEtFOSAA	(584.0 / 419.0) 100078 (584.0 / 526.0) 64349	(9.67, 1.00) (0.00, N/A, 0.1)	308.0 11085.9	0.6430 87.7 87.7	0.9729 [1.0000]	97.3%			
NMeFOSE	(616.1 / 59.0) 109477	(10.57, 1.00) (0.00, N/A, 0.0)	635.3	N/A 0.0 0.0	4.0466 [4.0000]	101.2%			
NEtFOSE	(630.0 / 59.0) 18470	(10.67, 1.00) (0.01, N/A, 0.0)	332.3	N/A 0.0 0.0	3.6420 [4.0000]	91.1%			
HFPO-DA	(285.0 / 169.0) 157217 (285.0 / 185.0) 447290	(6.45, 1.00) (0.00, N/A, 0.0)	473.3 607.4	2.8450 103.7 103.7	1.8500 [2.0000]	92.5%			
ADONA	(377.0 / 85.0) 712997 (377.0 / 251.0) 91158	(7.36, 1.14) (N/A, -0.07, 0.0)	873.4 270.7	0.1279 102.7 102.7	1.8890 [1.8854]	100.2%			
9CI-Pf3ONS	(531.0 / 351.0) 2025171 (533.0 / 353.0) 608975	(9.71, 1.50) (N/A, -0.03, 0.1)	727.3 554.2	0.3007 101.6 101.6	1.9101 [1.8665]	102.3%			
11CI-PF3OUDS	(631.0 / 451.0) 945192 (633.0 / 453.0) 304735	(10.00, 1.55) (N/A, -0.01, -0.1)	1065.3 837.5	0.3224 97.5 97.5	1.7916 [1.8864]	95.0%			

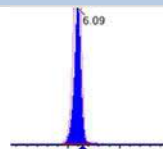
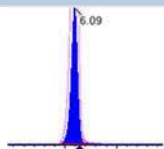
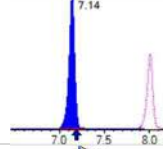
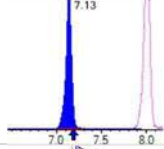
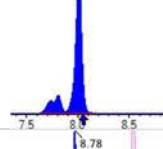
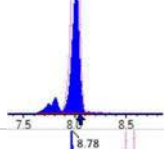
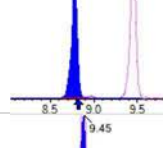
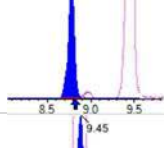
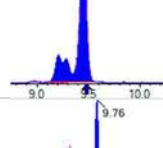
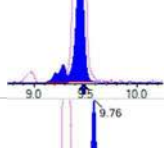
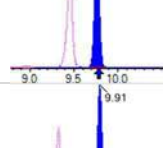
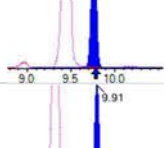
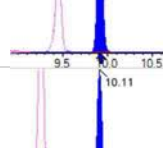
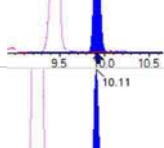
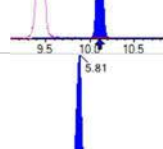
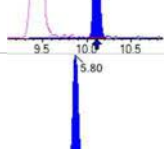
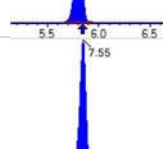
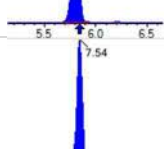
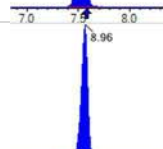
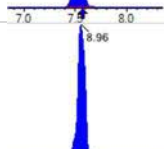
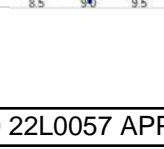
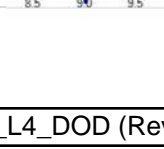
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 19424 (241.0 / 117.0) 28656	(4.43, 0.89) (N/A, -0.08, 0.0)	383.0 238.7	1.4753 88.2 88.2	4.0370 [4.0000]	100.9%			
5:3FTCA	(341.0 / 236.7) 163618 (341.0 / 217.0) 258573	(6.74, 1.10) (N/A, -0.08, -0.1)	567.6 530.2	1.5803 108.0 108.0	4.2520 [4.0000]	106.3%			
7:3FTCA	(441.0 / 317.0) 173439 (441.0 / 337.0) 148204	(8.57, 1.40) (N/A, -0.06, 0.2)	277.8 265.5	0.8545 102.0 102.0	3.9172 [4.0000]	97.9%			
PFEESA	(315.0 / 135.0) 425676 (315.0 / 83.0) 120482	(6.57, 1.08) (N/A, -0.07, 0.1)	558.7 464.3	0.2830 92.2 92.2	1.7854 [1.7849]	100.0%			
PFMPA	(229.0 / 85.0) 73196	(4.15, 0.84) (N/A, -0.08, 0.0)	797.4	N/A 0.0 0.0	1.9130 [2.0000]	95.6%			
PFMBA	(279.0 / 85.0) 259517	(5.34, 1.08) (N/A, -0.08, 0.0)	721.2	N/A 0.0 0.0	1.9622 [2.0000]	98.1%			
NFDHA	(295.0 / 201.0) 219791 (295.0 / 85.0) 199407	(5.99, 0.98) (N/A, -0.08, -0.1)	614.7 459.5	0.9073 102.8 102.8	2.0016 [2.0000]	100.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 133715	(3.65, N/A) (N/A, -0.07, N/A)	699.9	N/A	0.9606 [1.0000]	96.1% {88.1%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 210807	(6.11, N/A) (N/A, -0.08, N/A)	520.8	N/A	0.9129 [1.0000]	91.3% {90.1%}			
13C4_PFOA_IIS	(417.0 / 372.0) 203834	(7.86, N/A) (N/A, -0.07, N/A)	799.6	N/A	0.9272 [1.0000]	92.7% {85.6%}			
13C5_PFNA_IIS	(468.0 / 423.0) 176714	(8.60, N/A) (N/A, -0.07, N/A)	380.6	N/A	0.9543 [1.0000]	95.4% {87.4%}			

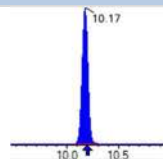
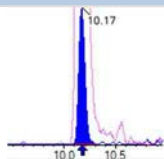
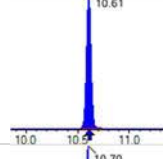
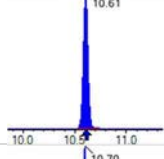
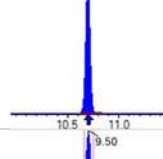
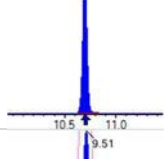
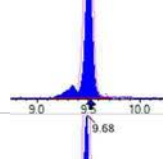
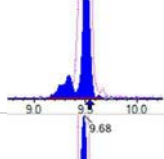
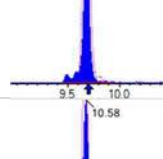
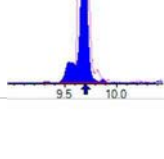
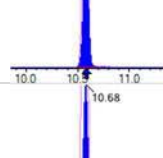
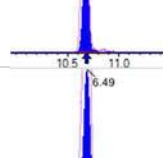
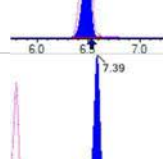
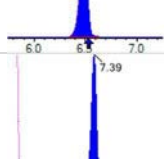
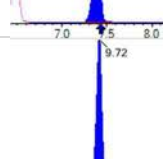
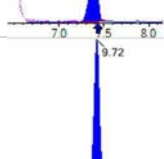
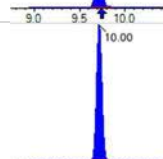
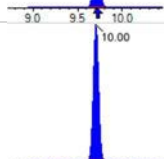
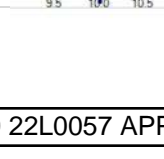
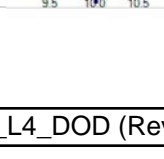
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 164172	(9.29, N/A) (N/A, -0.05, N/A)	395.8	N/A	0.8883 [1.0000]	88.8% { 94.4% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 382941	(7.99, N/A) (N/A, -0.06, N/A)	781.0	N/A	0.9486 [1.0000]	94.9% { 90.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 302129	(9.43, N/A) (N/A, -0.05, N/A)	425.5	N/A	0.9466 [1.0000]	94.7% { 92.2% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1150744	(3.65, N/A) (N/A, -0.07, N/A)	926.2	N/A	8.3617 [8.0000]	104.5% { 96.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 634958	(4.96, N/A) (N/A, -0.08, N/A)	725.6	N/A	4.3289 [4.0000]	108.2% { 91.2% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 507144	(6.11, N/A) (N/A, -0.08, N/A)	760.2	N/A	2.0905 [2.0000]	104.5% { 94.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 441364	(7.04, N/A) (N/A, -0.07, N/A)	592.1	N/A	2.0856 [2.0000]	104.3% { 89.9% }			
13C8_PFOA_EIS	(421.0 / 376.0) 438874	(7.86, N/A) (N/A, -0.06, N/A)	718.6	N/A	1.9633 [2.0000]	98.2% { 88.2% }			
13C9_PFNA_EIS	(472.0 / 427.0) 182699	(8.60, N/A) (N/A, -0.07, N/A)	305.7	N/A	0.9402 [1.0000]	94.0% { 83.5% }			
13C6_PFDA_EIS	(519.0 / 474.0) 284465	(9.29, N/A) (N/A, -0.06, N/A)	596.1	N/A	1.2183 [1.0000]	121.8% { 101.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 356973	(9.71, N/A) (N/A, -0.02, N/A)	765.7	N/A	1.0748 [1.0000]	107.5% { 89.6% }			

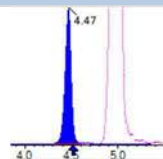
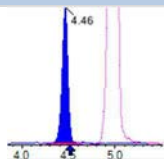
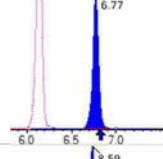
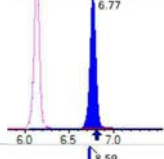
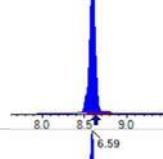
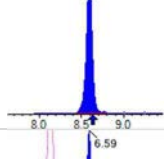
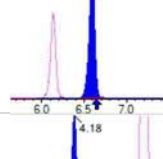
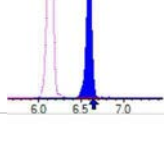
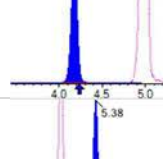
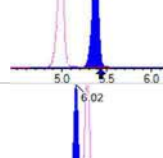
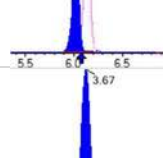
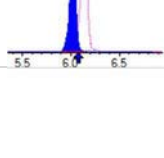
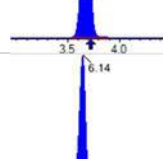
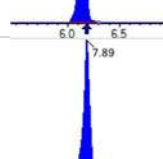
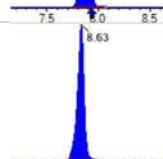
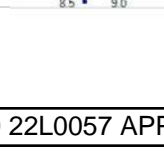
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 381316	(9.89, N/A) (N/A, -0.02, N/A)	333.2	N/A	1.1503 [1.0000]	115.0% { 98.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 230518	(10.12, N/A) (N/A, -0.02, N/A)	370.4	N/A	1.0471 [1.0000]	104.7% { 95.3% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1391867	(6.06, N/A) (N/A, -0.08, N/A)	799.8	N/A	2.1497 [2.0000]	107.5% { 101.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 670509	(7.98, N/A) (N/A, -0.07, N/A)	1003.2	N/A	1.9464 [2.0000]	97.3% { 88.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1081560	(9.43, N/A) (N/A, -0.05, N/A)	480.5	N/A	2.0858 [2.0000]	104.3% { 90.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 229082	(5.78, N/A) (N/A, -0.08, N/A)	619.0	N/A	4.1774 [4.0000]	104.4% { 102.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 294946	(7.52, N/A) (N/A, -0.06, N/A)	799.8	N/A	4.4673 [4.0000]	111.7% { 107.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 303660	(8.94, N/A) (N/A, -0.06, N/A)	479.0	N/A	4.5945 [4.0000]	114.9% { 102.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1318009	(10.16, N/A) (N/A, -0.02, N/A)	652.5	N/A	2.0109 [2.0000]	100.5% { 89.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 297155	(10.60, N/A) (N/A, -0.01, N/A)	855.7	N/A	2.0764 [2.0000]	103.8% { 90.0% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 291494	(10.69, N/A) (N/A, -0.01, N/A)	862.4	N/A	2.2065 [2.0000]	110.3% { 102.4% }			

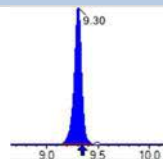
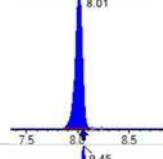
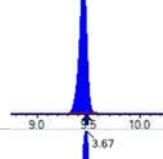
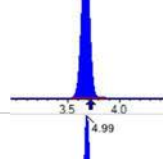
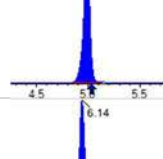
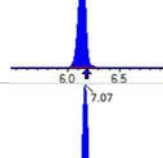
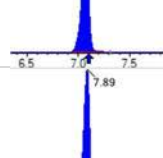
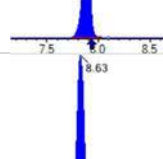
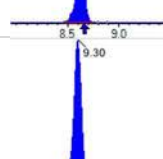
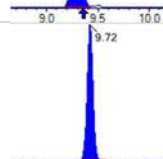
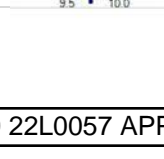
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 527024	(9.48, N/A) (N/A, -0.05, N/A)	346.8	N/A	4.2742 [4.0000]	106.9% { 103.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 458315	(9.67, N/A) (N/A, -0.02, N/A)	278.5	N/A	4.2171 [4.0000]	105.4% { 97.2% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 428676	(10.56, N/A) (N/A, -0.01, N/A)	1166.0	N/A	21.3333 [20.0000]	106.7% { 99.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 198093	(10.66, N/A) (N/A, -0.01, N/A)	1164.8	N/A	21.6544 [20.0000]	108.3% { 108.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1118507	(6.45, N/A) (N/A, -0.07, N/A)	638.3	N/A	8.6720 [8.0000]	108.4% { 95.2% }			

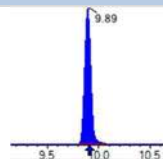
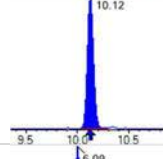
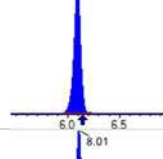
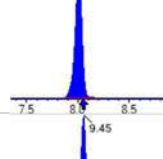
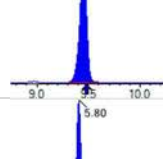
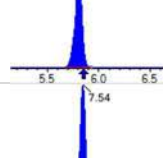
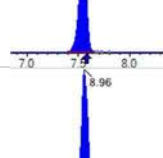
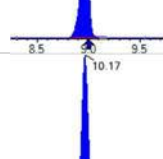
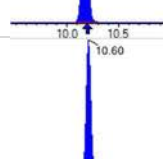
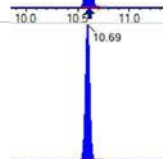
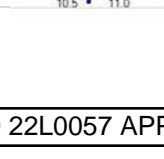
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 819896	(3.67, 1.00) (0.00, N/A, 0.0)	63.2	N/A 0.0 0.0	8.3322 [8.0000]	104.2%			
PFPeA	(262.9 / 219.0) 603288 (262.9 / 69.0) 6873	(4.99, 1.00) (0.00, N/A, 0.1)	714.5 139.6	0.0114 101.8 101.8	4.1560 [4.0000]	103.9%			
PFHxA	(313.0 / 269.0) 494481 (313.0 / 119.0) 48652	(6.14, 1.00) (0.00, N/A, -0.1)	480.7 302.7	0.0984 100.6 100.6	1.9728 [2.0000]	98.6%			
PFHpA	(363.0 / 319.0) 430799 (363.0 / 169.0) 129319	(7.07, 1.00) (0.00, N/A, -0.1)	617.2 361.9	0.3002 96.4 96.4	1.9616 [2.0000]	98.1%			
PFOA	(413.0 / 369.0) 498516 (413.0 / 169.0) 142531	(7.89, 1.00) (0.00, N/A, 0.1)	597.7 530.3	0.2859 87.5 87.5	1.9165 [2.0000]	95.8%			
PFNA	(463.0 / 419.0) 393754 (463.0 / 169.0) 83708	(8.63, 1.00) (0.00, N/A, 0.1)	416.4 106.0	0.2126 110.3 110.3	2.1745 [2.0000]	108.7%			
PFDA	(513.0 / 469.0) 564787 (513.0 / 169.0) 47750	(9.31, 1.00) (0.01, N/A, 0.1)	378.6 169.7	0.0845 88.5 88.5	2.2443 [2.0000]	112.2%			
PFUnA	(563.0 / 519.0) 658503 (563.0 / 169.0) 61653	(9.72, 1.00) (0.00, N/A, 0.4)	479.7 518.5	0.0936 107.8 107.8	2.0992 [2.0000]	105.0%			
PFDoA	(613.0 / 569.0) 675921 (613.0 / 169.0) 81123	(9.89, 1.00) (0.00, N/A, 0.2)	691.3 232.1	0.1200 86.2 86.2	1.9103 [2.0000]	95.5%			
PFTrDA	(663.0 / 619.0) 588988 (663.0 / 169.0) 110050	(10.02, 1.01) (N/A, 0.00, 0.1)	577.9 302.6	0.1868 91.3 91.3	1.9213 [2.0000]	96.1%			
PFTeDA	(713.0 / 669.0) 446345 (713.0 / 169.0) 83837	(10.13, 1.00) (0.00, N/A, 0.2)	486.0 629.5	0.1878 92.4 92.4	2.0034 [2.0000]	100.2%			

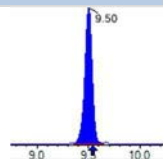
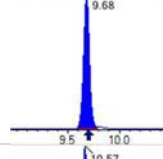
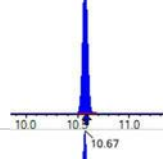
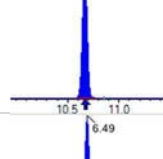
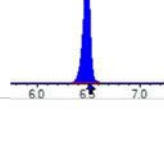
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 711903 (298.9 / 99.0) 484739	(6.09, 1.00) (0.00, N/A, 0.1)	731.9 757.9	0.6809 110.6 110.6	1.7756 [1.7695]	100.3%			
PFPeS	(349.0 / 80.0) 1288227 (349.0 / 99.0) 474774	(7.14, 0.89) (N/A, -0.04, 0.1)	707.6 705.0	0.3685 103.5 103.5	2.0076 [1.8768]	107.0%			
PFHxS	(399.0 / 80.0) 1027828 (399.0 / 99.0) 345011	(8.01, 1.00) (0.00, N/A, 0.0)	4264.5 49182.2	0.3357 99.9 99.9	1.8419 [1.8220]	101.1%			
PFHpS	(449.0 / 80.0) 977429 (449.0 / 99.0) 288763	(8.78, 0.93) (N/A, -0.04, 0.1)	730.0 481.1	0.2954 107.9 107.9	1.9191 [1.9028]	100.9%			
PFOS	(499.0 / 80.0) 1204037 (499.0 / 99.0) 223557	(9.45, 1.00) (0.00, N/A, 0.0)	87.9 105.3	0.1857 76.3 76.3	1.9004 [1.8550]	102.4%			
PFNS	(549.0 / 80.0) 1450440 (549.0 / 99.0) 305867	(9.76, 1.03) (N/A, -0.01, 0.0)	792.8 564.7	0.2109 86.4 86.4	2.0637 [1.9198]	107.5%			
PFDS	(599.0 / 80.0) 1519940 (599.0 / 99.0) 390353	(9.91, 1.05) (N/A, -0.01, -0.1)	861.1 462.0	0.2568 114.1 114.1	1.9480 [1.9262]	101.1%			
PFDoS	(698.9 / 80.0) 616036 (698.9 / 99.0) 122817	(10.11, 1.07) (N/A, -0.01, 0.2)	806.8 368.4	0.1994 81.5 81.5	1.8891 [1.9391]	97.4%			
4:2FTS	(327.0 / 307.0) 1460214 (327.0 / 81.0) 931969	(5.81, 1.00) (0.00, N/A, 0.3)	781.6 741.8	0.6382 129.2 129.2	7.3058 [7.4762]	97.7%			
6:2FTS	(427.0 / 407.0) 816068 (427.0 / 81.0) 629698	(7.55, 1.00) (0.00, N/A, 0.2)	696.5 806.5	0.7716 99.2 99.2	8.1240 [7.5923]	107.0%			
8:2FTS	(527.0 / 507.0) 874574 (527.0 / 81.0) 575440	(8.96, 1.00) (0.00, N/A, 0.1)	521.2 496.1	0.6580 116.2 116.2	7.8272 [7.6663]	102.1%			

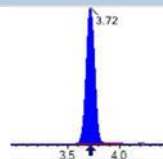
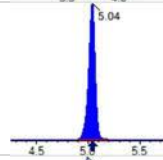
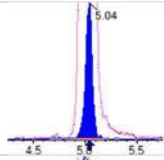
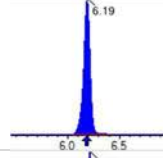
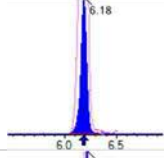
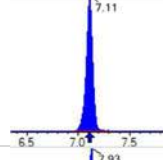
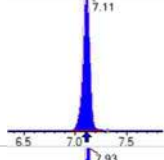
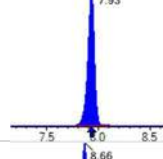
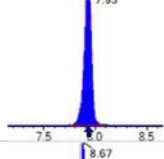
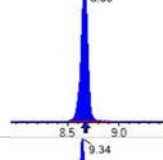
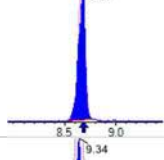
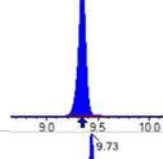
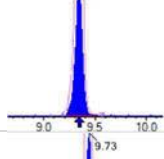
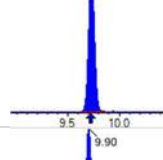
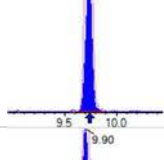
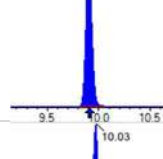
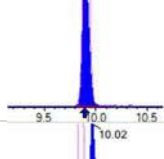
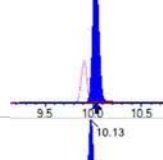
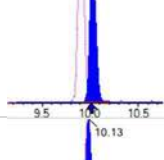
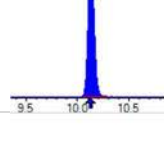
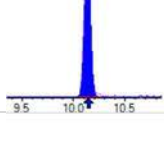
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 1485959 (498.0 / 478.0) 31674	(10.17, 1.00) (0.00, N/A, 0.2)	990.0 142.4	0.0213 102.3 102.3	2.1663 [2.0000]	108.3%			
NMeFOSA	(511.9 / 219.0) 1078575 (511.9 / 169.0) 708121	(10.61, 1.00) (0.00, N/A, 0.0)	1225.7 994.7	0.6565 91.2 91.2	8.7756 [8.0000]	109.7%			
NEIFOSA	(526.0 / 219.0) 1148331 (526.0 / 169.0) 1200365	(10.70, 1.00) (0.00, N/A, 0.0)	776.2 1306.9	1.0453 98.8 98.8	8.6933 [8.0000]	108.7%			
NMeFOSAA	(570.0 / 419.0) 241345 (570.0 / 483.0) 110259	(9.50, 1.00) (0.00, N/A, -0.4)	387.8 310.6	0.4569 74.3 74.3	2.3829 [2.0000]	119.1%			
NEIFOSAA	(584.0 / 419.0) 216496 (584.0 / 526.0) 131164	(9.68, 1.00) (0.00, N/A, -0.3)	488.0 17276.9	0.6059 82.6 82.6	1.8426 [2.0000]	92.1%			
NMeFOSE	(616.1 / 59.0) 263519	(10.58, 1.00) (0.01, N/A, 0.0)	1098.0	N/A 0.0 0.0	8.8080 [8.0000]	110.1%			
NEtFOSE	(630.0 / 59.0) 44341	(10.68, 1.00) (0.01, N/A, 0.0)	785.9	N/A 0.0 0.0	8.2657 [8.0000]	103.3%			
HFPO-DA	(285.0 / 169.0) 361196 (285.0 / 185.0) 1050555	(6.49, 1.00) (0.00, N/A, 0.1)	772.7 816.6	2.9085 106.0 106.0	4.2149 [4.0000]	105.4%			
ADONA	(377.0 / 85.0) 1531070 (377.0 / 251.0) 192620	(7.39, 1.14) (N/A, -0.04, 0.0)	808.7 452.2	0.1258 101.0 101.0	4.0224 [3.7708]	106.7%			
9CI-Pf3ONS	(531.0 / 351.0) 4127226 (533.0 / 353.0) 1353329	(9.72, 1.50) (N/A, -0.01, 0.1)	633.0 677.8	0.3279 110.8 110.8	3.9027 [3.7330]	104.5%			
11CI-PF3OUDS	(631.0 / 451.0) 2164994 (633.0 / 453.0) 639114	(10.00, 1.54) (N/A, -0.01, 0.2)	1045.2 822.2	0.2952 89.2 89.2	4.0695 [3.7728]	107.9%			

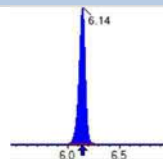
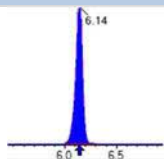
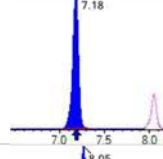
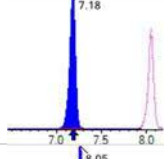
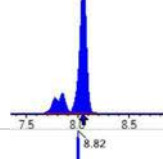
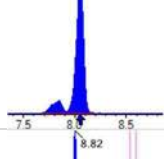
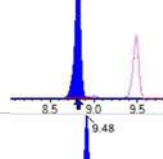
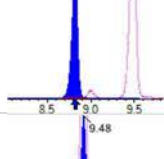
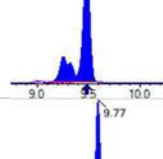
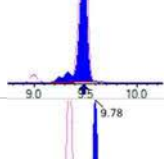
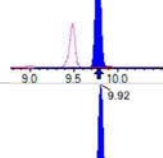
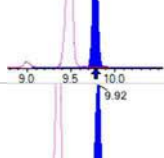
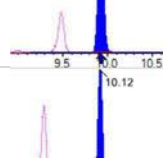
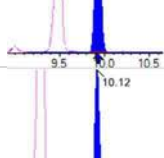
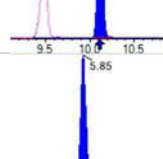
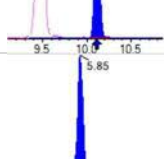
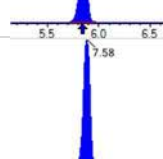
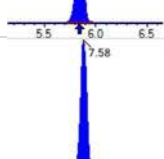
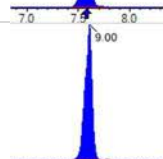
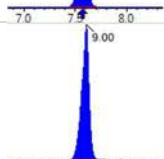
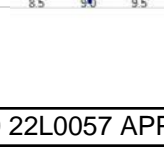
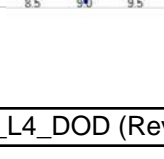
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 40453 (241.0 / 117.0) 66448	(4.47, 0.90) (N/A, -0.05, 0.1)	490.7 413.9	1.6426 98.2 98.2	8.0746 [8.0000]	100.9%			
5:3FTCA	(341.0 / 236.7) 329758 (341.0 / 217.0) 527254	(6.77, 1.10) (N/A, -0.05, 0.1)	661.0 537.3	1.5989 109.2 109.2	7.4457 [8.0000]	93.1%			
7:3FTCA	(441.0 / 317.0) 392499 (441.0 / 337.0) 316116	(8.59, 1.40) (N/A, -0.04, 0.1)	337.8 309.6	0.8054 96.2 96.2	7.7021 [8.0000]	96.3%			
PFEESA	(315.0 / 135.0) 963848 (315.0 / 83.0) 290484	(6.59, 1.07) (N/A, -0.05, 0.0)	701.2 684.7	0.3014 98.2 98.2	3.5124 [3.5698]	98.4%			
PFMPA	(229.0 / 85.0) 159859	(4.18, 0.84) (N/A, -0.05, 0.0)	785.7	N/A 0.0 0.0	4.0125 [4.0000]	100.3%			
PFMBA	(279.0 / 85.0) 557038	(5.38, 1.08) (N/A, -0.05, 0.0)	765.0	N/A 0.0 0.0	4.0451 [4.0000]	101.1%			
NFDHA	(295.0 / 201.0) 513792 (295.0 / 85.0) 442175	(6.02, 0.98) (N/A, -0.05, 0.0)	639.9 677.3	0.8606 97.5 97.5	4.0653 [4.0000]	101.6%			
13C3_PFBA_IIS	(216.0 / 172.0) 147062	(3.67, N/A) (N/A, -0.05, N/A)	798.2	N/A	1.0565 [1.0000]	105.7% { 96.9% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 235070	(6.14, N/A) (N/A, -0.04, N/A)	582.4	N/A	1.0180 [1.0000]	101.8% { 100.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 228180	(7.89, N/A) (N/A, -0.04, N/A)	542.9	N/A	1.0379 [1.0000]	103.8% { 95.9% }			
13C5_PFNA_IIS	(468.0 / 423.0) 190318	(8.63, N/A) (N/A, -0.04, N/A)	398.2	N/A	1.0277 [1.0000]	102.8% { 94.1% }			

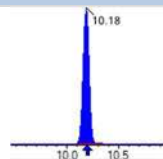
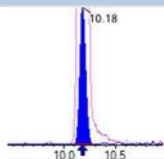
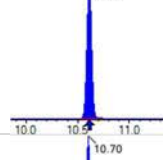
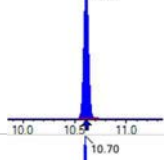
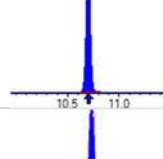
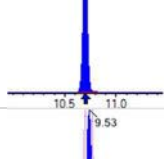
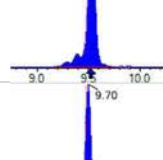
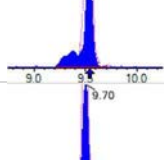
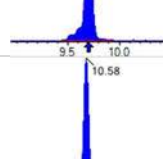
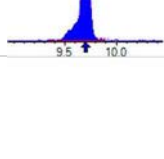
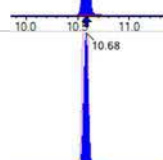
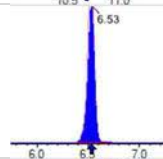
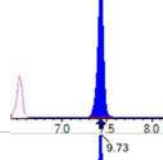
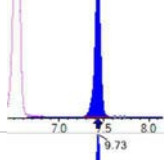
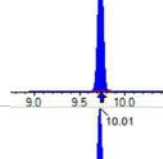
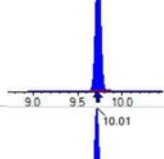
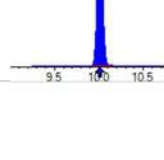
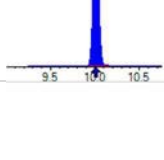
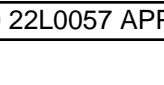
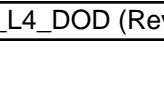
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 163196	(9.30, N/A) (N/A, -0.04, N/A)	351.2	N/A	0.8831 [1.0000]	88.3% { 93.9% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 399114	(8.01, N/A) (N/A, -0.04, N/A)	644.1	N/A	0.9886 [1.0000]	98.9% { 94.4% }			
13C4_PFOS_IIS	(502.8 / 79.9) 313371	(9.45, N/A) (N/A, -0.03, N/A)	470.2	N/A	0.9818 [1.0000]	98.2% { 95.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1206655	(3.67, N/A) (N/A, -0.05, N/A)	920.8	N/A	7.9721 [8.0000]	99.7% { 101.3% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 661139	(4.99, N/A) (N/A, -0.05, N/A)	803.5	N/A	4.0422 [4.0000]	101.1% { 95.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 583697	(6.14, N/A) (N/A, -0.05, N/A)	813.5	N/A	2.1578 [2.0000]	107.9% { 108.3% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 481858	(7.07, N/A) (N/A, -0.04, N/A)	625.4	N/A	2.0419 [2.0000]	102.1% { 98.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 529026	(7.89, N/A) (N/A, -0.04, N/A)	717.1	N/A	2.1141 [2.0000]	105.7% { 106.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 211031	(8.63, N/A) (N/A, -0.04, N/A)	522.0	N/A	1.0084 [1.0000]	100.8% { 96.5% }			
13C6_PFDA_EIS	(519.0 / 474.0) 264380	(9.30, N/A) (N/A, -0.04, N/A)	286.1	N/A	1.1391 [1.0000]	113.9% { 94.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 396942	(9.72, N/A) (N/A, -0.01, N/A)	636.0	N/A	1.2023 [1.0000]	120.2% { 99.7% }			

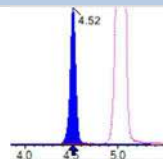
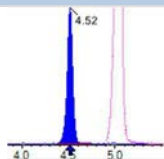
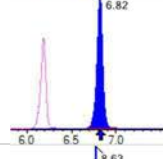
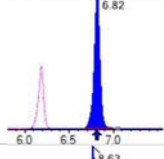
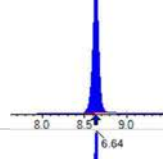
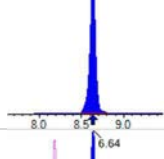
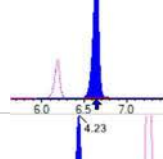
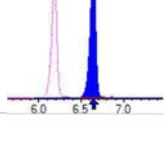
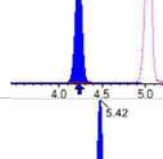
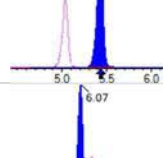
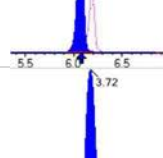
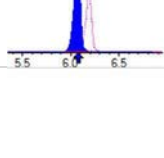
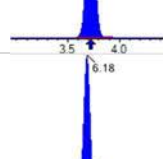
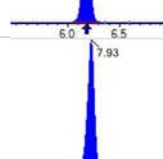
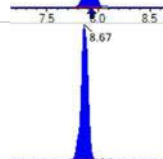
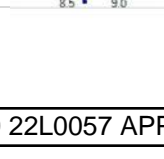
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 410435	(9.89, N/A) (N/A, -0.01, N/A)	625.4	N/A	1.2456 [1.0000]	124.6% { 105.9% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 251385	(10.12, N/A) (N/A, -0.01, N/A)	364.3	N/A	1.1487 [1.0000]	114.9% { 103.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1462627	(6.09, N/A) (N/A, -0.05, N/A)	798.2	N/A	2.1675 [2.0000]	108.4% { 106.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 718366	(8.01, N/A) (N/A, -0.04, N/A)	884.3	N/A	2.0008 [2.0000]	100.0% { 95.3% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1167403	(9.45, N/A) (N/A, -0.03, N/A)	347.8	N/A	2.1706 [2.0000]	108.5% { 98.1% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 241790	(5.80, N/A) (N/A, -0.05, N/A)	780.0	N/A	4.2305 [4.0000]	105.8% { 107.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 261330	(7.54, N/A) (N/A, -0.04, N/A)	519.2	N/A	3.7978 [4.0000]	94.9% { 95.2% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 282103	(8.96, N/A) (N/A, -0.04, N/A)	454.9	N/A	4.0954 [4.0000]	102.4% { 95.3% }			
13C8_PFOA_EIS	(506.0 / 78.0) 1451627	(10.17, N/A) (N/A, -0.01, N/A)	856.3	N/A	2.1353 [2.0000]	106.8% { 99.1% }			
D3_NMeFOA_EIS	(515.0 / 169.0) 301552	(10.60, N/A) (N/A, 0.00, N/A)	1022.7	N/A	2.0316 [2.0000]	101.6% { 91.4% }			
D5_NEtFOA_EIS	(531.1 / 169.0) 292885	(10.69, N/A) (N/A, 0.00, N/A)	1224.3	N/A	2.1375 [2.0000]	106.9% { 102.9% }			

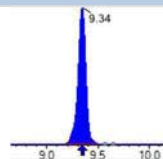
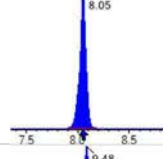
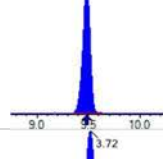
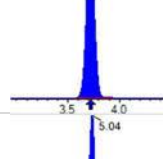
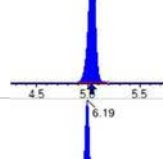
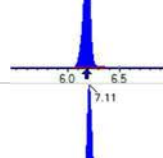
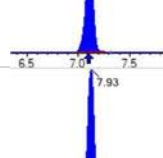
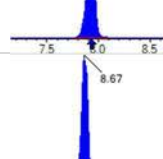
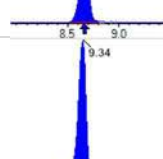
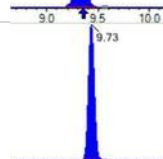
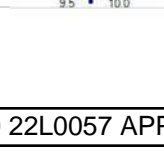
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 519867	(9.50, N/A) (N/A, -0.03, N/A)	351.6	N/A	4.0649 [4.0000]	101.6% { 101.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 523494	(9.68, N/A) (N/A, -0.01, N/A)	328.8	N/A	4.6440 [4.0000]	116.1% { 111.1% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 474063	(10.57, N/A) (N/A, 0.00, N/A)	906.7	N/A	22.7456 [20.0000]	113.7% { 109.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 209537	(10.67, N/A) (N/A, -0.01, N/A)	1132.4	N/A	22.0836 [20.0000]	110.4% { 114.8% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1127924	(6.49, N/A) (N/A, -0.04, N/A)	814.1	N/A	7.8424 [8.0000]	98.0% { 96.0% }			

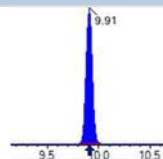
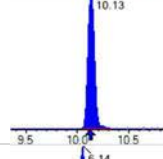
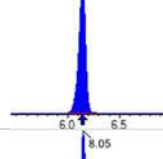
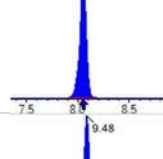
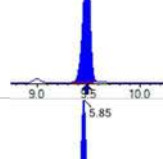
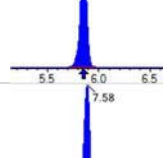
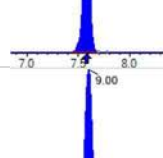
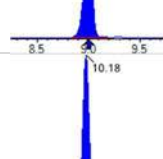
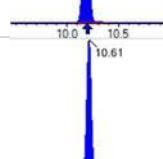
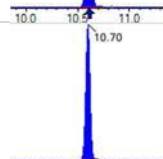
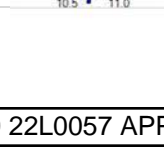
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 1990225	(3.72, 1.00) (0.00, N/A, 0.0)	64.8	N/A 0.0 0.0	20.4982 [20.0000]	102.5%			
PFPeA	(262.9 / 219.0) 1442100 (262.9 / 69.0) 16141	(5.04, 1.00) (0.00, N/A, 0.1)	681.9 331.7	0.0112 100.0 100.0	9.4373 [10.0000]	94.4%			
PFHxA	(313.0 / 269.0) 1106970 (313.0 / 119.0) 108235	(6.19, 1.00) (0.00, N/A, 0.1)	659.6 460.1	0.0978 100.0 100.0	4.7836 [5.0000]	95.7%			
PFHpA	(363.0 / 319.0) 1091562 (363.0 / 169.0) 339999	(7.11, 1.00) (0.00, N/A, 0.0)	794.0 590.8	0.3115 100.0 100.0	4.8774 [5.0000]	97.5%			
PFOA	(413.0 / 369.0) 1178218 (413.0 / 169.0) 385050	(7.93, 1.00) (0.00, N/A, 0.1)	590.9 623.3	0.3268 100.0 100.0	4.8153 [5.0000]	96.3%			
PFNA	(463.0 / 419.0) 1009822 (463.0 / 169.0) 194634	(8.66, 1.00) (0.00, N/A, -0.5)	531.9 118.3	0.1927 100.0 100.0	5.3804 [5.0000]	107.6%			
PFDA	(513.0 / 469.0) 1239600 (513.0 / 169.0) 118484	(9.34, 1.00) (0.00, N/A, 0.1)	438.5 380.8	0.0956 100.0 100.0	4.6297 [5.0000]	92.6%			
PFUnA	(563.0 / 519.0) 1546203 (563.0 / 169.0) 134285	(9.73, 1.00) (0.00, N/A, -0.2)	836.4 434.5	0.0868 100.0 100.0	4.9118 [5.0000]	98.2%			
PFDoA	(613.0 / 569.0) 1581806 (613.0 / 169.0) 220234	(9.90, 1.00) (0.00, N/A, 0.1)	474.2 387.0	0.1392 100.0 100.0	4.7333 [5.0000]	94.7%			
PFTrDA	(663.0 / 619.0) 1328428 (663.0 / 169.0) 271899	(10.03, 1.01) (N/A, 0.00, 0.0)	609.2 325.8	0.2047 100.0 100.0	4.5881 [5.0000]	91.8%			
PFTeDA	(713.0 / 669.0) 1063699 (713.0 / 169.0) 216340	(10.13, 1.00) (0.00, N/A, -0.2)	630.3 402.5	0.2034 100.0 100.0	4.9622 [5.0000]	99.2%			

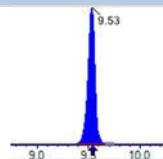
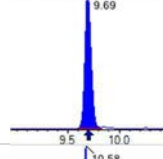
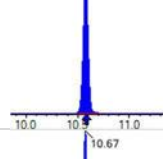
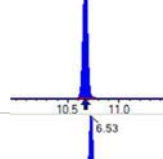
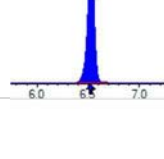
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1813615 (298.9 / 99.0) 1116198	(6.14, 1.00) (0.00, N/A, 0.0)	768.3 703.2	0.6155 100.0 100.0	4.8171 [4.4237]	108.9%			
PFPeS	(349.0 / 80.0) 3187262 (349.0 / 99.0) 1134601	(7.18, 0.89) (N/A, 0.00, 0.0)	946.8 863.6	0.3560 100.0 100.0	4.7330 [4.6919]	100.9%			
PFHxS	(399.0 / 80.0) 2633681 (399.0 / 99.0) 885281	(8.05, 1.00) (0.00, N/A, 0.1)	3311.5 3041.5	0.3361 100.0 100.0	4.4972 [4.5549]	98.7%			
PFHpS	(449.0 / 80.0) 2438304 (449.0 / 99.0) 667404	(8.82, 0.93) (N/A, 0.00, 0.1)	775.3 642.6	0.2737 100.0 100.0	4.6954 [4.7570]	98.7%			
PFOS	(499.0 / 80.0) 2788138 (499.0 / 99.0) 678060	(9.48, 1.00) (0.00, N/A, 0.1)	106.0 147.7	0.2432 100.0 100.0	4.3161 [4.6375]	93.1%			
PFNS	(549.0 / 80.0) 3204059 (549.0 / 99.0) 781912	(9.77, 1.03) (N/A, 0.00, -0.2)	897.4 623.4	0.2440 100.0 100.0	4.4712 [4.7994]	93.2%			
PFDS	(599.0 / 80.0) 3838984 (599.0 / 99.0) 864091	(9.92, 1.05) (N/A, 0.00, -0.1)	900.9 980.5	0.2251 100.0 100.0	4.8256 [4.8155]	100.2%			
PFDoS	(698.9 / 80.0) 1471553 (698.9 / 99.0) 360040	(10.12, 1.07) (N/A, 0.00, 0.1)	998.7 645.8	0.2447 100.0 100.0	4.4257 [4.8478]	91.3%			
4:2FTS	(327.0 / 307.0) 4028733 (327.0 / 81.0) 1990132	(5.85, 1.00) (0.00, N/A, -0.1)	873.0 781.7	0.4940 100.0 100.0	21.7465 [18.6906]	116.4%			
6:2FTS	(427.0 / 407.0) 1996255 (427.0 / 81.0) 1553538	(7.58, 1.00) (0.00, N/A, 0.1)	795.2 949.1	0.7782 100.0 100.0	18.9232 [18.9808]	99.7%			
8:2FTS	(527.0 / 507.0) 2012330 (527.0 / 81.0) 1139036	(9.00, 1.00) (0.00, N/A, 0.0)	497.7 645.4	0.5660 100.0 100.0	17.1622 [19.1658]	89.5%			

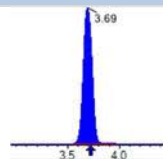
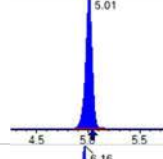
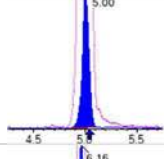
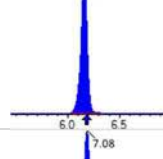
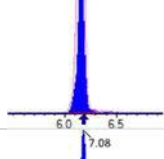
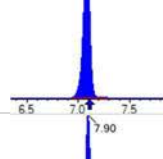
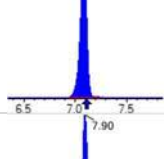
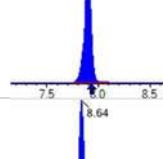
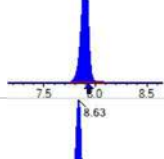
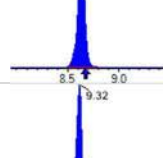
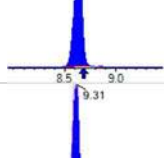
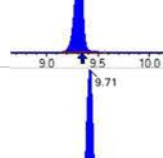
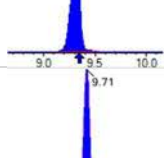
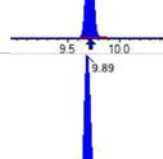
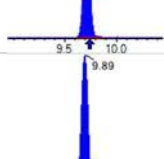
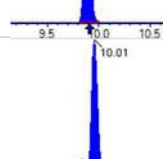
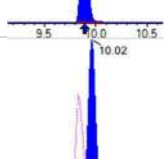
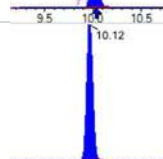
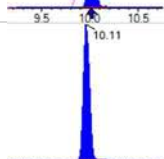
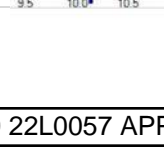
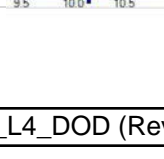
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 3270792 (498.0 / 478.0) 68177	(10.18, 1.00) (0.00, N/A, 0.2)	829.1 239.1	0.0208 100.0 100.0	4.7234 [5.0000]	94.5%			
NMeFOSA	(511.9 / 219.0) 2491137 (511.9 / 169.0) 1794272	(10.61, 1.00) (0.00, N/A, 0.0)	1462.0 1077.7	0.7203 100.0 100.0	18.5213 [20.0000]	92.6%			
NEIFOSA	(526.0 / 219.0) 2678351 (526.0 / 169.0) 2632868	(10.70, 1.00) (0.00, N/A, 0.1)	1554.8 1249.8	1.0577 100.0 100.0	20.8662 [20.0000]	104.3%			
NMeFOSAA	(570.0 / 419.0) 486745 (570.0 / 483.0) 299202	(9.53, 1.00) (0.00, N/A, -0.2)	573.1 562.9	0.6147 100.0 100.0	4.8937 [5.0000]	97.9%			
NEIFOSAA	(584.0 / 419.0) 490783 (584.0 / 526.0) 359842	(9.70, 1.00) (0.00, N/A, -0.1)	632.4 1809.1	0.7332 100.0 100.0	4.6394 [5.0000]	92.8%			
NMeFOSE	(616.1 / 59.0) 543390	(10.58, 1.00) (0.01, N/A, 0.0)	1051.7	N/A 0.0 0.0	19.9513 [20.0000]	99.8%			
NEtFOSE	(630.0 / 59.0) 87164	(10.68, 1.00) (0.01, N/A, 0.0)	921.6	N/A 0.0 0.0	18.6613 [20.0000]	93.3%			
HFPO-DA	(285.0 / 169.0) 898919 (285.0 / 185.0) 2467337	(6.53, 1.00) (0.00, N/A, 0.1)	856.6 806.8	2.7448 100.0 100.0	10.0733 [10.0000]	100.7%			
ADONA	(377.0 / 85.0) 3868840 (377.0 / 251.0) 481766	(7.43, 1.14) (N/A, 0.00, 0.0)	954.1 756.2	0.1245 100.0 100.0	9.7608 [9.4270]	103.5%			
9CI-Pf3ONS	(531.0 / 351.0) 10282118 (533.0 / 353.0) 3043082	(9.73, 1.49) (N/A, 0.00, 0.1)	1040.7 769.1	0.2960 100.0 100.0	9.5629 [9.3325]	102.5%			
11CI-PF3OUDS	(631.0 / 451.0) 5063261 (633.0 / 453.0) 1675005	(10.01, 1.53) (N/A, 0.00, 0.0)	1182.7 681.6	0.3308 100.0 100.0	9.1397 [9.4321]	96.9%			

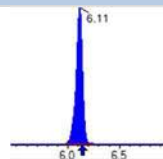
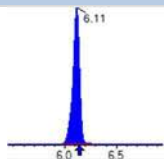
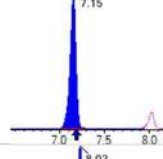
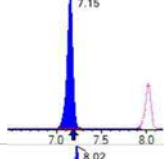
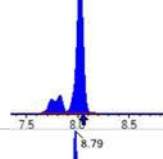
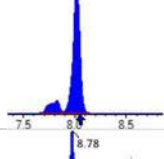
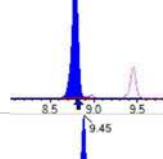
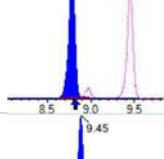
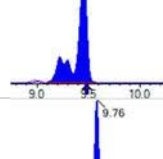
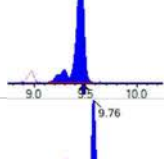
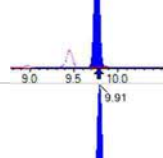
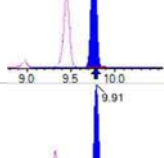
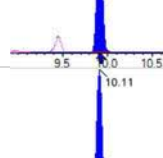
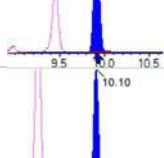
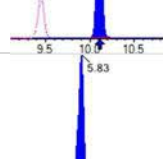
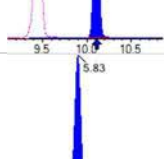
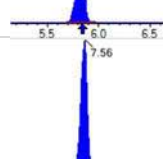
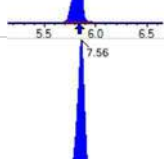
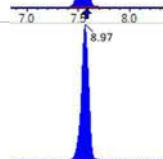
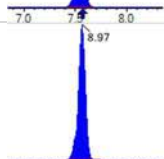
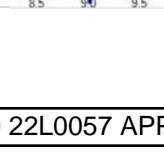
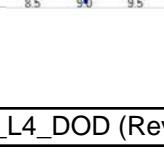
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 99522 (241.0 / 117.0) 166546	(4.52, 0.90) (N/A, 0.00, 0.0)	656.3 515.8	1.6734 100.0 100.0	18.8712 [20.0000]	94.4%			
5:3FTCA	(341.0 / 236.7) 874302 (341.0 / 217.0) 1279737	(6.82, 1.10) (N/A, 0.00, 0.1)	614.2 617.8	1.4637 100.0 100.0	21.3819 [20.0000]	106.9%			
7:3FTCA	(441.0 / 317.0) 962379 (441.0 / 337.0) 805964	(8.63, 1.40) (N/A, 0.00, 0.0)	516.9 404.8	0.8375 100.0 100.0	20.4549 [20.0000]	102.3%			
PFEESA	(315.0 / 135.0) 2085285 (315.0 / 83.0) 640190	(6.64, 1.07) (N/A, 0.00, 0.1)	832.1 689.8	0.3070 100.0 100.0	8.2307 [8.9246]	92.2%			
PFMPA	(229.0 / 85.0) 396790	(4.23, 0.84) (N/A, 0.00, 0.0)	1072.7	N/A 0.0 0.0	9.4611 [10.0000]	94.6%			
PFMBA	(279.0 / 85.0) 1416279	(5.42, 1.08) (N/A, 0.00, 0.0)	830.4	N/A 0.0 0.0	9.7700 [10.0000]	97.7%			
NFDHA	(295.0 / 201.0) 1199740 (295.0 / 85.0) 1059117	(6.07, 0.98) (N/A, 0.00, 0.0)	939.5 917.5	0.8828 100.0 100.0	10.2818 [10.0000]	102.8%			
13C3_PFBA_IIS	(216.0 / 172.0) 151758	(3.72, N/A) (N/A, 0.00, N/A)	805.9	N/A	1.0903 [1.0000]	109.0% { 100.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 233958	(6.18, N/A) (N/A, 0.00, N/A)	558.9	N/A	1.0132 [1.0000]	101.3% { 100.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 238020	(7.93, N/A) (N/A, 0.00, N/A)	686.2	N/A	1.0827 [1.0000]	108.3% { 100.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 202298	(8.67, N/A) (N/A, 0.00, N/A)	356.6	N/A	1.0924 [1.0000]	109.2% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 173856	(9.34, N/A) (N/A, 0.00, N/A)	302.9	N/A	0.9407 [1.0000]	94.1% { 100.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 422692	(8.05, N/A) (N/A, 0.00, N/A)	772.0	N/A	1.0470 [1.0000]	104.7% { 100.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 327849	(9.48, N/A) (N/A, 0.00, N/A)	486.2	N/A	1.0272 [1.0000]	102.7% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1190617	(3.72, N/A) (N/A, 0.00, N/A)	806.1	N/A	7.6228 [8.0000]	95.3% { 100.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 695964	(5.04, N/A) (N/A, 0.00, N/A)	743.0	N/A	4.2753 [4.0000]	106.9% { 100.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 538902	(6.19, N/A) (N/A, 0.00, N/A)	577.5	N/A	2.0016 [2.0000]	100.1% { 100.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 491038	(7.11, N/A) (N/A, 0.00, N/A)	663.4	N/A	2.0907 [2.0000]	104.5% { 100.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 497637	(7.93, N/A) (N/A, 0.00, N/A)	494.4	N/A	1.9065 [2.0000]	95.3% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 218730	(8.67, N/A) (N/A, 0.00, N/A)	468.8	N/A	0.9833 [1.0000]	98.3% { 100.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 281293	(9.34, N/A) (N/A, 0.00, N/A)	304.6	N/A	1.1376 [1.0000]	113.8% { 100.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 398330	(9.73, N/A) (N/A, 0.00, N/A)	590.9	N/A	1.1326 [1.0000]	113.3% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 387652	(9.91, N/A) (N/A, 0.00, N/A)	408.6	N/A	1.1043 [1.0000]	110.4% { 100.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 241867	(10.13, N/A) (N/A, 0.00, N/A)	473.7	N/A	1.0375 [1.0000]	103.7% { 100.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1373432	(6.14, N/A) (N/A, 0.00, N/A)	693.8	N/A	1.9218 [2.0000]	96.1% { 100.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 753903	(8.05, N/A) (N/A, 0.00, N/A)	856.1	N/A	1.9827 [2.0000]	99.1% { 100.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1190292	(9.48, N/A) (N/A, 0.00, N/A)	261.7	N/A	2.1154 [2.0000]	105.8% { 100.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 224114	(5.85, N/A) (N/A, 0.00, N/A)	886.7	N/A	3.7025 [4.0000]	92.6% { 100.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 274445	(7.58, N/A) (N/A, 0.00, N/A)	671.5	N/A	3.7659 [4.0000]	94.1% { 100.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 296038	(9.00, N/A) (N/A, 0.00, N/A)	428.2	N/A	4.0579 [4.0000]	101.4% { 100.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1465391	(10.18, N/A) (N/A, 0.00, N/A)	879.9	N/A	2.0603 [2.0000]	103.0% { 100.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 330001	(10.61, N/A) (N/A, 0.00, N/A)	806.2	N/A	2.1251 [2.0000]	106.3% { 100.0% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 284603	(10.70, N/A) (N/A, 0.00, N/A)	963.7	N/A	1.9853 [2.0000]	99.3% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 510539	(9.53, N/A) (N/A, 0.00, N/A)	423.7	N/A	3.8157 [4.0000]	95.4% { 100.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 471317	(9.69, N/A) (N/A, 0.00, N/A)	312.2	N/A	3.9965 [4.0000]	99.9% { 100.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 431560	(10.58, N/A) (N/A, 0.00, N/A)	1437.5	N/A	19.7920 [20.0000]	99.0% { 100.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 182445	(10.67, N/A) (N/A, 0.00, N/A)	924.0	N/A	18.3793 [20.0000]	91.9% { 100.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1174542	(6.53, N/A) (N/A, 0.00, N/A)	891.8	N/A	8.2053 [8.0000]	102.6% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 4050226	(3.69, 1.00) (0.00, N/A, 0.0)	65.3	N/A 0.0 0.0	42.6736 [40.0000]	106.7%			
PFPeA	(262.9 / 219.0) 2824768 (262.9 / 69.0) 30797	(5.01, 1.00) (0.00, N/A, 0.2)	725.3 354.5	0.0109 97.4 97.4	19.8721 [20.0000]	99.4%			
PFHxA	(313.0 / 269.0) 2355853 (313.0 / 119.0) 216426	(6.16, 1.00) (0.00, N/A, 0.1)	630.0 576.1	0.0919 94.0 94.0	9.7663 [10.0000]	97.7%			
PFHpA	(363.0 / 319.0) 2097907 (363.0 / 169.0) 669756	(7.08, 1.00) (0.00, N/A, 0.1)	650.6 555.8	0.3192 102.5 102.5	9.6572 [10.0000]	96.6%			
PFOA	(413.0 / 369.0) 2460865 (413.0 / 169.0) 754807	(7.90, 1.00) (0.00, N/A, 0.0)	797.2 515.8	0.3067 93.9 93.9	10.0578 [10.0000]	100.6%			
PFNA	(463.0 / 419.0) 1917681 (463.0 / 169.0) 398931	(8.64, 1.00) (0.00, N/A, 0.0)	698.0 110.9	0.2080 107.9 107.9	9.9870 [10.0000]	99.9%			
PFDA	(513.0 / 469.0) 2731475 (513.0 / 169.0) 237718	(9.32, 1.00) (0.01, N/A, 0.1)	431.9 384.2	0.0870 91.1 91.1	10.5011 [10.0000]	105.0%			
PFUnA	(563.0 / 519.0) 2762959 (563.0 / 169.0) 281752	(9.71, 1.00) (0.00, N/A, 0.0)	678.3 368.4	0.1020 117.4 117.4	10.3620 [10.0000]	103.6%			
PFDoA	(613.0 / 569.0) 3158081 (613.0 / 169.0) 408270	(9.89, 1.00) (0.00, N/A, -0.3)	740.9 505.8	0.1293 92.9 92.9	10.5649 [10.0000]	105.6%			
PFTrDA	(663.0 / 619.0) 2750923 (663.0 / 169.0) 615527	(10.01, 1.01) (N/A, -0.01, -0.3)	922.1 622.7	0.2238 109.3 109.3	10.6219 [10.0000]	106.2%			
PFTeDA	(713.0 / 669.0) 2392662 (713.0 / 169.0) 396949	(10.12, 1.00) (0.00, N/A, 0.2)	784.4 530.3	0.1659 81.6 81.6	12.1566 [10.0000]	121.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 3499294 (298.9 / 99.0) 2162960	(6.11, 1.00) (0.00, N/A, 0.0)	782.7 712.1	0.6181 100.4 100.4	9.3608 [8.8473]	105.8%			
PFPeS	(349.0 / 80.0) 6311120 (349.0 / 99.0) 2220135	(7.15, 0.89) (N/A, -0.03, 0.0)	774.9 858.6	0.3518 98.8 98.8	9.3269 [9.3838]	99.4%			
PFHxS	(399.0 / 80.0) 5497046 (399.0 / 99.0) 1809522	(8.02, 1.00) (0.00, N/A, 0.2)	3843.8 4067.6	0.3292 97.9 97.9	9.3415 [9.1098]	102.5%			
PFHpS	(449.0 / 80.0) 4655282 (449.0 / 99.0) 1364079	(8.79, 0.93) (N/A, -0.03, 0.1)	660.3 545.6	0.2930 107.1 107.1	10.1795 [9.5141]	107.0%			
PFOS	(499.0 / 80.0) 5408135 (499.0 / 99.0) 1245798	(9.45, 1.00) (0.00, N/A, -0.1)	107.2 128.5	0.2304 94.7 94.7	9.5064 [9.2749]	102.5%			
PFNS	(549.0 / 80.0) 6857872 (549.0 / 99.0) 1607367	(9.76, 1.03) (N/A, -0.01, 0.1)	779.5 870.0	0.2344 96.0 96.0	10.8669 [9.5989]	113.2%			
PFDS	(599.0 / 80.0) 7907397 (599.0 / 99.0) 1810025	(9.91, 1.05) (N/A, -0.01, 0.2)	1173.5 1014.3	0.2289 101.7 101.7	11.2866 [9.6311]	117.2%			
PFDoS	(698.9 / 80.0) 2945783 (698.9 / 99.0) 628808	(10.11, 1.07) (N/A, -0.01, 0.1)	1059.1 1043.2	0.2135 87.2 87.2	10.0602 [9.6956]	103.8%			
4:2FTS	(327.0 / 307.0) 7219424 (327.0 / 81.0) 3962590	(5.83, 1.00) (0.00, N/A, 0.3)	742.8 891.9	0.5489 111.1 111.1	35.0389 [37.3811]	93.7%			
6:2FTS	(427.0 / 407.0) 4387404 (427.0 / 81.0) 2952550	(7.56, 1.00) (0.00, N/A, -0.1)	852.0 1014.4	0.6730 86.5 86.5	42.2664 [37.9617]	111.3%			
8:2FTS	(527.0 / 507.0) 4299071 (527.0 / 81.0) 2483349	(8.97, 1.00) (0.00, N/A, 0.1)	581.6 491.2	0.5776 102.1 102.1	39.3656 [38.3315]	102.7%			

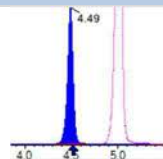
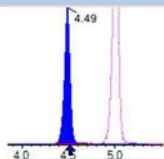
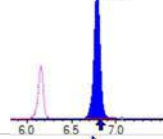
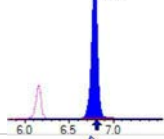
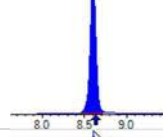
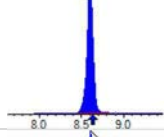
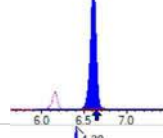
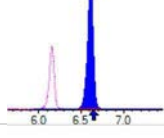
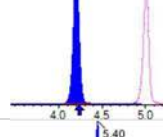
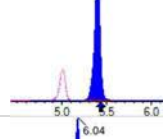
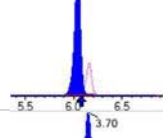
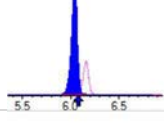
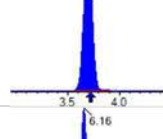
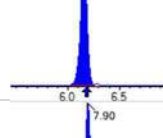
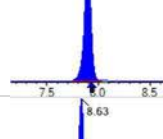
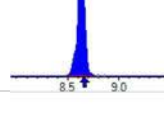


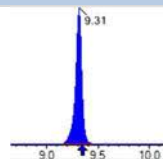
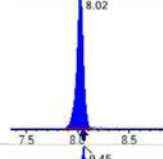
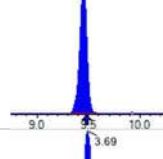
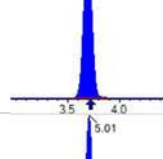
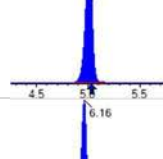
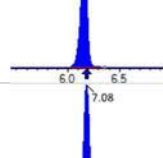
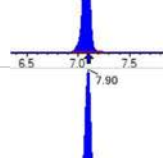
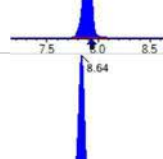
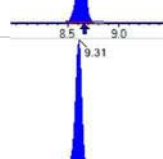
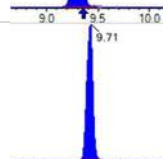
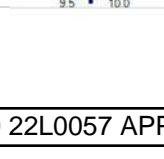
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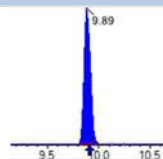
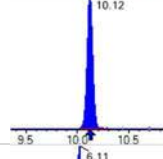
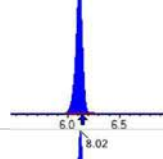
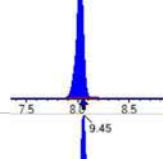
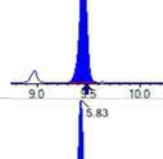
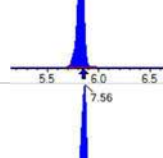
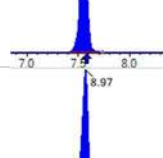
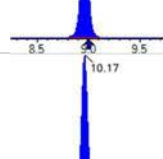
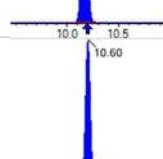
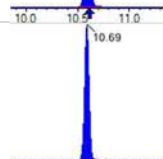
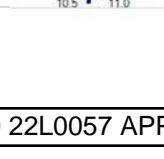
Sample I.D.: SB03941-CAL6
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21A (6)
 Acquired: 2022/12/21 - 15:30

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 7323816 (498.0 / 478.0) 156082	(10.17 , 1.00) (0.00 , N/A , -0.1)	1220.2 517.0	0.0213 102.2 102.2	11.2339 [10.0000]	112.3%			
NMeFOSA	(511.9 / 219.0) 5018962 (511.9 / 169.0) 3409088	(10.60 , 1.00) (0.00 , N/A , -0.1)	1068.1 1194.8	0.6792 94.3 94.3	41.0228 [40.0000]	102.6%			
NEIFOSA	(526.0 / 219.0) 5202781 (526.0 / 169.0) 5559747	(10.69 , 1.00) (0.00 , N/A , 0.0)	1128.4 1454.6	1.0686 101.0 101.0	41.3031 [40.0000]	103.3%			
NMeFOSAA	(570.0 / 419.0) 1047253 (570.0 / 483.0) 528303	(9.50 , 1.00) (0.01 , N/A , 0.0)	505.4 486.7	0.5045 82.1 82.1	9.6770 [10.0000]	96.8%			
NEIFOSAA	(584.0 / 419.0) 1028405 (584.0 / 526.0) 603316	(9.68 , 1.00) (0.01 , N/A , 0.0)	933.5 1079.0	0.5867 80.0 80.0	8.7467 [10.0000]	87.5%			
NMeFOSE	(616.1 / 59.0) 1066666	(10.57 , 1.00) (0.01 , N/A , 0.0)	1245.3	N/A 0.0 0.0	43.1436 [40.0000]	107.9%			
NEtFOSE	(630.0 / 59.0) 190429	(10.67 , 1.00) (0.01 , N/A , 0.0)	952.6	N/A 0.0 0.0	39.7759 [40.0000]	99.4%			
HFPO-DA	(285.0 / 169.0) 1706844 (285.0 / 185.0) 4940740	(6.50 , 1.00) (0.00 , N/A , 0.0)	940.9 950.3	2.8947 105.5 105.5	19.4163 [20.0000]	97.1%			
ADONA	(377.0 / 85.0) 7625070 (377.0 / 251.0) 966765	(7.40 , 1.14) (N/A , -0.03 , 0.0)	848.9 734.0	0.1268 101.8 101.8	19.5285 [18.8540]	103.6%			
9CI-Pf3ONS	(531.0 / 351.0) 18752532 (533.0 / 353.0) 6070274	(9.71 , 1.49) (N/A , -0.02 , 0.0)	653.0 661.6	0.3237 109.4 109.4	18.3510 [18.6651]	98.3%			
11CI-PF3OUDS	(631.0 / 451.0) 10830263 (633.0 / 453.0) 3030278	(10.00 , 1.54) (N/A , -0.01 , 0.1)	1577.4 1022.7	0.2798 84.6 84.6	19.8453 [18.8642]	105.2%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 204327 (241.0 / 117.0) 336062	(4.49, 0.90) (N/A, -0.03, 0.1)	792.9 648.3	1.6447 98.3 98.3	41.6496 [40.0000]	104.1%			
5:3FTCA	(341.0 / 236.7) 1619148 (341.0 / 217.0) 2611063	(6.79, 1.10) (N/A, -0.03, -0.1)	703.3 612.1	1.6126 110.2 110.2	37.9872 [40.0000]	95.0%			
7:3FTCA	(441.0 / 317.0) 1906765 (441.0 / 337.0) 1608500	(8.60, 1.40) (N/A, -0.03, -0.1)	523.3 597.0	0.8436 100.7 100.7	38.8788 [40.0000]	97.2%			
PFEESA	(315.0 / 135.0) 4593030 (315.0 / 83.0) 1327802	(6.61, 1.07) (N/A, -0.03, -0.1)	844.1 795.4	0.2891 94.2 94.2	17.3915 [17.8492]	97.4%			
PFMPA	(229.0 / 85.0) 810629	(4.20, 0.84) (N/A, -0.03, 0.0)	1061.6	N/A 0.0 0.0	20.7783 [20.0000]	103.9%			
PFMBA	(279.0 / 85.0) 2665168	(5.40, 1.08) (N/A, -0.03, 0.0)	868.7	N/A 0.0 0.0	19.7641 [20.0000]	98.8%			
NFDHA	(295.0 / 201.0) 2388001 (295.0 / 85.0) 2094961	(6.04, 0.98) (N/A, -0.03, 0.0)	636.9 870.9	0.8773 99.4 99.4	19.6329 [20.0000]	98.2%			
13C3_PFBA_IIS	(216.0 / 172.0) 145548	(3.70, N/A) (N/A, -0.02, N/A)	760.7	N/A	1.0457 [1.0000]	104.6% { 95.9% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 251161	(6.16, N/A) (N/A, -0.03, N/A)	573.8	N/A	1.0877 [1.0000]	108.8% { 107.4% }			
13C4_PFOA_IIS	(417.0 / 372.0) 228422	(7.90, N/A) (N/A, -0.03, N/A)	604.8	N/A	1.0390 [1.0000]	103.9% { 96.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 199253	(8.63, N/A) (N/A, -0.03, N/A)	633.0	N/A	1.0760 [1.0000]	107.6% { 98.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 224539	(9.31, N/A) (N/A, -0.03, N/A)	595.4	N/A	1.2150 [1.0000]	121.5% { 129.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 425062	(8.02, N/A) (N/A, -0.03, N/A)	758.0	N/A	1.0529 [1.0000]	105.3% { 100.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 327789	(9.45, N/A) (N/A, -0.03, N/A)	437.5	N/A	1.0270 [1.0000]	102.7% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1163869	(3.69, N/A) (N/A, -0.02, N/A)	943.4	N/A	7.7695 [8.0000]	97.1% { 97.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 647411	(5.01, N/A) (N/A, -0.03, N/A)	744.3	N/A	3.7047 [4.0000]	92.6% { 93.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 561752	(6.16, N/A) (N/A, -0.03, N/A)	573.9	N/A	1.9436 [2.0000]	97.2% { 104.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 476643	(7.08, N/A) (N/A, -0.03, N/A)	661.3	N/A	1.8904 [2.0000]	94.5% { 97.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 497619	(7.90, N/A) (N/A, -0.03, N/A)	689.7	N/A	1.9865 [2.0000]	99.3% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 223778	(8.64, N/A) (N/A, -0.03, N/A)	409.0	N/A	1.0213 [1.0000]	102.1% { 102.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 273272	(9.31, N/A) (N/A, -0.03, N/A)	311.9	N/A	0.8557 [1.0000]	85.6% { 97.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 337405	(9.71, N/A) (N/A, -0.01, N/A)	389.2	N/A	0.7428 [1.0000]	74.3% { 84.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 346746	(9.89, N/A) (N/A, -0.02, N/A)	642.1	N/A	0.7648 [1.0000]	76.5% { 89.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 222076	(10.12, N/A) (N/A, -0.01, N/A)	456.1	N/A	0.7376 [1.0000]	73.8% { 91.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1363704	(6.11, N/A) (N/A, -0.03, N/A)	654.6	N/A	1.8975 [2.0000]	94.9% { 99.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 757540	(8.02, N/A) (N/A, -0.03, N/A)	799.7	N/A	1.9811 [2.0000]	99.1% { 100.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1048231	(9.45, N/A) (N/A, -0.03, N/A)	180.4	N/A	1.8633 [2.0000]	93.2% { 88.1% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 249254	(5.83, N/A) (N/A, -0.03, N/A)	640.7	N/A	4.0948 [4.0000]	102.4% { 111.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 270052	(7.56, N/A) (N/A, -0.03, N/A)	709.3	N/A	3.6849 [4.0000]	92.1% { 98.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 275725	(8.97, N/A) (N/A, -0.03, N/A)	445.9	N/A	3.7584 [4.0000]	94.0% { 93.1% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1379635	(10.17, N/A) (N/A, -0.01, N/A)	959.9	N/A	1.9401 [2.0000]	97.0% { 94.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 300177	(10.60, N/A) (N/A, -0.01, N/A)	888.1	N/A	1.9334 [2.0000]	96.7% { 91.0% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 279297	(10.69, N/A) (N/A, -0.01, N/A)	926.2	N/A	1.9487 [2.0000]	97.4% { 98.1% }			

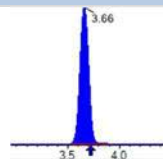
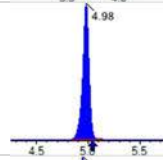
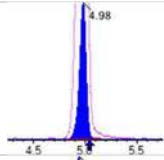
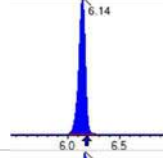
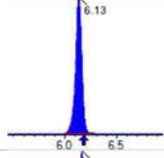
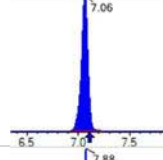
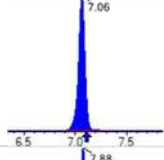
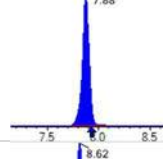
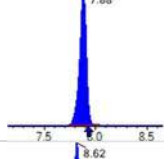
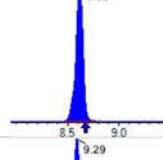
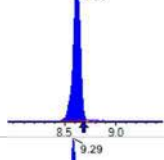
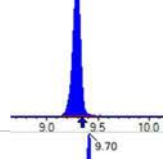
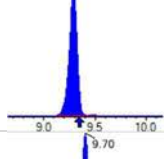
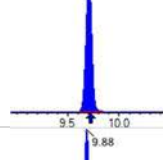
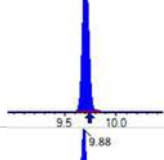
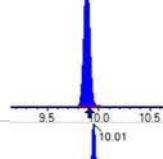
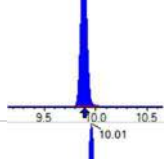
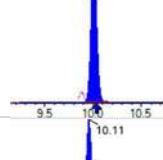
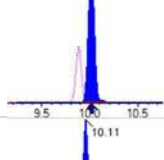
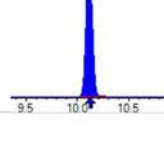
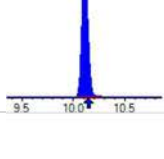


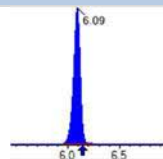
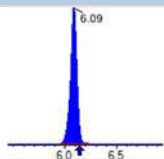
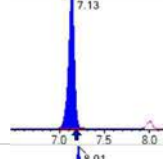
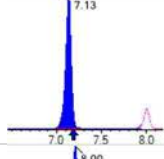
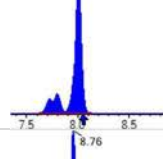
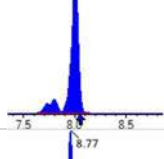
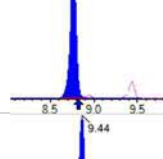
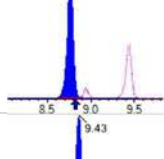
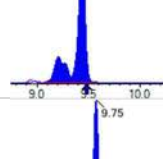
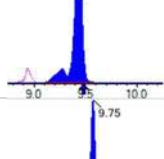
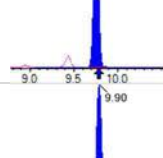
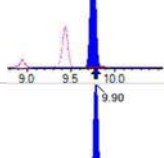
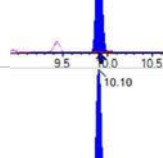
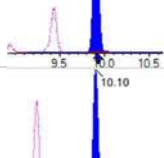
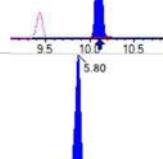
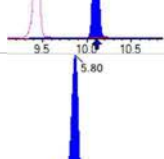
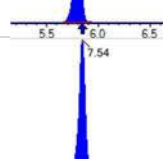
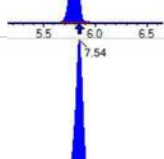
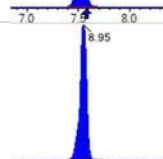
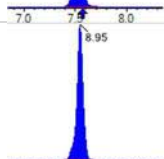
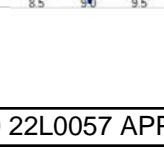
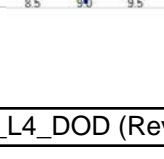
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 Instrument: Saphira
 Type: Sciex Q3 5500

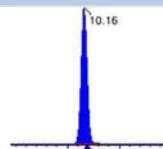
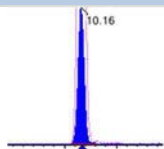
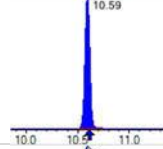
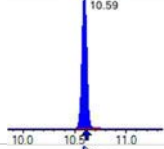
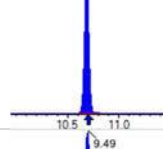
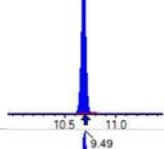
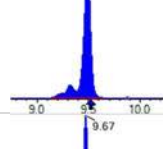
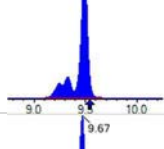
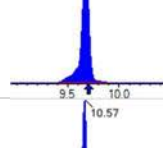
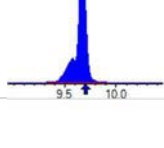
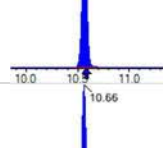
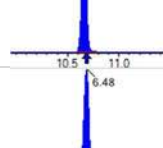
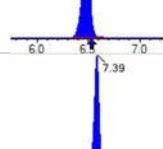
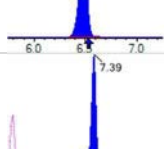
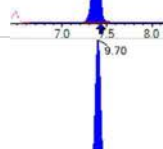
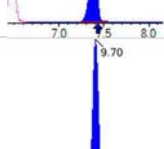
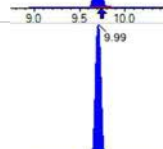
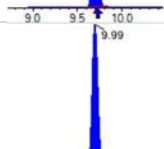
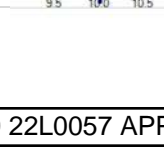
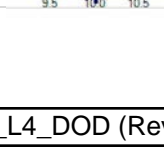
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 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

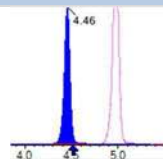
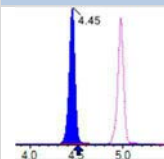
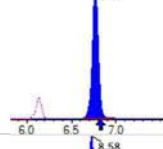
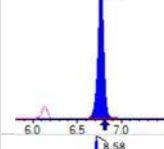
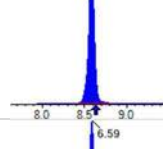
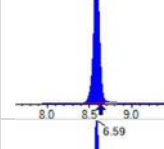
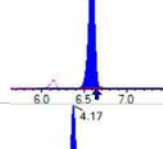
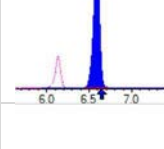
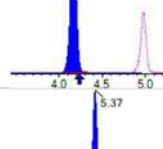
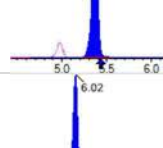
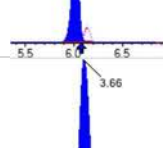
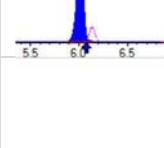
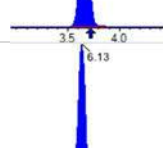
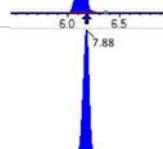
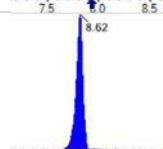
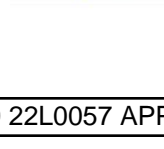
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 Path: S2022-12-21A (6)
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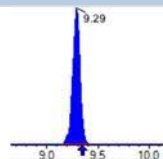
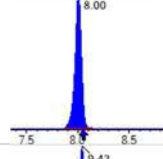
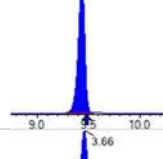
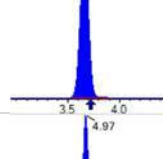
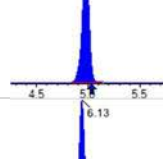
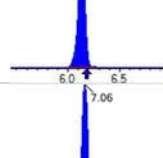
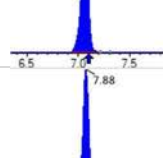
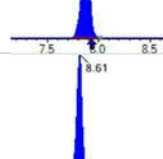
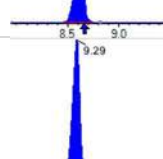
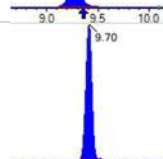
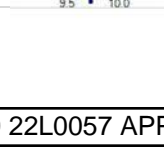
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 555492	(9.50, N/A) (N/A, -0.03, N/A)	414.0	N/A	4.1525 [4.0000]	103.8% { 108.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 523855	(9.68, N/A) (N/A, -0.02, N/A)	484.6	N/A	4.4428 [4.0000]	111.1% { 111.1% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 391753	(10.56, N/A) (N/A, -0.01, N/A)	1314.7	N/A	17.9697 [20.0000]	89.8% { 90.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 187004	(10.66, N/A) (N/A, -0.01, N/A)	901.5	N/A	18.8420 [20.0000]	94.2% { 102.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1157042	(6.50, N/A) (N/A, -0.03, N/A)	770.4	N/A	7.5294 [8.0000]	94.1% { 98.5% }			

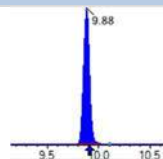
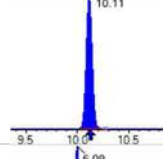
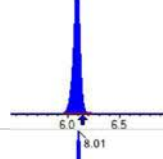
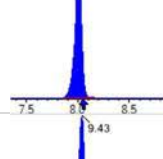
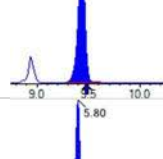
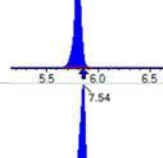
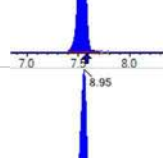
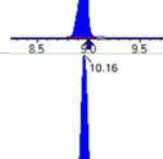
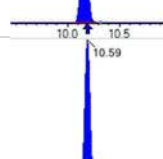
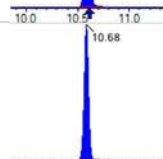
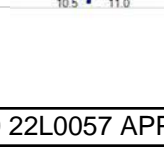
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 7729586	(3.66, 1.00) (0.00, N/A, 0.0)	67.9	N/A 0.0 0.0	81.7379 [80.0000]	102.2%			
PFPeA	(262.9 / 219.0) 5643399 (262.9 / 69.0) 60722	(4.98, 1.00) (0.00, N/A, 0.0)	694.2 520.3	0.0108 96.1 96.1	40.6136 [40.0000]	101.5%			
PFHxA	(313.0 / 269.0) 4661260 (313.0 / 119.0) 458438	(6.14, 1.00) (0.00, N/A, 0.3)	740.9 630.9	0.0984 100.6 100.6	21.3969 [20.0000]	107.0%			
PFHpA	(363.0 / 319.0) 4440128 (363.0 / 169.0) 1284143	(7.06, 1.00) (0.00, N/A, 0.0)	668.8 659.4	0.2892 92.9 92.9	21.0935 [20.0000]	105.5%			
PFOA	(413.0 / 369.0) 4641747 (413.0 / 169.0) 1487003	(7.88, 1.00) (0.00, N/A, -0.3)	945.5 720.9	0.3204 98.0 98.0	20.0481 [20.0000]	100.2%			
PFNA	(463.0 / 419.0) 3537219 (463.0 / 169.0) 723244	(8.62, 1.00) (0.00, N/A, -0.2)	600.2 105.2	0.2045 106.1 106.1	20.0197 [20.0000]	100.1%			
PFDA	(513.0 / 469.0) 4550414 (513.0 / 169.0) 407049	(9.29, 1.00) (0.00, N/A, 0.3)	458.4 340.9	0.0895 93.6 93.6	18.7496 [20.0000]	93.7%			
PFUnA	(563.0 / 519.0) 5474685 (563.0 / 169.0) 489769	(9.70, 1.00) (0.00, N/A, 0.3)	796.9 670.2	0.0895 103.0 103.0	20.8759 [20.0000]	104.4%			
PFDoA	(613.0 / 569.0) 6253442 (613.0 / 169.0) 780811	(9.88, 1.00) (0.00, N/A, 0.0)	838.3 526.7	0.1249 89.7 89.7	19.2908 [20.0000]	96.5%			
PFTrDA	(663.0 / 619.0) 5585067 (663.0 / 169.0) 1021977	(10.01, 1.01) (N/A, -0.02, -0.4)	939.9 794.3	0.1830 89.4 89.4	19.8858 [20.0000]	99.4%			
PFTeDA	(713.0 / 669.0) 4569846 (713.0 / 169.0) 904045	(10.11, 1.00) (0.00, N/A, 0.2)	734.0 687.4	0.1978 97.3 97.3	17.5178 [20.0000]	87.6%			

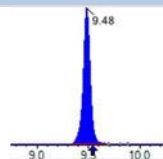
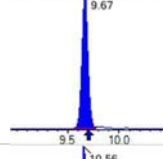
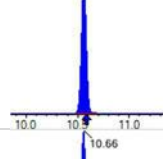
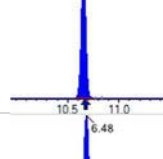
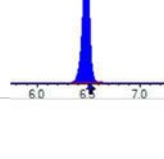
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 6221305 (298.9 / 99.0) 4130206	(6.09, 1.00) (0.00, N/A, 0.1)	735.2 716.1	0.6639 107.9 107.9	17.4196 [17.6947]	98.4%			
PFPeS	(349.0 / 80.0) 12435170 (349.0 / 99.0) 4513587	(7.13, 0.89) (N/A, -0.05, 0.0)	731.5 788.8	0.3630 102.0 102.0	19.6427 [18.7676]	104.7%			
PFHxS	(399.0 / 80.0) 10414987 (399.0 / 99.0) 3525485	(8.01, 1.00) (0.00, N/A, 0.2)	3224.1 4892.8	0.3385 100.7 100.7	18.9174 [18.2197]	103.8%			
PFHpS	(449.0 / 80.0) 9724229 (449.0 / 99.0) 2826299	(8.76, 0.93) (N/A, -0.05, -0.1)	693.4 620.9	0.2906 106.2 106.2	19.4303 [19.0281]	102.1%			
PFOS	(499.0 / 80.0) 11033465 (499.0 / 99.0) 2411819	(9.44, 1.00) (0.00, N/A, 0.2)	102.1 160.8	0.2186 89.9 89.9	17.7225 [18.5499]	95.5%			
PFNS	(549.0 / 80.0) 12066925 (549.0 / 99.0) 3200250	(9.75, 1.03) (N/A, -0.02, 0.0)	748.7 678.2	0.2652 108.7 108.7	17.4726 [19.1977]	91.0%			
PFDS	(599.0 / 80.0) 13381834 (599.0 / 99.0) 3299330	(9.90, 1.05) (N/A, -0.02, 0.1)	1052.2 1451.8	0.2466 109.5 109.5	17.4537 [19.2621]	90.6%			
PFDoS	(698.9 / 80.0) 5470070 (698.9 / 99.0) 1315874	(10.10, 1.07) (N/A, -0.02, 0.0)	1218.8 960.3	0.2406 98.3 98.3	17.0703 [19.3913]	88.0%			
4:2FTS	(327.0 / 307.0) 13496630 (327.0 / 81.0) 7417812	(5.80, 1.00) (0.00, N/A, 0.1)	849.9 833.0	0.5496 111.3 111.3	72.4566 [74.7622]	96.9%			
6:2FTS	(427.0 / 407.0) 8307126 (427.0 / 81.0) 5171329	(7.54, 1.00) (0.00, N/A, 0.0)	820.9 695.6	0.6225 80.0 80.0	76.1349 [75.9234]	100.3%			
8:2FTS	(527.0 / 507.0) 8258969 (527.0 / 81.0) 4745404	(8.95, 1.00) (0.00, N/A, 0.3)	609.9 658.7	0.5746 101.5 101.5	75.3496 [76.6631]	98.3%			

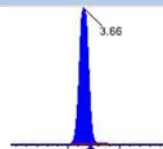
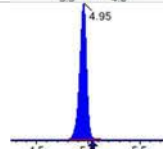
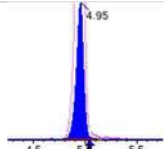
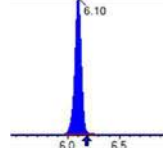
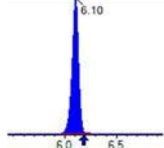
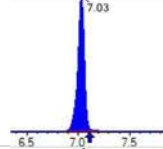
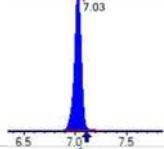
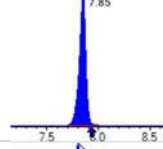
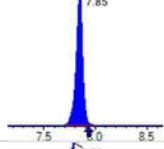
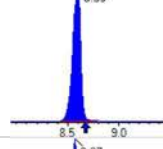
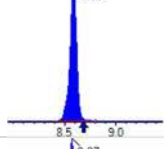
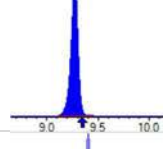
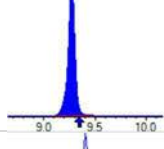
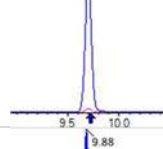
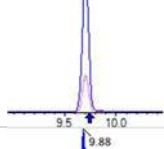
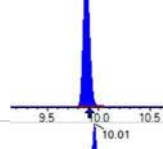
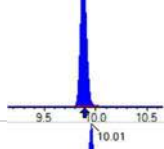
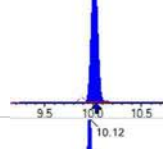
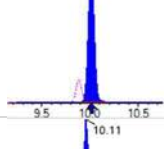
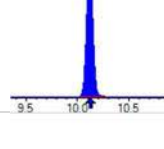
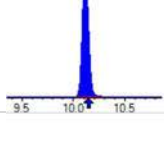
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 12934205 (498.0 / 478.0) 273418	(10.16, 1.00) (0.00, N/A, 0.0)	1019.0 675.2	0.0211 101.4 101.4	18.9126 [20.0000]	94.6%			
NMeFOSA	(511.9 / 219.0) 10047403 (511.9 / 169.0) 6239729	(10.59, 1.00) (0.00, N/A, 0.0)	963.4 963.6	0.6210 86.2 86.2	79.4328 [80.0000]	99.3%			
NEIFOSA	(526.0 / 219.0) 10330116 (526.0 / 169.0) 10487941	(10.69, 1.00) (0.00, N/A, 0.0)	1549.4 1526.7	1.0153 96.0 96.0	82.6028 [80.0000]	103.3%			
NMeFOSAA	(570.0 / 419.0) 2160138 (570.0 / 483.0) 1120189	(9.49, 1.00) (0.01, N/A, 0.0)	519.4 506.9	0.5186 84.4 84.4	21.0347 [20.0000]	105.2%			
NEIFOSAA	(584.0 / 419.0) 1755294 (584.0 / 526.0) 1179499	(9.67, 1.00) (0.01, N/A, 0.2)	1046.0 2541.1	0.6720 91.6 91.6	19.8369 [20.0000]	99.2%			
NMeFOSE	(616.1 / 59.0) 2100981	(10.57, 1.00) (0.01, N/A, 0.0)	1163.7	N/A 0.0 0.0	87.8464 [80.0000]	109.8%			
NEtFOSE	(630.0 / 59.0) 379057	(10.66, 1.00) (0.01, N/A, 0.0)	1328.5	N/A 0.0 0.0	79.1545 [80.0000]	98.9%			
HFPO-DA	(285.0 / 169.0) 3403206 (285.0 / 185.0) 9550202	(6.48, 1.00) (0.00, N/A, 0.0)	822.2 932.2	2.8062 102.2 102.2	39.8571 [40.0000]	99.6%			
ADONA	(377.0 / 85.0) 14175645 (377.0 / 251.0) 1888186	(7.39, 1.14) (N/A, -0.04, -0.1)	782.5 715.9	0.1332 107.0 107.0	37.3778 [37.7080]	99.1%			
9CI-Pf3ONS	(531.0 / 351.0) 33927453 (533.0 / 353.0) 11818760	(9.70, 1.50) (N/A, -0.03, 0.1)	767.5 701.4	0.3484 117.7 117.7	37.0127 [37.3302]	99.1%			
11CI-PF3OUDS	(631.0 / 451.0) 18459375 (633.0 / 453.0) 6096113	(9.99, 1.54) (N/A, -0.02, 0.1)	875.1 1257.4	0.3302 99.8 99.8	34.8243 [37.7283]	92.3%			

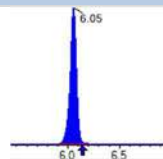
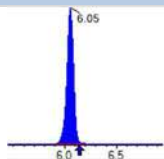
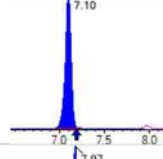
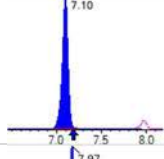
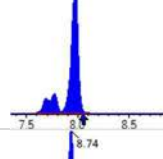
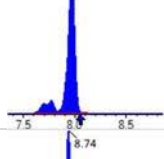
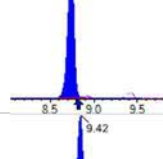
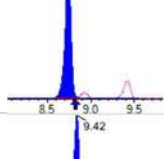
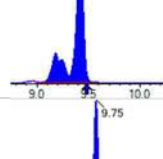
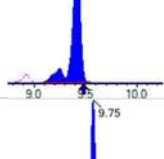
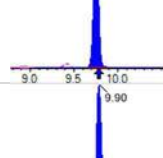
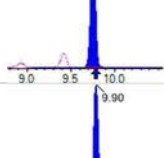
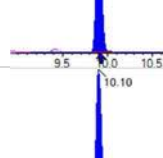
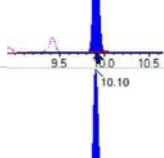
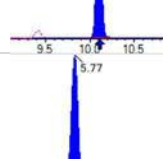
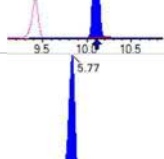
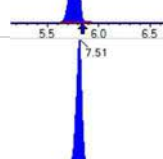
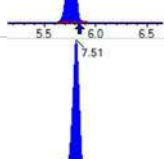
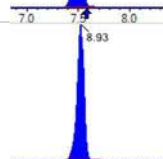
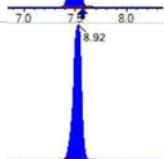
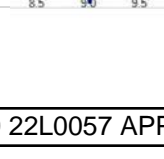
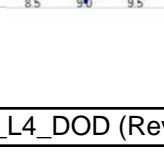
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 413530 (241.0 / 117.0) 684831	(4.46, 0.90) (N/A, -0.06, 0.0)	763.7 842.4	1.6561 99.0 99.0	86.2307 [80.0000]	107.8%			
5:3FTCA	(341.0 / 236.7) 3356741 (341.0 / 217.0) 5218130	(6.77, 1.10) (N/A, -0.05, -0.2)	736.7 741.6	1.5545 106.2 106.2	87.2034 [80.0000]	109.0%			
7:3FTCA	(441.0 / 317.0) 3849941 (441.0 / 337.0) 3225448	(8.58, 1.40) (N/A, -0.05, 0.0)	479.5 551.2	0.8378 100.0 100.0	86.9230 [80.0000]	108.7%			
PFEESA	(315.0 / 135.0) 8973610 (315.0 / 83.0) 2426863	(6.59, 1.07) (N/A, -0.05, 0.2)	892.6 762.9	0.2704 88.1 88.1	37.6244 [35.6984]	105.4%			
PFMPA	(229.0 / 85.0) 1587857	(4.17, 0.84) (N/A, -0.06, 0.0)	1007.1	N/A 0.0 0.0	41.6361 [40.0000]	104.1%			
PFMBA	(279.0 / 85.0) 5452093	(5.37, 1.08) (N/A, -0.06, 0.0)	936.0	N/A 0.0 0.0	41.3605 [40.0000]	103.4%			
NFDHA	(295.0 / 201.0) 4564595 (295.0 / 85.0) 4173432	(6.02, 0.98) (N/A, -0.05, -0.1)	742.5 3610.4	0.9143 103.6 103.6	41.5544 [40.0000]	103.9%			
13C3_PFBA_IIS	(216.0 / 172.0) 143451	(3.66, N/A) (N/A, -0.06, N/A)	719.9	N/A	1.0306 [1.0000]	103.1% { 94.5% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 248043	(6.13, N/A) (N/A, -0.05, N/A)	661.9	N/A	1.0742 [1.0000]	107.4% { 106.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 234938	(7.88, N/A) (N/A, -0.05, N/A)	713.0	N/A	1.0686 [1.0000]	106.9% { 98.7% }			
13C5_PFNA_IIS	(468.0 / 423.0) 193387	(8.62, N/A) (N/A, -0.05, N/A)	335.2	N/A	1.0443 [1.0000]	104.4% { 95.6% }			

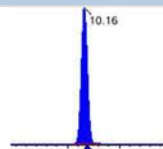
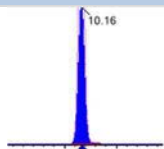
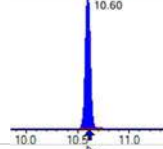
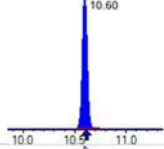
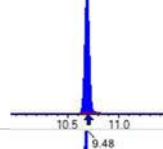
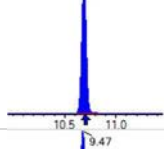
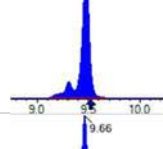
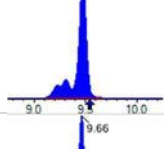
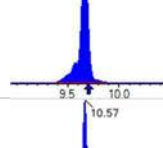
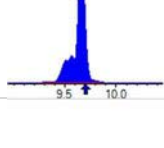
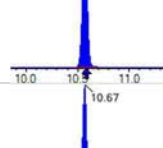
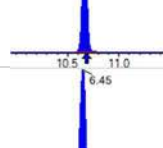
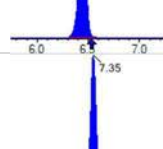
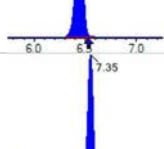
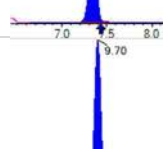
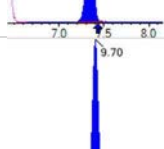
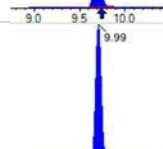
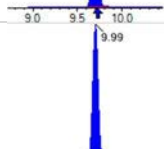
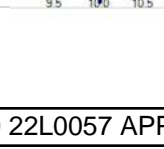
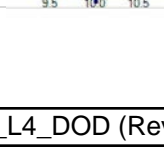
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 186408	(9.29, N/A) (N/A, -0.05, N/A)	664.1	N/A	1.0087 [1.0000]	100.9% { 107.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 428893	(8.00, N/A) (N/A, -0.05, N/A)	824.8	N/A	1.0624 [1.0000]	106.2% { 101.5% }			
13C4_PFOS_IIS	(502.8 / 79.9) 333901	(9.43, N/A) (N/A, -0.05, N/A)	344.0	N/A	1.0461 [1.0000]	104.6% { 101.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1159624	(3.66, N/A) (N/A, -0.06, N/A)	908.2	N/A	7.8543 [8.0000]	98.2% { 97.4% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 632863	(4.97, N/A) (N/A, -0.06, N/A)	720.4	N/A	3.6669 [4.0000]	91.7% { 90.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 507317	(6.13, N/A) (N/A, -0.05, N/A)	683.8	N/A	1.7773 [2.0000]	88.9% { 94.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 461855	(7.06, N/A) (N/A, -0.04, N/A)	556.4	N/A	1.8548 [2.0000]	92.7% { 94.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 470888	(7.88, N/A) (N/A, -0.05, N/A)	672.4	N/A	1.8276 [2.0000]	91.4% { 94.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 205912	(8.61, N/A) (N/A, -0.05, N/A)	479.7	N/A	0.9683 [1.0000]	96.8% { 94.1% }			
13C6_PFDA_EIS	(519.0 / 474.0) 254972	(9.29, N/A) (N/A, -0.06, N/A)	408.6	N/A	0.9617 [1.0000]	96.2% { 90.6% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 331844	(9.70, N/A) (N/A, -0.02, N/A)	703.9	N/A	0.8800 [1.0000]	88.0% { 83.3% }			

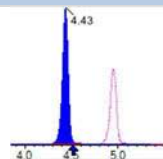
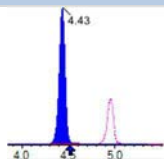
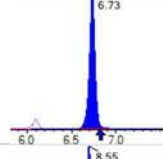
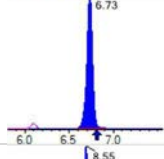
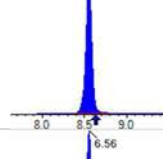
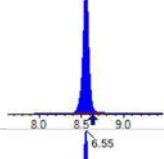
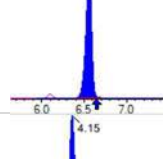
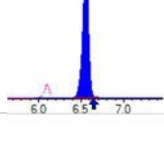
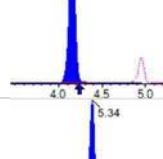
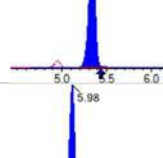
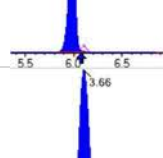
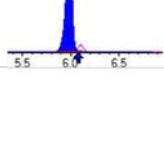
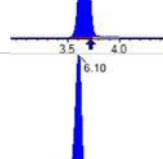
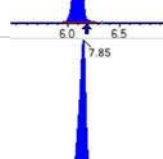
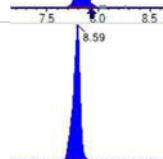
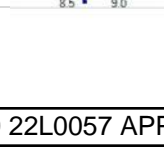
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 376028	(9.88, N/A) (N/A, -0.02, N/A)	523.5	N/A	0.9990 [1.0000]	99.9% { 97.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 294342	(10.11, N/A) (N/A, -0.02, N/A)	600.7	N/A	1.1775 [1.0000]	117.8% { 121.7% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1302850	(6.09, N/A) (N/A, -0.05, N/A)	735.8	N/A	1.7967 [2.0000]	89.8% { 94.9% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 708742	(8.01, N/A) (N/A, -0.05, N/A)	751.5	N/A	1.8369 [2.0000]	91.8% { 94.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1147133	(9.43, N/A) (N/A, -0.05, N/A)	153.7	N/A	2.0018 [2.0000]	100.1% { 96.4% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 225340	(5.80, N/A) (N/A, -0.05, N/A)	720.4	N/A	3.6689 [4.0000]	91.7% { 100.5% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 283858	(7.54, N/A) (N/A, -0.04, N/A)	652.9	N/A	3.8387 [4.0000]	96.0% { 103.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 276735	(8.95, N/A) (N/A, -0.05, N/A)	514.2	N/A	3.7385 [4.0000]	93.5% { 93.5% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1447254	(10.16, N/A) (N/A, -0.02, N/A)	722.4	N/A	1.9979 [2.0000]	99.9% { 98.8% }			
D3_NMeFOsa_EIS	(515.0 / 169.0) 310344	(10.59, N/A) (N/A, -0.01, N/A)	1001.9	N/A	1.9623 [2.0000]	98.1% { 94.0% }			
D5_NEtFOsa_EIS	(531.1 / 169.0) 277284	(10.68, N/A) (N/A, -0.01, N/A)	799.4	N/A	1.8992 [2.0000]	95.0% { 97.4% }			

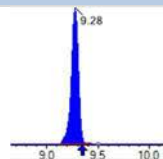
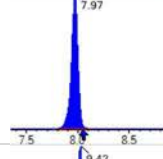
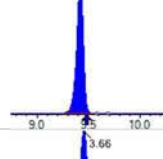
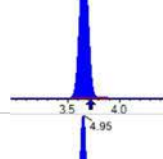
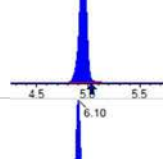
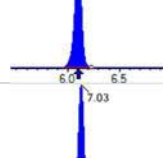
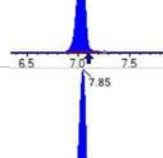
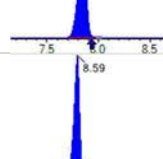
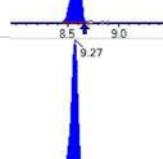
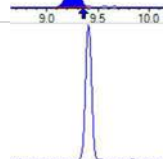
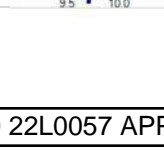
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 527124	(9.48, N/A) (N/A, -0.05, N/A)	391.6	N/A	3.8683 [4.0000]	96.7% { 103.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 394245	(9.67, N/A) (N/A, -0.03, N/A)	343.6	N/A	3.2824 [4.0000]	82.1% { 83.6% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 378964	(10.56, N/A) (N/A, -0.02, N/A)	878.6	N/A	17.0648 [20.0000]	85.3% { 87.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 187054	(10.66, N/A) (N/A, -0.02, N/A)	1005.6	N/A	18.5020 [20.0000]	92.5% { 102.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1123837	(6.48, N/A) (N/A, -0.05, N/A)	699.6	N/A	7.4053 [8.0000]	92.6% { 95.7% }			

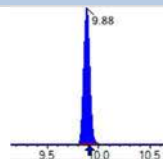
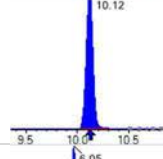
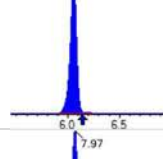
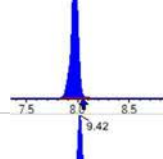
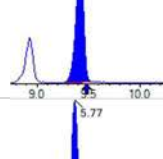
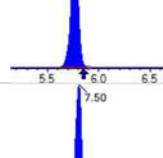
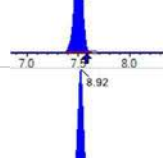
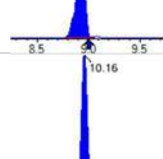
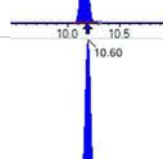
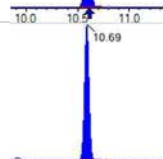
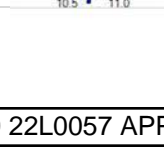
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 15778457	(3.66, 1.00) (0.00, N/A, 0.0)	61.8	N/A 0.0 0.0	201.2526 [200.0000]	100.6%			
PFPeA	(262.9 / 219.0) 12133479 (262.9 / 69.0) 132475	(4.95, 1.00) (0.00, N/A, 0.1)	828.8 567.2	0.0109 97.5 97.5	97.3969 [100.0000]	97.4%			
PFHxA	(313.0 / 269.0) 10205443 (313.0 / 119.0) 948352	(6.10, 1.00) (0.00, N/A, -0.2)	779.4 798.1	0.0929 95.0 95.0	48.9028 [50.0000]	97.8%			
PFHpA	(363.0 / 319.0) 9310576 (363.0 / 169.0) 2680356	(7.03, 1.00) (0.00, N/A, 0.2)	724.8 594.8	0.2879 92.4 92.4	47.8422 [50.0000]	95.7%			
PFOA	(413.0 / 369.0) 10880930 (413.0 / 169.0) 3245631	(7.85, 1.00) (0.00, N/A, 0.1)	767.4 928.5	0.2983 91.3 91.3	47.1047 [50.0000]	94.2%			
PFNA	(463.0 / 419.0) 7522680 (463.0 / 169.0) 1650478	(8.59, 1.00) (0.00, N/A, 0.3)	453.6 145.2	0.2194 113.8 113.8	44.6746 [50.0000]	89.3%			
PFDA	(513.0 / 469.0) 10901269 (513.0 / 169.0) 1054782	(9.27, 1.00) (0.00, N/A, 0.0)	475.9 419.2	0.0968 101.2 101.2	47.0411 [50.0000]	94.1%			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000 [50.0000]	N/A%			QC,
PFDoA	(613.0 / 569.0) 13234710 (613.0 / 169.0) 1677806	(9.88, 1.00) (0.00, N/A, 0.0)	801.8 797.3	0.1268 91.1 91.1	43.9737 [50.0000]	87.9%			
PFTrDA	(663.0 / 619.0) 10582859 (663.0 / 169.0) 2206188	(10.01, 1.01) (N/A, -0.01, 0.1)	667.9 1097.1	0.2085 101.9 101.9	40.5849 [50.0000]	81.2%			
PFTeDA	(713.0 / 669.0) 7805760 (713.0 / 169.0) 1615620	(10.12, 1.00) (0.00, N/A, 0.2)	709.6 922.1	0.2070 101.8 101.8	43.8879 [50.0000]	87.8%			

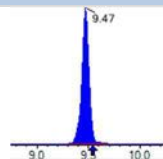
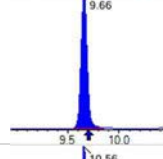
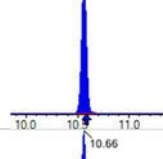
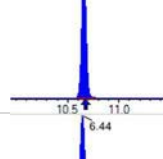
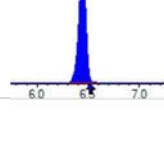
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 14320384 (298.9 / 99.0) 9157257	(6.05, 1.00) (0.00, N/A, 0.0)	609.6 755.2	0.6395 103.9 103.9	41.9991 [44.2367]	94.9%			
PFPeS	(349.0 / 80.0) 27380308 (349.0 / 99.0) 10684632	(7.10, 0.89) (N/A, -0.08, 0.0)	716.4 803.4	0.3902 109.6 109.6	43.5556 [46.9191]	92.8%			
PFHxS	(399.0 / 80.0) 23822711 (399.0 / 99.0) 8501412	(7.97, 1.00) (0.00, N/A, 0.2)	3206.8 4858.3	0.3569 106.2 106.2	43.5764 [45.5491]	95.7%			
PFHpS	(449.0 / 80.0) 21526516 (449.0 / 99.0) 6225213	(8.74, 0.93) (N/A, -0.08, -0.2)	807.9 582.9	0.2892 105.7 105.7	53.6267 [47.5703]	112.7%			
PFOS	(499.0 / 80.0) 23361916 (499.0 / 99.0) 5350161	(9.42, 1.00) (0.00, N/A, 0.2)	90.6 158.6	0.2290 94.2 94.2	46.7847 [46.3746]	100.9%			
PFNS	(549.0 / 80.0) 25746195 (549.0 / 99.0) 6429920	(9.75, 1.04) (N/A, -0.02, -0.1)	637.6 712.8	0.2497 102.3 102.3	46.4790 [47.9943]	96.8%			
PFDS	(599.0 / 80.0) 29991360 (599.0 / 99.0) 7324275	(9.90, 1.05) (N/A, -0.02, 0.0)	1114.1 872.9	0.2442 108.5 108.5	48.7700 [48.1553]	101.3%			
PFDoS	(698.9 / 80.0) 13570418 (698.9 / 99.0) 2668933	(10.10, 1.07) (N/A, -0.02, 0.0)	1153.0 1114.8	0.1967 80.4 80.4	52.7987 [48.4781]	108.9%			
4:2FTS	(327.0 / 307.0) 28030184 (327.0 / 81.0) 16838889	(5.77, 1.00) (0.00, N/A, -0.1)	791.1 776.4	0.6007 121.6 121.6	162.6637 [186.9055]	87.0%			
6:2FTS	(427.0 / 407.0) 17601598 (427.0 / 81.0) 12202144	(7.51, 1.00) (0.01, N/A, 0.1)	1049.9 926.0	0.6932 89.1 89.1	159.3520 [189.8085]	84.0%			
8:2FTS	(527.0 / 507.0) 17933024 (527.0 / 81.0) 10716573	(8.93, 1.00) (0.00, N/A, 0.1)	442.8 462.7	0.5976 105.6 105.6	159.3327 [191.6577]	83.1%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 26488352 (498.0 / 478.0) 712333	(10.16 , 1.00) (0.00 , N/A , 0.0)	898.9 465.3	0.0269 129.0 129.0	44.9093 [50.0000]	89.8%			
NMeFOSA	(511.9 / 219.0) 20550926 (511.9 / 169.0) 14258423	(10.60 , 1.00) (0.00 , N/A , 0.0)	1415.7 1392.1	0.6938 96.3 96.3	154.7837 [200.0000]	77.4%			
NEIFOSA	(526.0 / 219.0) 20990611 (526.0 / 169.0) 22220555	(10.69 , 1.00) (0.00 , N/A , 0.0)	1261.8 1236.0	1.0586 100.1 100.1	180.9576 [200.0000]	90.5%			
NMeFOSAA	(570.0 / 419.0) 4624057 (570.0 / 483.0) 2546681	(9.48 , 1.00) (0.00 , N/A , 0.1)	612.4 699.2	0.5507 89.6 89.6	52.0507 [50.0000]	104.1%			
NEIFOSAA	(584.0 / 419.0) 3449541 (584.0 / 526.0) 2257461	(9.66 , 1.00) (0.01 , N/A , 0.1)	2584.8 1657.6	0.6544 89.3 89.3	44.6984 [50.0000]	89.4%			
NMeFOSE	(616.1 / 59.0) 4659899	(10.57 , 1.00) (0.01 , N/A , 0.0)	1409.7	N/A 0.0 0.0	193.2279 [200.0000]	96.6%			
NEtFOSE	(630.0 / 59.0) 761135	(10.67 , 1.00) (0.01 , N/A , 0.0)	1449.6	N/A 0.0 0.0	176.5757 [200.0000]	88.3%			
HFPO-DA	(285.0 / 169.0) 7283624 (285.0 / 185.0) 21015218	(6.45 , 1.00) (0.00 , N/A , 0.0)	819.6 766.3	2.8853 105.1 105.1	92.2819 [100.0000]	92.3%			
ADONA	(377.0 / 85.0) 30997851 (377.0 / 251.0) 4228517	(7.35 , 1.14) (N/A , -0.08 , -0.1)	720.3 754.4	0.1364 109.5 109.5	88.4207 [94.2700]	93.8%			
9CI-Pf3ONS	(531.0 / 351.0) 59541631 (533.0 / 353.0) 22562888	(9.70 , 1.51) (N/A , -0.03 , 0.0)	623.2 593.5	0.3789 128.0 128.0	93.8486 [93.3254]	100.6%			
11CI-PF3OUDS	(631.0 / 451.0) 37565149 (633.0 / 453.0) 12408034	(9.99 , 1.55) (N/A , -0.02 , 0.0)	851.2 754.0	0.3303 99.8 99.8	76.6659 [94.3208]	81.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 940591 (241.0 / 117.0) 1590971	(4.43, 0.90) (N/A, -0.08, 0.1)	760.7 709.5	1.6915 101.1 101.1	218.7688 [200.0000]	109.4%			
5:3FTCA	(341.0 / 236.7) 7717092 (341.0 / 217.0) 13002088	(6.73, 1.10) (N/A, -0.09, 0.0)	773.6 732.5	1.6848 115.1 115.1	209.2781 [200.0000]	104.6%			
7:3FTCA	(441.0 / 317.0) 8714946 (441.0 / 337.0) 7497720	(8.55, 1.40) (N/A, -0.08, -0.1)	569.5 568.2	0.8603 102.7 102.7	205.3998 [200.0000]	102.7%			
PFEESA	(315.0 / 135.0) 18885479 (315.0 / 83.0) 5523428	(6.56, 1.07) (N/A, -0.08, 0.1)	779.0 865.9	0.2925 95.3 95.3	82.6581 [89.2459]	92.6%			
PFMPA	(229.0 / 85.0) 3283850	(4.15, 0.84) (N/A, -0.07, 0.0)	1205.9	N/A 0.0 0.0	96.0441 [100.0000]	96.0%			
PFMBA	(279.0 / 85.0) 11632442	(5.34, 1.08) (N/A, -0.09, 0.0)	841.8	N/A 0.0 0.0	98.4289 [100.0000]	98.4%			
NFDHA	(295.0 / 201.0) 10199642 (295.0 / 85.0) 9290082	(5.98, 0.98) (N/A, -0.09, 0.0)	742.8 3901.2	0.9108 103.2 103.2	96.9290 [100.0000]	96.9%			
13C3_PFBA_IIS	(216.0 / 172.0) 117318	(3.66, N/A) (N/A, -0.06, N/A)	626.3	N/A	0.8428 [1.0000]	84.3% {77.3%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 217089	(6.10, N/A) (N/A, -0.08, N/A)	517.0	N/A	0.9401 [1.0000]	94.0% {92.8%}			
13C4_PFOA_IIS	(417.0 / 372.0) 213627	(7.85, N/A) (N/A, -0.08, N/A)	585.4	N/A	0.9717 [1.0000]	97.2% {89.8%}			
13C5_PFNA_IIS	(468.0 / 423.0) 176727	(8.59, N/A) (N/A, -0.07, N/A)	679.2	N/A	0.9543 [1.0000]	95.4% {87.4%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 182763	(9.28, N/A) (N/A, -0.07, N/A)	341.1	N/A	0.9889 [1.0000]	98.9% { 105.1% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 402575	(7.97, N/A) (N/A, -0.08, N/A)	727.1	N/A	0.9972 [1.0000]	99.7% { 95.2% }			
13C4_PFOS_IIS	(502.8 / 79.9) 278049	(9.42, N/A) (N/A, -0.06, N/A)	306.0	N/A	0.8711 [1.0000]	87.1% { 84.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 961408	(3.66, N/A) (N/A, -0.06, N/A)	859.7	N/A	7.9622 [8.0000]	99.5% { 80.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 567388	(4.95, N/A) (N/A, -0.09, N/A)	677.6	N/A	3.7563 [4.0000]	93.9% { 81.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 485987	(6.10, N/A) (N/A, -0.09, N/A)	662.7	N/A	1.9454 [2.0000]	97.3% { 90.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 426996	(7.03, N/A) (N/A, -0.08, N/A)	645.9	N/A	1.9593 [2.0000]	98.0% { 87.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 469799	(7.85, N/A) (N/A, -0.08, N/A)	623.6	N/A	2.0053 [2.0000]	100.3% { 94.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 196241	(8.59, N/A) (N/A, -0.08, N/A)	331.3	N/A	1.0098 [1.0000]	101.0% { 89.7% }			
13C6_PFDA_EIS	(519.0 / 474.0) 243463	(9.27, N/A) (N/A, -0.07, N/A)	373.7	N/A	0.9366 [1.0000]	93.7% { 86.6% }			
13C7_PFUnA_EIS	(570.0 / 525.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A	0.0000 [1.0000]	0.0% { 0.0% }			S1,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 349119	(9.88, N/A) (N/A, -0.02, N/A)	640.2	N/A	0.9461 [1.0000]	94.6% { 90.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 200679	(10.12, N/A) (N/A, -0.01, N/A)	414.7	N/A	0.8188 [1.0000]	81.9% { 83.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1243843	(6.05, N/A) (N/A, -0.09, N/A)	653.6	N/A	1.8274 [2.0000]	91.4% { 90.6% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 703772	(7.97, N/A) (N/A, -0.08, N/A)	1021.2	N/A	1.9433 [2.0000]	97.2% { 93.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 920090	(9.42, N/A) (N/A, -0.07, N/A)	82.3	N/A	1.9281 [2.0000]	96.4% { 77.3% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 208461	(5.77, N/A) (N/A, -0.09, N/A)	614.0	N/A	3.6160 [4.0000]	90.4% { 93.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 287362	(7.50, N/A) (N/A, -0.08, N/A)	693.3	N/A	4.1402 [4.0000]	103.5% { 104.7% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 284164	(8.92, N/A) (N/A, -0.08, N/A)	462.0	N/A	4.0898 [4.0000]	102.2% { 96.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1248175	(10.16, N/A) (N/A, -0.02, N/A)	697.4	N/A	2.0692 [2.0000]	103.5% { 85.2% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 325759	(10.60, N/A) (N/A, -0.01, N/A)	1257.7	N/A	2.4735 [2.0000]	123.7% { 98.7% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 257195	(10.69, N/A) (N/A, -0.01, N/A)	672.7	N/A	2.1155 [2.0000]	105.8% { 90.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 455998	(9.47, N/A) (N/A, -0.06, N/A)	320.1	N/A	4.0185 [4.0000]	100.5% { 89.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 343842	(9.66, N/A) (N/A, -0.04, N/A)	325.4	N/A	3.4378 [4.0000]	85.9% { 73.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 382126	(10.56, N/A) (N/A, -0.01, N/A)	1054.7	N/A	20.6637 [20.0000]	103.3% { 88.5% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 168371	(10.66, N/A) (N/A, -0.01, N/A)	1121.1	N/A	19.9994 [20.0000]	100.0% { 92.3% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1038848	(6.44, N/A) (N/A, -0.08, N/A)	965.8	N/A	7.8213 [8.0000]	97.8% { 88.4% }			

SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2251013**Laboratory ID:** SB03823-SCV1**Sequence:** SB03823**Standard ID:** 22L0185

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
PFBA	8.00	7.82	-2.3	30.00
PFPEA	4.00	3.88	-3.1	30.00
PFHXA	2.00	2.21	10.5	30.00
PFHPA	2.00	2.16	8.0	30.00
PFOA	2.00	1.86	-6.8	30.00
PFNA	2.00	2.03	1.7	30.00
PFDA	2.00	1.71	-14.7	30.00
PFUnA	2.00	1.95	-2.3	30.00
PFDOA	2.00	1.87	-6.5	30.00
PFTRDA	2.00	2.19	9.5	30.00
PFTEDA	2.00	1.81	-9.6	30.00
PFBS	1.77	1.87	5.5	30.00
PFPEs	1.88	1.86	-1.0	30.00
PFHXS	1.83	1.73	-5.7	30.00
PFHPS	1.91	1.87	-2.2	30.00
PFOS	1.86	1.91	2.6	30.00
PFNS	1.92	1.86	-3.1	30.00
PFDS	1.93	1.92	-0.5	30.00
PFDOS	1.94	2.25	15.8	30.00
4:2FTS	7.50	7.45	-0.7	30.00
6:2FTS	7.60	7.97	4.9	30.00
8:2FTS	7.68	7.58	-1.3	30.00
PFOSA	2.00	2.21	10.5	30.00
NMeFOSA	8.00	8.10	1.3	30.00
NEtFOSA	8.00	7.53	-5.9	30.00
NMeFOSAA	2.00	2.14	7.2	30.00
NEtFOSAA	2.00	2.12	6.1	30.00

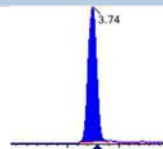
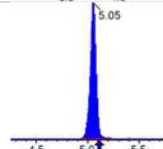
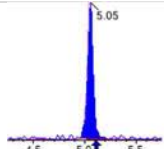
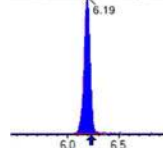
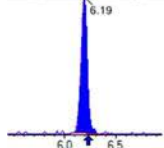
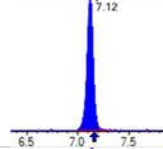
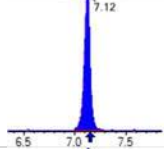
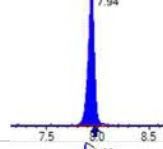
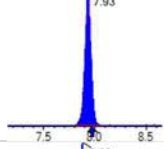
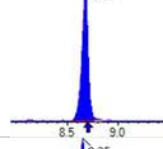
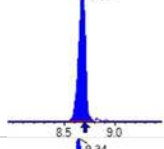
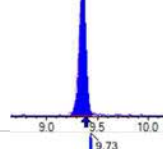
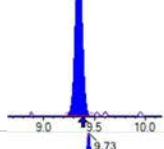
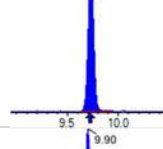
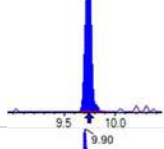
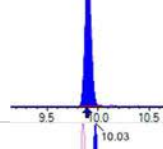
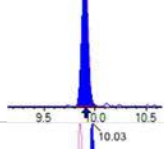
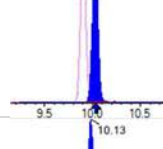
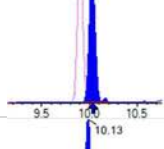
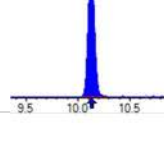
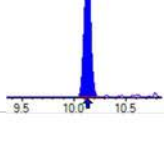
SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2251013**Laboratory ID:** SB03823-SCV1**Sequence:** SB03823**Standard ID:** 22L0185

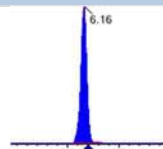
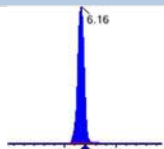
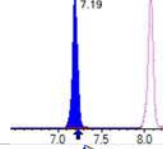
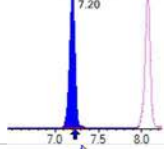
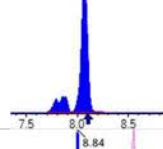
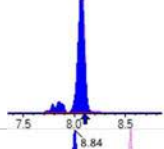
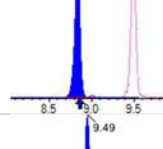
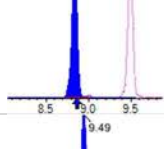
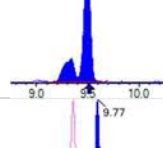
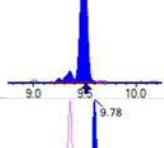
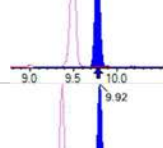
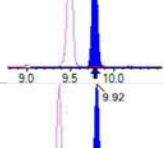
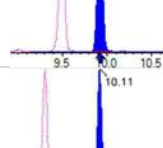
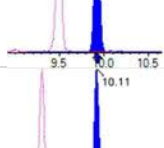
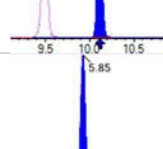
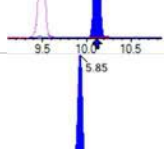
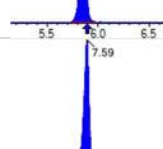
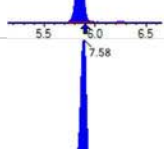
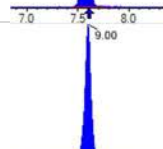
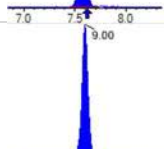

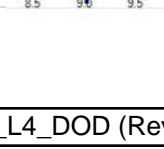
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NEtFOSE	8.00	7.40	-7.5	30.00
HFPO-DA	4.00	3.65	-8.7	30.00
ADONA	3.78	3.48	-7.9	30.00
PFEESA	3.56	4.04	13.4	30.00
PFMPA	4.00	4.20	4.9	30.00
PFMBA	4.00	3.90	-2.4	30.00
NFDHA	4.00	3.93	-1.8	30.00
9CL-PF3ONS	3.74	3.37	-9.8	30.00
11CL-PF3OUDS	3.78	3.50	-7.4	30.00
3:3FTCA	8.00	7.97	-0.4	30.00
5:3FTCA	8.00	8.62	7.7	30.00
7:3FTCA	8.00	7.98	-0.3	30.00
13C4-PFBA	8.00	8.29	3.6	30.00
13C5-PFPEA	4.00	3.74	-6.6	30.00
13C5-PFHXA	2.00	1.67	-16.3	30.00
13C4-PFHPA	2.00	1.75	-12.4	30.00
13C8-PFOA	2.00	1.99	-0.4	30.00
13C9-PFNA	1.00	1.01	1.4	30.00
13C6-PFDA	1.00	1.04	4.1	30.00
13C7-PFUnA	1.00	1.07	6.7	30.00
13C2-PFDOA	1.00	1.07	6.6	30.00
13C2-PFTEDA	1.00	1.09	8.8	30.00
13C3-PFBS	2.00	2.20	10.1	30.00
13C3-PFHXS	2.00	2.21	10.5	30.00
13C8-PFOS	2.00	1.85	-7.4	30.00
13C2-4:2FTS	4.00	4.60	15.0	30.00
13C2-6:2FTS	4.00	4.15	3.7	30.00
13C2-8:2FTS	4.00	4.27	6.7	30.00

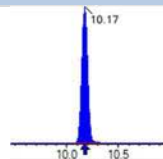
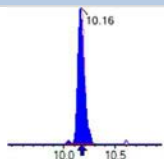
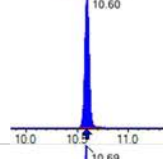
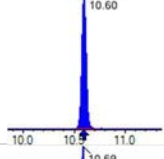
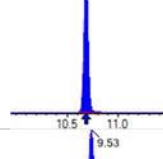
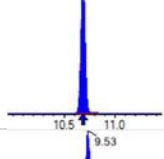
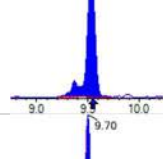
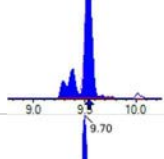
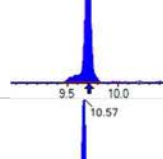
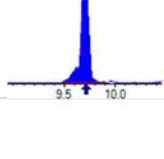
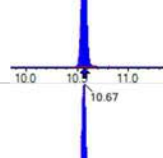
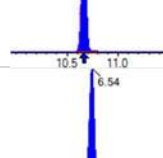
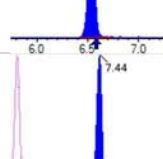
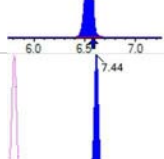
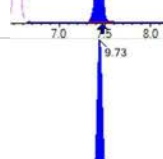
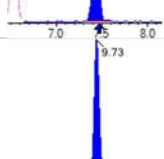
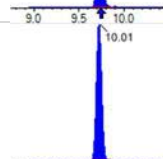
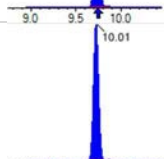
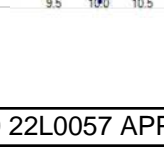
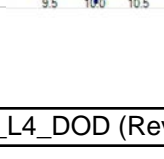
SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2251013**Laboratory ID:** SB03823-SCV1**Sequence:** SB03823**Standard ID:** 22L0185

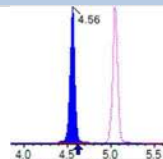
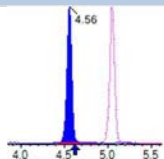
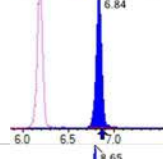
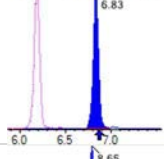
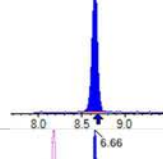
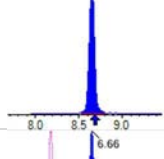
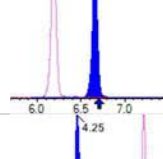
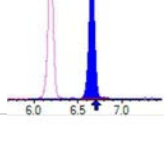
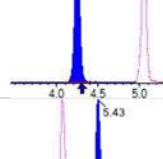
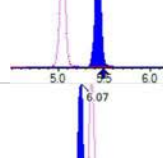
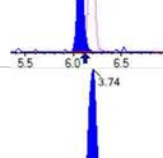
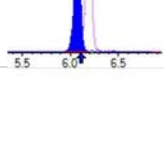
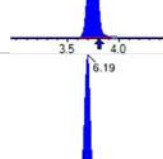
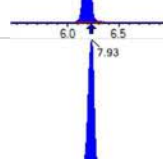
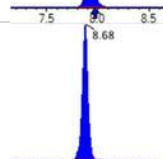
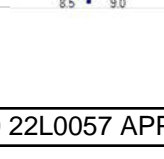
13C8-PFOSA	2.00	1.96	-2.2	30.00
D5-NETFOSA	2.00	1.96	-1.8	30.00
D3-NMEFOSA	2.00	1.91	-4.5	30.00
D3-NMEFOSAA	4.00	3.65	-8.7	30.00
D5-NETFOSAA	4.00	3.81	-4.9	30.00
D7-NMEFOSE	20.0	20.2	1.2	30.00
D9-NETFOSAE	20.0	20.1	0.4	30.00
13C3-HFPO-DA	8.00	8.34	4.2	30.00

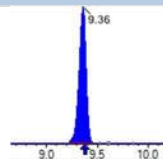
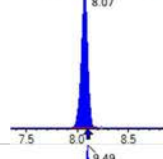
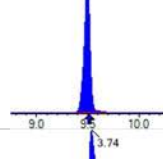
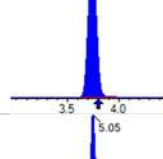
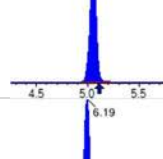
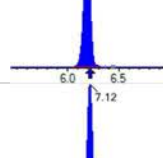
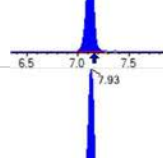
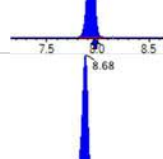
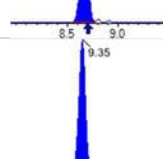
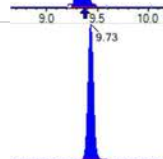
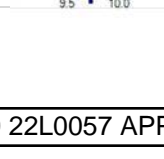
* Values outside of QC limits

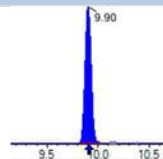
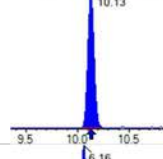
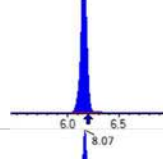
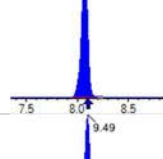
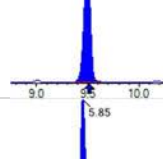
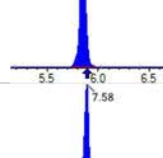
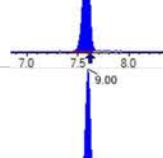
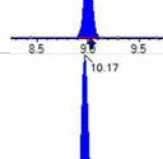
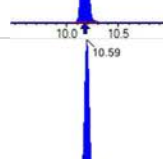
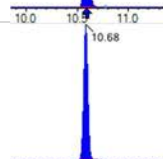
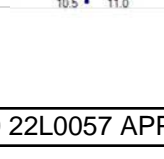
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 521283	(3.74, 1.00) (0.00, N/A, 0.0)	64.0	N/A 0.0 0.0	7.8153 [8.0000]	97.7%			
PFPeA	(262.9 / 219.0) 352654 (262.9 / 69.0) 4723	(5.05, 1.00) (0.00, N/A, 0.0)	733.4 142.8	0.0134 106.6 106.6	3.8762 [4.0000]	96.9%			
PFHxA	(313.0 / 269.0) 273990 (313.0 / 119.0) 23426	(6.19, 1.00) (0.00, N/A, 0.0)	596.0 194.8	0.0855 92.4 92.4	2.2108 [2.0000]	110.5%			
PFHpA	(363.0 / 319.0) 253738 (363.0 / 169.0) 72500	(7.12, 1.00) (0.00, N/A, -0.1)	486.6 415.8	0.2857 91.8 91.8	2.1598 [2.0000]	108.0%			
PFOA	(413.0 / 369.0) 261722 (413.0 / 169.0) 89729	(7.94, 1.00) (0.00, N/A, 0.3)	530.8 718.6	0.3428 102.2 102.2	1.8646 [2.0000]	93.2%			
PFNA	(463.0 / 419.0) 196810 (463.0 / 169.0) 40835	(8.68, 1.00) (0.00, N/A, -0.1)	375.3 76.9	0.2075 118.2 118.2	2.0341 [2.0000]	101.7%			
PFDA	(513.0 / 469.0) 236417 (513.0 / 169.0) 22896	(9.35, 1.00) (0.01, N/A, 0.6)	295.7 134.2	0.0968 96.2 96.2	1.7054 [2.0000]	85.3%			
PFUnA	(563.0 / 519.0) 327077 (563.0 / 169.0) 26457	(9.73, 1.00) (0.00, N/A, -0.3)	463.5 126.9	0.0809 88.4 88.4	1.9535 [2.0000]	97.7%			
PFDoA	(613.0 / 569.0) 384313 (613.0 / 169.0) 47625	(9.90, 1.00) (0.00, N/A, 0.0)	780.9 189.4	0.1239 96.7 96.7	1.8709 [2.0000]	93.5%			
PFTrDA	(663.0 / 619.0) 370971 (663.0 / 169.0) 73664	(10.03, 1.01) (N/A, 0.00, 0.1)	627.4 257.9	0.1986 90.4 90.4	2.1905 [2.0000]	109.5%			
PFTeDA	(713.0 / 669.0) 251126 (713.0 / 169.0) 45614	(10.13, 1.00) (0.00, N/A, -0.2)	523.6 197.0	0.1816 97.6 97.6	1.8073 [2.0000]	90.4%			

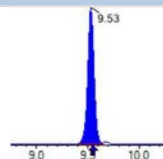
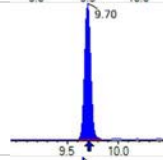
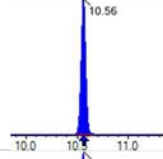
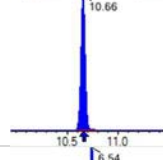
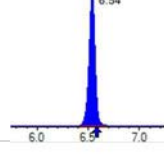
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 399690 (298.9 / 99.0) 271711	(6.16, 1.00) (0.00, N/A, 0.0)	657.2 685.3	0.6798 94.4 94.4	1.8668 [1.7695]	105.5%			
PFPeS	(349.0 / 80.0) 700884 (349.0 / 99.0) 244137	(7.19, 0.89) (N/A, -0.04, -0.3)	934.3 641.9	0.3483 93.0 93.0	1.8611 [1.8768]	99.2%			
PFHxS	(399.0 / 80.0) 593243 (399.0 / 99.0) 204683	(8.07, 1.00) (0.00, N/A, 0.0)	4198.1 49801.5	0.3450 107.0 107.0	1.7258 [1.8220]	94.7%			
PFHpS	(449.0 / 80.0) 504794 (449.0 / 99.0) 154118	(8.84, 0.93) (N/A, -0.03, -0.1)	638.7 470.9	0.3053 99.4 99.4	1.8688 [1.9028]	98.2%			
PFOS	(499.0 / 80.0) 626181 (499.0 / 99.0) 140172	(9.49, 1.00) (0.00, N/A, 0.3)	149.9 205.2	0.2239 97.5 97.5	1.9076 [1.8550]	102.8%			
PFNS	(549.0 / 80.0) 752461 (549.0 / 99.0) 229833	(9.77, 1.03) (N/A, 0.00, -0.1)	644.6 737.7	0.3054 117.8 117.8	1.8605 [1.9198]	96.9%			
PFDS	(599.0 / 80.0) 1021053 (599.0 / 99.0) 255891	(9.92, 1.04) (N/A, 0.00, -0.1)	951.0 524.3	0.2506 111.3 111.3	1.9203 [1.9262]	99.7%			
PFDoS	(698.9 / 80.0) 604400 (698.9 / 99.0) 124167	(10.11, 1.07) (N/A, -0.01, 0.0)	831.9 501.9	0.2054 101.5 101.5	2.2471 [1.9391]	115.9%			
4:2FTS	(327.0 / 307.0) 561734 (327.0 / 81.0) 307869	(5.85, 1.00) (0.00, N/A, 0.0)	953.8 580.9	0.5481 90.3 90.3	7.4483 [7.4762]	99.6%			
6:2FTS	(427.0 / 407.0) 331406 (427.0 / 81.0) 225416	(7.59, 1.00) (0.00, N/A, 0.1)	737.9 565.4	0.6802 104.7 104.7	7.9705 [7.5923]	105.0%			
8:2FTS	(527.0 / 507.0) 282426 (527.0 / 81.0) 180594	(9.00, 1.00) (0.00, N/A, 0.1)	473.9 354.1	0.6394 102.0 102.0	7.5776 [7.6663]	98.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 1033250 (498.0 / 478.0) 20256	(10.17, 1.00) (0.00, N/A, 0.7)	1124.8 1128.7	0.0196 86.1 86.1	2.2099 [2.0000]	110.5%			
NMeFOSA	(511.9 / 219.0) 806028 (511.9 / 169.0) 545125	(10.60, 1.00) (0.00, N/A, 0.0)	867.7 1095.5	0.6763 106.0 106.0	8.1041 [8.0000]	101.3%			
NEIFOSA	(526.0 / 219.0) 741467 (526.0 / 169.0) 822114	(10.69, 1.00) (0.00, N/A, 0.0)	1398.0 1346.0	1.1088 103.9 103.9	7.5260 [8.0000]	94.1%			
NMeFOSAA	(570.0 / 419.0) 115495 (570.0 / 483.0) 58777	(9.53, 1.00) (0.00, N/A, 0.1)	317.6 233.5	0.5089 88.7 88.7	2.1441 [2.0000]	107.2%			
NEIFOSAA	(584.0 / 419.0) 121264 (584.0 / 526.0) 62833	(9.70, 1.00) (0.00, N/A, 0.2)	934.5 356.5	0.5182 91.4 91.4	2.1213 [2.0000]	106.1%			
NMeFOSE	(616.1 / 59.0) 241287	(10.57, 1.00) (0.00, N/A, 0.0)	729.7	N/A 0.0 0.0	7.3639 [8.0000]	92.0%			
NEtFOSE	(630.0 / 59.0) 60435	(10.67, 1.00) (0.01, N/A, 0.0)	950.3	N/A 0.0 0.0	7.4001 [8.0000]	92.5%			
HFPO-DA	(285.0 / 169.0) 240754 (285.0 / 185.0) 715161	(6.54, 1.00) (0.00, N/A, 0.0)	532.0 989.0	2.9705 112.9 112.9	3.6520 [4.0000]	91.3%			
ADONA	(377.0 / 85.0) 978775 (377.0 / 251.0) 123153	(7.44, 1.14) (N/A, -0.03, 0.0)	787.5 372.2	0.1258 106.7 106.7	3.4816 [3.7708]	92.3%			
9CI-Pf3ONS	(531.0 / 351.0) 2687817 (533.0 / 353.0) 867444	(9.73, 1.49) (N/A, 0.00, 0.0)	726.9 763.1	0.3227 111.3 111.3	3.3719 [3.7330]	90.3%			
11CI-PF3OUDS	(631.0 / 451.0) 1788684 (633.0 / 453.0) 542381	(10.01, 1.53) (N/A, 0.00, 0.0)	913.1 696.5	0.3032 96.1 96.1	3.5015 [3.7728]	92.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 30472 (241.0 / 117.0) 52613	(4.56, 0.90) (N/A, -0.06, 0.1)	444.2 449.4	1.7266 105.3 105.3	7.9696 [8.0000]	99.6%			
5:3FTCA	(341.0 / 236.7) 213757 (341.0 / 217.0) 360066	(6.84, 1.10) (N/A, -0.04, 0.0)	542.0 451.8	1.6845 106.9 106.9	8.6199 [8.0000]	107.7%			
7:3FTCA	(441.0 / 317.0) 247588 (441.0 / 337.0) 214717	(8.65, 1.40) (N/A, -0.03, 0.0)	351.2 406.1	0.8672 103.5 103.5	7.9797 [8.0000]	99.7%			
PFEESA	(315.0 / 135.0) 544606 (315.0 / 83.0) 149416	(6.66, 1.08) (N/A, -0.04, 0.1)	936.7 544.5	0.2744 89.5 89.5	4.0353 [3.5698]	113.0%			
PFMPA	(229.0 / 85.0) 103603	(4.25, 0.84) (N/A, -0.06, 0.0)	817.6	N/A 0.0 0.0	4.1950 [4.0000]	104.9%			
PFMBA	(279.0 / 85.0) 322612	(5.43, 1.08) (N/A, -0.06, 0.0)	837.4	N/A 0.0 0.0	3.9033 [4.0000]	97.6%			
NFDHA	(201.0 / 85.0) 10183 (295.0 / 201.0) 71338	(6.07, 0.98) (N/A, -0.04, 0.0)	198.6 618.0	7.0057 106.4 106.4	3.9282 [4.0000]	98.2%			
13C3_PFBA_IIS	(216.0 / 172.0) 120239	(3.74, N/A) (N/A, -0.06, N/A)	778.8	N/A	0.9910 [1.0000]	99.1% { 94.9% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 198173	(6.19, N/A) (N/A, -0.04, N/A)	473.8	N/A	1.0860 [1.0000]	108.6% { 101.2% }			
13C4_PFOA_IIS	(417.0 / 372.0) 183914	(7.93, N/A) (N/A, -0.03, N/A)	948.8	N/A	1.0536 [1.0000]	105.4% { 104.4% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 135808	(8.68, N/A) (N/A, -0.03, N/A)	347.8	N/A	0.9994 [1.0000]	99.9% { 102.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 137382	(9.36, N/A) (N/A, -0.02, N/A)	403.3	N/A	0.9901 [1.0000]	99.0% { 97.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 299066	(8.07, N/A) (N/A, -0.03, N/A)	939.8	N/A	0.9267 [1.0000]	92.7% { 89.2% }			
13C4_PFOS_IIS	(502.8 / 79.9) 258856	(9.49, N/A) (N/A, -0.01, N/A)	568.8	N/A	1.0279 [1.0000]	102.8% { 93.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 759623	(3.74, N/A) (N/A, -0.06, N/A)	788.5	N/A	8.2879 [8.0000]	103.6% { 95.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 409883	(5.05, N/A) (N/A, -0.06, N/A)	719.2	N/A	3.7358 [4.0000]	93.4% { 96.1% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 279695	(6.19, N/A) (N/A, -0.04, N/A)	594.6	N/A	1.6747 [2.0000]	83.7% { 88.3% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 253878	(7.12, N/A) (N/A, -0.04, N/A)	507.3	N/A	1.7511 [2.0000]	87.6% { 88.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 280931	(7.93, N/A) (N/A, -0.03, N/A)	587.3	N/A	1.9921 [2.0000]	99.6% { 103.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 106130	(8.68, N/A) (N/A, -0.03, N/A)	283.5	N/A	1.0143 [1.0000]	101.4% { 98.4% }			
13C6_PFDA_EIS	(519.0 / 474.0) 137102	(9.35, N/A) (N/A, -0.03, N/A)	473.4	N/A	1.0406 [1.0000]	104.1% { 112.7% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 193012	(9.73, N/A) (N/A, 0.00, N/A)	433.2	N/A	1.0666 [1.0000]	106.7% { 103.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 237203	(9.90, N/A) (N/A, 0.00, N/A)	390.7	N/A	1.0659 [1.0000]	106.6% { 97.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 152044	(10.13, N/A) (N/A, 0.00, N/A)	415.3	N/A	1.0881 [1.0000]	108.8% { 102.2% }			
13C3_PFBs_EIS	(302.0 / 80.0) 757837	(6.16, N/A) (N/A, -0.04, N/A)	622.2	N/A	2.2023 [2.0000]	110.1% { 98.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 428070	(8.07, N/A) (N/A, -0.03, N/A)	640.8	N/A	2.2105 [2.0000]	110.5% { 95.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 597041	(9.49, N/A) (N/A, -0.01, N/A)	346.2	N/A	1.8525 [2.0000]	92.6% { 93.4% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 92518	(5.85, N/A) (N/A, -0.05, N/A)	623.9	N/A	4.6002 [4.0000]	115.0% { 99.1% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 102037	(7.58, N/A) (N/A, -0.03, N/A)	436.6	N/A	4.1494 [4.0000]	103.7% { 91.7% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 104682	(9.00, N/A) (N/A, -0.03, N/A)	583.3	N/A	4.2668 [4.0000]	106.7% { 94.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 953329	(10.17, N/A) (N/A, 0.00, N/A)	852.4	N/A	1.9555 [2.0000]	97.8% { 92.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 239101	(10.59, N/A) (N/A, 0.00, N/A)	1205.5	N/A	1.9107 [2.0000]	95.5% { 102.2% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 213162	(10.68, N/A) (N/A, 0.00, N/A)	1102.1	N/A	1.9634 [2.0000]	98.2% { 99.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 278724	(9.53, N/A) (N/A, -0.01, N/A)	461.1	N/A	3.6538 [4.0000]	91.3% { 88.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 262675	(9.70, N/A) (N/A, -0.01, N/A)	341.3	N/A	3.8055 [4.0000]	95.1% { 88.7% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 485730	(10.56, N/A) (N/A, 0.00, N/A)	1038.3	N/A	20.2473 [20.0000]	101.2% { 107.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 241423	(10.66, N/A) (N/A, 0.00, N/A)	1233.7	N/A	20.0838 [20.0000]	100.4% { 100.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 852806	(6.54, N/A) (N/A, -0.04, N/A)	906.2	N/A	8.3362 [8.0000]	104.2% { 113.8% }			

SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633 SPLP****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
PFBA	8.00	7.99	-0.1	30.00
PFBA	8.00	7.99	-0.1	30.00
PFPEA	4.00	4.05	1.3	30.00
PFPEA	4.00	4.05	1.3	30.00
PFHXA	2.00	2.06	2.9	30.00
PFHXA	2.00	2.06	2.9	30.00
PFHPA	2.00	1.83	-8.4	30.00
PFHPA	2.00	1.83	-8.4	30.00
PFOA	2.00	1.92	-4.0	30.00
PFOA	2.00	1.92	-4.0	30.00
PFNA	2.00	1.98	-1.0	30.00
PFNA	2.00	1.98	-1.0	30.00
PFDA	2.00	1.94	-3.0	30.00
PFDA	2.00	1.94	-3.0	30.00
PFUnA	2.00	2.01	0.6	30.00
PFUnA	2.00	2.01	0.6	30.00
PFDOA	2.00	1.94	-2.8	30.00
PFDOA	2.00	1.94	-2.8	30.00
PFTRDA	2.00	2.06	3.0	30.00
PFTRDA	2.00	2.06	3.0	30.00
PFTEDA	2.00	2.52	25.9	30.00
PFTEDA	2.00	2.52	25.9	30.00
PFBS	1.77	1.80	1.7	30.00
PFBS	1.77	1.80	1.7	30.00
PFPEs	1.88	1.90	1.2	30.00
PFPEs	1.88	1.90	1.2	30.00
PFHXS	1.83	1.70	-7.0	30.00

SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633 SPLP****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

PFHXS	1.83	1.70	-7.0	30.00
PFHPS	1.91	1.91	-0.1	30.00
PFHPS	1.91	1.91	-0.1	30.00
PFOS	1.86	1.92	3.4	30.00
PFOS	1.86	1.92	3.4	30.00
PFNS	1.92	2.20	14.7	30.00
PFNS	1.92	2.20	14.7	30.00
PFDS	1.93	2.24	16.0	30.00
PFDS	1.93	2.24	16.0	30.00
PFDOS	1.94	2.09	7.7	30.00
PFDOS	1.94	2.09	7.7	30.00
4:2FTS	7.50	7.40	-1.3	30.00
4:2FTS	7.50	7.40	-1.3	30.00
6:2FTS	7.60	7.32	-3.6	30.00
6:2FTS	7.60	7.32	-3.6	30.00
8:2FTS	7.68	8.45	10.0	30.00
8:2FTS	7.68	8.45	10.0	30.00
PFOSA	2.00	1.87	-6.3	30.00
PFOSA	2.00	1.87	-6.3	30.00
NMeFOSA	8.00	7.40	-7.5	30.00
NMeFOSA	8.00	7.40	-7.5	30.00
NEtFOSA	8.00	7.80	-2.5	30.00
NEtFOSA	8.00	7.80	-2.5	30.00
NMeFOSAA	2.00	2.24	11.9	30.00
NMeFOSAA	2.00	2.24	11.9	30.00
NEtFOSAA	2.00	1.95	-2.5	30.00
NEtFOSAA	2.00	1.95	-2.5	30.00
NMeFOSE	8.00	7.20	-10.0	30.00
NMeFOSE	8.00	7.20	-10.0	30.00

SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

NEtFOSE	8.00	7.47	-6.6	30.00
NEtFOSE	8.00	7.47	-6.6	30.00
HFPO-DA	4.00	3.77	-5.8	30.00
HFPO-DA	4.00	3.77	-5.8	30.00
ADONA	3.78	3.68	-2.6	30.00
ADONA	3.78	3.68	-2.6	30.00
PFEESA	3.56	3.55	-0.3	30.00
PFEESA	3.56	3.55	-0.3	30.00
PFMPA	4.00	3.70	-7.5	30.00
PFMPA	4.00	3.70	-7.5	30.00
PFMBA	4.00	3.61	-9.8	30.00
PFMBA	4.00	3.61	-9.8	30.00
NFDHA	4.00	3.97	-0.8	30.00
NFDHA	4.00	3.97	-0.8	30.00
9CL-PF3ONS	3.74	3.62	-3.2	30.00
9CL-PF3ONS	3.74	3.62	-3.2	30.00
11CL-PF3OUDS	3.78	3.53	-6.6	30.00
11CL-PF3OUDS	3.78	3.53	-6.6	30.00
3:3FTCA	8.00	7.48	-6.5	30.00
3:3FTCA	8.00	7.48	-6.5	30.00
5:3FTCA	8.00	8.11	1.4	30.00
5:3FTCA	8.00	8.11	1.4	30.00
7:3FTCA	8.00	8.03	0.3	30.00
7:3FTCA	8.00	8.03	0.3	30.00
13C4-PFBA	8.00	8.64	8.0	30.00
13C4-PFBA	8.00	8.64	8.0	30.00
13C5-PFPEA	4.00	4.71	17.7	30.00
13C5-PFPEA	4.00	4.71	17.7	30.00
13C5-PFHXA	2.00	2.18	8.9	30.00

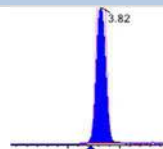
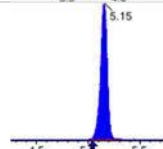
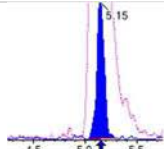
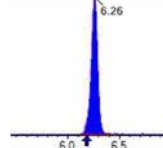
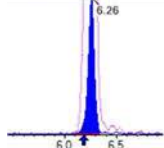
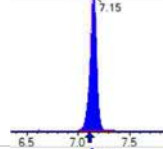
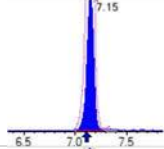
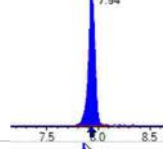
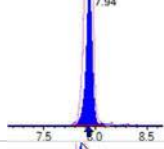
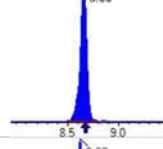
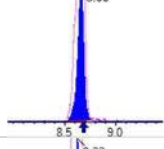
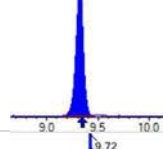
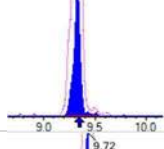
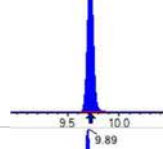
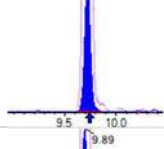
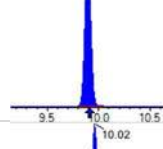
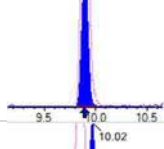
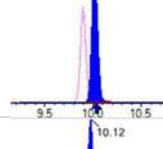
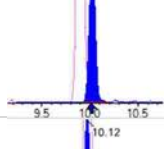
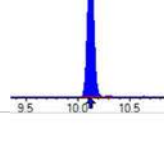
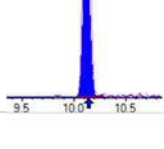
SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

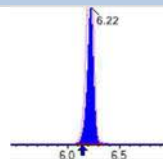
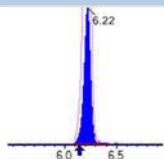
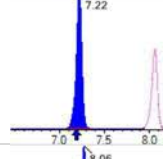
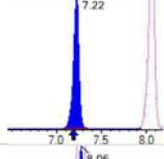
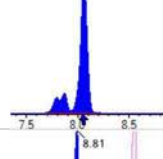
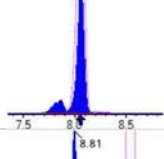
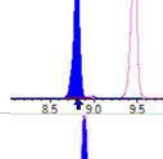
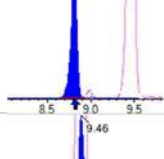
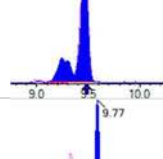
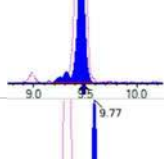
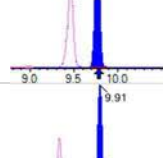
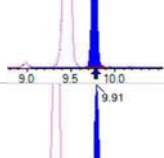
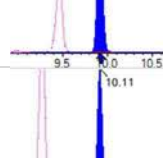
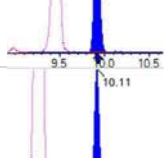
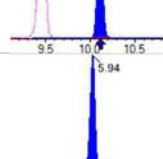
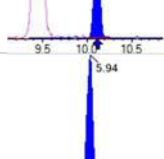
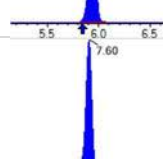
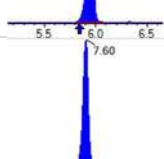
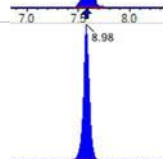
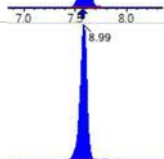
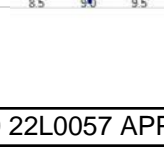
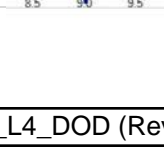
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13C4-PFHXA	2.00	2.44	22.0	30.00
13C8-PFOA	2.00	2.51	25.6	30.00
13C8-PFOA	2.00	2.51	25.6	30.00
13C9-PFNA	1.00	1.15	15.1	30.00
13C9-PFNA	1.00	1.15	15.1	30.00
13C6-PFDA	1.00	1.02	1.6	30.00
13C6-PFDA	1.00	1.02	1.6	30.00
13C7-PFUnA	1.00	1.01	0.9	30.00
13C7-PFUnA	1.00	1.01	0.9	30.00
13C2-PFDOA	1.00	1.12	12.1	30.00
13C2-PFDOA	1.00	1.12	12.1	30.00
13C2-PFTEDA	1.00	0.926	-7.4	30.00
13C2-PFTEDA	1.00	0.926	-7.4	30.00
13C3-PFBS	2.00	2.14	7.0	30.00
13C3-PFBS	2.00	2.14	7.0	30.00
13C3-PFHXS	2.00	2.11	5.5	30.00
13C3-PFHXS	2.00	2.11	5.5	30.00
13C8-PFOS	2.00	2.03	1.7	30.00
13C8-PFOS	2.00	2.03	1.7	30.00
13C2-4:2FTS	4.00	4.28	7.0	30.00
13C2-4:2FTS	4.00	4.28	7.0	30.00
13C2-6:2FTS	4.00	4.19	4.8	30.00
13C2-6:2FTS	4.00	4.19	4.8	30.00
13C2-8:2FTS	4.00	4.81	20.3	30.00
13C2-8:2FTS	4.00	4.81	20.3	30.00
13C8-PFOSA	2.00	2.54	26.8	30.00
13C8-PFOSA	2.00	2.54	26.8	30.00

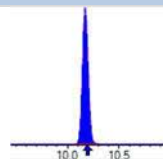
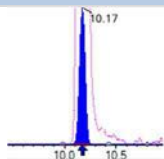
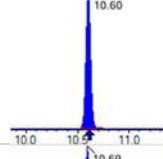
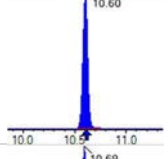
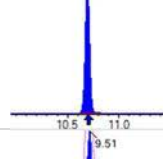
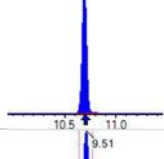
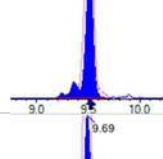
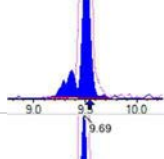
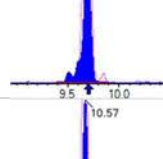
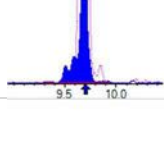
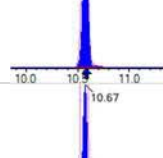
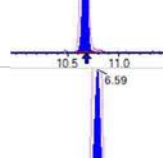
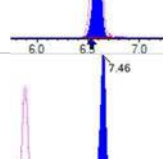
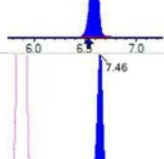
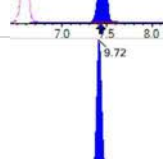
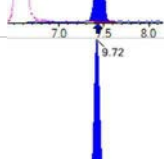
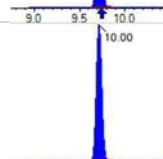
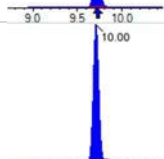
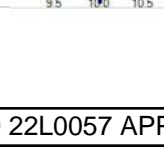
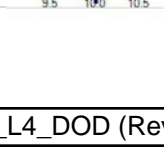
SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

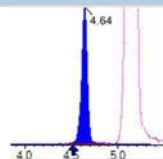
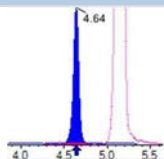
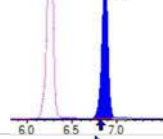
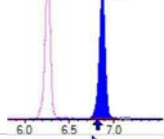
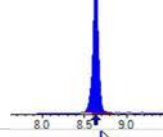
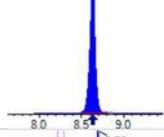
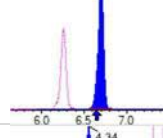
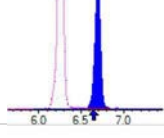
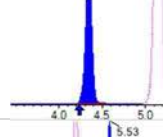
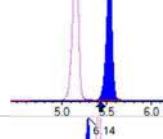
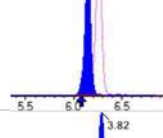
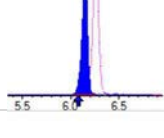
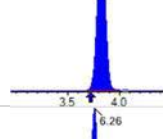
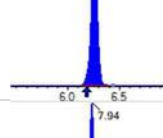
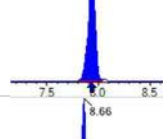
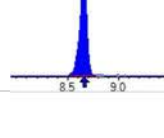
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D5-NETFOSA	2.00	2.46	23.2	30.00
D3-NMEFOSA	2.00	2.31	15.5	30.00
D3-NMEFOSA	2.00	2.31	15.5	30.00
D3-NMEFOSAA	4.00	3.87	-3.3	30.00
D3-NMEFOSAA	4.00	3.87	-3.3	30.00
D5-NETFOSAA	4.00	4.12	3.0	30.00
D5-NETFOSAA	4.00	4.12	3.0	30.00
D7-NMEFOSE	20.0	22.3	11.5	30.00
D7-NMEFOSE	20.0	22.3	11.5	30.00
D9-NETFOSE	20.0	21.7	8.5	30.00
D9-NETFOSE	20.0	21.7	8.5	30.00
13C3-HFPO-DA	8.00	9.26	15.7	30.00
13C3-HFPO-DA	8.00	9.26	15.7	30.00

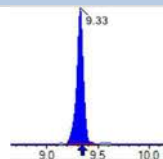
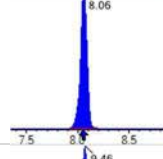
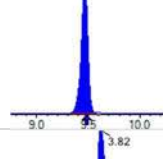
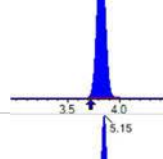
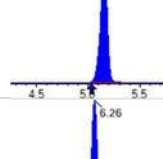
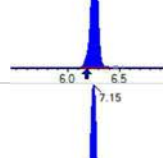
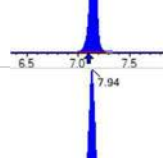
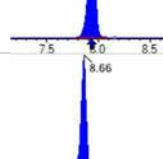
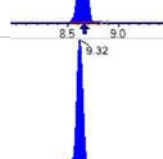
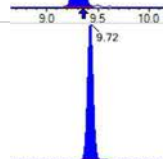
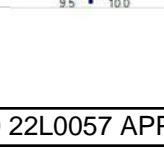
* Values outside of QC limits

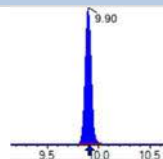
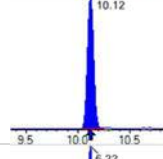
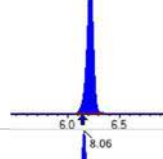
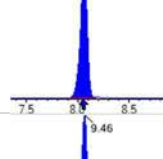
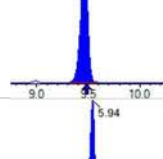
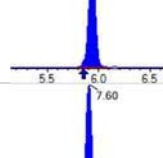
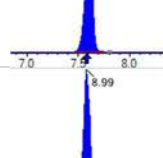
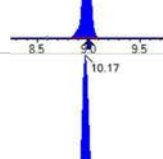
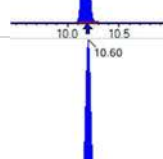
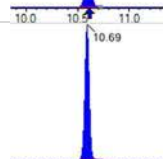
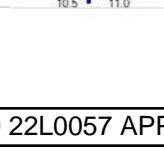
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 826160	(3.82, 1.00) (0.00, N/A, 0.0)	66.3	N/A 0.0 0.0	7.9908 [8.0000]	99.9%			
PFPeA	(262.9 / 219.0) 615408 (262.9 / 69.0) 7099	(5.15, 1.00) (0.00, N/A, 0.4)	793.3 166.5	0.0115 103.1 103.1	4.0518 [4.0000]	101.3%			
PFHxA	(313.0 / 269.0) 467843 (313.0 / 119.0) 45951	(6.26, 1.00) (0.00, N/A, 0.1)	507.4 322.7	0.0982 100.5 100.5	2.0587 [2.0000]	102.9%			
PFHpA	(363.0 / 319.0) 432075 (363.0 / 169.0) 138649	(7.15, 1.00) (0.00, N/A, 0.1)	541.7 385.0	0.3209 103.0 103.0	1.8321 [2.0000]	91.6%			
PFOA	(413.0 / 369.0) 540570 (413.0 / 169.0) 167693	(7.94, 1.00) (0.00, N/A, -0.3)	662.9 505.8	0.3102 94.9 94.9	1.9199 [2.0000]	96.0%			
PFNA	(463.0 / 419.0) 409308 (463.0 / 169.0) 78936	(8.66, 1.00) (0.00, N/A, -0.2)	495.2 94.8	0.1929 100.1 100.1	1.9793 [2.0000]	99.0%			
PFDA	(513.0 / 469.0) 482820 (513.0 / 169.0) 47535	(9.32, 1.00) (0.00, N/A, -0.3)	450.3 235.5	0.0985 103.0 103.0	1.9394 [2.0000]	97.0%			
PFUnA	(563.0 / 519.0) 587146 (563.0 / 169.0) 44298	(9.72, 1.00) (0.00, N/A, 0.0)	626.0 279.6	0.0754 86.9 86.9	2.0110 [2.0000]	100.6%			
PFDoA	(613.0 / 569.0) 686509 (613.0 / 169.0) 89917	(9.89, 1.00) (0.00, N/A, 0.0)	663.9 317.2	0.1310 94.1 94.1	1.9439 [2.0000]	97.2%			
PFTrDA	(663.0 / 619.0) 630517 (663.0 / 169.0) 105737	(10.02, 1.01) (N/A, -0.01, -0.3)	802.7 413.6	0.1677 81.9 81.9	2.0607 [2.0000]	103.0%			
PFTeDA	(713.0 / 669.0) 501366 (713.0 / 169.0) 87460	(10.12, 1.00) (0.00, N/A, 0.2)	703.1 221.5	0.1744 85.8 85.8	2.5178 [2.0000]	125.9%			

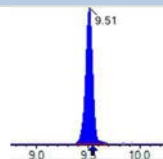
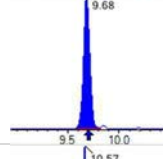
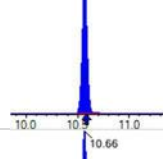
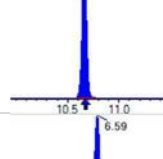
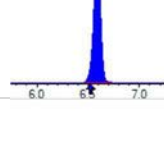
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 721250 (298.9 / 99.0) 444102	(6.22, 1.00) (0.00, N/A, 0.0)	841.6 645.4	0.6157 100.0 100.0	1.7993 [1.7695]	101.7%			
PFPeS	(349.0 / 80.0) 1304493 (349.0 / 99.0) 488870	(7.22, 0.90) (N/A, 0.04, -0.1)	955.5 884.4	0.3748 105.3 105.3	1.9033 [1.8768]	101.4%			
PFHxS	(399.0 / 80.0) 1014894 (399.0 / 99.0) 344027	(8.06, 1.00) (0.00, N/A, 0.0)	2419.1 74677.8	0.3390 100.8 100.8	1.7027 [1.8220]	93.5%			
PFHpS	(449.0 / 80.0) 879262 (449.0 / 99.0) 257815	(8.81, 0.93) (N/A, -0.01, -0.3)	667.5 488.6	0.2932 107.1 107.1	1.9077 [1.9028]	100.3%			
PFOS	(499.0 / 80.0) 1102928 (499.0 / 99.0) 236253	(9.46, 1.00) (0.00, N/A, 0.1)	115.1 129.8	0.2142 88.1 88.1	1.9236 [1.8550]	103.7%			
PFNS	(549.0 / 80.0) 1400580 (549.0 / 99.0) 348700	(9.77, 1.03) (N/A, -0.01, 0.0)	867.1 541.9	0.2490 102.0 102.0	2.2021 [1.9198]	114.7%			
PFDS	(599.0 / 80.0) 1581305 (599.0 / 99.0) 390095	(9.91, 1.05) (N/A, -0.01, 0.2)	992.5 464.1	0.2467 109.6 109.6	2.2395 [1.9262]	116.3%			
PFDoS	(698.9 / 80.0) 616747 (698.9 / 99.0) 133778	(10.11, 1.07) (N/A, -0.01, 0.0)	738.0 572.8	0.2169 88.7 88.7	2.0898 [1.9391]	107.8%			
4:2FTS	(327.0 / 307.0) 1514379 (327.0 / 81.0) 770935	(5.94, 1.00) (0.00, N/A, -0.1)	803.6 624.3	0.5091 103.1 103.1	7.3999 [7.4762]	99.0%			
6:2FTS	(427.0 / 407.0) 821840 (427.0 / 81.0) 567834	(7.60, 1.00) (0.00, N/A, 0.1)	946.6 705.6	0.6909 88.8 88.8	7.3229 [7.5923]	96.5%			
8:2FTS	(527.0 / 507.0) 1122259 (527.0 / 81.0) 538134	(8.98, 1.00) (0.00, N/A, -0.3)	414.3 515.2	0.4795 84.7 84.7	8.4461 [7.6663]	110.2%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 1474063 (498.0 / 478.0) 37178	(10.17, 1.00) (0.00, N/A, -0.1)	843.1 534.3	0.0252 121.0 121.0	1.8741 [2.0000]	93.7%			
NMeFOSA	(511.9 / 219.0) 999598 (511.9 / 169.0) 689735	(10.60, 1.00) (0.00, N/A, 0.0)	861.8 1151.0	0.6900 95.8 95.8	7.4034 [8.0000]	92.5%			
NEIFOSA	(526.0 / 219.0) 1146883 (526.0 / 169.0) 1178077	(10.69, 1.00) (0.00, N/A, 0.0)	1268.4 1089.4	1.0272 97.1 97.1	7.8009 [8.0000]	97.5%			
NMeFOSAA	(570.0 / 419.0) 208249 (570.0 / 483.0) 104771	(9.51, 1.00) (0.00, N/A, 0.2)	375.1 198.5	0.5031 81.8 81.8	2.2376 [2.0000]	111.9%			
NEIFOSAA	(584.0 / 419.0) 196413 (584.0 / 526.0) 111297	(9.69, 1.00) (0.01, N/A, 0.2)	455.1 117896.6	0.5666 77.3 77.3	1.9508 [2.0000]	97.5%			
NMeFOSE	(616.1 / 59.0) 203936	(10.57, 1.00) (0.01, N/A, 0.0)	1358.7	N/A 0.0 0.0	7.2019 [8.0000]	90.0%			
NEtFOSE	(630.0 / 59.0) 38033	(10.67, 1.00) (0.01, N/A, 0.0)	607.4	N/A 0.0 0.0	7.4728 [8.0000]	93.4%			
HFPO-DA	(285.0 / 169.0) 342689 (285.0 / 185.0) 1020987	(6.59, 1.00) (0.00, N/A, -0.1)	626.5 698.6	2.9793 108.5 108.5	3.7699 [4.0000]	94.2%			
ADONA	(377.0 / 85.0) 1486505 (377.0 / 251.0) 199325	(7.46, 1.13) (N/A, 0.03, 0.1)	678.2 385.1	0.1341 107.7 107.7	3.6817 [3.7708]	97.6%			
9CI-Pf3ONS	(531.0 / 351.0) 4066455 (533.0 / 353.0) 1234707	(9.72, 1.47) (N/A, -0.01, 0.0)	855.0 727.0	0.3036 102.6 102.6	3.6202 [3.7330]	97.0%			
11CI-PF3OUDS	(631.0 / 451.0) 1991501 (633.0 / 453.0) 617773	(10.00, 1.52) (N/A, -0.01, 0.0)	1070.3 1217.2	0.3102 93.8 93.8	3.5291 [3.7728]	93.5%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 39196 (241.0 / 117.0) 66770	(4.64, 0.90) (N/A, 0.12, 0.0)	403.7 453.1	1.7035 101.8 101.8	7.4773 [8.0000]	93.5%			
5:3FTCA	(341.0 / 236.7) 325755 (341.0 / 217.0) 500274	(6.87, 1.10) (N/A, 0.05, 0.0)	422.5 555.2	1.5357 104.9 104.9	8.1123 [8.0000]	101.4%			
7:3FTCA	(441.0 / 317.0) 370796 (441.0 / 337.0) 321550	(8.63, 1.38) (N/A, 0.00, 0.0)	380.2 406.9	0.8672 103.5 103.5	8.0251 [8.0000]	100.3%			
PFEESA	(315.0 / 135.0) 883452 (315.0 / 83.0) 263398	(6.70, 1.07) (N/A, 0.06, 0.2)	692.7 623.8	0.2981 97.1 97.1	3.5508 [3.5698]	99.5%			
PFMPA	(229.0 / 85.0) 154156	(4.34, 0.84) (N/A, 0.12, 0.0)	850.9	N/A 0.0 0.0	3.6980 [4.0000]	92.5%			
PFMBA	(279.0 / 85.0) 519912	(5.53, 1.07) (N/A, 0.11, 0.0)	881.8	N/A 0.0 0.0	3.6083 [4.0000]	90.2%			
NFDHA	(295.0 / 201.0) 454901 (295.0 / 85.0) 446222	(6.14, 0.98) (N/A, 0.08, -0.1)	909.2 665.8	0.9809 111.1 111.1	3.9698 [4.0000]	99.2%			
13C3_PFBa_IIS	(216.0 / 172.0) 142617	(3.82, N/A) (N/A, 0.11, N/A)	772.3	N/A	1.0246 [1.0000]	102.5% { 94.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 211230	(6.26, N/A) (N/A, 0.07, N/A)	637.8	N/A	0.9147 [1.0000]	91.5% { 90.3% }			
13C4_PFOA_IIS	(417.0 / 372.0) 207848	(7.94, N/A) (N/A, 0.01, N/A)	791.1	N/A	0.9454 [1.0000]	94.5% { 87.3% }			
13C5_PFNAl_IIS	(468.0 / 423.0) 190473	(8.66, N/A) (N/A, -0.01, N/A)	365.8	N/A	1.0286 [1.0000]	102.9% { 94.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 180965	(9.33, N/A) (N/A, -0.02, N/A)	300.8	N/A	0.9792 [1.0000]	97.9% { 104.1% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 404075	(8.06, N/A) (N/A, 0.01, N/A)	755.5	N/A	1.0009 [1.0000]	100.1% { 95.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 302637	(9.46, N/A) (N/A, -0.02, N/A)	490.6	N/A	0.9482 [1.0000]	94.8% { 92.3% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1267826	(3.82, N/A) (N/A, 0.10, N/A)	950.4	N/A	8.6374 [8.0000]	108.0% { 106.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 691765	(5.15, N/A) (N/A, 0.12, N/A)	655.0	N/A	4.7068 [4.0000]	117.7% { 99.4% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 529227	(6.26, N/A) (N/A, 0.07, N/A)	586.3	N/A	2.1772 [2.0000]	108.9% { 98.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 517454	(7.15, N/A) (N/A, 0.04, N/A)	625.4	N/A	2.4402 [2.0000]	122.0% { 105.4% }			
13C8_PFOA_EIS	(421.0 / 376.0) 572643	(7.94, N/A) (N/A, 0.01, N/A)	628.4	N/A	2.5123 [2.0000]	125.6% { 115.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 241000	(8.66, N/A) (N/A, -0.01, N/A)	482.3	N/A	1.1506 [1.0000]	115.1% { 110.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 261552	(9.32, N/A) (N/A, -0.02, N/A)	324.9	N/A	1.0162 [1.0000]	101.6% { 93.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 369444	(9.72, N/A) (N/A, -0.01, N/A)	383.8	N/A	1.0092 [1.0000]	100.9% { 92.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 409663	(9.90, N/A) (N/A, -0.01, N/A)	784.5	N/A	1.1211 [1.0000]	112.1% { 105.7% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 224684	(10.12, N/A) (N/A, -0.01, N/A)	303.5	N/A	0.9259 [1.0000]	92.6% { 92.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1462249	(6.22, N/A) (N/A, 0.08, N/A)	885.8	N/A	2.1403 [2.0000]	107.0% { 106.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 767313	(8.06, N/A) (N/A, 0.01, N/A)	732.1	N/A	2.1109 [2.0000]	105.5% { 101.8% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1056462	(9.46, N/A) (N/A, -0.02, N/A)	326.6	N/A	2.0340 [2.0000]	101.7% { 88.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 247570	(5.94, N/A) (N/A, 0.09, N/A)	728.4	N/A	4.2784 [4.0000]	107.0% { 110.5% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 291971	(7.60, N/A) (N/A, 0.02, N/A)	611.1	N/A	4.1910 [4.0000]	104.8% { 106.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 335471	(8.99, N/A) (N/A, -0.02, N/A)	757.5	N/A	4.8103 [4.0000]	120.3% { 113.3% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1664459	(10.17, N/A) (N/A, -0.01, N/A)	652.8	N/A	2.5352 [2.0000]	126.8% { 113.6% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 331270	(10.60, N/A) (N/A, -0.01, N/A)	916.6	N/A	2.3109 [2.0000]	115.5% { 100.4% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 325977	(10.69, N/A) (N/A, -0.01, N/A)	1349.4	N/A	2.4634 [2.0000]	123.2% { 114.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 477723	(9.51, N/A) (N/A, -0.02, N/A)	407.1	N/A	3.8679 [4.0000]	96.7% { 93.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 448595	(9.68, N/A) (N/A, -0.01, N/A)	368.4	N/A	4.1207 [4.0000]	103.0% { 95.2% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 448688	(10.57, N/A) (N/A, -0.01, N/A)	1653.3	N/A	22.2917 [20.0000]	111.5% { 104.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 198798	(10.66, N/A) (N/A, -0.01, N/A)	1695.3	N/A	21.6950 [20.0000]	108.5% { 109.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1196436	(6.59, N/A) (N/A, 0.06, N/A)	797.8	N/A	9.2576 [8.0000]	115.7% { 101.9% }			

LOW-CONCENTRATION CALIBRATION VERIFICATION

EPA 1633

Laboratory: APPL, LLC

SDG:

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Calibration: 2251013

Laboratory ID: SB03835-LCV1

Sequence: SB03835

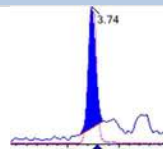
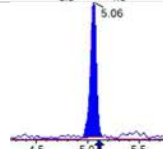
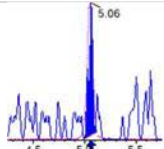
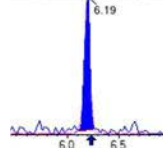
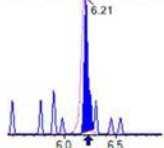
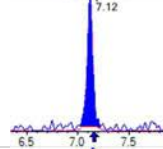
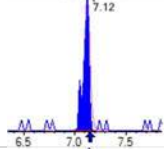
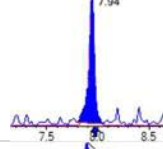
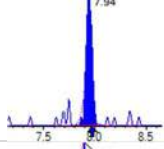
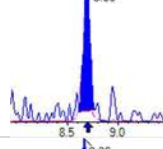
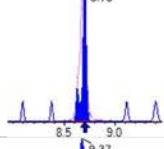
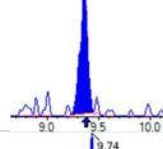
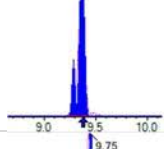
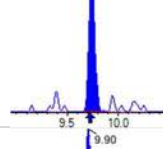
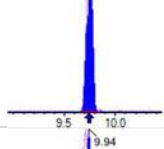
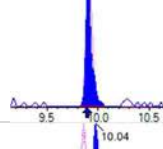
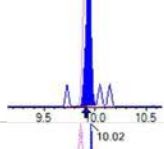
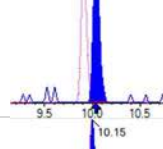
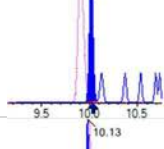
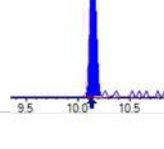
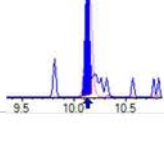
Standard ID: 22L0176

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
PFBA	0.400	0.384	-4.1	30.00
PFPEA	0.200	0.224	11.8	30.00
PFHXA	0.100	0.111	11.4	30.00
PFHPA	0.100	0.116	16.4	30.00
PFOA	0.100	0.135	34.8 *	30.00
PFNA	0.100	0.0925	-7.5	30.00
PFDA	0.100	0.116	15.5	30.00
PFUnA	0.100	0.0828	-17.2	30.00
PFDOA	0.100	0.0982	-1.8	30.00
PFTRDA	0.100	0.0889	-11.1	30.00
PFTEDA	0.100	0.0951	-4.9	30.00
PFBS	0.0885	0.0865	-2.3	30.00
PFPEs	0.0940	0.108	14.4	30.00
PFHXS	0.0915	0.107	16.4	30.00
PFHPS	0.0955	0.108	13.4	30.00
PFOS	0.0930	0.102	9.8	30.00
PFNS	0.0960	0.124	29.1	30.00
PFDS	0.0965	0.0954	-1.1	30.00
PFDOS	0.0970	0.102	4.9	30.00
4:2FTS	0.375	0.360	-4.0	30.00
6:2FTS	0.380	0.377	-0.8	30.00
8:2FTS	0.384	0.486	26.7	30.00
PFOSA	0.100	0.119	18.7	30.00
NMeFOSA	0.400	0.447	11.9	30.00
NEtFOSA	0.400	0.395	-1.1	30.00
NMeFOSAA	0.100	0.109	9.1	30.00
NEtFOSAA	0.100	0.0995	-0.5	30.00
NMeFOSE	0.400	0.477	19.2	30.00

LOW-CONCENTRATION CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2251013**Laboratory ID:** SB03835-LCV1**Sequence:** SB03835**Standard ID:** 22L0176

NEtFOSE	0.400	0.381	-4.7	30.00
HFPO-DA	0.200	0.244	22.0	30.00
ADONA	0.189	0.220	16.6	30.00
PFEESA	0.178	0.174	-2.1	30.00
PFMPA	0.200	0.230	14.8	30.00
PFMBA	0.200	0.221	10.6	30.00
NFDHA	0.200	0.499	150 *	30.00
9CL-PF3ONS	0.187	0.221	18.2	30.00
11CL-PF3OUDS	0.189	0.226	19.4	30.00
3:3FTCA	0.400	0.329	-17.7	30.00
5:3FTCA	0.400	0.387	-3.2	30.00
7:3FTCA	0.400	0.498	24.6	30.00

* Values outside of QC limits

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 20109	(3.74, 1.00) (-0.01, N/A, 0.0)	37.6	N/A 0.0 0.0	0.3836 [0.4000]	95.9%			
PFPeA	(262.9 / 219.0) 15029 (262.9 / 69.0) 191	(5.06, 1.00) (0.01, N/A, -0.3)	136.8 13.6	0.0127 101.1 108.1	0.2236 [0.2000]	111.8%			
PFHxA	(313.0 / 269.0) 11403 (313.0 / 119.0) 1181	(6.19, 1.00) (0.00, N/A, -0.9)	65.1 35.6	0.1035 111.8 97.2	0.1114 [0.1000]	111.4%			
PFHpA	(363.0 / 319.0) 11854 (363.0 / 169.0) 2843	(7.12, 1.00) (0.00, N/A, 0.0)	63.6 60.1	0.2398 77.1 74.1	0.1164 [0.1000]	116.4%			
PFOA	(413.0 / 369.0) 14374 (413.0 / 169.0) 3385	(7.94, 1.00) (0.00, N/A, 0.0)	45.6 62.9	0.2355 70.2 80.8	0.1348 [0.1000]	134.8%			QC,
PFNA	(463.0 / 419.0) 6566 (463.0 / 169.0) 1906	(8.69, 1.00) (0.01, N/A, -0.4)	23.5 35.9	0.2903 165.4 142.4	0.0925 [0.1000]	92.5%			IR2,
PFDA	(513.0 / 469.0) 13597 (513.0 / 169.0) 1403	(9.36, 1.00) (0.00, N/A, -0.4)	39.8 108.1	0.1032 102.5 78.7	0.1155 [0.1000]	115.5%			
PFUnA	(563.0 / 519.0) 12011 (563.0 / 169.0) 1556	(9.74, 1.00) (0.00, N/A, -0.8)	56.9 184.3	0.1296 141.5 149.2	0.0828 [0.1000]	82.8%			
PFDoA	(613.0 / 569.0) 15762 (613.0 / 169.0) 2864	(9.90, 1.00) (-0.01, N/A, -2.1)	74.7 63.0	0.1817 141.8 127.6	0.0982 [0.1000]	98.2%			
PFTrDA	(663.0 / 619.0) 11758 (663.0 / 169.0) 1575	(10.04, 1.01) (N/A, 0.01, 1.1)	63.1 44.7	0.1340 61.0 58.1	0.0889 [0.1000]	88.9%			
PFTeDA	(713.0 / 669.0) 11415 (713.0 / 169.0) 2492	(10.15, 1.00) (0.01, N/A, 1.0)	67.8 32.3	0.2183 117.3 124.4	0.0951 [0.1000]	95.1%			

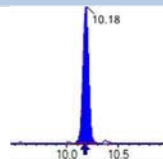
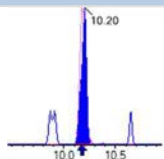
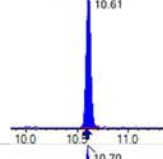
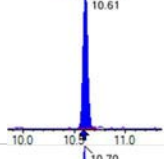
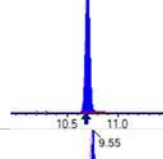
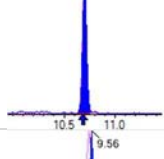
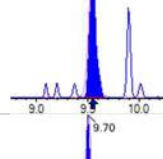
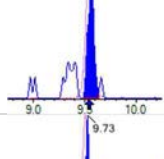
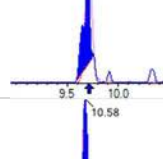
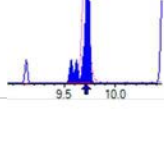
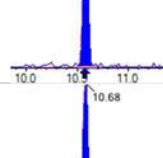
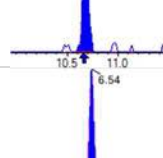
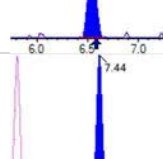
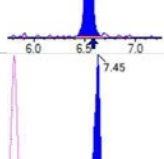
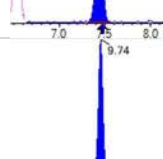
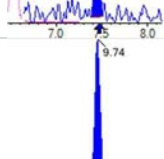
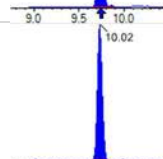
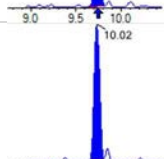
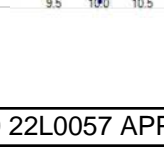
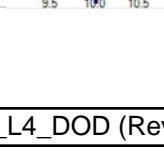


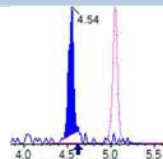
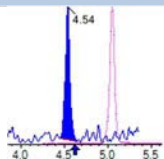
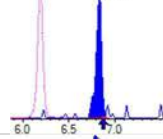
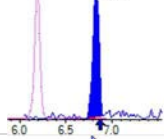
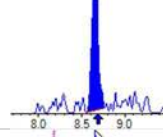
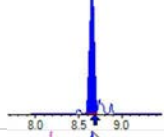
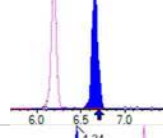
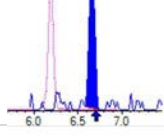
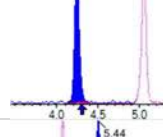
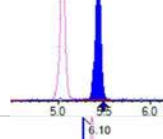
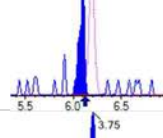
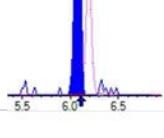
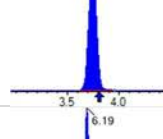
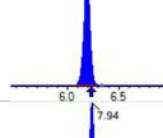
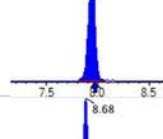
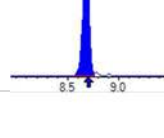
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

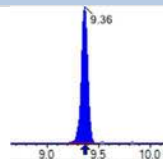
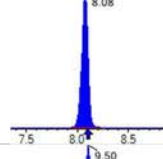
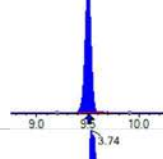
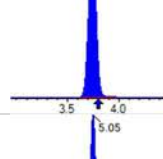
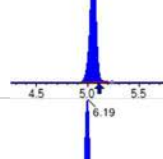
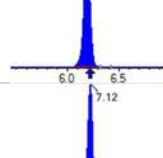
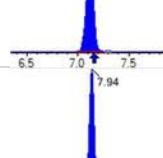
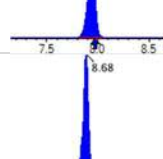
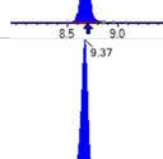
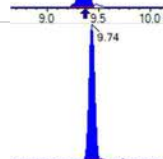
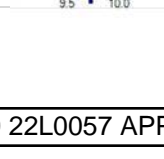
Sample I.D.: SB03835-LCV1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

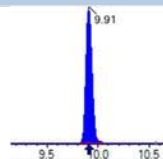
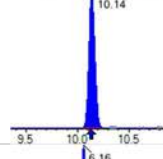
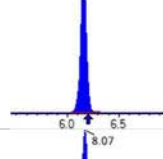
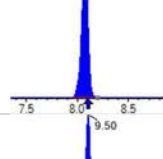
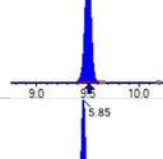
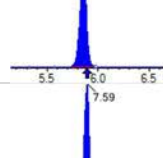
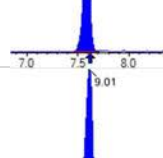
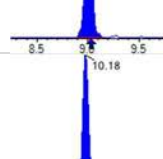
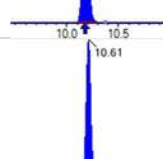
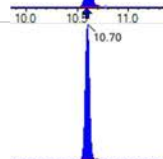
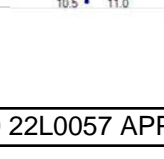
Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A03.wiff-
 Acquired: 2022/12/14 - 11:08

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 15999 (298.9 / 99.0) 12304	(6.15, 1.00) (0.00, N/A, -0.4)	177.1 113.9	0.7690 106.8 115.7	0.0865 [0.0885]	97.7%			
PFPeS	(349.0 / 80.0) 31980 (349.0 / 99.0) 10287	(7.20, 0.89) (N/A, 0.02, 0.3)	246.6 82.7	0.3217 85.9 85.9	0.1075 [0.0938]	114.6%			
PFHxS	(399.0 / 80.0) 28922 (399.0 / 99.0) 9793	(8.08, 1.00) (0.00, N/A, -0.2)	1679840.9 315.4	0.3386 105.0 97.9	0.1065 [0.0911]	117.0%			MI5 DG 2022-12-14
PFHpS	(449.0 / 80.0) 28278 (449.0 / 99.0) 4781	(8.85, 0.93) (N/A, 0.02, 0.5)	198.2 188.7	0.1691 55.1 56.6	0.1083 [0.0951]	113.9%			
PFOS	(499.0 / 80.0) 32389 (499.0 / 99.0) 7435	(9.50, 1.00) (0.00, N/A, -1.1)	45118.5 3711.0	0.2295 100.0 90.0	0.1021 [0.0927]	110.1%			
PFNS	(549.0 / 80.0) 48440 (549.0 / 99.0) 9930	(9.78, 1.03) (N/A, 0.00, 0.3)	151.3 78.1	0.2050 79.1 86.6	0.1239 [0.0960]	129.1%			
PFDS	(599.0 / 80.0) 49029 (599.0 / 99.0) 9548	(9.93, 1.05) (N/A, 0.01, 0.5)	166.8 37.8	0.1947 86.5 78.9	0.0954 [0.0963]	99.1%			
PFDoS	(698.9 / 80.0) 26450 (698.9 / 99.0) 6933	(10.12, 1.07) (N/A, 0.01, -0.1)	204.1 61.0	0.2621 129.5 129.9	0.1018 [0.0970]	105.0%			
4:2FTS	(327.0 / 307.0) 21916 (327.0 / 81.0) 11978	(5.86, 1.00) (0.00, N/A, 0.3)	332.8 130.1	0.5466 90.1 95.7	0.3600 [0.3738]	96.3%			
6:2FTS	(427.0 / 407.0) 13821 (427.0 / 81.0) 10675	(7.59, 1.00) (0.00, N/A, -0.1)	84.5 63.8	0.7724 118.9 104.1	0.3770 [0.3796]	99.3%			
8:2FTS	(527.0 / 507.0) 12439 (527.0 / 81.0) 5906	(9.01, 1.00) (0.00, N/A, 0.2)	244.7 118.2	0.4748 75.7 69.0	0.4864 [0.3833]	126.9%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 44217 (498.0 / 478.0) 1814	(10.18, 1.00) (0.00, N/A, -1.0)	242.7 216.9	0.0410 180.3 148.5	0.1187 [0.1000]	118.7%			
NMeFOSA	(511.9 / 219.0) 34642 (511.9 / 169.0) 22030	(10.61, 1.00) (0.00, N/A, 0.1)	411.0 397.1	0.6359 99.7 99.7	0.4475 [0.4000]	111.9%			
NEIFOSA	(526.0 / 219.0) 34357 (526.0 / 169.0) 36474	(10.70, 1.00) (0.00, N/A, 0.1)	667.1 307.1	1.0616 99.4 97.7	0.3954 [0.4000]	98.9%			
NMeFOSAA	(570.0 / 419.0) 5136 (570.0 / 483.0) 3229	(9.55, 1.00) (0.01, N/A, -0.9)	268.8 1473.3	0.6286 109.5 120.3	0.1091 [0.1000]	109.1%			
NEIFOSAA	(584.0 / 419.0) 5072 (584.0 / 526.0) 2650	(9.70, 1.00) (-0.01, N/A, -1.6)	12.6 1575.4	0.5225 92.2 88.7	0.0995 [0.1000]	99.5%			
NMeFOSE	(616.1 / 59.0) 11091	(10.58, 1.00) (0.01, N/A, 0.0)	145.4	N/A 0.0 0.0	0.4768 [0.4000]	119.2%			
NEtFOSE	(630.0 / 59.0) 2508	(10.68, 1.00) (0.01, N/A, 0.0)	105.2	N/A 0.0 0.0	0.3812 [0.4000]	95.3%			
HFPO-DA	(285.0 / 169.0) 11031 (285.0 / 185.0) 27019	(6.54, 1.00) (0.00, N/A, -0.3)	222.3 166.1	2.4493 93.1 83.5	0.2439 [0.2000]	122.0%			
ADONA	(377.0 / 85.0) 42516 (377.0 / 251.0) 4910	(7.44, 1.14) (N/A, 0.01, -0.9)	364.4 29.5	0.1155 97.9 107.5	0.2205 [0.1885]	116.9%			
9CI-Pf3ONS	(531.0 / 351.0) 120854 (533.0 / 353.0) 46846	(9.74, 1.49) (N/A, 0.01, 0.1)	327.7 163.2	0.3876 133.7 124.4	0.2210 [0.1867]	118.4%			
11CI-PF3OUDS	(631.0 / 451.0) 79106 (633.0 / 453.0) 22526	(10.02, 1.53) (N/A, 0.00, -0.2)	2282.5 332.4	0.2848 90.3 82.2	0.2257 [0.1886]	119.7%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 930 (241.0 / 117.0) 2221	(4.54, 0.90) (N/A, 0.03, 0.4)	12.0 46.8	2.3886 145.7 130.2	0.3292 [0.4000]	82.3%			
5:3FTCA	(341.0 / 236.7) 7936 (341.0 / 217.0) 17540	(6.83, 1.10) (N/A, 0.02, 0.1)	94.5 72.7	2.2102 140.2 142.9	0.3873 [0.4000]	96.8%			
7:3FTCA	(441.0 / 317.0) 12772 (441.0 / 337.0) 12380	(8.65, 1.40) (N/A, 0.02, 0.0)	32.0 106.3	0.9694 115.7 119.5	0.4982 [0.4000]	124.6%			
PFEESA	(315.0 / 135.0) 19434 (315.0 / 83.0) 4936	(6.66, 1.08) (N/A, 0.01, -0.2)	290.1 44.8	0.2540 82.8 82.8	0.1743 [0.1785]	97.6%			
PFMPA	(229.0 / 85.0) 4191	(4.24, 0.84) (N/A, 0.02, 0.0)	207.0	N/A 0.0 0.0	0.2297 [0.2000]	114.8%			
PFMBA	(279.0 / 85.0) 13508	(5.44, 1.08) (N/A, 0.02, 0.0)	366.4	N/A 0.0 0.0	0.2212 [0.2000]	110.6%			
NFDHA	(201.0 / 85.0) 1294 (295.0 / 201.0) 4855	(6.10, 0.99) (N/A, 0.04, 1.6)	34.5 78.3	3.7532 57.0 51.8	0.4991 [0.2000]	249.6%			QC,
13C3_PFBA_IIS	(216.0 / 172.0) 98277	(3.75, N/A) (N/A, 0.03, N/A)	747.6	N/A	0.8100 [1.0000]	81.0% {102.1%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 159168	(6.19, N/A) (N/A, 0.01, N/A)	731.3	N/A	0.8722 [1.0000]	87.2% {90.9%}			
13C4_PFOA_IIS	(417.0 / 372.0) 146557	(7.94, N/A) (N/A, 0.02, N/A)	585.2	N/A	0.8396 [1.0000]	84.0% {101.1%}			
13C5_PFNxA_IIS	(468.0 / 423.0) 109385	(8.68, N/A) (N/A, 0.01, N/A)	456.1	N/A	0.8050 [1.0000]	80.5% {93.3%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 125383	(9.36, N/A) (N/A, 0.02, N/A)	381.6	N/A	0.9036 [1.0000]	90.4% { 95.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 267732	(8.08, N/A) (N/A, 0.02, N/A)	714.4	N/A	0.8296 [1.0000]	83.0% { 94.5% }			
13C4_PFOS_IIS	(502.8 / 79.9) 232394	(9.50, N/A) (N/A, 0.01, N/A)	400.6	N/A	0.9229 [1.0000]	92.3% { 91.3% }			
13C4_PFBA_EIS	(217.0 / 172.0) 596994	(3.74, N/A) (N/A, 0.03, N/A)	898.0	N/A	7.9692 [8.0000]	99.6% { 93.2% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 302908	(5.05, N/A) (N/A, 0.02, N/A)	782.5	N/A	3.4365 [4.0000]	85.9% { 92.7% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 231091	(6.19, N/A) (N/A, 0.02, N/A)	606.3	N/A	1.7228 [2.0000]	86.1% { 83.5% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 220086	(7.12, N/A) (N/A, 0.02, N/A)	510.6	N/A	1.8901 [2.0000]	94.5% { 94.7% }			
13C8_PFOA_EIS	(421.0 / 376.0) 213427	(7.94, N/A) (N/A, 0.02, N/A)	1047.2	N/A	1.8992 [2.0000]	95.0% { 92.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 77865	(8.68, N/A) (N/A, 0.02, N/A)	380.7	N/A	0.9239 [1.0000]	92.4% { 75.7% }			
13C6_PFDA_EIS	(519.0 / 474.0) 116397	(9.37, N/A) (N/A, 0.02, N/A)	395.8	N/A	0.9680 [1.0000]	96.8% { 95.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 167272	(9.74, N/A) (N/A, 0.01, N/A)	344.0	N/A	1.0128 [1.0000]	101.3% { 95.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 185268	(9.91, N/A) (N/A, 0.01, N/A)	365.0	N/A	0.9122 [1.0000]	91.2% { 88.6% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 131335	(10.14, N/A) (N/A, 0.01, N/A)	339.3	N/A	1.0299 [1.0000]	103.0% { 97.4% }			
13C3_PFBs_EIS	(302.0 / 80.0) 655051	(6.16, N/A) (N/A, 0.01, N/A)	781.4	N/A	2.1264 [2.0000]	106.3% { 96.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 338017	(8.07, N/A) (N/A, 0.01, N/A)	889.9	N/A	1.9497 [2.0000]	97.5% { 89.6% }			
13C8_PFOS_EIS	(507.0 / 80.0) 576970	(9.50, N/A) (N/A, 0.01, N/A)	360.7	N/A	1.9941 [2.0000]	99.7% { 96.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 74685	(5.85, N/A) (N/A, 0.02, N/A)	524.3	N/A	4.1481 [4.0000]	103.7% { 99.8% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 89978	(7.59, N/A) (N/A, 0.01, N/A)	471.0	N/A	4.0873 [4.0000]	102.2% { 89.2% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 71825	(9.01, N/A) (N/A, 0.01, N/A)	308.0	N/A	3.2702 [4.0000]	81.8% { 74.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 759574	(10.18, N/A) (N/A, 0.01, N/A)	832.6	N/A	1.7355 [2.0000]	86.8% { 86.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 186100	(10.61, N/A) (N/A, 0.01, N/A)	757.9	N/A	1.6565 [2.0000]	82.8% { 79.6% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 187990	(10.70, N/A) (N/A, 0.01, N/A)	702.8	N/A	1.9287 [2.0000]	96.4% { 99.3% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-LCV1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A03.wiff-
 Acquired: 2022/12/14 - 11:08

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 243624	(9.54, N/A) (N/A, 0.01, N/A)	426.5	N/A	3.5574 [4.0000]	88.9% { 96.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 234337	(9.71, N/A) (N/A, 0.01, N/A)	405.2	N/A	3.7816 [4.0000]	94.5% { 95.4% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 344810	(10.57, N/A) (N/A, 0.01, N/A)	935.8	N/A	16.0098 [20.0000]	80.0% { 84.9% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 194511	(10.67, N/A) (N/A, 0.01, N/A)	1337.3	N/A	18.0237 [20.0000]	90.1% { 89.1% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 584998	(6.54, N/A) (N/A, 0.01, N/A)	885.2	N/A	7.1197 [8.0000]	89.0% { 88.0% }			

LOW-CONCENTRATION CALIBRATION VERIFICATION

EPA 1633

Laboratory: APPL, LLC

SDG:

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Calibration: 2251013

Laboratory ID: SB03845-LCV1

Sequence: SB03845

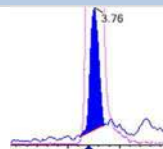
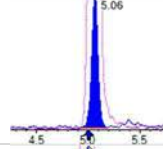
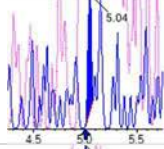
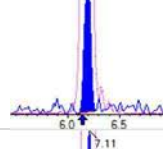
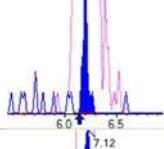
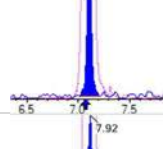
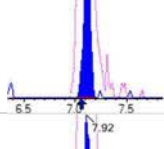
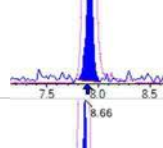
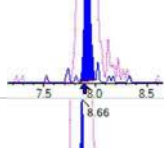
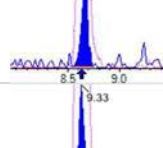
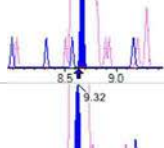
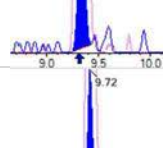
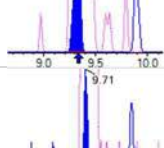
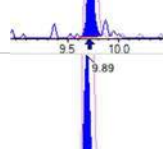
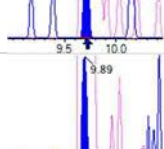
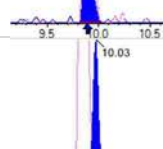
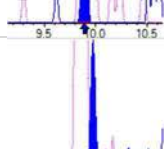
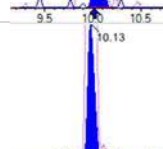
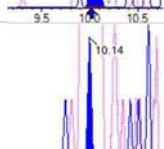
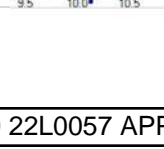
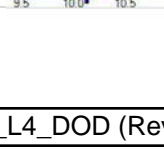
Standard ID: 22L0176

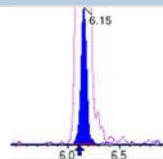
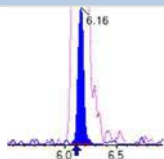
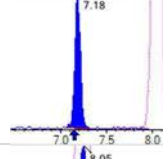
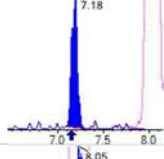
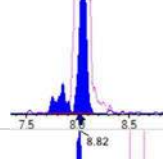
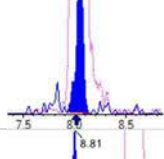
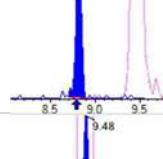
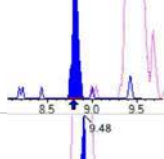
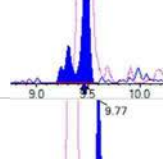
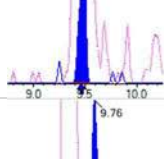
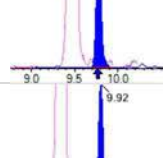
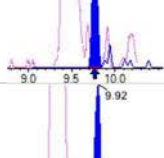
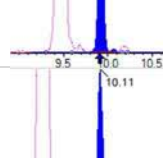
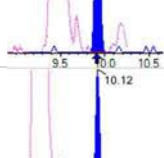
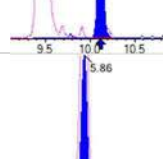
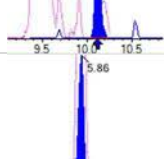
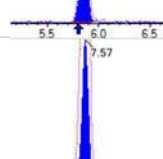
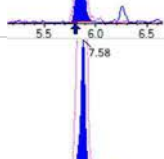
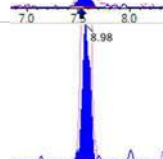
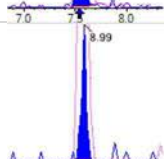
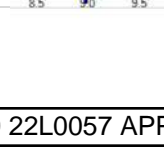
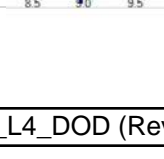
ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
PFBA	0.400	0.399	-0.1	30.00
PFPEA	0.200	0.234	17.1	30.00
PFHXA	0.100	0.118	17.8	30.00
PFHPA	0.100	0.117	16.8	30.00
PFOA	0.100	0.121	21.2	30.00
PFNA	0.100	0.111	11.1	30.00
PFDA	0.100	0.0788	-21.2	30.00
PFUnA	0.100	0.0877	-12.3	30.00
PFDOA	0.100	0.145	44.7 *	30.00
PFTRDA	0.100	0.120	19.6	30.00
PFTEDA	0.100	0.147	46.9 *	30.00
PFBS	0.0885	0.0958	8.2	30.00
PFPEs	0.0940	0.0956	1.7	30.00
PFHXS	0.0915	0.0989	8.1	30.00
PFHPS	0.0955	0.0919	-3.8	30.00
PFOS	0.0930	0.109	17.2	30.00
PFNS	0.0960	0.120	24.6	30.00
PFDS	0.0965	0.108	11.6	30.00
PFDOS	0.0970	0.123	26.7	30.00
4:2Fts	0.375	0.417	11.1	30.00
6:2Fts	0.380	0.399	5.1	30.00
8:2Fts	0.384	0.572	49.0 *	30.00
PFOSA	0.100	0.124	23.7	30.00
NMeFOSA	0.400	0.471	17.7	30.00
NEtFOSA	0.400	0.425	6.2	30.00
NMeFOSAA	0.100	0.124	23.9	30.00
NEtFOSAA	0.100	0.0956	-4.4	30.00
NMeFOSE	0.400	0.358	-10.6	30.00

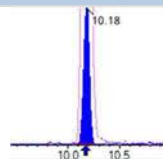
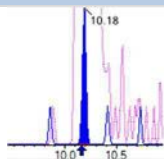
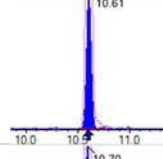
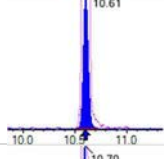
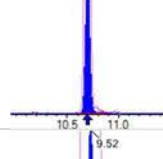
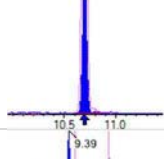
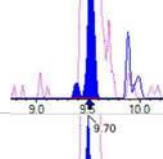
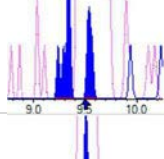
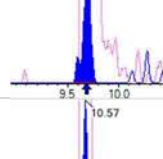
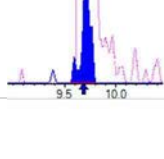
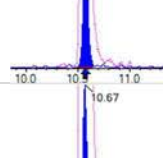
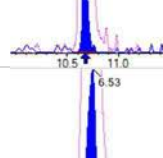
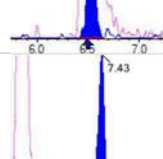
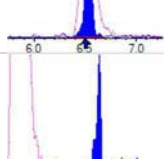
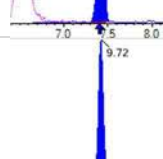
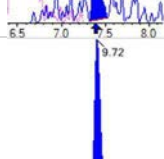
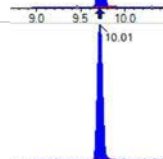
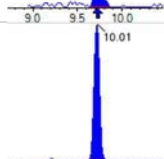
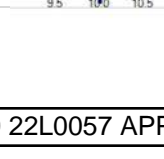
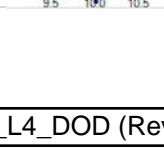
LOW-CONCENTRATION CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2251013**Laboratory ID:** SB03845-LCV1**Sequence:** SB03845**Standard ID:** 22L0176

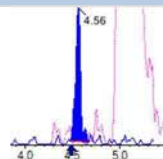
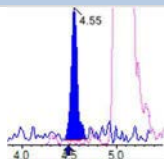
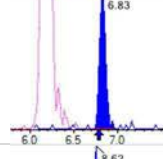
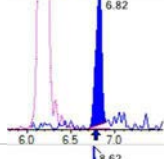
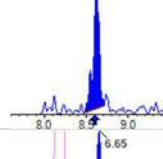
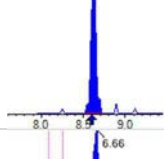
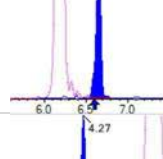
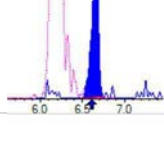
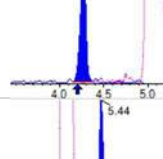
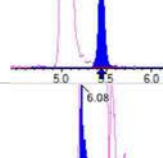
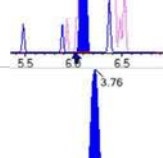
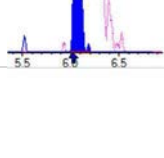
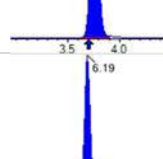
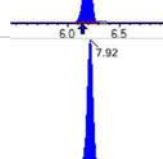
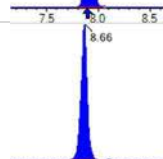
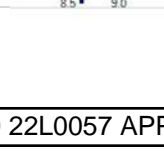
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HFPO-DA	0.200	0.228	13.8	30.00
ADONA	0.189	0.195	3.0	30.00
PFEESA	0.178	0.177	-0.4	30.00
PFMPA	0.200	0.226	12.8	30.00
PFMBA	0.200	0.234	17.0	30.00
NFDHA	0.200	0.202	1.1	30.00
9CL-PF3ONS	0.187	0.212	13.5	30.00
11CL-PF3OUDS	0.189	0.188	-0.3	30.00
3:3FTCA	0.400	0.347	-13.4	30.00
5:3FTCA	0.400	0.457	14.3	30.00
7:3FTCA	0.400	0.541	35.2 *	30.00

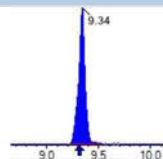
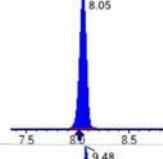
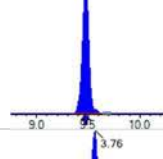
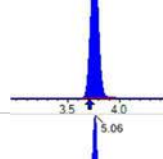
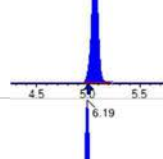
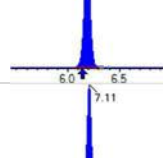
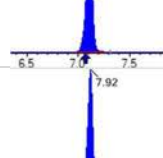
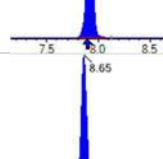
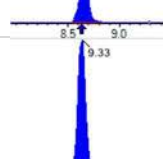
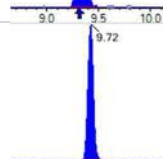
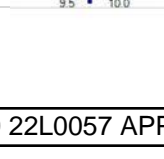
* Values outside of QC limits

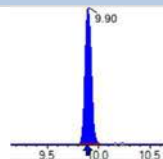
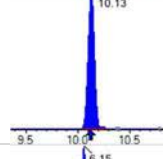
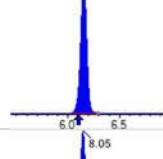
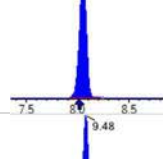
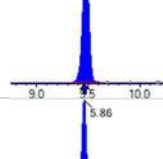
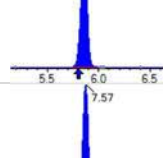
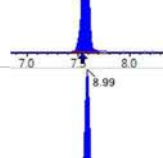
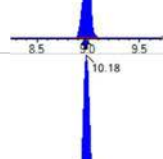
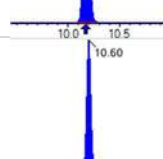
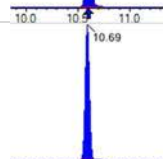
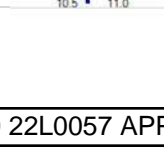
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 22492	(3.76, 1.00) (0.00, N/A, 0.0)	38.4	N/A 0.0 0.0	0.3994 [0.4000]	99.9%			
PFPeA	(262.9 / 219.0) 17754 (262.9 / 69.0) 110	(5.06, 1.00) (0.00, N/A, 1.3)	146.3 6.6	0.0062 49.1 58.9	0.2342 [0.2000]	117.1%			
PFHxA	(313.0 / 269.0) 14192 (313.0 / 119.0) 1078	(6.19, 1.00) (0.00, N/A, -0.5)	49.4 31.2	0.0759 82.0 72.8	0.1178 [0.1000]	117.8%			
PFHpA	(363.0 / 319.0) 14359 (363.0 / 169.0) 5649	(7.11, 1.00) (0.00, N/A, -0.6)	96.9 190.2	0.3934 126.4 122.2	0.1168 [0.1000]	116.8%			
PFOA	(413.0 / 369.0) 17190 (413.0 / 169.0) 4066	(7.92, 1.00) (0.00, N/A, 0.0)	74.8 83.1	0.2365 70.5 75.7	0.1212 [0.1000]	121.2%			
PFNA	(463.0 / 419.0) 10903 (463.0 / 169.0) 955	(8.66, 1.00) (0.01, N/A, 0.0)	49.6 33.6	0.0876 49.9 44.1	0.1111 [0.1000]	111.1%			IR1,
PFDA	(513.0 / 469.0) 8562 (513.0 / 169.0) 1882	(9.33, 1.00) (0.00, N/A, 0.5)	34.7 1191.5	0.2198 218.4 234.3	0.0788 [0.1000]	78.8%			IR2,
PFUnA	(563.0 / 519.0) 14852 (563.0 / 169.0) 796	(9.72, 1.00) (-0.01, N/A, 0.7)	61.6 30.6	0.0536 58.6 58.0	0.0877 [0.1000]	87.7%			
PFDoA	(613.0 / 569.0) 24233 (613.0 / 169.0) 1685	(9.89, 1.00) (-0.01, N/A, -0.3)	92.0 27.1	0.0695 54.2 47.2	0.1447 [0.1000]	144.7%			QC,IR1,
PFTrDA	(663.0 / 619.0) 16510 (663.0 / 169.0) 5391	(10.03, 1.01) (N/A, 0.01, -0.1)	76.1 41.8	0.3266 148.7 134.9	0.1196 [0.1000]	119.6%			
PFTeDA	(713.0 / 669.0) 19180 (713.0 / 169.0) 630	(10.13, 1.00) (0.00, N/A, -1.0)	92.2 21.3	0.0328 17.6 15.6	0.1469 [0.1000]	146.9%			QC,IR1,

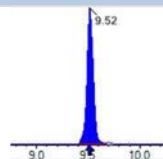
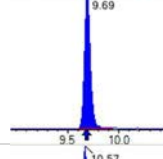
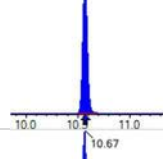
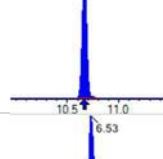
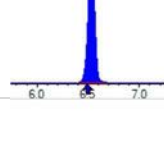
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 18982 (298.9 / 99.0) 10540	(6.15, 1.00) (0.00, N/A, 0.0)	222.3 109.5	0.5553 77.1 91.1	0.0958 [0.0885]	108.3%			
PFPeS	(349.0 / 80.0) 33141 (349.0 / 99.0) 11802	(7.18, 0.89) (N/A, 0.04, -0.1)	204.6 111.0	0.3561 95.1 94.7	0.0956 [0.0938]	101.9%			
PFHxS	(399.0 / 80.0) 31288 (399.0 / 99.0) 8598	(8.05, 1.00) (0.00, N/A, 0.0)	1529511.2 3731.3	0.2748 85.2 81.5	0.0989 [0.0911]	108.6%			
PFHpS	(449.0 / 80.0) 24245 (449.0 / 99.0) 6332	(8.82, 0.93) (N/A, 0.03, 0.5)	121.7 69.9	0.2612 85.1 116.2	0.0919 [0.0951]	96.6%			
PFOS	(499.0 / 80.0) 34953 (499.0 / 99.0) 6696	(9.48, 1.00) (0.00, N/A, -0.2)	44.3 122.7	0.1916 83.5 84.5	0.1090 [0.0927]	117.6%			
PFNS	(549.0 / 80.0) 47252 (549.0 / 99.0) 9465	(9.77, 1.03) (N/A, 0.01, 0.6)	269.8 63.0	0.2003 77.3 78.7	0.1196 [0.0960]	124.6%			
PFDS	(599.0 / 80.0) 55922 (599.0 / 99.0) 11994	(9.92, 1.05) (N/A, 0.01, 0.0)	223.6 194.2	0.2145 95.3 85.6	0.1077 [0.0963]	111.8%			
PFDoS	(698.9 / 80.0) 32276 (698.9 / 99.0) 7907	(10.11, 1.07) (N/A, 0.00, -0.4)	204.2 171.2	0.2450 121.0 119.2	0.1229 [0.0970]	126.7%			
4:2FTS	(327.0 / 307.0) 27660 (327.0 / 81.0) 17089	(5.86, 1.00) (0.00, N/A, 0.0)	326.7 153.1	0.6178 101.8 115.7	0.4166 [0.3738]	111.5%			
6:2FTS	(427.0 / 407.0) 16724 (427.0 / 81.0) 13164	(7.57, 1.00) (0.00, N/A, -0.5)	202.8 119.0	0.7871 121.2 116.9	0.3994 [0.3796]	105.2%			
8:2FTS	(527.0 / 507.0) 15795 (527.0 / 81.0) 6247	(8.98, 1.00) (-0.01, N/A, -0.5)	200.2 78.1	0.3955 63.1 66.2	0.5722 [0.3833]	149.3%			QC,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 57705 (498.0 / 478.0) 1207	(10.18, 1.00) (0.00, N/A, -0.3)	266.4 176.3	0.0209 91.9 112.7	0.1237 [0.1000]	123.7%			
NMeFOSA	(511.9 / 219.0) 47597 (511.9 / 169.0) 33111	(10.61, 1.00) (0.00, N/A, 0.0)	511.7 601.3	0.6956 109.0 97.8	0.4709 [0.4000]	117.7%			
NEIFOSA	(526.0 / 219.0) 44445 (526.0 / 169.0) 50351	(10.70, 1.00) (0.00, N/A, -0.1)	581.7 425.8	1.1329 106.1 101.1	0.4248 [0.4000]	106.2%			
NMeFOSAA	(570.0 / 419.0) 6583 (570.0 / 483.0) 2146	(9.52, 1.00) (0.01, N/A, 8.2)	244733.9 6634.8	0.3260 56.8 60.4	0.1239 [0.1000]	123.9%			
NEIFOSAA	(584.0 / 419.0) 6370 (584.0 / 526.0) 6592	(9.70, 1.00) (0.01, N/A, -0.7)	2006.5 20972.0	1.0349 182.6 228.0	0.0956 [0.1000]	95.6%			IR2,
NMeFOSE	(616.1 / 59.0) 12372	(10.57, 1.00) (0.00, N/A, 0.0)	178.5	N/A 0.0 0.0	0.3578 [0.4000]	89.4%			
NEtFOSE	(630.0 / 59.0) 3187	(10.67, 1.00) (0.00, N/A, 0.0)	88.1	N/A 0.0 0.0	0.3755 [0.4000]	93.9%			
HFPO-DA	(285.0 / 169.0) 12120 (285.0 / 185.0) 33808	(6.53, 1.00) (0.00, N/A, 0.3)	152.4 234.2	2.7893 106.1 88.6	0.2276 [0.2000]	113.8%			
ADONA	(377.0 / 85.0) 44205 (377.0 / 251.0) 5534	(7.43, 1.14) (N/A, 0.04, -0.1)	381.9 23.8	0.1252 106.2 96.0	0.1947 [0.1885]	103.3%			
9CI-Pf3ONS	(531.0 / 351.0) 136656 (533.0 / 353.0) 43418	(9.72, 1.49) (N/A, 0.01, 0.1)	353.9 96.8	0.3177 109.6 91.2	0.2123 [0.1867]	113.7%			
11CI-PF3OUDS	(631.0 / 451.0) 77731 (633.0 / 453.0) 24717	(10.01, 1.53) (N/A, 0.01, 0.0)	313.5 4968.8	0.3180 100.8 102.3	0.1884 [0.1886]	99.9%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 1104 (241.0 / 117.0) 2843	(4.56, 0.90) (N/A, 0.08, 0.4)	67.0 39.4	2.5748 157.1 142.6	0.3466 [0.4000]	86.6%			IR2,
5:3FTCA	(341.0 / 236.7) 11014 (341.0 / 217.0) 15009	(6.83, 1.10) (N/A, 0.04, 0.3)	122.8 47.0	1.3627 86.5 76.3	0.4570 [0.4000]	114.3%			
7:3FTCA	(441.0 / 317.0) 16311 (441.0 / 337.0) 12121	(8.62, 1.39) (N/A, 0.02, 0.0)	43.2 178.6	0.7431 88.7 93.3	0.5410 [0.4000]	135.2%			QC,
PFEESA	(315.0 / 135.0) 23260 (315.0 / 83.0) 8375	(6.65, 1.08) (N/A, 0.05, -0.2)	307.6 62.4	0.3601 117.4 117.2	0.1774 [0.1785]	99.4%			
PFMPA	(229.0 / 85.0) 4644	(4.27, 0.84) (N/A, 0.07, 0.0)	167.0	N/A 0.0 0.0	0.2257 [0.2000]	112.8%			
PFMBA	(279.0 / 85.0) 16114	(5.44, 1.07) (N/A, 0.06, 0.0)	551.7	N/A 0.0 0.0	0.2340 [0.2000]	117.0%			
NFDHA	(201.0 / 85.0) 796 (295.0 / 201.0) 3768	(6.08, 0.98) (N/A, 0.06, 1.6)	156.1 631.8	4.7311 71.8 74.6	0.2022 [0.2000]	101.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 104089	(3.76, N/A) (N/A, 0.07, N/A)	688.3	N/A	0.8579 [1.0000]	85.8% {105.7%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 187247	(6.19, N/A) (N/A, 0.05, N/A)	524.8	N/A	1.0261 [1.0000]	102.6% {106.1%}			
13C4_PFOA_IIS	(417.0 / 372.0) 173194	(7.92, N/A) (N/A, 0.03, N/A)	635.1	N/A	0.9921 [1.0000]	99.2% {99.0%}			
13C5_PFNA_IIS	(468.0 / 423.0) 139151	(8.66, N/A) (N/A, 0.02, N/A)	527.5	N/A	1.0240 [1.0000]	102.4% {102.2%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 125067	(9.34, N/A) (N/A, 0.02, N/A)	294.9	N/A	0.9013 [1.0000]	90.1% { 109.5% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 323295	(8.05, N/A) (N/A, 0.03, N/A)	1018.3	N/A	1.0017 [1.0000]	100.2% { 110.2% }			
13C4_PFOS_IIS	(502.8 / 79.9) 249416	(9.48, N/A) (N/A, 0.01, N/A)	442.6	N/A	0.9904 [1.0000]	99.0% { 107.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 641341	(3.76, N/A) (N/A, 0.07, N/A)	1014.0	N/A	8.0831 [8.0000]	101.0% { 99.3% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 341560	(5.06, N/A) (N/A, 0.07, N/A)	688.0	N/A	3.2939 [4.0000]	82.3% { 89.2% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 271803	(6.19, N/A) (N/A, 0.05, N/A)	434.8	N/A	1.7224 [2.0000]	86.1% { 93.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 265679	(7.11, N/A) (N/A, 0.04, N/A)	540.4	N/A	1.9395 [2.0000]	97.0% { 108.7% }			
13C8_PFOA_EIS	(421.0 / 376.0) 283767	(7.92, N/A) (N/A, 0.04, N/A)	769.3	N/A	2.1367 [2.0000]	106.8% { 109.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 107657	(8.65, N/A) (N/A, 0.02, N/A)	408.9	N/A	1.0042 [1.0000]	100.4% { 108.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 107419	(9.33, N/A) (N/A, 0.02, N/A)	363.4	N/A	0.8955 [1.0000]	89.6% { 77.7% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 195248	(9.72, N/A) (N/A, 0.01, N/A)	466.1	N/A	1.1852 [1.0000]	118.5% { 106.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 193318	(9.90, N/A) (N/A, 0.01, N/A)	506.6	N/A	0.9543 [1.0000]	95.4% { 75.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 142839	(10.13, N/A) (N/A, 0.01, N/A)	376.4	N/A	1.1229 [1.0000]	112.3% { 89.3% }			
13C3_PFBs_EIS	(302.0 / 80.0) 701520	(6.15, N/A) (N/A, 0.05, N/A)	732.5	N/A	1.8859 [2.0000]	94.3% { 89.9% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 393955	(8.05, N/A) (N/A, 0.03, N/A)	773.3	N/A	1.8818 [2.0000]	94.1% { 94.6% }			
13C8_PFOS_EIS	(507.0 / 80.0) 583081	(9.48, N/A) (N/A, 0.02, N/A)	491.5	N/A	1.8777 [2.0000]	93.9% { 97.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 81441	(5.86, N/A) (N/A, 0.05, N/A)	541.3	N/A	3.7459 [4.0000]	93.6% { 92.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 102763	(7.57, N/A) (N/A, 0.03, N/A)	514.7	N/A	3.8658 [4.0000]	96.6% { 88.9% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 77536	(8.99, N/A) (N/A, 0.03, N/A)	1975.8	N/A	2.9235 [4.0000]	73.1% { 72.5% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 951202	(10.18, N/A) (N/A, 0.01, N/A)	869.4	N/A	2.0250 [2.0000]	101.3% { 105.7% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 242990	(10.60, N/A) (N/A, 0.01, N/A)	1144.6	N/A	2.0153 [2.0000]	100.8% { 96.7% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 226356	(10.69, N/A) (N/A, 0.01, N/A)	924.6	N/A	2.1638 [2.0000]	108.2% { 101.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 274819	(9.52, N/A) (N/A, 0.01, N/A)	443.9	N/A	3.7390 [4.0000]	93.5% { 103.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 306255	(9.69, N/A) (N/A, 0.01, N/A)	393.6	N/A	4.6049 [4.0000]	115.1% { 122.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 512663	(10.57, N/A) (N/A, 0.00, N/A)	1316.0	N/A	22.1788 [20.0000]	110.9% { 100.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 250914	(10.67, N/A) (N/A, 0.01, N/A)	1305.1	N/A	21.6635 [20.0000]	108.3% { 100.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 688801	(6.53, N/A) (N/A, 0.04, N/A)	899.1	N/A	7.1259 [8.0000]	89.1% { 100.0% }			

LOW-CONCENTRATION CALIBRATION VERIFICATION

EPA 1633

Laboratory: APPL, LLC

SDG:

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Calibration: 2252011

Laboratory ID: SB03951-LCV1

Sequence: SB03951

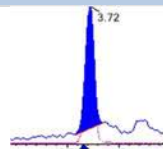
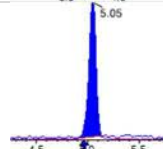
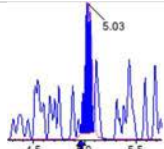
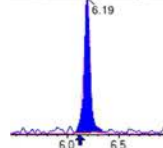
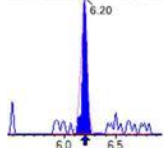
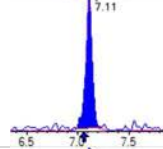
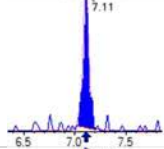
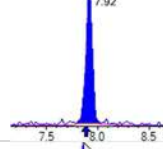
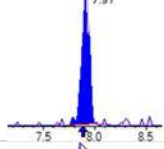
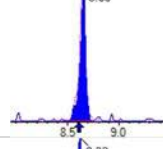
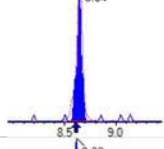
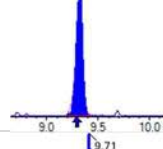
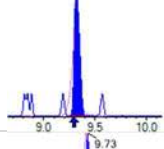
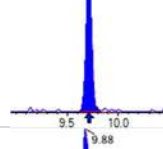
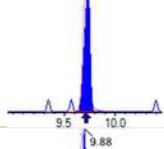
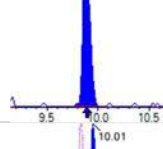
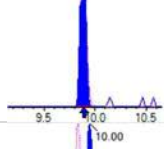
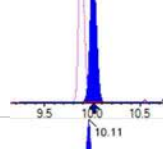
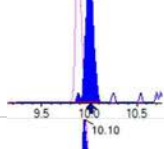
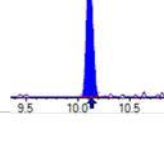
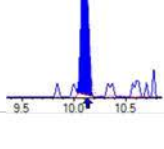
Standard ID: 22L0300

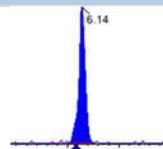
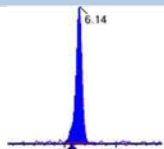
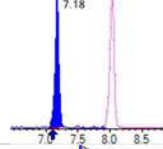
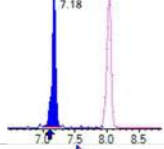
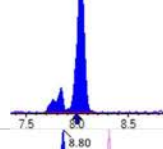
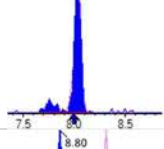
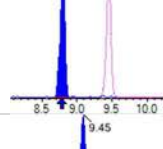
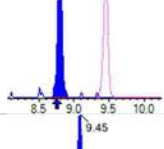
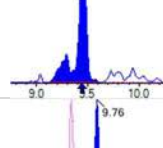
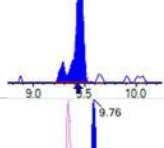
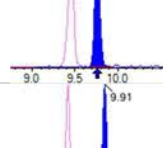
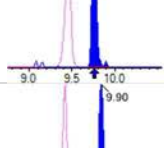
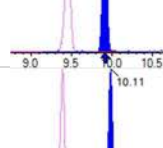
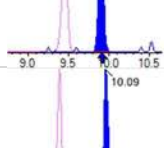
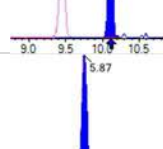
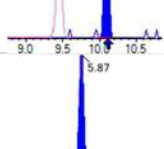
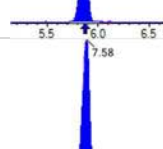
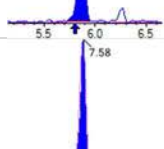
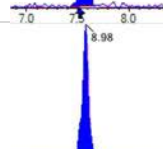
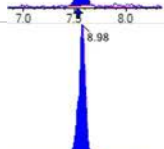

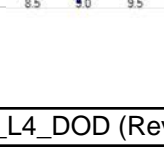
ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
PFBA	0.400	0.398	-0.5	30.00
PFPEA	0.200	0.213	6.4	30.00
PFHXA	0.100	0.115	15.1	30.00
PFHPA	0.100	0.103	2.5	30.00
PFOA	0.100	0.109	8.8	30.00
PFNA	0.100	0.117	17.1	30.00
PFDA	0.100	0.110	9.9	30.00
PFUnA	0.100	0.106	6.3	30.00
PFDOA	0.100	0.0924	-7.6	30.00
PFTRDA	0.100	0.115	15.3	30.00
PFTEDA	0.100	0.139	38.7 *	30.00
PFBS	0.0885	0.0780	-11.8	30.00
PFPEs	0.0940	0.0881	-6.3	30.00
PFHXS	0.0915	0.0946	3.4	30.00
PFHPS	0.0955	0.110	15.0	30.00
PFOS	0.0930	0.115	24.0	30.00
PFNS	0.0960	0.106	10.8	30.00
PFDS	0.0965	0.123	28.0	30.00
PFDOS	0.0970	0.106	9.2	30.00
4:2FTS	0.375	0.314	-16.4	30.00
6:2FTS	0.380	0.410	7.8	30.00
8:2FTS	0.384	0.357	-7.1	30.00
PFOSA	0.100	0.115	14.9	30.00
NMeFOSA	0.400	0.471	17.7	30.00
NEtFOSA	0.400	0.442	10.5	30.00
NMeFOSAA	0.100	0.111	10.7	30.00
NEtFOSAA	0.100	0.0789	-21.1	30.00
NMeFOSE	0.400	0.426	6.4	30.00

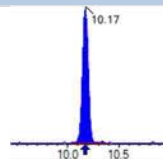
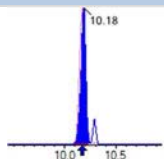
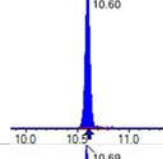
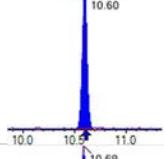
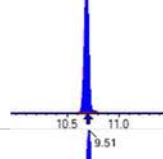
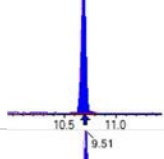
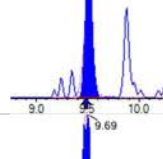
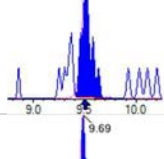
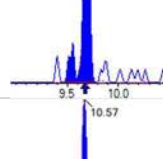
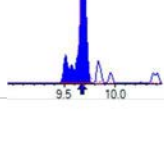
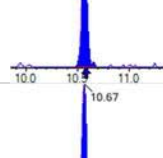
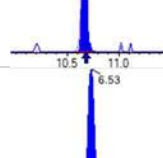
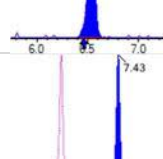
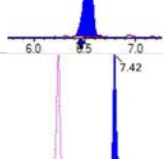
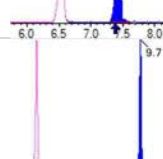
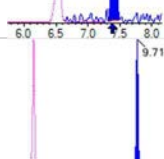
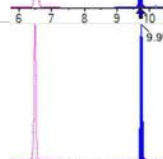
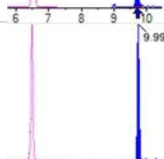
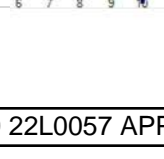
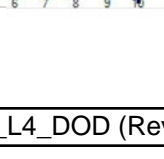
LOW-CONCENTRATION CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03951-LCV1**Sequence:** SB03951**Standard ID:** 22L0300

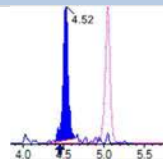
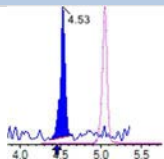
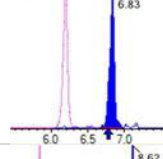
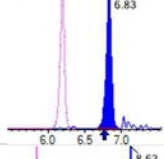
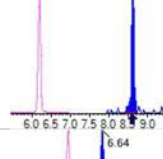
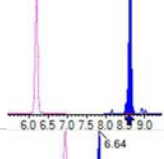
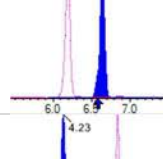
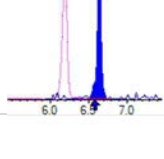
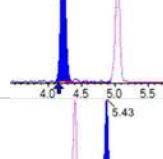
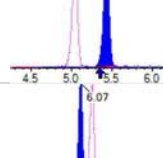
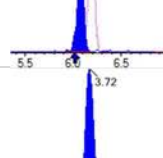
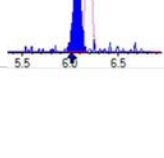
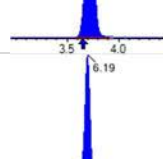
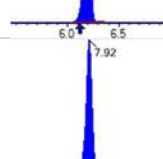
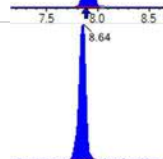
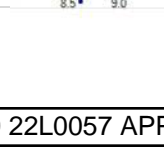
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HFPO-DA	0.200	0.180	-10.0	30.00
ADONA	0.189	0.185	-2.1	30.00
PFEESA	0.178	0.165	-7.4	30.00
PFMPA	0.200	0.205	2.6	30.00
PFMBA	0.200	0.188	-5.9	30.00
NFDHA	0.200	0.222	11.0	30.00
9CL-PF3ONS	0.187	0.164	-12.1	30.00
11CL-PF3OUDS	0.189	0.164	-13.3	30.00
3:3FTCA	0.400	0.377	-5.8	30.00
5:3FTCA	0.400	0.426	6.6	30.00
7:3FTCA	0.400	0.434	8.4	30.00

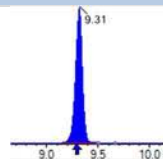
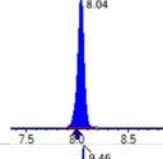
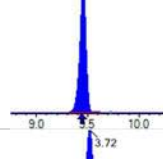
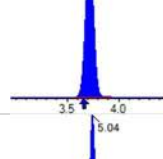
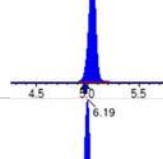
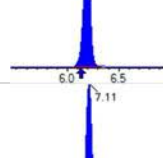
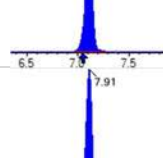
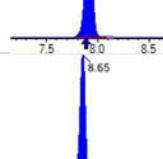
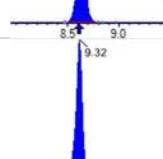
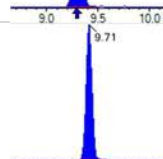
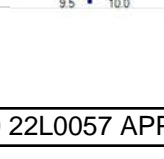
* Values outside of QC limits

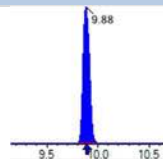
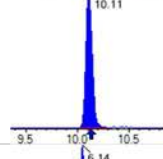
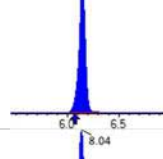
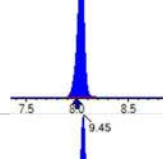
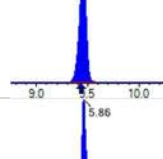
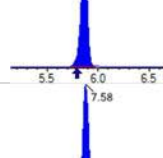
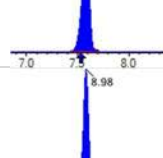
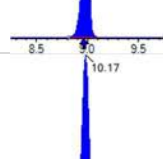
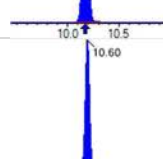
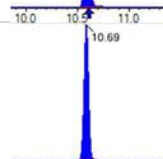
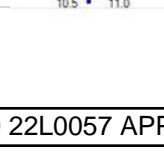
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 43849	(3.72, 1.00) (0.00, N/A, 0.0)	47.4	N/A 0.0 0.0	0.3982 [0.4000]	99.5%			
PFPeA	(262.9 / 219.0) 33025 (262.9 / 69.0) 324	(5.05, 1.00) (0.00, N/A, 0.9)	187.3 9.9	0.0098 87.6 94.3	0.2128 [0.2000]	106.4%			
PFHxA	(313.0 / 269.0) 28190 (313.0 / 119.0) 2074	(6.19, 1.00) (0.00, N/A, -0.4)	102.9 39.3	0.0736 75.3 82.4	0.1151 [0.1000]	115.1%			
PFHpA	(363.0 / 319.0) 21648 (363.0 / 169.0) 5491	(7.11, 1.00) (0.00, N/A, 0.0)	89.2 55.5	0.2536 81.4 82.3	0.1025 [0.1000]	102.5%			
PFOA	(413.0 / 369.0) 27606 (413.0 / 169.0) 10696	(7.92, 1.00) (0.00, N/A, 0.3)	133.0 99.0	0.3875 118.6 131.0	0.1088 [0.1000]	108.8%			
PFNA	(463.0 / 419.0) 20286 (463.0 / 169.0) 6368	(8.65, 1.00) (0.01, N/A, 0.5)	126.3 83.9	0.3139 162.9 150.7	0.1171 [0.1000]	117.1%			IR2,
PFDA	(513.0 / 469.0) 29031 (513.0 / 169.0) 2696	(9.32, 1.00) (0.00, N/A, 0.0)	183.4 70.6	0.0929 97.2 94.5	0.1099 [0.1000]	109.9%			
PFUnA	(563.0 / 519.0) 31385 (563.0 / 169.0) 5290	(9.71, 1.00) (0.00, N/A, -1.0)	139.2 130.3	0.1686 194.1 188.0	0.1063 [0.1000]	106.3%			IR2,
PFDoA	(613.0 / 569.0) 28685 (613.0 / 169.0) 8034	(9.88, 1.00) (0.00, N/A, 0.0)	130.3 115.9	0.2801 201.2 213.0	0.0924 [0.1000]	92.4%			IR2,
PFTTrDA	(663.0 / 619.0) 31017 (663.0 / 169.0) 10350	(10.01, 1.01) (N/A, -0.01, 0.3)	367.3 68.0	0.3337 163.0 146.0	0.1153 [0.1000]	115.3%			IR2,
PFTeDA	(713.0 / 669.0) 26604 (713.0 / 169.0) 5809	(10.11, 1.00) (0.00, N/A, 0.5)	18.7 35.2	0.2183 107.3 106.4	0.1387 [0.1000]	138.7%			QC,

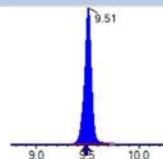
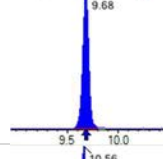
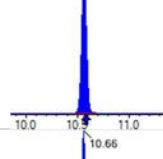
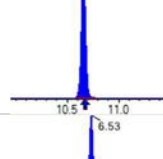
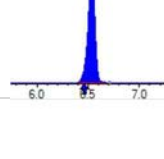
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 30593 (298.9 / 99.0) 24923	(6.14, 1.00) (0.00, N/A, 0.0)	223.0 187.4	0.8147 132.4 124.4	0.0780 [0.0885]	88.2%			
PFPeS	(349.0 / 80.0) 62381 (349.0 / 99.0) 22889	(7.18, 0.89) (N/A, 0.06, 0.0)	234.7 196.1	0.3669 103.1 95.5	0.0881 [0.0938]	93.8%			
PFHxS	(399.0 / 80.0) 58273 (399.0 / 99.0) 18743	(8.03, 1.00) (0.00, N/A, 0.1)	828.8 6172.7	0.3216 95.7 97.2	0.0946 [0.0911]	103.8%			
PFHpS	(449.0 / 80.0) 53380 (449.0 / 99.0) 15272	(8.80, 0.93) (N/A, 0.03, 0.1)	299.9 145.3	0.2861 104.5 112.5	0.1098 [0.0951]	115.4%			
PFOS	(499.0 / 80.0) 69748 (499.0 / 99.0) 13321	(9.45, 1.00) (0.00, N/A, 0.2)	144.6 68.1	0.1910 78.5 83.5	0.1153 [0.0927]	124.4%			
PFNS	(549.0 / 80.0) 71336 (549.0 / 99.0) 12422	(9.76, 1.03) (N/A, 0.00, 0.1)	277.5 189.8	0.1741 71.4 68.2	0.1063 [0.0960]	110.8%			
PFDS	(599.0 / 80.0) 91956 (599.0 / 99.0) 16604	(9.91, 1.05) (N/A, 0.00, 0.3)	317.6 111.6	0.1806 80.2 77.2	0.1235 [0.0963]	128.2%			
PFDoS	(698.9 / 80.0) 32962 (698.9 / 99.0) 9833	(10.11, 1.07) (N/A, 0.00, 1.3)	264.4 17.8	0.2983 121.9 153.7	0.1059 [0.0970]	109.2%			IR2,
4:2FTS	(327.0 / 307.0) 70063 (327.0 / 81.0) 46903	(5.87, 1.00) (0.01, N/A, 0.0)	399.9 154.7	0.6694 135.5 116.9	0.3137 [0.3738]	83.9%			
6:2FTS	(427.0 / 407.0) 48949 (427.0 / 81.0) 40250	(7.58, 1.00) (0.00, N/A, 0.1)	138.4 212.7	0.8223 105.7 117.9	0.4098 [0.3796]	107.9%			
8:2FTS	(527.0 / 507.0) 39792 (527.0 / 81.0) 32476	(8.98, 1.00) (0.00, N/A, 0.1)	340.0 177.0	0.8161 144.2 148.2	0.3567 [0.3833]	93.1%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 84737 (498.0 / 478.0) 2413	(10.17, 1.00) (0.00, N/A, -0.7)	370.7 66.5	0.0285 136.6 117.4	0.1149 [0.1000]	114.9%			
NMeFOSA	(511.9 / 219.0) 60872 (511.9 / 169.0) 33917	(10.60, 1.00) (0.00, N/A, -0.1)	625.6 398.7	0.5572 77.4 82.4	0.4706 [0.4000]	117.7%			
NEIFOSA	(526.0 / 219.0) 58190 (526.0 / 169.0) 61870	(10.69, 1.00) (0.00, N/A, -0.1)	585.9 547.8	1.0633 100.5 100.3	0.4419 [0.4000]	110.5%			
NMeFOSAA	(570.0 / 419.0) 11247 (570.0 / 483.0) 3240	(9.51, 1.00) (0.01, N/A, -0.1)	88.9 44.7	0.2881 46.9 57.6	0.1107 [0.1000]	110.7%			IR1,
NEIFOSAA	(584.0 / 419.0) 8264 (584.0 / 526.0) 8267	(9.69, 1.00) (0.01, N/A, 0.2)	47.4 51.5	1.0004 136.4 137.7	0.0789 [0.1000]	78.9%			
NMeFOSE	(616.1 / 59.0) 10857	(10.57, 1.00) (0.01, N/A, 0.0)	203.2	N/A 0.0 0.0	0.4256 [0.4000]	106.4%			
NEIFOSE	(630.0 / 59.0) 1665	(10.67, 1.00) (0.01, N/A, 0.0)	793.9	N/A 0.0 0.0	0.3238 [0.4000]	81.0%			
HFPO-DA	(285.0 / 169.0) 16385 (285.0 / 185.0) 49552	(6.53, 1.00) (0.00, N/A, -0.1)	232.5 275.5	3.0242 110.2 116.2	0.1799 [0.2000]	90.0%			
ADONA	(377.0 / 85.0) 74840 (377.0 / 251.0) 10655	(7.43, 1.14) (N/A, 0.05, 0.5)	405.7 56.9	0.1424 114.3 111.5	0.1850 [0.1885]	98.1%			
9CI-Pf3ONS	(531.0 / 351.0) 200793 (533.0 / 353.0) 65513	(9.71, 1.49) (N/A, 0.00, 0.3)	354.5 256.5	0.3263 110.2 112.4	0.1643 [0.1867]	88.0%			
11CI-PF3OUDS	(631.0 / 451.0) 92694 (633.0 / 453.0) 27149	(9.99, 1.53) (N/A, -0.01, 0.2)	463.1 763.6	0.2929 88.5 91.1	0.1639 [0.1886]	86.9%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 2017 (241.0 / 117.0) 4545	(4.52, 0.90) (N/A, 0.08, -0.3)	79.7 55.8	2.2528 134.6 134.2	0.3766 [0.4000]	94.2%			
5:3FTCA	(341.0 / 236.7) 18450 (341.0 / 217.0) 24814	(6.83, 1.10) (N/A, 0.07, 0.3)	173.8 126.1	1.3449 91.9 83.7	0.4263 [0.4000]	106.6%			
7:3FTCA	(441.0 / 317.0) 21598 (441.0 / 337.0) 15586	(8.62, 1.39) (N/A, 0.03, -0.5)	92.5 129.6	0.7216 86.2 86.5	0.4337 [0.4000]	108.4%			
PFEESA	(315.0 / 135.0) 44202 (315.0 / 83.0) 14794	(6.64, 1.07) (N/A, 0.06, 0.1)	423.1 109.0	0.3347 109.0 113.3	0.1648 [0.1785]	92.3%			
PFMPA	(229.0 / 85.0) 8741	(4.23, 0.84) (N/A, 0.07, 0.0)	234.4	N/A 0.0 0.0	0.2052 [0.2000]	102.6%			
PFMBA	(279.0 / 85.0) 27711	(5.43, 1.08) (N/A, 0.08, 0.0)	438.5	N/A 0.0 0.0	0.1882 [0.2000]	94.1%			
NFDHA	(295.0 / 201.0) 27421 (295.0 / 85.0) 23355	(6.07, 0.98) (N/A, 0.07, 0.2)	261.2 49.5	0.8517 96.5 97.2	0.2220 [0.2000]	111.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 149416	(3.72, N/A) (N/A, 0.06, N/A)	849.1	N/A	1.0734 [1.0000]	107.3% {95.1%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 235804	(6.19, N/A) (N/A, 0.07, N/A)	486.5	N/A	1.0212 [1.0000]	102.1% {99.9%}			
13C4_PFOA_IIS	(417.0 / 372.0) 237795	(7.92, N/A) (N/A, 0.04, N/A)	630.7	N/A	1.0816 [1.0000]	108.2% {92.6%}			
13C5_PFNA_IIS	(468.0 / 423.0) 197981	(8.64, N/A) (N/A, 0.03, N/A)	508.8	N/A	1.0691 [1.0000]	106.9% {84.4%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 198543	(9.31, N/A) (N/A, 0.02, N/A)	319.6	N/A	1.0743 [1.0000]	107.4% { 106.1% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 433793	(8.04, N/A) (N/A, 0.04, N/A)	800.2	N/A	1.0745 [1.0000]	107.5% { 97.2% }			
13C4_PFOS_IIS	(502.8 / 79.9) 342798	(9.46, N/A) (N/A, 0.02, N/A)	514.7	N/A	1.0740 [1.0000]	107.4% { 98.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1350396	(3.72, N/A) (N/A, 0.07, N/A)	854.9	N/A	8.7813 [8.0000]	109.8% { 107.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 706916	(5.04, N/A) (N/A, 0.08, N/A)	674.5	N/A	4.3086 [4.0000]	107.7% { 104.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 570391	(6.19, N/A) (N/A, 0.07, N/A)	517.3	N/A	2.1020 [2.0000]	105.1% { 106.4% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 463373	(7.11, N/A) (N/A, 0.06, N/A)	563.5	N/A	1.9575 [2.0000]	97.9% { 103.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 516185	(7.91, N/A) (N/A, 0.04, N/A)	616.4	N/A	1.9794 [2.0000]	99.0% { 86.7% }			
13C9_PFNA_EIS	(472.0 / 427.0) 201968	(8.65, N/A) (N/A, 0.03, N/A)	455.2	N/A	0.9277 [1.0000]	92.8% { 87.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 277526	(9.32, N/A) (N/A, 0.03, N/A)	347.4	N/A	0.9828 [1.0000]	98.3% { 100.8% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 373620	(9.71, N/A) (N/A, 0.00, N/A)	501.2	N/A	0.9302 [1.0000]	93.0% { 100.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 360218	(9.88, N/A) (N/A, -0.01, N/A)	670.2	N/A	0.8985 [1.0000]	89.9% { 98.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 216489	(10.11, N/A) (N/A, -0.01, N/A)	356.9	N/A	0.8131 [1.0000]	81.3% { 84.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1430211	(6.14, N/A) (N/A, 0.07, N/A)	665.5	N/A	1.9500 [2.0000]	97.5% { 107.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 793030	(8.04, N/A) (N/A, 0.04, N/A)	865.4	N/A	2.0322 [2.0000]	101.6% { 103.3% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1114220	(9.45, N/A) (N/A, 0.02, N/A)	619.8	N/A	1.8939 [2.0000]	94.7% { 99.7% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 270205	(5.86, N/A) (N/A, 0.07, N/A)	647.9	N/A	4.3497 [4.0000]	108.7% { 120.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 310773	(7.58, N/A) (N/A, 0.05, N/A)	726.9	N/A	4.1552 [4.0000]	103.9% { 92.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 281638	(8.98, N/A) (N/A, 0.03, N/A)	437.7	N/A	3.7617 [4.0000]	94.0% { 89.1% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1561120	(10.17, N/A) (N/A, 0.00, N/A)	1127.8	N/A	2.0992 [2.0000]	105.0% { 114.4% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 317356	(10.60, N/A) (N/A, -0.01, N/A)	822.0	N/A	1.9545 [2.0000]	97.7% { 110.5% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 291977	(10.69, N/A) (N/A, -0.01, N/A)	1303.7	N/A	1.9479 [2.0000]	97.4% { 96.1% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 521360	(9.51, N/A) (N/A, 0.02, N/A)	373.5	N/A	3.7267 [4.0000]	93.2% { 98.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 466379	(9.68, N/A) (N/A, 0.00, N/A)	389.5	N/A	3.7822 [4.0000]	94.6% { 112.4% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 404186	(10.56, N/A) (N/A, -0.01, N/A)	1088.1	N/A	17.7282 [20.0000]	88.6% { 93.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 200858	(10.66, N/A) (N/A, -0.01, N/A)	1642.9	N/A	19.3518 [20.0000]	96.8% { 101.4% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1198727	(6.53, N/A) (N/A, 0.07, N/A)	676.0	N/A	8.3087 [8.0000]	103.9% { 98.5% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03835

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03835-CCV1	PFBA	8.00	8.01	100	ng/mL	+/- 30.00%
	PFPEA	4.00	4.05	101	ng/mL	+/- 30.00%
	PFHXA	2.00	1.98	99.0	ng/mL	+/- 30.00%
	PFHPA	2.00	1.96	97.9	ng/mL	+/- 30.00%
	PFOA	2.00	2.02	101	ng/mL	+/- 30.00%
	PFNA	2.00	1.80	89.9	ng/mL	+/- 30.00%
	PFDA	2.00	1.81	90.4	ng/mL	+/- 30.00%
	PFUnA	2.00	2.35	117	ng/mL	+/- 30.00%
	PFDOA	2.00	1.86	93.1	ng/mL	+/- 30.00%
	PFTRDA	2.00	2.11	105	ng/mL	+/- 30.00%
	PFTEDA	2.00	2.08	104	ng/mL	+/- 30.00%
	PFBS	1.77	1.69	95.7	ng/mL	+/- 30.00%
	PFPEs	1.88	1.88	100	ng/mL	+/- 30.00%
	PFHXS	1.83	1.77	97.0	ng/mL	+/- 30.00%
	PFHPS	1.91	1.86	97.4	ng/mL	+/- 30.00%
	PFOS	1.86	1.75	94.3	ng/mL	+/- 30.00%
	PFNS	1.92	2.04	106	ng/mL	+/- 30.00%
	PFDS	1.93	1.80	93.1	ng/mL	+/- 30.00%
	PFDOS	1.94	2.18	112	ng/mL	+/- 30.00%
	4:2FTS	7.50	8.01	107	ng/mL	+/- 30.00%
	6:2FTS	7.60	7.30	96.1	ng/mL	+/- 30.00%
	8:2FTS	7.68	7.36	95.8	ng/mL	+/- 30.00%
	PFOSA	2.00	2.17	109	ng/mL	+/- 30.00%
	NMeFOSA	8.00	8.19	102	ng/mL	+/- 30.00%
	NEtFOSA	8.00	8.27	103	ng/mL	+/- 30.00%
	NMeFOSAA	2.00	2.10	105	ng/mL	+/- 30.00%
	NEtFOSAA	2.00	2.14	107	ng/mL	+/- 30.00%
	NMeFOSE	8.00	7.69	96.1	ng/mL	+/- 30.00%
	NEtFOSE	8.00	8.15	102	ng/mL	+/- 30.00%
	HFPO-DA	4.00	4.01	100	ng/mL	+/- 30.00%

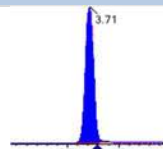
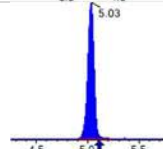
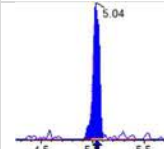
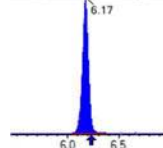
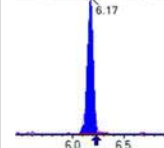
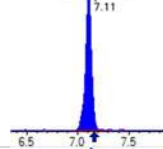
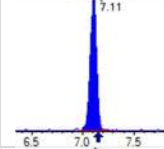
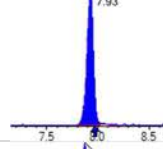
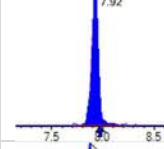
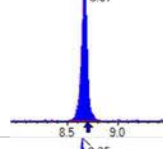
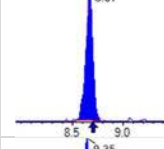
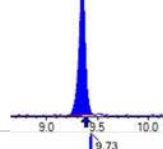
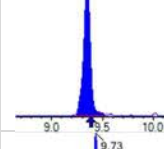
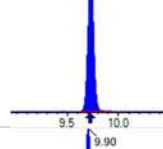
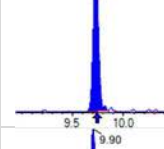
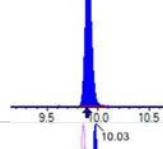
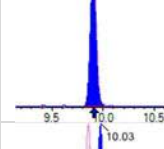
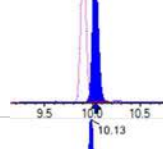
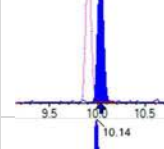
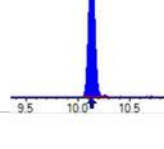
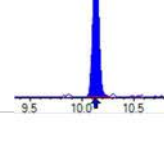
INITIAL AND CONTINUING CALIBRATION CHECK

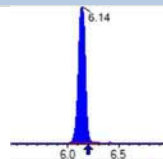
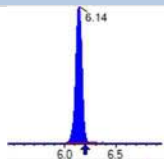
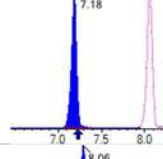
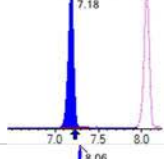
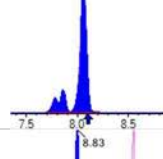
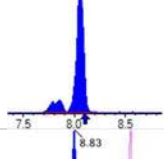
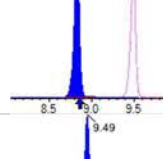
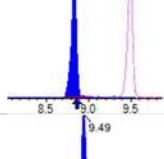
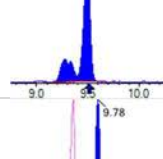
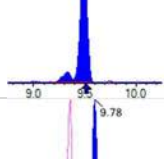
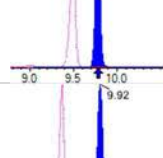
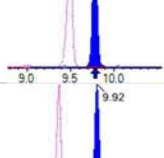
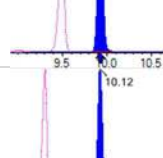
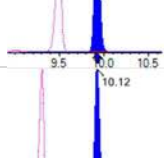
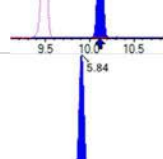
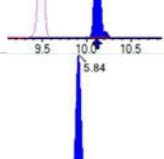
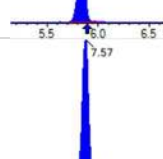
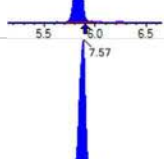
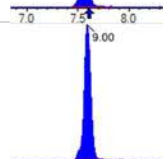
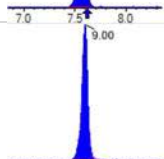
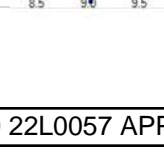
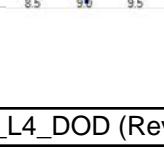
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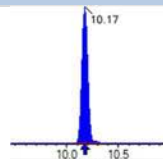
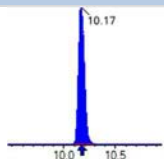
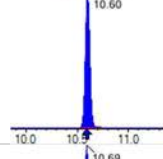
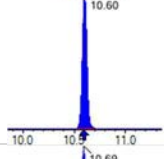
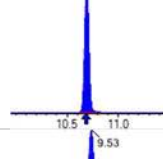
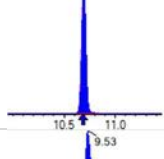
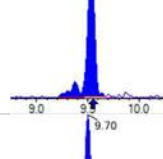
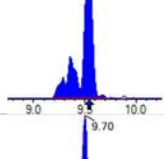
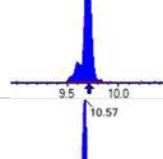
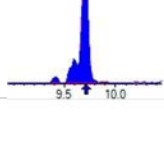
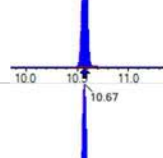
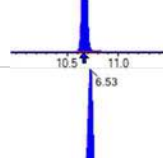
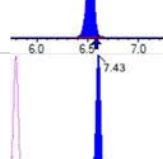
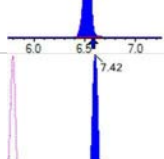
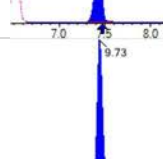
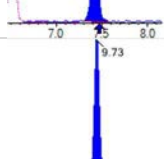
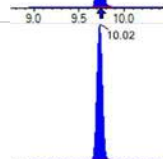
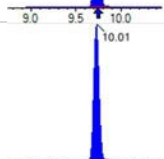
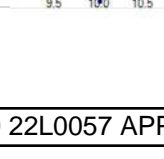
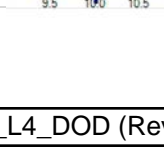
Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

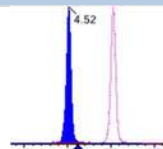
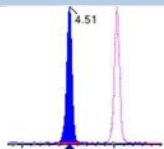
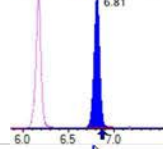
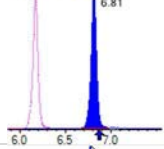
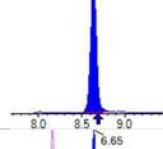
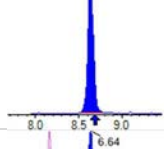
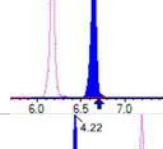
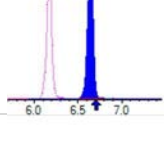
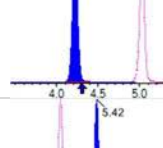
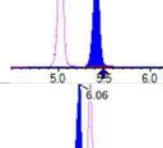
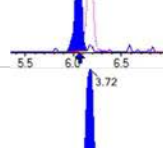
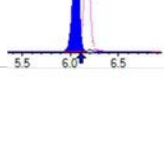
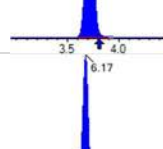
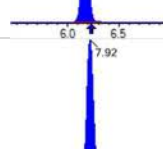
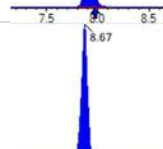

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03835

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03835-CCV1	ADONA	3.78	4.08	108	ng/mL	+/- 30.00%
	PFEESA	3.56	3.78	106	ng/mL	+/- 30.00%
	PFMPA	4.00	3.92	97.9	ng/mL	+/- 30.00%
	PFMBA	4.00	4.24	106	ng/mL	+/- 30.00%
	NFDHA	4.00	3.75	93.8	ng/mL	+/- 30.00%
	9CL-PF3ONS	3.74	3.84	103	ng/mL	+/- 30.00%
	11CL-PF3OUDS	3.78	3.68	97.2	ng/mL	+/- 30.00%
	3:3FTCA	8.00	8.08	101	ng/mL	+/- 30.00%
	5:3FTCA	8.00	8.68	109	ng/mL	+/- 30.00%
	7:3FTCA	8.00	7.69	96.1	ng/mL	+/- 30.00%

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 450471	(3.71, 1.00) (0.00, N/A, 0.0)	64.9	N/A 0.0 0.0	8.0099 [8.0000]	100.1%			
PFPeA	(262.9 / 219.0) 293625 (262.9 / 69.0) 3448	(5.03, 1.00) (0.00, N/A, -0.3)	512.9 105.4	0.0117 93.5 100.0	4.0502 [4.0000]	101.3%			
PFHxA	(313.0 / 269.0) 242765 (313.0 / 119.0) 25858	(6.17, 1.00) (0.00, N/A, 0.1)	495.9 329.3	0.1065 115.0 100.0	1.9792 [2.0000]	99.0%			
PFHpA	(363.0 / 319.0) 210590 (363.0 / 169.0) 68202	(7.11, 1.00) (0.00, N/A, 0.1)	435.5 349.1	0.3239 104.1 100.0	1.9577 [2.0000]	97.9%			
PFOA	(413.0 / 369.0) 234122 (413.0 / 169.0) 68205	(7.93, 1.00) (0.00, N/A, 0.1)	487.1 334.8	0.2913 86.8 100.0	2.0215 [2.0000]	101.1%			
PFNA	(463.0 / 419.0) 168572 (463.0 / 169.0) 34379	(8.67, 1.00) (0.01, N/A, 0.0)	378.9 70.9	0.2039 116.2 100.0	1.7971 [2.0000]	89.9%			
PFDA	(513.0 / 469.0) 223105 (513.0 / 169.0) 29228	(9.35, 1.00) (0.00, N/A, 0.1)	271.6 163.0	0.1310 130.1 100.0	1.8074 [2.0000]	90.4%			
PFUnA	(563.0 / 519.0) 356024 (563.0 / 169.0) 30906	(9.73, 1.00) (0.00, N/A, 0.0)	565.9 201.3	0.0868 94.8 100.0	2.3492 [2.0000]	117.5%			
PFDoA	(613.0 / 569.0) 337301 (613.0 / 169.0) 48022	(9.90, 1.00) (0.00, N/A, 0.1)	747.2 470.9	0.1424 111.1 100.0	1.8624 [2.0000]	93.1%			
PFTrDA	(663.0 / 619.0) 314485 (663.0 / 169.0) 72464	(10.03, 1.01) (N/A, 0.00, -0.2)	551.1 251.7	0.2304 104.9 100.0	2.1062 [2.0000]	105.3%			
PFTeDA	(713.0 / 669.0) 256722 (713.0 / 169.0) 45054	(10.13, 1.00) (0.00, N/A, -0.1)	591.5 199.2	0.1755 94.3 100.0	2.0827 [2.0000]	104.1%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 325536 (298.9 / 99.0) 216392	(6.14 , 1.00) (0.00 , N/A , 0.1)	599.5 522.1	0.6647 92.3 100.0	1.6941 [1.7695]	95.7%			
PFPeS	(349.0 / 80.0) 625468 (349.0 / 99.0) 234207	(7.18 , 0.89) (N/A , 0.00 , 0.0)	636.9 490.1	0.3745 100.0 100.0	1.8837 [1.8768]	100.4%			
PFHxS	(399.0 / 80.0) 537843 (399.0 / 99.0) 186027	(8.06 , 1.00) (0.00 , N/A , 0.1)	74821.6 43764.4	0.3459 107.2 100.0	1.7745 [1.8220]	97.4%			
PFHpS	(449.0 / 80.0) 501200 (449.0 / 99.0) 149845	(8.83 , 0.93) (N/A , 0.00 , -0.1)	567.6 503.0	0.2990 97.4 100.0	1.8610 [1.9028]	97.8%			
PFOS	(499.0 / 80.0) 574108 (499.0 / 99.0) 146421	(9.49 , 1.00) (0.00 , N/A , 0.2)	112.7 184.9	0.2550 111.1 100.0	1.7541 [1.8550]	94.6%			
PFNS	(549.0 / 80.0) 822505 (549.0 / 99.0) 194735	(9.78 , 1.03) (N/A , 0.00 , 0.0)	659.8 479.0	0.2368 91.3 100.0	2.0396 [1.9198]	106.2%			
PFDS	(599.0 / 80.0) 952563 (599.0 / 99.0) 234987	(9.92 , 1.05) (N/A , 0.00 , 0.1)	796.5 585.6	0.2467 109.6 100.0	1.7968 [1.9262]	93.3%			
PFDoS	(698.9 / 80.0) 583949 (698.9 / 99.0) 117794	(10.12 , 1.07) (N/A , 0.00 , -0.1)	834.1 8925.4	0.2017 99.6 100.0	2.1774 [1.9391]	112.3%			
4:2FTS	(327.0 / 307.0) 488607 (327.0 / 81.0) 279054	(5.84 , 1.00) (0.00 , N/A , 0.1)	932.3 503.7	0.5711 94.1 100.0	8.0096 [7.4762]	107.1%			
6:2FTS	(427.0 / 407.0) 300268 (427.0 / 81.0) 222810	(7.57 , 1.00) (0.00 , N/A , -0.1)	696.0 730.2	0.7420 114.2 100.0	7.3010 [7.5923]	96.2%			
8:2FTS	(527.0 / 507.0) 254061 (527.0 / 81.0) 174796	(9.00 , 1.00) (0.00 , N/A , -0.3)	291.9 555.0	0.6880 109.7 100.0	7.3567 [7.6663]	96.0%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 939862 (498.0 / 478.0) 25975	(10.17, 1.00) (0.00, N/A, 0.3)	1112.0 206.3	0.0276 121.4 100.0	2.1700 [2.0000]	108.5%			
NMeFOFA	(511.9 / 219.0) 796904 (511.9 / 169.0) 508514	(10.60, 1.00) (0.00, N/A, 0.0)	1518.1 1320.6	0.6381 100.0 100.0	8.1911 [8.0000]	102.4%			
NEIFOSA	(526.0 / 219.0) 723422 (526.0 / 169.0) 785696	(10.69, 1.00) (0.00, N/A, 0.0)	1201.5 1623.2	1.0861 101.7 100.0	8.2657 [8.0000]	103.3%			
NMeFOSAA	(570.0 / 419.0) 102968 (570.0 / 483.0) 53818	(9.53, 1.00) (0.00, N/A, 0.0)	222.2 1164.0	0.5227 91.1 100.0	2.0992 [2.0000]	105.0%			
NEIFOSAA	(584.0 / 419.0) 114270 (584.0 / 526.0) 67347	(9.70, 1.00) (0.00, N/A, -0.1)	3999.5 65064.7	0.5894 104.0 100.0	2.1374 [2.0000]	106.9%			
NMeFOSE	(616.1 / 59.0) 210678	(10.57, 1.00) (0.01, N/A, 0.0)	832.2	N/A 0.0 0.0	7.6915 [8.0000]	96.1%			
NEtFOSE	(630.0 / 59.0) 60175	(10.67, 1.00) (0.01, N/A, 0.0)	752.4	N/A 0.0 0.0	8.1514 [8.0000]	101.9%			
HFPO-DA	(285.0 / 169.0) 205773 (285.0 / 185.0) 603252	(6.53, 1.00) (0.00, N/A, 0.3)	1006.4 818.6	2.9316 111.5 100.0	4.0060 [4.0000]	100.1%			
ADONA	(377.0 / 85.0) 893364 (377.0 / 251.0) 95940	(7.43, 1.14) (N/A, 0.00, 0.1)	879.8 268.8	0.1074 91.1 100.0	4.0783 [3.7708]	108.2%			
9CI-Pr3ONS	(531.0 / 351.0) 2385164 (533.0 / 353.0) 743441	(9.73, 1.49) (N/A, 0.00, -0.1)	880.6 832.3	0.3117 107.5 100.0	3.8402 [3.7330]	102.9%			
11CI-PF3OUDS	(631.0 / 451.0) 1463195 (633.0 / 453.0) 506956	(10.02, 1.54) (N/A, 0.00, 0.2)	999.4 959.9	0.3465 109.8 100.0	3.6760 [3.7728]	97.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 24608 (241.0 / 117.0) 45154	(4.52, 0.90) (N/A, 0.00, 0.2)	486.8 494.6	1.8350 111.9 100.0	8.0766 [8.0000]	101.0%			
5:3FTCA	(341.0 / 236.7) 213083 (341.0 / 217.0) 329647	(6.81, 1.10) (N/A, 0.00, 0.0)	602.6 476.3	1.5470 98.2 100.0	8.6819 [8.0000]	108.5%			
7:3FTCA	(441.0 / 317.0) 236191 (441.0 / 337.0) 191550	(8.64, 1.40) (N/A, 0.00, 0.0)	292.1 350.1	0.8110 96.8 100.0	7.6914 [8.0000]	96.1%			
PFEESA	(315.0 / 135.0) 505496 (315.0 / 83.0) 155018	(6.65, 1.08) (N/A, 0.00, 0.2)	745.0 541.7	0.3067 100.0 100.0	3.7844 [3.5698]	106.0%			
PFMPA	(229.0 / 85.0) 77098	(4.22, 0.84) (N/A, 0.00, 0.0)	791.9	N/A 0.0 0.0	3.9177 [4.0000]	97.9%			
PFMBA	(279.0 / 85.0) 279537	(5.42, 1.08) (N/A, 0.00, 0.0)	776.8	N/A 0.0 0.0	4.2444 [4.0000]	106.1%			
NFDHA	(201.0 / 85.0) 9638 (295.0 / 201.0) 69852	(6.06, 0.98) (N/A, 0.00, -0.1)	111.5 474.2	7.2472 110.0 100.0	3.7514 [4.0000]	93.8%			
13C3_PFBA_IIS	(216.0 / 172.0) 96278	(3.72, N/A) (N/A, 0.00, N/A)	669.8	N/A	0.7935 [1.0000]	79.4% { 100.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 175192	(6.17, N/A) (N/A, 0.00, N/A)	554.8	N/A	0.9600 [1.0000]	96.0% { 100.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 144958	(7.92, N/A) (N/A, 0.00, N/A)	536.4	N/A	0.8304 [1.0000]	83.0% { 100.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 117192	(8.67, N/A) (N/A, 0.00, N/A)	305.4	N/A	0.8624 [1.0000]	86.2% { 100.0% }			

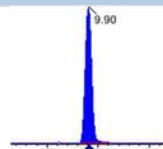
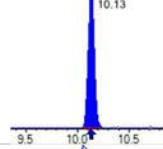
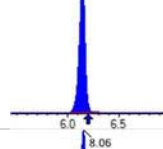
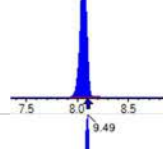
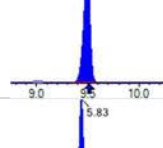
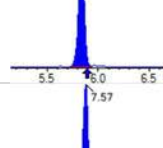
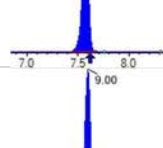
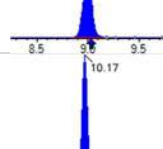
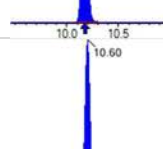
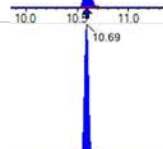
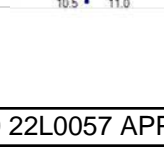


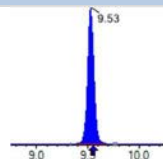
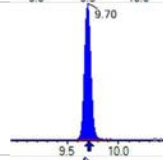
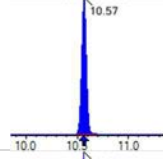
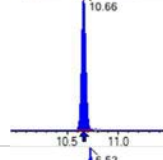
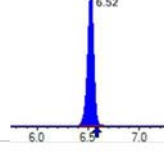
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCV1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A04.wiff-
 Acquired: 2022/12/14 - 11:21

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 130981	(9.35, N/A) (N/A, 0.00, N/A)	333.9	N/A	0.9440 [1.0000]	94.4% { 100.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 283288	(8.06, N/A) (N/A, 0.00, N/A)	698.2	N/A	0.8778 [1.0000]	87.8% { 100.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 254551	(9.49, N/A) (N/A, 0.00, N/A)	787.1	N/A	1.0108 [1.0000]	101.1% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 640490	(3.71, N/A) (N/A, 0.00, N/A)	787.7	N/A	8.7273 [8.0000]	109.1% { 100.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 326693	(5.03, N/A) (N/A, 0.00, N/A)	813.6	N/A	3.3673 [4.0000]	84.2% { 100.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 276821	(6.17, N/A) (N/A, 0.00, N/A)	775.5	N/A	1.8749 [2.0000]	93.7% { 100.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 232466	(7.11, N/A) (N/A, 0.00, N/A)	474.0	N/A	1.8138 [2.0000]	90.7% { 100.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 231791	(7.92, N/A) (N/A, 0.00, N/A)	530.1	N/A	2.0853 [2.0000]	104.3% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 102893	(8.66, N/A) (N/A, 0.00, N/A)	391.8	N/A	1.1396 [1.0000]	114.0% { 100.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 122079	(9.35, N/A) (N/A, 0.00, N/A)	245.8	N/A	0.9718 [1.0000]	97.2% { 100.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 174704	(9.73, N/A) (N/A, 0.00, N/A)	318.1	N/A	1.0126 [1.0000]	101.3% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 209133	(9.90, N/A) (N/A, 0.00, N/A)	434.4	N/A	0.9857 [1.0000]	98.6% { 100.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 134878	(10.13, N/A) (N/A, 0.00, N/A)	391.8	N/A	1.0125 [1.0000]	101.2% { 100.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 680162	(6.14, N/A) (N/A, 0.00, N/A)	678.7	N/A	2.0867 [2.0000]	104.3% { 100.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 377433	(8.06, N/A) (N/A, 0.00, N/A)	590.9	N/A	2.0575 [2.0000]	102.9% { 100.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 595289	(9.49, N/A) (N/A, 0.00, N/A)	425.5	N/A	1.8783 [2.0000]	93.9% { 100.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 74834	(5.83, N/A) (N/A, 0.00, N/A)	422.2	N/A	3.9281 [4.0000]	98.2% { 100.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 100928	(7.57, N/A) (N/A, 0.00, N/A)	618.1	N/A	4.3329 [4.0000]	108.3% { 100.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 96996	(9.00, N/A) (N/A, 0.00, N/A)	323.4	N/A	4.1738 [4.0000]	104.3% { 100.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 883079	(10.17, N/A) (N/A, 0.00, N/A)	749.0	N/A	1.8421 [2.0000]	92.1% { 100.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 233883	(10.60, N/A) (N/A, 0.00, N/A)	992.9	N/A	1.9007 [2.0000]	95.0% { 100.0% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 189363	(10.69, N/A) (N/A, 0.00, N/A)	1059.7	N/A	1.7737 [2.0000]	88.7% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 253816	(9.53 , N/A) (N/A , 0.00 , N/A)	435.6	N/A	3.3836 [4.0000]	84.6% { 100.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 245660	(9.70 , N/A) (N/A , 0.00 , N/A)	434.7	N/A	3.6192 [4.0000]	90.5% { 100.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 406049	(10.57 , N/A) (N/A , 0.00 , N/A)	987.6	N/A	17.2121 [20.0000]	86.1% { 100.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 218227	(10.66 , N/A) (N/A , 0.00 , N/A)	1262.1	N/A	18.4612 [20.0000]	92.3% { 100.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 664499	(6.52 , N/A) (N/A , 0.00 , N/A)	650.9	N/A	7.3476 [8.0000]	91.8% { 100.0% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03835

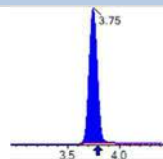
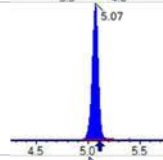
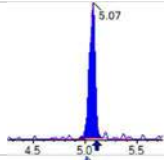
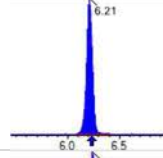
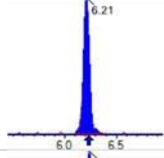
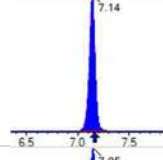
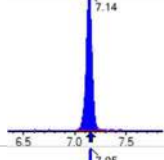
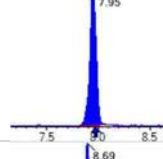
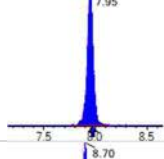
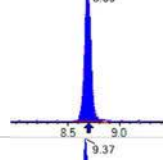
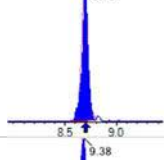
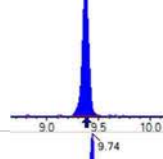
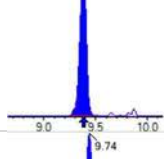
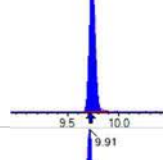
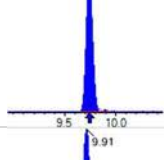
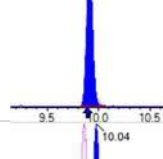
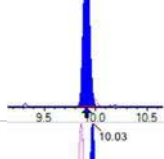
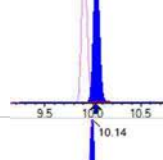
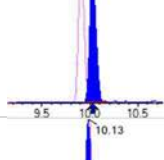
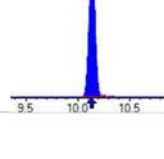
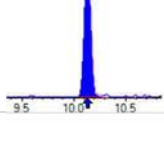
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03835-CCV2	PFBA	8.00	8.08	101	ng/mL	+/- 30.00%
	PFPEA	4.00	4.01	100	ng/mL	+/- 30.00%
	PFHXA	2.00	2.19	109	ng/mL	+/- 30.00%
	PFHPA	2.00	2.21	110	ng/mL	+/- 30.00%
	PFOA	2.00	1.76	88.2	ng/mL	+/- 30.00%
	PFNA	2.00	2.11	105	ng/mL	+/- 30.00%
	PFDA	2.00	2.02	101	ng/mL	+/- 30.00%
	PFUnA	2.00	1.86	92.8	ng/mL	+/- 30.00%
	PFDOA	2.00	1.82	91.2	ng/mL	+/- 30.00%
	PFTRDA	2.00	1.92	96.0	ng/mL	+/- 30.00%
	PFTEDA	2.00	1.90	95.0	ng/mL	+/- 30.00%
	PFBS	1.77	1.87	106	ng/mL	+/- 30.00%
	PFPEs	1.88	1.84	98.0	ng/mL	+/- 30.00%
	PFHXS	1.83	1.64	89.4	ng/mL	+/- 30.00%
	PFHPS	1.91	1.70	89.2	ng/mL	+/- 30.00%
	PFOS	1.86	1.86	100	ng/mL	+/- 30.00%
	PFNS	1.92	1.74	90.8	ng/mL	+/- 30.00%
	PFDS	1.93	1.71	88.8	ng/mL	+/- 30.00%
	PFDOS	1.94	1.97	102	ng/mL	+/- 30.00%
	4:2FTS	7.50	7.75	103	ng/mL	+/- 30.00%
	6:2FTS	7.60	7.17	94.3	ng/mL	+/- 30.00%
	8:2FTS	7.68	8.93	116	ng/mL	+/- 30.00%
	PFOSA	2.00	2.01	101	ng/mL	+/- 30.00%
	NMeFOSA	8.00	8.72	109	ng/mL	+/- 30.00%
	NEtFOSA	8.00	7.79	97.4	ng/mL	+/- 30.00%
	NMeFOSAA	2.00	2.37	118	ng/mL	+/- 30.00%
	NEtFOSAA	2.00	1.80	90.2	ng/mL	+/- 30.00%
	NMeFOSE	8.00	7.55	94.4	ng/mL	+/- 30.00%
	NEtFOSE	8.00	8.02	100	ng/mL	+/- 30.00%
	HFPO-DA	4.00	3.93	98.3	ng/mL	+/- 30.00%

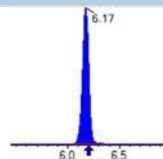
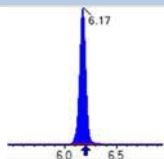
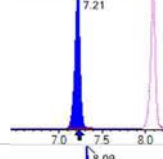
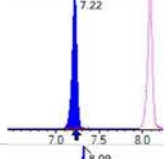
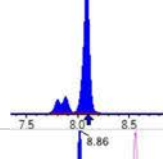
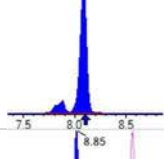
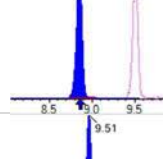
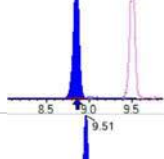
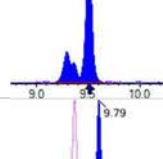
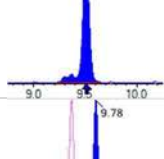
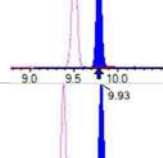
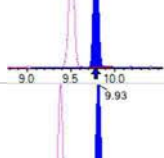
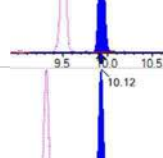
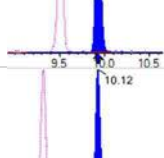
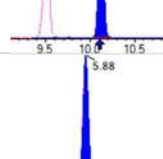
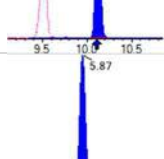
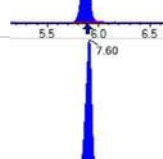
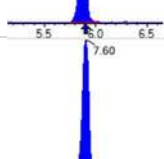
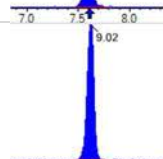
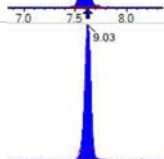
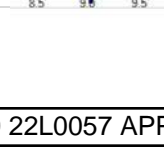
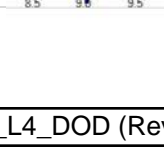
INITIAL AND CONTINUING CALIBRATION CHECK

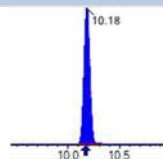
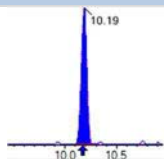
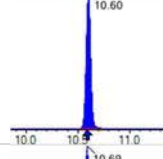
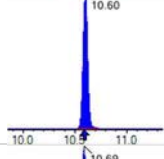
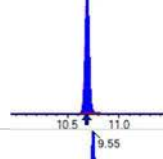
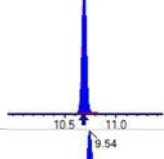
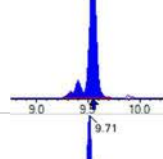
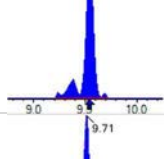
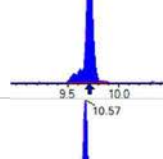
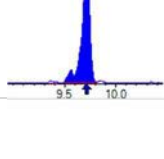
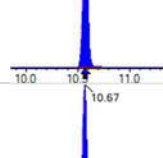
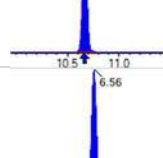
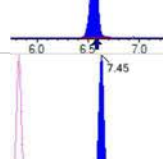
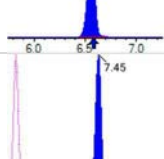
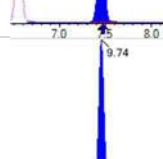
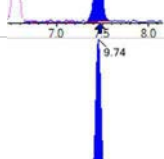
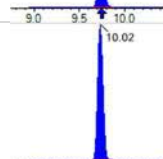
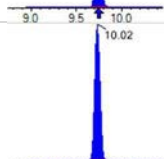
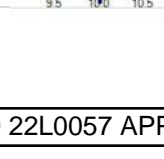
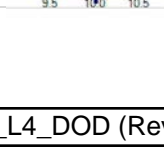
EPA 1633

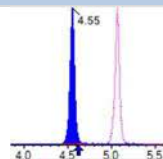
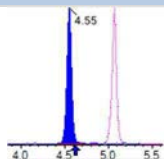
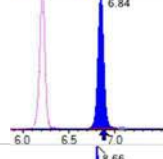
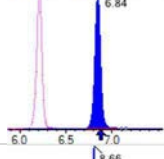
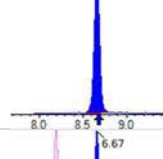
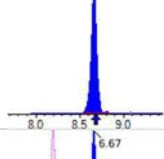
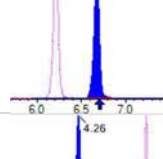
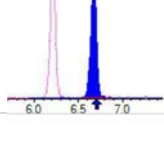
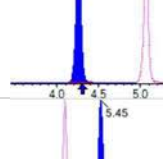
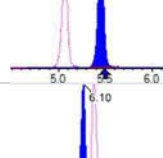
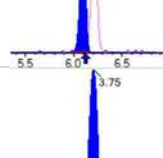
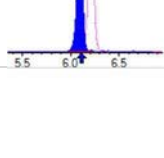
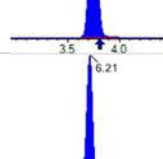
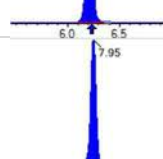
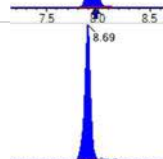
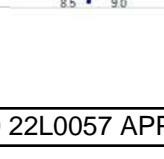
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Instrument ID:	Saphira	Calibration:	2251013
Standard ID:	22L0179	Sequence:	SB03835

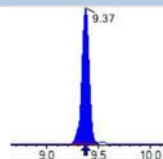
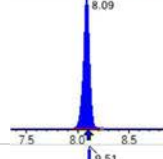
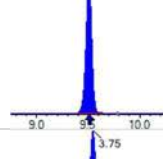
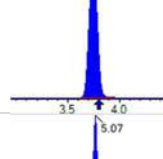
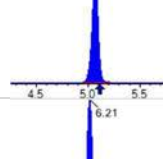
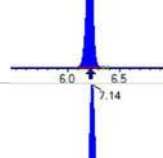
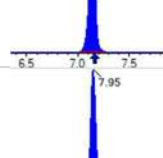
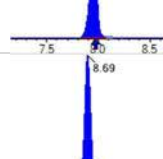
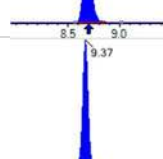
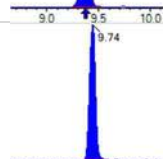
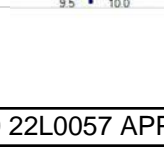
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03835-CCV2	ADONA	3.78	3.24	85.6	ng/mL	+/- 30.00%
	PFEESA	3.56	3.46	97.1	ng/mL	+/- 30.00%
	PFMPA	4.00	3.85	96.3	ng/mL	+/- 30.00%
	PFMBA	4.00	4.09	102	ng/mL	+/- 30.00%
	NFDHA	4.00	4.73	118	ng/mL	+/- 30.00%
	9CL-PF3ONS	3.74	3.57	95.5	ng/mL	+/- 30.00%
	11CL-PF3OUDS	3.78	3.95	104	ng/mL	+/- 30.00%
	3:3FTCA	8.00	7.97	99.6	ng/mL	+/- 30.00%
	5:3FTCA	8.00	8.42	105	ng/mL	+/- 30.00%
	7:3FTCA	8.00	9.19	115	ng/mL	+/- 30.00%

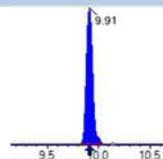
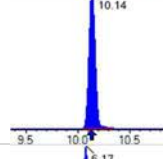
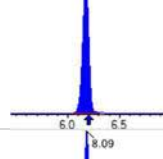
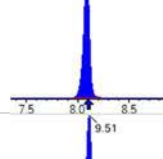
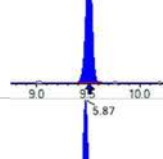
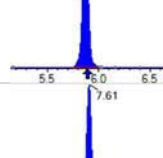
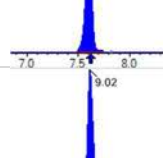
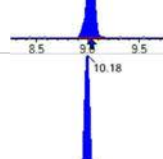
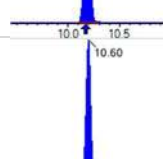
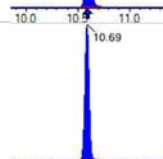
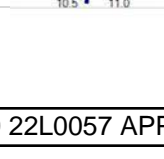
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 471556	(3.75, 1.00) (0.00, N/A, 0.0)	71.5	N/A 0.0 0.0	8.0758 [8.0000]	100.9%			
PFPeA	(262.9 / 219.0) 336896 (262.9 / 69.0) 3845	(5.07, 1.00) (0.00, N/A, -0.1)	712.8 125.6	0.0114 90.9 97.2	4.0090 [4.0000]	100.2%			
PFHxA	(313.0 / 269.0) 283965 (313.0 / 119.0) 28306	(6.21, 1.00) (0.00, N/A, 0.0)	644.5 340.2	0.0997 107.7 93.6	2.1859 [2.0000]	109.3%			
PFHpA	(363.0 / 319.0) 301327 (363.0 / 169.0) 82007	(7.14, 1.00) (0.00, N/A, 0.2)	647.7 410.5	0.2722 87.5 84.0	2.2057 [2.0000]	110.3%			
PFOA	(413.0 / 369.0) 264074 (413.0 / 169.0) 87846	(7.95, 1.00) (0.00, N/A, -0.1)	530.7 445.4	0.3327 99.1 114.2	1.7644 [2.0000]	88.2%			
PFNA	(463.0 / 419.0) 220521 (463.0 / 169.0) 47294	(8.69, 1.00) (0.00, N/A, -0.3)	405.4 58.0	0.2145 122.2 105.2	2.1088 [2.0000]	105.4%			
PFDA	(513.0 / 469.0) 295507 (513.0 / 169.0) 23823	(9.37, 1.00) (0.00, N/A, -0.4)	424.3 206.7	0.0806 80.1 61.5	2.0167 [2.0000]	100.8%			
PFUnA	(563.0 / 519.0) 351345 (563.0 / 169.0) 36865	(9.74, 1.00) (0.00, N/A, -0.1)	516.5 1059.5	0.1049 114.6 120.9	1.8564 [2.0000]	92.8%			
PFDoA	(613.0 / 569.0) 413746 (613.0 / 169.0) 55063	(9.91, 1.00) (0.00, N/A, 0.2)	527.8 584.2	0.1331 103.8 93.5	1.8239 [2.0000]	91.2%			
PFTTrDA	(663.0 / 619.0) 358968 (663.0 / 169.0) 69243	(10.04, 1.01) (N/A, 0.01, 0.5)	641.3 259.6	0.1929 87.8 83.7	1.9194 [2.0000]	96.0%			
PFTeDA	(713.0 / 669.0) 306380 (713.0 / 169.0) 60635	(10.14, 1.00) (0.00, N/A, 0.5)	636.2 232.1	0.1979 106.4 112.8	1.9000 [2.0000]	95.0%			

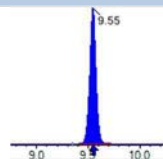
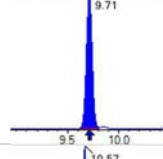
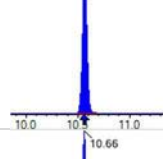
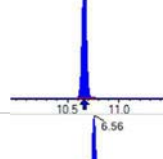
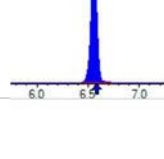
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 398416 (298.9 / 99.0) 250128	(6.17, 1.00) (0.00, N/A, 0.0)	737.7 737.1	0.6278 87.1 94.4	1.8733 [1.7695]	105.9%			
PFPeS	(349.0 / 80.0) 725535 (349.0 / 99.0) 284827	(7.21, 0.89) (N/A, 0.03, 0.0)	624.9 752.4	0.3926 104.8 104.8	1.8419 [1.8768]	98.1%			
PFHxS	(399.0 / 80.0) 588342 (399.0 / 99.0) 228829	(8.09, 1.00) (0.00, N/A, 0.1)	10855.0 57546.4	0.3889 120.6 112.5	1.6363 [1.8220]	89.8%			
PFHpS	(449.0 / 80.0) 532244 (449.0 / 99.0) 147433	(8.86, 0.93) (N/A, 0.03, 0.0)	652.8 280.4	0.2770 90.2 92.7	1.7042 [1.9028]	89.6%			
PFOS	(499.0 / 80.0) 706286 (499.0 / 99.0) 161086	(9.51, 1.00) (0.00, N/A, 0.0)	104.2 144.3	0.2281 99.4 89.4	1.8609 [1.8550]	100.3%			
PFNS	(549.0 / 80.0) 815284 (549.0 / 99.0) 201460	(9.79, 1.03) (N/A, 0.01, 0.0)	790.1 551.5	0.2471 95.3 104.4	1.7434 [1.9198]	90.8%			
PFDS	(599.0 / 80.0) 1053059 (599.0 / 99.0) 232905	(9.93, 1.04) (N/A, 0.01, 0.0)	951.7 596.9	0.2212 98.3 89.7	1.7129 [1.9262]	88.9%			
PFDoS	(698.9 / 80.0) 613112 (698.9 / 99.0) 139888	(10.12, 1.06) (N/A, 0.01, 0.1)	976.7 426.9	0.2282 112.7 113.1	1.9714 [1.9391]	101.7%			
4:2FTS	(327.0 / 307.0) 495827 (327.0 / 81.0) 297935	(5.88, 1.00) (0.00, N/A, 0.1)	711.5 598.9	0.6009 99.0 105.2	7.7500 [7.4762]	103.7%			
6:2FTS	(427.0 / 407.0) 345720 (427.0 / 81.0) 245779	(7.60, 1.00) (0.00, N/A, 0.1)	705.5 705.6	0.7109 109.4 95.8	7.1684 [7.5923]	94.4%			
8:2FTS	(527.0 / 507.0) 309475 (527.0 / 81.0) 217822	(9.02, 1.00) (0.00, N/A, -0.1)	523.6 359.9	0.7038 112.3 102.3	8.9331 [7.6663]	116.5%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 1063672 (498.0 / 478.0) 26692	(10.18, 1.00) (0.00, N/A, -0.2)	986.5 361.6	0.0251 110.2 90.8	2.0143 [2.0000]	100.7%			
NMeFOSA	(511.9 / 219.0) 904078 (511.9 / 169.0) 631018	(10.60, 1.00) (0.00, N/A, 0.0)	1232.8 1092.4	0.6980 109.4 109.4	8.7198 [8.0000]	109.0%			
NEtFOSA	(526.0 / 219.0) 839032 (526.0 / 169.0) 927494	(10.69, 1.00) (0.00, N/A, 0.0)	1966.9 1613.7	1.1054 103.5 101.8	7.7934 [8.0000]	97.4%			
NMeFOSAA	(570.0 / 419.0) 139044 (570.0 / 483.0) 69640	(9.55, 1.00) (0.00, N/A, 0.2)	2749.5 15093763.7	0.5008 87.3 95.8	2.3688 [2.0000]	118.4%			
NEtFOSAA	(584.0 / 419.0) 127378 (584.0 / 526.0) 77123	(9.71, 1.00) (0.00, N/A, -0.1)	2799.6 269.6	0.6055 106.8 102.7	1.8040 [2.0000]	90.2%			
NMeFOSE	(616.1 / 59.0) 290519	(10.57, 1.00) (0.01, N/A, 0.0)	865.4	N/A 0.0 0.0	7.5504 [8.0000]	94.4%			
NEtFOSE	(630.0 / 59.0) 78277	(10.67, 1.00) (0.01, N/A, 0.0)	842.8	N/A 0.0 0.0	8.0203 [8.0000]	100.3%			
HFPO-DA	(285.0 / 169.0) 257334 (285.0 / 185.0) 658359	(6.56, 1.00) (0.00, N/A, -0.1)	698.4 924.8	2.5584 97.3 87.3	3.9302 [4.0000]	98.3%			
ADONA	(377.0 / 85.0) 903919 (377.0 / 251.0) 111391	(7.45, 1.14) (N/A, 0.03, 0.0)	930.2 296.1	0.1232 104.5 114.7	3.2373 [3.7708]	85.9%			
9CI-Pf3ONS	(531.0 / 351.0) 2826806 (533.0 / 353.0) 919916	(9.74, 1.49) (N/A, 0.01, 0.0)	1233.3 915.9	0.3254 112.2 104.4	3.5705 [3.7330]	95.6%			
11CI-PF3OUDS	(631.0 / 451.0) 2002304 (633.0 / 453.0) 620059	(10.02, 1.53) (N/A, 0.00, -0.1)	846.3 919.9	0.3097 98.2 89.4	3.9465 [3.7728]	104.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 28153 (241.0 / 117.0) 49245	(4.55, 0.90) (N/A, 0.04, 0.1)	487.0 411.3	1.7492 106.7 95.3	7.9714 [8.0000]	99.6%			
5:3FTCA	(341.0 / 236.7) 218764 (341.0 / 217.0) 359642	(6.84, 1.10) (N/A, 0.03, 0.0)	450.5 448.7	1.6440 104.3 106.3	8.4160 [8.0000]	105.2%			
7:3FTCA	(441.0 / 317.0) 298841 (441.0 / 337.0) 250362	(8.66, 1.39) (N/A, 0.03, -0.1)	421.0 461.5	0.8378 100.0 103.3	9.1885 [8.0000]	114.9%			
PFEESA	(315.0 / 135.0) 488799 (315.0 / 83.0) 139530	(6.67, 1.07) (N/A, 0.03, 0.0)	1133.8 569.8	0.2855 93.1 93.1	3.4552 [3.5698]	96.8%			
PFMPA	(229.0 / 85.0) 87869	(4.26, 0.84) (N/A, 0.04, 0.0)	933.7	N/A 0.0 0.0	3.8520 [4.0000]	96.3%			
PFMBA	(279.0 / 85.0) 312163	(5.45, 1.08) (N/A, 0.03, 0.0)	770.0	N/A 0.0 0.0	4.0889 [4.0000]	102.2%			
NFDHA	(201.0 / 85.0) 12773 (295.0 / 201.0) 78920	(6.10, 0.98) (N/A, 0.04, 0.3)	248.4 463.7	6.1786 93.8 85.3	4.7251 [4.0000]	118.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 99013	(3.75, N/A) (N/A, 0.03, N/A)	821.9	N/A	0.8160 [1.0000]	81.6% { 102.8% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 163411	(6.21, N/A) (N/A, 0.04, N/A)	581.3	N/A	0.8955 [1.0000]	89.5% { 93.3% }			
13C4_PFOA_IIS	(417.0 / 372.0) 182662	(7.95, N/A) (N/A, 0.03, N/A)	562.5	N/A	1.0464 [1.0000]	104.6% { 126.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 153306	(8.69, N/A) (N/A, 0.02, N/A)	274.9	N/A	1.1282 [1.0000]	112.8% { 130.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 142463	(9.37, N/A) (N/A, 0.03, N/A)	278.6	N/A	1.0267 [1.0000]	102.7% { 108.8% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 312677	(8.09, N/A) (N/A, 0.03, N/A)	758.9	N/A	0.9688 [1.0000]	96.9% { 110.4% }			
13C4_PFOS_IIS	(502.8 / 79.9) 255624	(9.51, N/A) (N/A, 0.02, N/A)	590.4	N/A	1.0151 [1.0000]	101.5% { 100.4% }			
13C4_PFBA_EIS	(217.0 / 172.0) 664995	(3.75, N/A) (N/A, 0.03, N/A)	885.5	N/A	8.8109 [8.0000]	110.1% { 103.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 378689	(5.07, N/A) (N/A, 0.04, N/A)	788.7	N/A	4.1847 [4.0000]	104.6% { 115.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 293182	(6.21, N/A) (N/A, 0.04, N/A)	489.7	N/A	2.1289 [2.0000]	106.4% { 105.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 295220	(7.14, N/A) (N/A, 0.03, N/A)	809.1	N/A	2.4695 [2.0000]	123.5% { 127.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 299548	(7.95, N/A) (N/A, 0.03, N/A)	546.8	N/A	2.1386 [2.0000]	106.9% { 129.2% }			
13C9_PFNA_EIS	(472.0 / 427.0) 114704	(8.69, N/A) (N/A, 0.03, N/A)	287.6	N/A	0.9711 [1.0000]	97.1% { 111.5% }			
13C6_PFDA_EIS	(519.0 / 474.0) 144918	(9.37, N/A) (N/A, 0.02, N/A)	328.9	N/A	1.0607 [1.0000]	106.1% { 118.7% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 218176	(9.74, N/A) (N/A, 0.01, N/A)	312.7	N/A	1.1627 [1.0000]	116.3% { 124.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 261951	(9.91, N/A) (N/A, 0.01, N/A)	534.3	N/A	1.1351 [1.0000]	113.5% { 125.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 176447	(10.14, N/A) (N/A, 0.00, N/A)	584.1	N/A	1.2178 [1.0000]	121.8% { 130.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 752812	(6.17, N/A) (N/A, 0.03, N/A)	760.0	N/A	2.0925 [2.0000]	104.6% { 110.7% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 447749	(8.09, N/A) (N/A, 0.03, N/A)	867.6	N/A	2.2114 [2.0000]	110.6% { 118.6% }			
13C8_PFOS_EIS	(507.0 / 80.0) 690330	(9.51, N/A) (N/A, 0.01, N/A)	462.3	N/A	2.1690 [2.0000]	108.5% { 116.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 78484	(5.87, N/A) (N/A, 0.04, N/A)	500.6	N/A	3.7325 [4.0000]	93.3% { 104.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 118356	(7.61, N/A) (N/A, 0.03, N/A)	568.3	N/A	4.6035 [4.0000]	115.1% { 117.3% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 97302	(9.02, N/A) (N/A, 0.02, N/A)	464.8	N/A	3.7934 [4.0000]	94.8% { 100.3% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1076678	(10.18, N/A) (N/A, 0.01, N/A)	700.9	N/A	2.2365 [2.0000]	111.8% { 121.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 249249	(10.60, N/A) (N/A, 0.00, N/A)	735.8	N/A	2.0170 [2.0000]	100.9% { 106.6% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 232935	(10.69, N/A) (N/A, 0.00, N/A)	1056.0	N/A	2.1726 [2.0000]	108.6% { 123.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 303729	(9.55, N/A) (N/A, 0.02, N/A)	542.9	N/A	4.0320 [4.0000]	100.8% { 119.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 324451	(9.71, N/A) (N/A, 0.01, N/A)	332.2	N/A	4.7600 [4.0000]	119.0% { 132.1% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 570393	(10.57, N/A) (N/A, 0.00, N/A)	1024.2	N/A	24.0770 [20.0000]	120.4% { 140.5% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 288521	(10.66, N/A) (N/A, 0.00, N/A)	1538.8	N/A	24.3053 [20.0000]	121.5% { 132.2% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 847018	(6.56, N/A) (N/A, 0.03, N/A)	1152.8	N/A	10.0409 [8.0000]	125.5% { 127.5% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03835

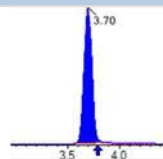
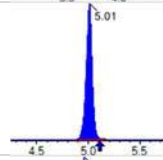
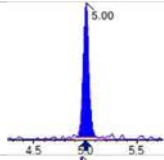
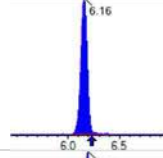
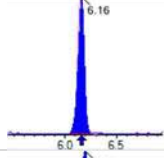
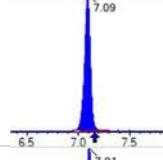
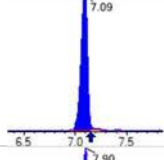
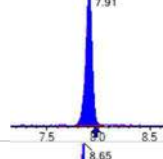
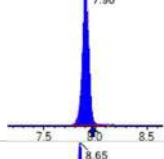
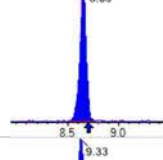
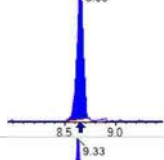
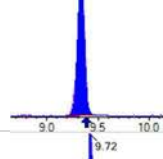
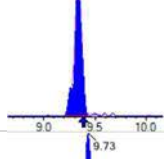
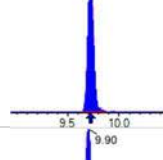
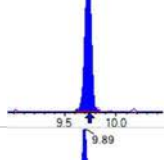
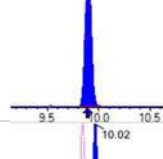
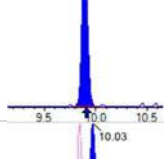
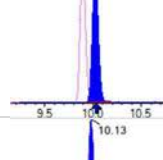
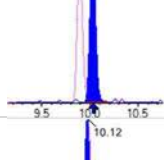
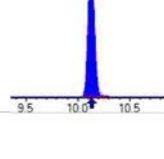
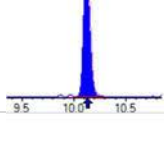
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03835-CCV3	PFBA	8.00	7.73	96.6	ng/mL	+/- 30.00%
	PFPEA	4.00	3.80	94.9	ng/mL	+/- 30.00%
	PFHXA	2.00	2.14	107	ng/mL	+/- 30.00%
	PFHPA	2.00	2.12	106	ng/mL	+/- 30.00%
	PFOA	2.00	1.99	99.4	ng/mL	+/- 30.00%
	PFNA	2.00	1.88	93.9	ng/mL	+/- 30.00%
	PFDA	2.00	2.16	108	ng/mL	+/- 30.00%
	PFUnA	2.00	2.14	107	ng/mL	+/- 30.00%
	PFDOA	2.00	1.92	95.9	ng/mL	+/- 30.00%
	PFTRDA	2.00	1.95	97.5	ng/mL	+/- 30.00%
	PFTEDA	2.00	2.27	114	ng/mL	+/- 30.00%
	PFBS	1.77	1.63	92.1	ng/mL	+/- 30.00%
	PFPEs	1.88	2.00	106	ng/mL	+/- 30.00%
	PFHXS	1.83	1.85	101	ng/mL	+/- 30.00%
	PFHPS	1.91	1.75	91.6	ng/mL	+/- 30.00%
	PFOS	1.86	1.81	97.1	ng/mL	+/- 30.00%
	PFNS	1.92	1.86	96.9	ng/mL	+/- 30.00%
	PFDS	1.93	1.92	99.3	ng/mL	+/- 30.00%
	PFDOS	1.94	1.92	99.0	ng/mL	+/- 30.00%
	4:2FTS	7.50	7.52	100	ng/mL	+/- 30.00%
	6:2FTS	7.60	7.54	99.3	ng/mL	+/- 30.00%
	8:2FTS	7.68	8.95	117	ng/mL	+/- 30.00%
	PFOSA	2.00	2.09	105	ng/mL	+/- 30.00%
	NMeFOSA	8.00	8.54	107	ng/mL	+/- 30.00%
	NEtFOSA	8.00	8.26	103	ng/mL	+/- 30.00%
	NMeFOSAA	2.00	1.93	96.7	ng/mL	+/- 30.00%
	NEtFOSAA	2.00	2.11	106	ng/mL	+/- 30.00%
	NMeFOSE	8.00	7.91	98.9	ng/mL	+/- 30.00%
	NEtFOSE	8.00	7.93	99.1	ng/mL	+/- 30.00%
	HFPO-DA	4.00	4.49	112	ng/mL	+/- 30.00%

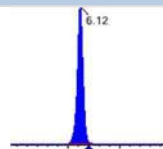
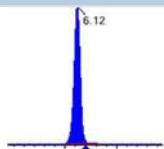
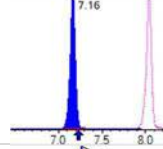
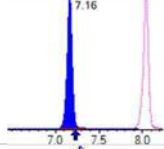
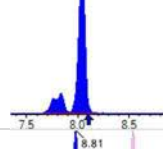
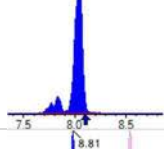
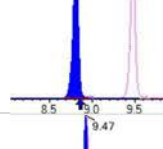
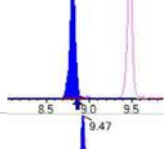
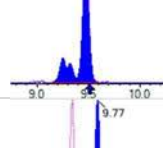
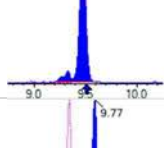
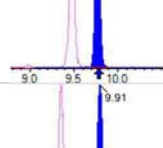
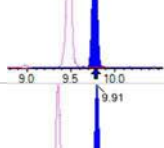
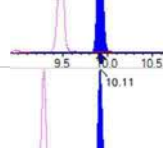
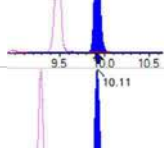
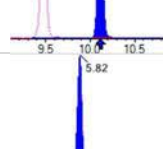
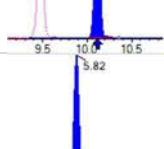
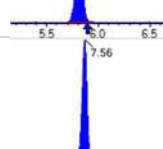
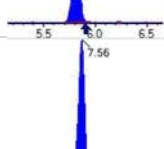
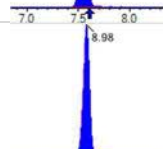
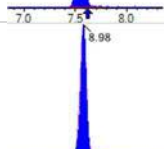

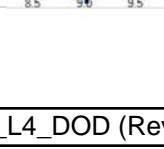
INITIAL AND CONTINUING CALIBRATION CHECK

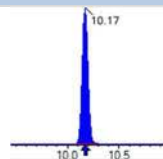
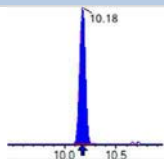
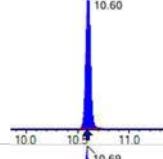
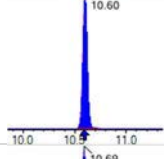
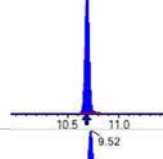
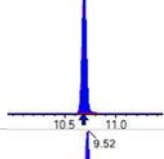
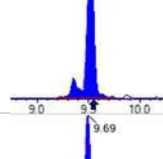
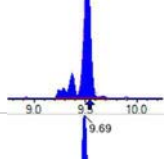
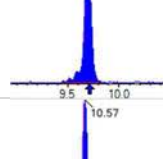
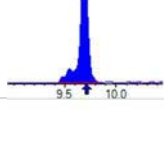
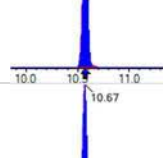
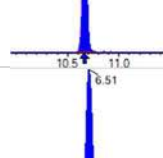
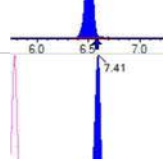
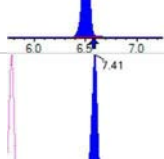
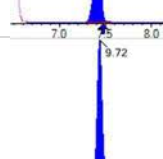
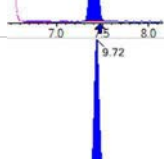
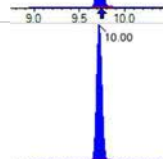
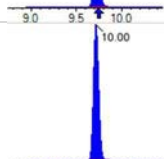
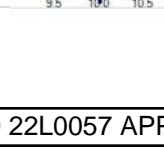
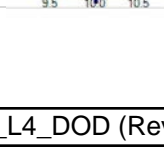
EPA 1633

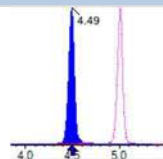
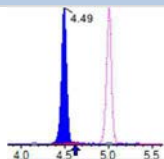
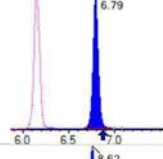
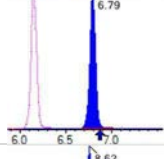
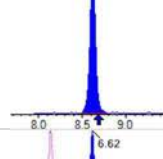
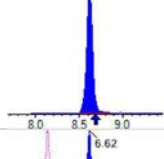
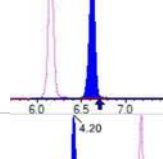
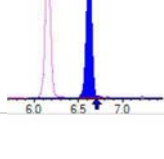
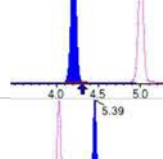
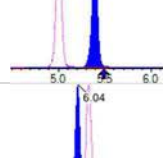
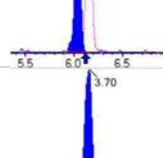
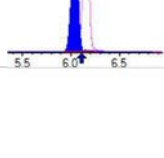
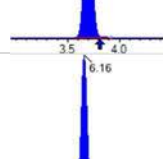
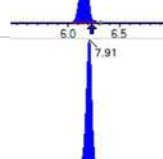
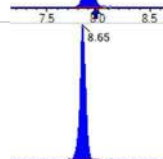
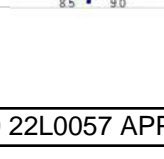
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Instrument ID:	Saphira	Calibration:	2251013
Standard ID:	22L0179	Sequence:	SB03835

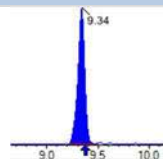
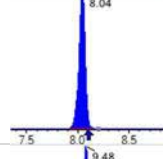
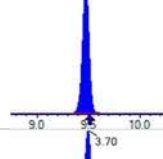
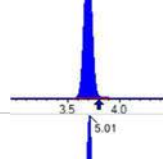
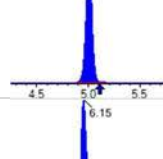
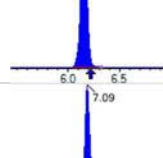
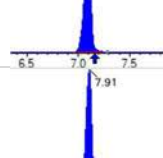
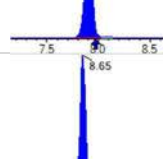
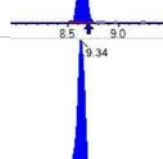
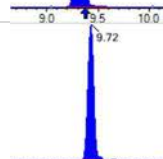
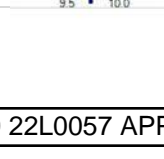
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03835-CCV3	ADONA	3.78	3.93	104	ng/mL	+/- 30.00%
	PFEESA	3.56	3.76	106	ng/mL	+/- 30.00%
	PFMPA	4.00	3.78	94.5	ng/mL	+/- 30.00%
	PFMBA	4.00	3.87	96.8	ng/mL	+/- 30.00%
	NFDHA	4.00	4.84	121	ng/mL	+/- 30.00%
	9CL-PF3ONS	3.74	3.99	107	ng/mL	+/- 30.00%
	11CL-PF3OUDS	3.78	4.17	110	ng/mL	+/- 30.00%
	3:3FTCA	8.00	8.47	106	ng/mL	+/- 30.00%
	5:3FTCA	8.00	8.50	106	ng/mL	+/- 30.00%
	7:3FTCA	8.00	8.51	106	ng/mL	+/- 30.00%

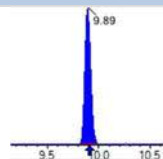
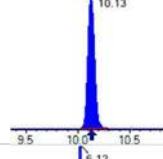
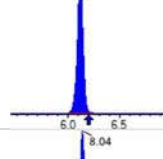
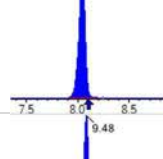
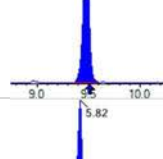
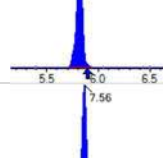
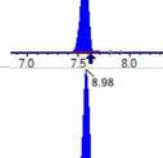
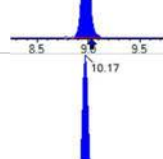
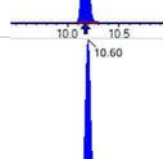
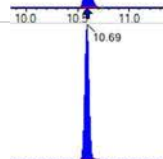
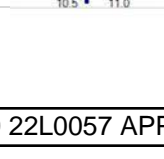
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 481915	(3.70, 1.00) (0.00, N/A, 0.0)	60.0	N/A 0.0 0.0	7.7313 [8.0000]	96.6%			
PFPeA	(262.9 / 219.0) 321883 (262.9 / 69.0) 4123	(5.01, 1.00) (0.00, N/A, 0.2)	626.5 137.2	0.0128 102.0 109.1	3.7973 [4.0000]	94.9%			
PFHxA	(313.0 / 269.0) 267389 (313.0 / 119.0) 27476	(6.16, 1.00) (0.01, N/A, -0.2)	570.7 271.4	0.1028 111.0 96.5	2.1363 [2.0000]	106.8%			
PFHpA	(363.0 / 319.0) 252320 (363.0 / 169.0) 68808	(7.09, 1.00) (0.00, N/A, 0.1)	454.5 393.7	0.2727 87.6 84.2	2.1248 [2.0000]	106.2%			
PFOA	(413.0 / 369.0) 257208 (413.0 / 169.0) 86040	(7.91, 1.00) (0.00, N/A, 0.3)	449.1 529.4	0.3345 99.7 114.8	1.9878 [2.0000]	99.4%			
PFNA	(463.0 / 419.0) 191080 (463.0 / 169.0) 38633	(8.65, 1.00) (0.00, N/A, 0.0)	383.1 95.9	0.2022 115.2 99.1	1.8788 [2.0000]	93.9%			
PFDA	(513.0 / 469.0) 276792 (513.0 / 169.0) 28887	(9.33, 1.00) (0.00, N/A, -0.1)	349.9 182.4	0.1044 103.7 79.7	2.1620 [2.0000]	108.1%			
PFUnA	(563.0 / 519.0) 334181 (563.0 / 169.0) 30506	(9.72, 1.00) (0.00, N/A, -0.4)	568.3 237.1	0.0913 99.7 105.2	2.1351 [2.0000]	106.8%			
PFDoA	(613.0 / 569.0) 372032 (613.0 / 169.0) 43219	(9.90, 1.00) (0.01, N/A, 0.4)	551.7 173.2	0.1162 90.6 81.6	1.9174 [2.0000]	95.9%			
PFTrDA	(663.0 / 619.0) 311821 (663.0 / 169.0) 50171	(10.02, 1.01) (N/A, -0.01, -0.2)	548.2 176.2	0.1609 73.3 69.8	1.9493 [2.0000]	97.5%			
PFTeDA	(713.0 / 669.0) 293668 (713.0 / 169.0) 57677	(10.13, 1.00) (0.00, N/A, 0.5)	621.1 227.0	0.1964 105.6 111.9	2.2722 [2.0000]	113.6%			

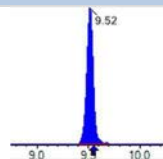
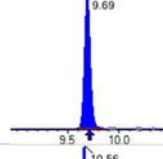
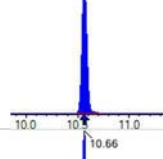
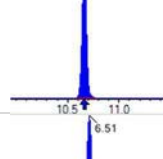
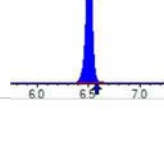
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 350234 (298.9 / 99.0) 220603	(6.12, 1.00) (0.00, N/A, 0.0)	617.7 479.1	0.6299 87.4 94.8	1.6310 [1.7695]	92.2%			
PFPeS	(349.0 / 80.0) 683163 (349.0 / 99.0) 253458	(7.16, 0.89) (N/A, -0.02, 0.1)	777.1 648.1	0.3710 99.1 99.1	1.9985 [1.8768]	106.5%			
PFHxS	(399.0 / 80.0) 576261 (399.0 / 99.0) 190814	(8.04, 1.00) (0.00, N/A, 0.1)	3980.6 380521.3	0.3311 102.7 95.7	1.8468 [1.8220]	101.4%			
PFHpS	(449.0 / 80.0) 524792 (449.0 / 99.0) 149372	(8.81, 0.93) (N/A, -0.02, -0.1)	623.1 588.1	0.2846 92.7 95.2	1.7500 [1.9028]	92.0%			
PFOS	(499.0 / 80.0) 657900 (499.0 / 99.0) 156824	(9.47, 1.00) (0.00, N/A, 0.0)	124.7 139.1	0.2384 103.9 93.5	1.8053 [1.8550]	97.3%			
PFNS	(549.0 / 80.0) 835259 (549.0 / 99.0) 192284	(9.77, 1.03) (N/A, -0.01, -0.1)	926.6 684.0	0.2302 88.8 97.2	1.8602 [1.9198]	96.9%			
PFDS	(599.0 / 80.0) 1131673 (599.0 / 99.0) 260162	(9.91, 1.05) (N/A, -0.01, 0.0)	902.1 527.5	0.2299 102.1 93.2	1.9171 [1.9262]	99.5%			
PFDoS	(698.9 / 80.0) 573519 (698.9 / 99.0) 129574	(10.11, 1.07) (N/A, -0.01, -0.1)	936.0 429.5	0.2259 111.6 112.0	1.9206 [1.9391]	99.0%			
4:2FTS	(327.0 / 307.0) 530784 (327.0 / 81.0) 298465	(5.82, 1.00) (0.00, N/A, 0.1)	790.5 547.3	0.5623 92.7 98.5	7.5218 [7.4762]	100.6%			
6:2FTS	(427.0 / 407.0) 329124 (427.0 / 81.0) 239545	(7.56, 1.00) (0.00, N/A, 0.1)	733.1 593.2	0.7278 112.0 98.1	7.5432 [7.5923]	99.4%			
8:2FTS	(527.0 / 507.0) 288168 (527.0 / 81.0) 171958	(8.98, 1.00) (0.00, N/A, 0.1)	565.3 418.1	0.5967 95.2 86.7	8.9530 [7.6663]	116.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 949427 (498.0 / 478.0) 26168	(10.17, 1.00) (0.00, N/A, -0.3)	924.3 3161.0	0.0276 121.1 99.7	2.0924 [2.0000]	104.6%			
NMeFOSA	(511.9 / 219.0) 911267 (511.9 / 169.0) 620561	(10.60, 1.00) (0.00, N/A, 0.1)	1236.0 944.1	0.6810 106.7 106.7	8.5429 [8.0000]	106.8%			
NEIFOSA	(526.0 / 219.0) 853071 (526.0 / 169.0) 858551	(10.69, 1.00) (0.00, N/A, 0.0)	1969.8 1697.9	1.0064 94.3 92.7	8.2596 [8.0000]	103.2%			
NMeFOSAA	(570.0 / 419.0) 115043 (570.0 / 483.0) 63858	(9.52, 1.00) (0.01, N/A, 0.1)	318.5 609.2	0.5551 96.7 106.2	1.9336 [2.0000]	96.7%			
NEIFOSAA	(584.0 / 419.0) 124091 (584.0 / 526.0) 75212	(9.69, 1.00) (0.00, N/A, 0.3)	390.9 7438.2	0.6061 106.9 102.8	2.1106 [2.0000]	105.5%			
NMeFOSE	(616.1 / 59.0) 264445	(10.57, 1.00) (0.01, N/A, 0.0)	816.7	N/A 0.0 0.0	7.9123 [8.0000]	98.9%			
NEtFOSE	(630.0 / 59.0) 68588	(10.67, 1.00) (0.00, N/A, 0.0)	925.0	N/A 0.0 0.0	7.9269 [8.0000]	99.1%			
HFPO-DA	(285.0 / 169.0) 253372 (285.0 / 185.0) 766390	(6.51, 1.00) (0.00, N/A, 0.1)	818.0 1155.9	3.0248 115.0 103.2	4.4891 [4.0000]	112.2%			
ADONA	(377.0 / 85.0) 946703 (377.0 / 251.0) 122217	(7.41, 1.14) (N/A, -0.01, 0.0)	882.3 373.5	0.1291 109.5 120.2	3.9332 [3.7708]	104.3%			
9CI-Pf3ONS	(531.0 / 351.0) 2721079 (533.0 / 353.0) 886535	(9.72, 1.49) (N/A, -0.01, 0.0)	928.1 846.2	0.3258 112.4 104.5	3.9871 [3.7330]	106.8%			
11CI-PF3OUDS	(631.0 / 451.0) 1825561 (633.0 / 453.0) 636817	(10.00, 1.54) (N/A, -0.01, 0.1)	979.4 882.0	0.3488 110.6 100.7	4.1740 [3.7728]	110.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 30178 (241.0 / 117.0) 49168	(4.49, 0.90) (N/A, -0.02, 0.1)	446.6 444.4	1.6293 99.4 88.8	8.4712 [8.0000]	105.9%			
5:3FTCA	(341.0 / 236.7) 212805 (341.0 / 217.0) 371354	(6.79, 1.10) (N/A, -0.02, -0.1)	538.3 545.4	1.7450 110.7 112.8	8.4968 [8.0000]	106.2%			
7:3FTCA	(441.0 / 317.0) 266805 (441.0 / 337.0) 229733	(8.62, 1.40) (N/A, -0.02, 0.1)	396.2 418.4	0.8611 102.8 106.2	8.5142 [8.0000]	106.4%			
PFEESA	(315.0 / 135.0) 512043 (315.0 / 83.0) 152316	(6.62, 1.08) (N/A, -0.03, 0.0)	765.1 510.8	0.2975 97.0 97.0	3.7566 [3.5698]	105.2%			
PFMPA	(229.0 / 85.0) 87006	(4.20, 0.84) (N/A, -0.02, 0.0)	976.3	N/A 0.0 0.0	3.7813 [4.0000]	94.5%			
PFMBA	(279.0 / 85.0) 298028	(5.39, 1.08) (N/A, -0.02, 0.0)	825.6	N/A 0.0 0.0	3.8701 [4.0000]	96.8%			
NFDHA	(201.0 / 85.0) 12609 (295.0 / 201.0) 85414	(6.04, 0.98) (N/A, -0.02, 0.0)	267.3 593.3	6.7742 102.8 93.5	4.8441 [4.0000]	121.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 111854	(3.70, N/A) (N/A, -0.01, N/A)	818.5	N/A	0.9219 [1.0000]	92.2% { 116.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 181331	(6.16, N/A) (N/A, -0.02, N/A)	491.1	N/A	0.9937 [1.0000]	99.4% { 103.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 186735	(7.91, N/A) (N/A, -0.01, N/A)	609.6	N/A	1.0697 [1.0000]	107.0% { 128.8% }			
13C5_PFNA_IIS	(468.0 / 423.0) 139119	(8.65, N/A) (N/A, -0.02, N/A)	345.6	N/A	1.0238 [1.0000]	102.4% { 118.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 130065	(9.34, N/A) (N/A, -0.01, N/A)	308.9	N/A	0.9374 [1.0000]	93.7% { 99.3% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 278794	(8.04, N/A) (N/A, -0.02, N/A)	716.0	N/A	0.8638 [1.0000]	86.4% { 98.4% }			
13C4_PFOS_IIS	(502.8 / 79.9) 304390	(9.48, N/A) (N/A, -0.02, N/A)	454.7	N/A	1.2088 [1.0000]	120.9% { 119.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 709892	(3.70, N/A) (N/A, -0.02, N/A)	819.8	N/A	8.3260 [8.0000]	104.1% { 110.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 381981	(5.01, N/A) (N/A, -0.02, N/A)	907.5	N/A	3.8039 [4.0000]	95.1% { 116.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 282481	(6.15, N/A) (N/A, -0.02, N/A)	639.7	N/A	1.8485 [2.0000]	92.4% { 102.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 256625	(7.09, N/A) (N/A, -0.02, N/A)	532.8	N/A	1.9345 [2.0000]	96.7% { 110.4% }			
13C8_PFOA_EIS	(421.0 / 376.0) 258963	(7.91, N/A) (N/A, -0.02, N/A)	478.8	N/A	1.8086 [2.0000]	90.4% { 111.7% }			
13C9_PFNA_EIS	(472.0 / 427.0) 111559	(8.65, N/A) (N/A, -0.02, N/A)	332.4	N/A	1.0408 [1.0000]	104.1% { 108.4% }			
13C6_PFDA_EIS	(519.0 / 474.0) 126614	(9.34, N/A) (N/A, -0.01, N/A)	334.6	N/A	1.0150 [1.0000]	101.5% { 103.7% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 180428	(9.72, N/A) (N/A, -0.01, N/A)	437.3	N/A	1.0531 [1.0000]	105.3% { 103.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 224049	(9.89, N/A) (N/A, -0.01, N/A)	482.0	N/A	1.0634 [1.0000]	106.3% { 107.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 141425	(10.13, N/A) (N/A, -0.01, N/A)	458.4	N/A	1.0691 [1.0000]	106.9% { 104.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 760091	(6.12, N/A) (N/A, -0.03, N/A)	889.3	N/A	2.3695 [2.0000]	118.5% { 111.8% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 388563	(8.04, N/A) (N/A, -0.02, N/A)	744.2	N/A	2.1524 [2.0000]	107.6% { 102.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 662827	(9.48, N/A) (N/A, -0.01, N/A)	364.9	N/A	1.7490 [2.0000]	87.4% { 111.3% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 86566	(5.82, N/A) (N/A, -0.01, N/A)	525.9	N/A	4.6172 [4.0000]	115.4% { 115.7% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 107076	(7.56, N/A) (N/A, -0.02, N/A)	569.5	N/A	4.6710 [4.0000]	116.8% { 106.1% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 90401	(8.98, N/A) (N/A, -0.02, N/A)	356.5	N/A	3.9527 [4.0000]	98.8% { 93.2% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 925164	(10.17, N/A) (N/A, 0.00, N/A)	928.8	N/A	1.6139 [2.0000]	80.7% { 104.8% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 256433	(10.60, N/A) (N/A, 0.00, N/A)	814.5	N/A	1.7427 [2.0000]	87.1% { 109.6% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 223465	(10.69, N/A) (N/A, 0.00, N/A)	1034.4	N/A	1.7504 [2.0000]	87.5% { 118.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 307870	(9.52, N/A) (N/A, -0.01, N/A)	730.4	N/A	3.4322 [4.0000]	85.8% { 121.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 270154	(9.69, N/A) (N/A, -0.01, N/A)	264.9	N/A	3.3284 [4.0000]	83.2% { 110.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 495454	(10.56, N/A) (N/A, 0.00, N/A)	828.3	N/A	17.5631 [20.0000]	87.8% { 122.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 255786	(10.66, N/A) (N/A, 0.00, N/A)	1029.0	N/A	18.0956 [20.0000]	90.5% { 117.2% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 730152	(6.51, N/A) (N/A, -0.01, N/A)	945.9	N/A	7.8001 [8.0000]	97.5% { 109.9% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03835

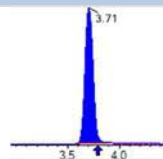
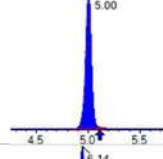
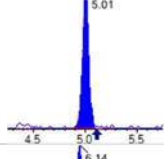
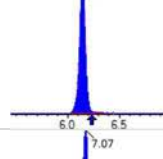
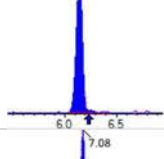
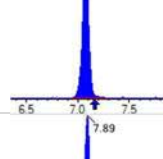
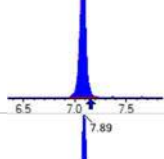
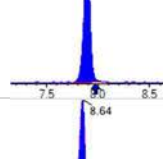
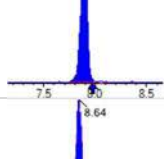
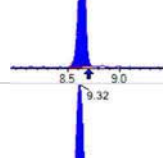
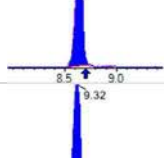
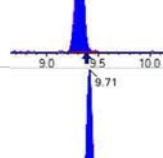
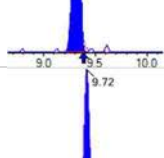
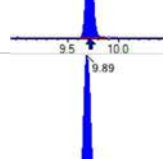
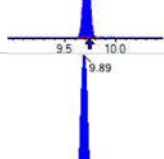
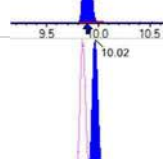
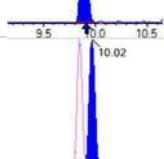
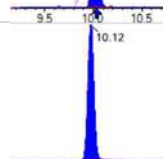
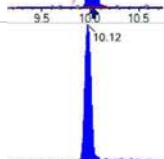
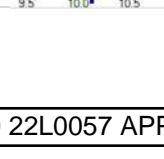
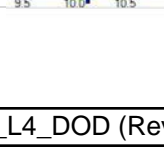
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03835-CCV4	PFBA	8.00	7.84	98.0	ng/mL	+/- 30.00%
	PFPEA	4.00	4.13	103	ng/mL	+/- 30.00%
	PFHXA	2.00	2.11	105	ng/mL	+/- 30.00%
	PFHPA	2.00	2.05	102	ng/mL	+/- 30.00%
	PFOA	2.00	2.10	105	ng/mL	+/- 30.00%
	PFNA	2.00	1.86	93.0	ng/mL	+/- 30.00%
	PFDA	2.00	1.72	86.2	ng/mL	+/- 30.00%
	PFUnA	2.00	2.09	105	ng/mL	+/- 30.00%
	PFDOA	2.00	2.10	105	ng/mL	+/- 30.00%
	PFTRDA	2.00	2.42	121	ng/mL	+/- 30.00%
	PFTEDA	2.00	1.85	92.7	ng/mL	+/- 30.00%
	PFBS	1.77	1.98	112	ng/mL	+/- 30.00%
	PFPEs	1.88	1.94	103	ng/mL	+/- 30.00%
	PFHXS	1.83	1.85	101	ng/mL	+/- 30.00%
	PFHPS	1.91	1.58	82.9	ng/mL	+/- 30.00%
	PFOS	1.86	1.83	98.3	ng/mL	+/- 30.00%
	PFNS	1.92	1.59	82.7	ng/mL	+/- 30.00%
	PFDS	1.93	1.66	86.3	ng/mL	+/- 30.00%
	PFDOS	1.94	1.94	100	ng/mL	+/- 30.00%
	4:2FTS	7.50	7.90	105	ng/mL	+/- 30.00%
	6:2FTS	7.60	6.93	91.1	ng/mL	+/- 30.00%
	8:2FTS	7.68	9.09	118	ng/mL	+/- 30.00%
	PFOSA	2.00	1.82	91.1	ng/mL	+/- 30.00%
	NMeFOSA	8.00	8.76	109	ng/mL	+/- 30.00%
	NEtFOSA	8.00	8.40	105	ng/mL	+/- 30.00%
	NMeFOSAA	2.00	2.00	100	ng/mL	+/- 30.00%
	NEtFOSAA	2.00	1.99	99.7	ng/mL	+/- 30.00%
	NMeFOSE	8.00	8.00	100	ng/mL	+/- 30.00%
	NEtFOSE	8.00	7.99	99.8	ng/mL	+/- 30.00%
	HFPO-DA	4.00	3.85	96.1	ng/mL	+/- 30.00%

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Instrument ID:	Saphira	Calibration:	2251013
Standard ID:	22L0179	Sequence:	SB03835

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03835-CCV4	ADONA	3.78	3.87	102	ng/mL	+/- 30.00%
	PFEESA	3.56	3.76	106	ng/mL	+/- 30.00%
	PFMPA	4.00	3.99	99.7	ng/mL	+/- 30.00%
	PFMBA	4.00	4.04	101	ng/mL	+/- 30.00%
	NFDHA	4.00	4.37	109	ng/mL	+/- 30.00%
	9CL-PF3ONS	3.74	3.91	105	ng/mL	+/- 30.00%
	11CL-PF3OUDS	3.78	3.90	103	ng/mL	+/- 30.00%
	3:3FTCA	8.00	8.57	107	ng/mL	+/- 30.00%
	5:3FTCA	8.00	8.05	101	ng/mL	+/- 30.00%
	7:3FTCA	8.00	8.68	108	ng/mL	+/- 30.00%

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 450871	(3.71, 1.00) (0.00, N/A, 0.0)	66.4	N/A 0.0 0.0	7.8414 [8.0000]	98.0%			
PFPeA	(262.9 / 219.0) 327381 (262.9 / 69.0) 3918	(5.00, 1.00) (0.00, N/A, -0.1)	755.3 153.9	0.0120 95.3 101.9	4.1292 [4.0000]	103.2%			
PFHxA	(313.0 / 269.0) 269243 (313.0 / 119.0) 26583	(6.14, 1.00) (0.00, N/A, 0.0)	561.6 264.0	0.0987 106.6 92.7	2.1098 [2.0000]	105.5%			
PFHpA	(363.0 / 319.0) 237502 (363.0 / 169.0) 71835	(7.07, 1.00) (0.00, N/A, -0.2)	450.3 449.1	0.3025 97.2 93.4	2.0454 [2.0000]	102.3%			
PFOA	(413.0 / 369.0) 255526 (413.0 / 169.0) 80297	(7.89, 1.00) (0.00, N/A, 0.0)	450.7 574.2	0.3142 93.6 107.9	2.1024 [2.0000]	105.1%			
PFNA	(463.0 / 419.0) 191619 (463.0 / 169.0) 41576	(8.64, 1.00) (0.00, N/A, 0.1)	368.8 79.6	0.2170 123.6 106.4	1.8598 [2.0000]	93.0%			
PFDA	(513.0 / 469.0) 243922 (513.0 / 169.0) 26582	(9.32, 1.00) (0.00, N/A, -0.1)	374.6 176.1	0.1090 108.3 83.2	1.7244 [2.0000]	86.2%			
PFUnA	(563.0 / 519.0) 320256 (563.0 / 169.0) 31255	(9.71, 1.00) (0.00, N/A, -0.3)	431.5 793136.8	0.0976 106.6 112.4	2.0941 [2.0000]	104.7%			
PFDoA	(613.0 / 569.0) 392395 (613.0 / 169.0) 49437	(9.89, 1.00) (0.00, N/A, 0.0)	487.1 197.1	0.1260 98.3 88.5	2.1030 [2.0000]	105.1%			
PFTrDA	(663.0 / 619.0) 372363 (663.0 / 169.0) 61815	(10.02, 1.01) (N/A, -0.01, 0.0)	556.6 267.2	0.1660 75.6 72.0	2.4206 [2.0000]	121.0%			
PFTeDA	(713.0 / 669.0) 274126 (713.0 / 169.0) 60536	(10.12, 1.00) (0.00, N/A, 0.0)	444.5 205.7	0.2208 118.7 125.8	1.8542 [2.0000]	92.7%			

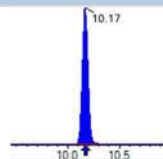
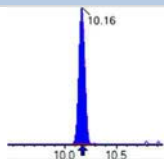
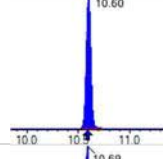
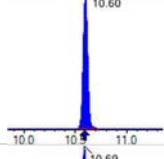
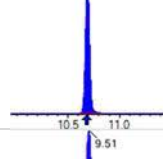
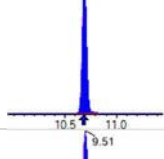
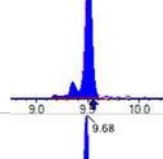
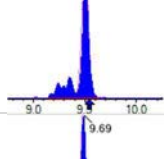
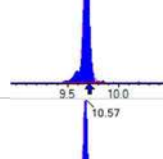
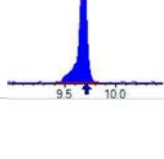
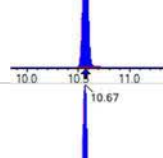
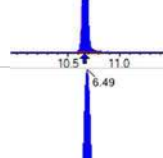
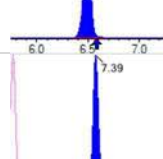
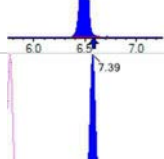
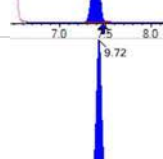
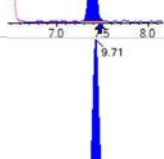
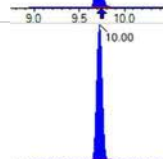
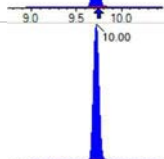
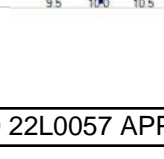
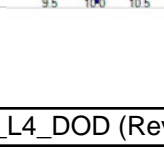


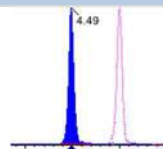
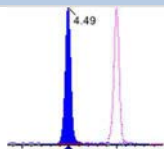
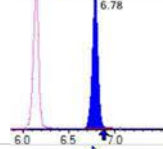
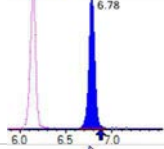
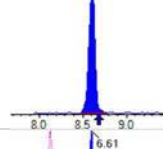
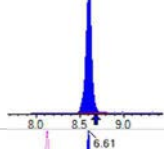
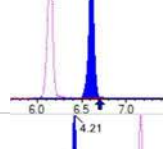
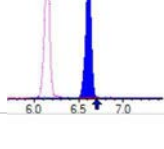
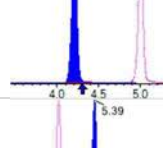
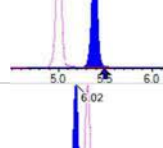
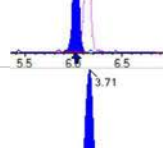
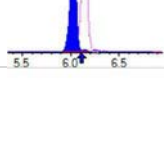
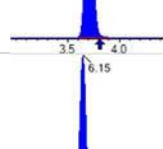
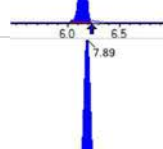
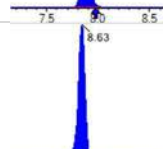
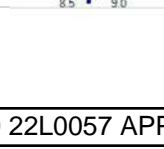
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

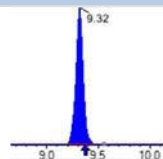
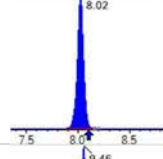
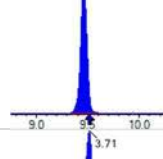
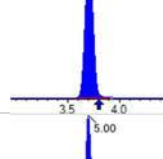
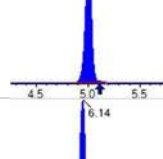
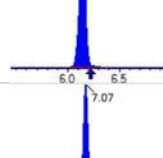
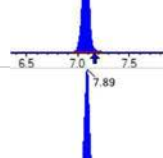
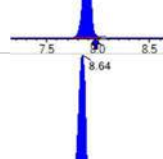
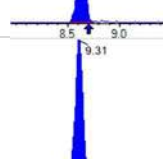
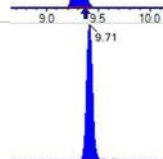
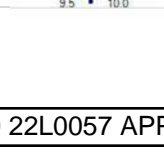
Sample I.D.: SB03835-CCV4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

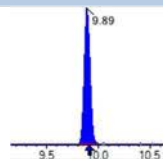
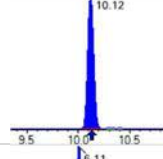
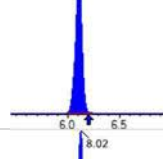
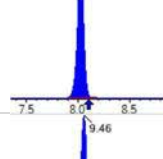
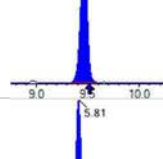
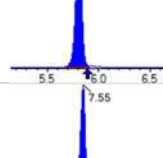
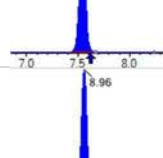
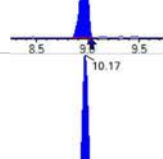
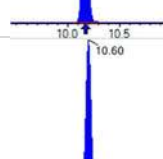
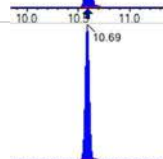
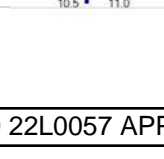
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 Path: S2022-12-14A (53)
 Acquired: 2022/12/14 - 22:22

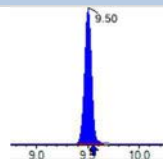
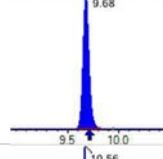
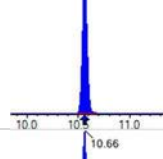
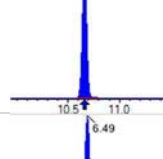
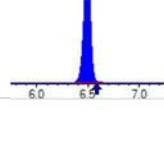
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 377744 (298.9 / 99.0) 246677	(6.11, 1.00) (0.00, N/A, 0.0)	872.9 590.6	0.6530 90.7 98.2	1.9782 [1.7695]	111.8%			
PFPeS	(349.0 / 80.0) 657051 (349.0 / 99.0) 230429	(7.15, 0.89) (N/A, -0.04, -0.2)	743.4 550.4	0.3507 93.6 93.7	1.9448 [1.8768]	103.6%			
PFHxS	(399.0 / 80.0) 570135 (399.0 / 99.0) 189905	(8.02, 1.00) (0.00, N/A, 0.2)	48713.5 7610.1	0.3331 103.3 96.3	1.8487 [1.8220]	101.5%			
PFHpS	(449.0 / 80.0) 484786 (449.0 / 99.0) 139707	(8.80, 0.93) (N/A, -0.03, 0.1)	389.7 533.9	0.2882 93.9 96.4	1.5830 [1.9028]	83.2%			
PFOS	(499.0 / 80.0) 680127 (499.0 / 99.0) 164956	(9.46, 1.00) (0.00, N/A, 0.0)	145.4 161.5	0.2425 105.7 95.1	1.8275 [1.8550]	98.5%			
PFNS	(549.0 / 80.0) 727887 (549.0 / 99.0) 204776	(9.76, 1.03) (N/A, -0.02, 0.0)	626.3 489.0	0.2813 108.5 118.8	1.5874 [1.9198]	82.7%			
PFDS	(599.0 / 80.0) 1003674 (599.0 / 99.0) 250942	(9.91, 1.05) (N/A, -0.01, 0.0)	651.2 434.5	0.2500 111.1 101.4	1.6649 [1.9262]	86.4%			
PFDoS	(698.9 / 80.0) 592197 (698.9 / 99.0) 147587	(10.11, 1.07) (N/A, -0.01, 0.2)	1035.6 505.6	0.2492 123.1 123.5	1.9419 [1.9391]	100.1%			
4:2FTS	(327.0 / 307.0) 489799 (327.0 / 81.0) 309933	(5.81, 1.00) (0.00, N/A, -0.1)	878.6 602.0	0.6328 104.3 110.8	7.9009 [7.4762]	105.7%			
6:2FTS	(427.0 / 407.0) 317645 (427.0 / 81.0) 208806	(7.55, 1.00) (0.00, N/A, 0.2)	739.4 693.4	0.6574 101.2 88.6	6.9261 [7.5923]	91.2%			
8:2FTS	(527.0 / 507.0) 280993 (527.0 / 81.0) 186284	(8.96, 1.00) (0.00, N/A, -0.2)	353.6 376.2	0.6630 105.7 96.4	9.0917 [7.6663]	118.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 955187 (498.0 / 478.0) 22849	(10.17, 1.00) (0.00, N/A, 0.2)	954.0 1204.7	0.0239 105.1 86.6	1.8214 [2.0000]	91.1%			
NMeFOSA	(511.9 / 219.0) 926927 (511.9 / 169.0) 632587	(10.60, 1.00) (0.00, N/A, 0.1)	1050.7 1277.3	0.6825 107.0 106.9	8.7588 [8.0000]	109.5%			
NEIFOSA	(526.0 / 219.0) 878304 (526.0 / 169.0) 890716	(10.69, 1.00) (0.00, N/A, 0.0)	1688.8 993.9	1.0141 95.0 93.4	8.4004 [8.0000]	105.0%			
NMeFOSAA	(570.0 / 419.0) 115565 (570.0 / 483.0) 57739	(9.51, 1.00) (0.01, N/A, 0.2)	259.7 5541.9	0.4996 87.0 95.6	2.0020 [2.0000]	100.1%			
NEIFOSAA	(584.0 / 419.0) 117225 (584.0 / 526.0) 69707	(9.68, 1.00) (0.00, N/A, 0.0)	22370.5 2696.0	0.5946 104.9 100.9	1.9947 [2.0000]	99.7%			
NMeFOSE	(616.1 / 59.0) 269891	(10.57, 1.00) (0.01, N/A, 0.0)	810.7	N/A 0.0 0.0	8.0032 [8.0000]	100.0%			
NEtFOSE	(630.0 / 59.0) 70122	(10.67, 1.00) (0.01, N/A, 0.0)	887.9	N/A 0.0 0.0	7.9867 [8.0000]	99.8%			
HFPO-DA	(285.0 / 169.0) 205729 (285.0 / 185.0) 632917	(6.49, 1.00) (0.00, N/A, -0.1)	824.6 892.6	3.0765 117.0 104.9	3.8454 [4.0000]	96.1%			
ADONA	(377.0 / 85.0) 882497 (377.0 / 251.0) 114663	(7.39, 1.14) (N/A, -0.03, 0.0)	763.6 327.5	0.1299 110.2 121.0	3.8681 [3.7708]	102.6%			
9CI-Pf3ONS	(531.0 / 351.0) 2528669 (533.0 / 353.0) 838276	(9.72, 1.50) (N/A, -0.01, 0.2)	812.1 698.4	0.3315 114.3 106.4	3.9089 [3.7330]	104.7%			
11CI-PF3OUDS	(631.0 / 451.0) 1618135 (633.0 / 453.0) 554865	(10.00, 1.54) (N/A, -0.01, 0.2)	1228.1 750.0	0.3429 108.7 99.0	3.9032 [3.7728]	103.5%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 28557 (241.0 / 117.0) 50655	(4.49, 0.90) (N/A, -0.03, 0.1)	487.6 510.5	1.7738 108.2 96.7	8.5705 [8.0000]	107.1%			
5:3FTCA	(341.0 / 236.7) 205527 (341.0 / 217.0) 340856	(6.78, 1.10) (N/A, -0.03, 0.2)	515.8 665.8	1.6584 105.2 107.2	8.0486 [8.0000]	100.6%			
7:3FTCA	(441.0 / 317.0) 277249 (441.0 / 337.0) 201686	(8.61, 1.40) (N/A, -0.03, 0.2)	356.1 395.6	0.7275 86.8 89.7	8.6776 [8.0000]	108.5%			
PFEESA	(315.0 / 135.0) 523123 (315.0 / 83.0) 155040	(6.61, 1.08) (N/A, -0.04, 0.0)	1151.4 563.0	0.2964 96.7 96.6	3.7642 [3.5698]	105.4%			
PFMPA	(229.0 / 85.0) 85864	(4.21, 0.84) (N/A, -0.01, 0.0)	1012.2	N/A 0.0 0.0	3.9897 [4.0000]	99.7%			
PFMBA	(279.0 / 85.0) 291280	(5.39, 1.08) (N/A, -0.03, 0.0)	956.8	N/A 0.0 0.0	4.0441 [4.0000]	101.1%			
NFDHA	(201.0 / 85.0) 11617 (295.0 / 201.0) 79678	(6.02, 0.98) (N/A, -0.04, -0.4)	254.9 489.3	6.8589 104.1 94.6	4.3653 [4.0000]	109.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 101309	(3.71, N/A) (N/A, -0.01, N/A)	971.6	N/A	0.8350 [1.0000]	83.5% { 105.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 173581	(6.15, N/A) (N/A, -0.03, N/A)	589.9	N/A	0.9512 [1.0000]	95.1% { 99.1% }			
13C4_PFOA_IIS	(417.0 / 372.0) 158748	(7.89, N/A) (N/A, -0.03, N/A)	770.9	N/A	0.9094 [1.0000]	90.9% { 109.5% }			
13C5_PFNA_IIS	(468.0 / 423.0) 131812	(8.63, N/A) (N/A, -0.04, N/A)	422.9	N/A	0.9700 [1.0000]	97.0% { 112.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 147621	(9.32, N/A) (N/A, -0.03, N/A)	368.2	N/A	1.0639 [1.0000]	106.4% { 112.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 308448	(8.02, N/A) (N/A, -0.04, N/A)	629.3	N/A	0.9557 [1.0000]	95.6% { 108.9% }			
13C4_PFOS_IIS	(502.8 / 79.9) 228709	(9.46, N/A) (N/A, -0.03, N/A)	630.1	N/A	0.9082 [1.0000]	90.8% { 89.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 654836	(3.71, N/A) (N/A, -0.01, N/A)	926.4	N/A	8.4797 [8.0000]	106.0% { 102.2% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 357277	(5.00, N/A) (N/A, -0.03, N/A)	835.1	N/A	3.7168 [4.0000]	92.9% { 109.4% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 288014	(6.14, N/A) (N/A, -0.03, N/A)	726.8	N/A	1.9688 [2.0000]	98.4% { 104.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 250930	(7.07, N/A) (N/A, -0.03, N/A)	695.2	N/A	1.9760 [2.0000]	98.8% { 107.9% }			
13C8_PFOA_EIS	(421.0 / 376.0) 243249	(7.89, N/A) (N/A, -0.03, N/A)	653.9	N/A	1.9983 [2.0000]	99.9% { 104.9% }			
13C9_PFNA_EIS	(472.0 / 427.0) 113014	(8.64, N/A) (N/A, -0.03, N/A)	308.7	N/A	1.1128 [1.0000]	111.3% { 109.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 139899	(9.31, N/A) (N/A, -0.03, N/A)	67379.9	N/A	0.9881 [1.0000]	98.8% { 114.6% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 176292	(9.71, N/A) (N/A, -0.02, N/A)	417.5	N/A	0.9066 [1.0000]	90.7% { 100.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 215462	(9.89, N/A) (N/A, -0.01, N/A)	411.3	N/A	0.9011 [1.0000]	90.1% { 103.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 161774	(10.12, N/A) (N/A, -0.01, N/A)	346.8	N/A	1.0775 [1.0000]	107.7% { 119.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 675896	(6.11, N/A) (N/A, -0.04, N/A)	729.8	N/A	1.9044 [2.0000]	95.2% { 99.4% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 384032	(8.02, N/A) (N/A, -0.03, N/A)	862.5	N/A	1.9227 [2.0000]	96.1% { 101.7% }			
13C8_PFOS_EIS	(507.0 / 80.0) 676908	(9.46, N/A) (N/A, -0.03, N/A)	449.8	N/A	2.3771 [2.0000]	118.9% { 113.7% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 76049	(5.81, N/A) (N/A, -0.03, N/A)	519.8	N/A	3.6663 [4.0000]	91.7% { 101.6% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 112548	(7.55, N/A) (N/A, -0.03, N/A)	770.6	N/A	4.4377 [4.0000]	110.9% { 111.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 86805	(8.96, N/A) (N/A, -0.04, N/A)	371.3	N/A	3.4306 [4.0000]	85.8% { 89.5% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1069280	(10.17, N/A) (N/A, 0.00, N/A)	1261.9	N/A	2.4825 [2.0000]	124.1% { 121.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 254409	(10.60, N/A) (N/A, 0.00, N/A)	898.0	N/A	2.3011 [2.0000]	115.1% { 108.8% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 226218	(10.69, N/A) (N/A, 0.00, N/A)	898.3	N/A	2.3583 [2.0000]	117.9% { 119.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 298694	(9.50, N/A) (N/A, -0.03, N/A)	470.2	N/A	4.4318 [4.0000]	110.8% { 117.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 270039	(9.68, N/A) (N/A, -0.02, N/A)	509.7	N/A	4.4279 [4.0000]	110.7% { 109.9% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 499916	(10.56, N/A) (N/A, 0.00, N/A)	1277.7	N/A	23.5854 [20.0000]	117.9% { 123.1% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 259547	(10.66, N/A) (N/A, 0.00, N/A)	1277.7	N/A	24.4376 [20.0000]	122.2% { 118.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 692090	(6.49, N/A) (N/A, -0.03, N/A)	906.0	N/A	7.7237 [8.0000]	96.5% { 104.2% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03845

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03845-CCV1	PFBA	8.00	7.84	98.0	ng/mL	+/- 30.00%
	PFPEA	4.00	3.84	95.9	ng/mL	+/- 30.00%
	PFHXA	2.00	1.97	98.5	ng/mL	+/- 30.00%
	PFHPA	2.00	2.00	99.8	ng/mL	+/- 30.00%
	PFOA	2.00	2.12	106	ng/mL	+/- 30.00%
	PFNA	2.00	2.20	110	ng/mL	+/- 30.00%
	PFDA	2.00	1.78	89.2	ng/mL	+/- 30.00%
	PFUnA	2.00	2.07	103	ng/mL	+/- 30.00%
	PFDOA	2.00	1.67	83.6	ng/mL	+/- 30.00%
	PFTRDA	2.00	1.80	90.1	ng/mL	+/- 30.00%
	PFTEDA	2.00	1.83	91.4	ng/mL	+/- 30.00%
	PFBS	1.77	1.80	102	ng/mL	+/- 30.00%
	PFPEs	1.88	1.96	104	ng/mL	+/- 30.00%
	PFHXS	1.83	1.77	96.6	ng/mL	+/- 30.00%
	PFHPS	1.91	1.93	101	ng/mL	+/- 30.00%
	PFOS	1.86	1.85	99.5	ng/mL	+/- 30.00%
	PFNS	1.92	1.92	99.9	ng/mL	+/- 30.00%
	PFDS	1.93	2.05	106	ng/mL	+/- 30.00%
	PFDOS	1.94	2.14	110	ng/mL	+/- 30.00%
	4:2FTS	7.50	7.33	97.8	ng/mL	+/- 30.00%
	6:2FTS	7.60	6.81	89.6	ng/mL	+/- 30.00%
	8:2FTS	7.68	8.25	107	ng/mL	+/- 30.00%
	PFOSA	2.00	2.47	124	ng/mL	+/- 30.00%
	NMeFOSA	8.00	8.74	109	ng/mL	+/- 30.00%
	NEtFOSA	8.00	7.66	95.8	ng/mL	+/- 30.00%
	NMeFOSAA	2.00	2.32	116	ng/mL	+/- 30.00%
	NEtFOSAA	2.00	2.36	118	ng/mL	+/- 30.00%
	NMeFOSE	8.00	7.65	95.6	ng/mL	+/- 30.00%
	NEtFOSE	8.00	8.31	104	ng/mL	+/- 30.00%
	HFPO-DA	4.00	4.05	101	ng/mL	+/- 30.00%

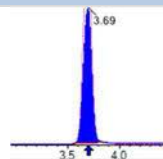
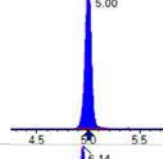
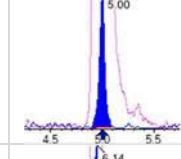
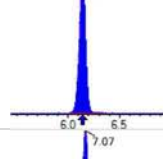
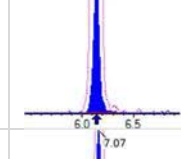
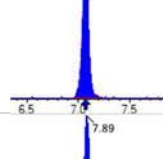
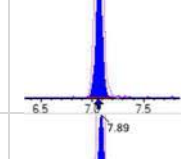
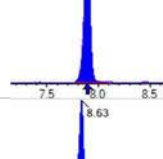
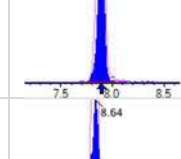
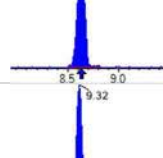
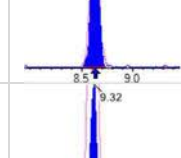
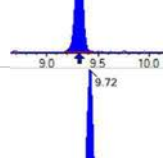
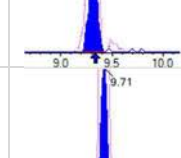
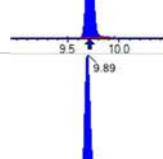
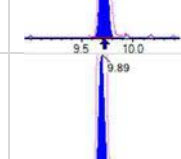
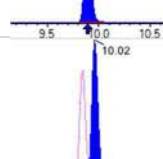
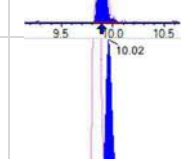
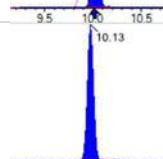
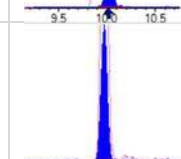
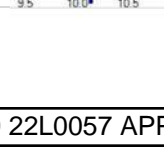
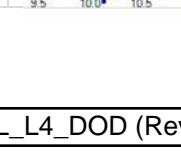
INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03845

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03845-CCV1	ADONA	3.78	3.89	103	ng/mL	+/- 30.00%
	PFEESA	3.56	3.53	99.1	ng/mL	+/- 30.00%
	PFMPA	4.00	3.67	91.7	ng/mL	+/- 30.00%
	PFMBA	4.00	3.89	97.2	ng/mL	+/- 30.00%
	NFDHA	4.00	4.27	107	ng/mL	+/- 30.00%
	9CL-PF3ONS	3.74	3.83	102	ng/mL	+/- 30.00%
	11CL-PF3OUDS	3.78	4.45	118	ng/mL	+/- 30.00%
	3:3FTCA	8.00	7.89	98.7	ng/mL	+/- 30.00%
	5:3FTCA	8.00	8.21	103	ng/mL	+/- 30.00%
	7:3FTCA	8.00	7.94	99.2	ng/mL	+/- 30.00%

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 444833	(3.69, 1.00) (0.00, N/A, 0.0)	70.3	N/A 0.0 0.0	7.8430 [8.0000]	98.0%			
PFPeA	(262.9 / 219.0) 325896 (262.9 / 69.0) 3416	(5.00, 1.00) (0.00, N/A, 0.0)	743.1 111.2	0.0105 83.5 100.0	3.8372 [4.0000]	95.9%			
PFHxA	(313.0 / 269.0) 254855 (313.0 / 119.0) 26560	(6.14, 1.00) (0.00, N/A, 0.2)	544.8 238.7	0.1042 112.6 100.0	1.9707 [2.0000]	98.5%			
PFHpA	(363.0 / 319.0) 225748 (363.0 / 169.0) 72667	(7.07, 1.00) (0.00, N/A, 0.3)	495.4 383.5	0.3219 103.4 100.0	1.9957 [2.0000]	99.8%			
PFOA	(413.0 / 369.0) 275771 (413.0 / 169.0) 86198	(7.89, 1.00) (0.00, N/A, -0.1)	660.2 422.7	0.3126 93.1 100.0	2.1227 [2.0000]	106.1%			
PFNA	(463.0 / 419.0) 198653 (463.0 / 169.0) 39477	(8.63, 1.00) (0.00, N/A, -0.1)	307.1 73.8	0.1987 113.2 100.0	2.2029 [2.0000]	110.1%			
PFDA	(513.0 / 469.0) 249277 (513.0 / 169.0) 23389	(9.32, 1.00) (0.00, N/A, -0.3)	447.3 243.5	0.0938 93.2 100.0	1.7842 [2.0000]	89.2%			
PFUnA	(563.0 / 519.0) 328721 (563.0 / 169.0) 30368	(9.72, 1.00) (0.00, N/A, 0.1)	468.4 289.2	0.0924 100.9 100.0	2.0688 [2.0000]	103.4%			
PFDoA	(613.0 / 569.0) 373170 (613.0 / 169.0) 54927	(9.89, 1.00) (0.00, N/A, -0.1)	589.5 798.3	0.1472 114.8 100.0	1.6722 [2.0000]	83.6%			
PFTrDA	(663.0 / 619.0) 331703 (663.0 / 169.0) 80305	(10.02, 1.01) (N/A, 0.00, 0.0)	626.8 9107.6	0.2421 110.2 100.0	1.8029 [2.0000]	90.1%			
PFTeDA	(713.0 / 669.0) 267219 (713.0 / 169.0) 56206	(10.13, 1.00) (0.00, N/A, 0.2)	536.3 276.1	0.2103 113.0 100.0	1.8277 [2.0000]	91.4%			

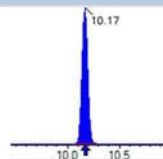
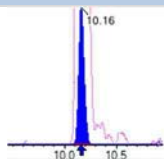
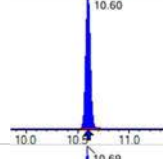
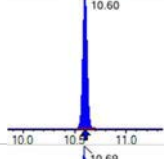
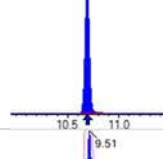
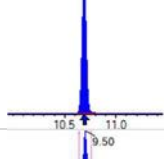
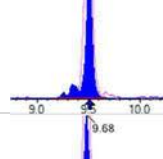
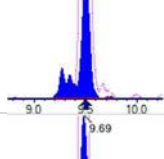
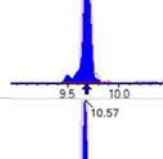
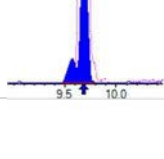
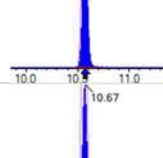
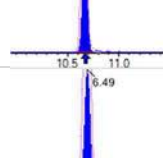
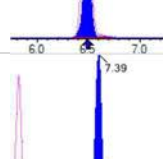
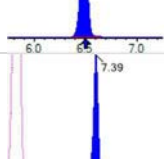
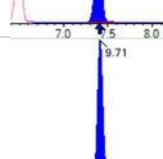
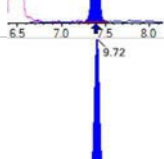
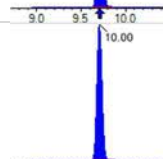
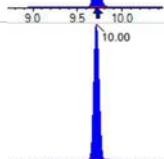
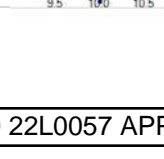
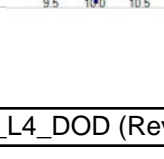


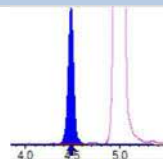
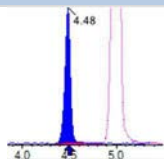
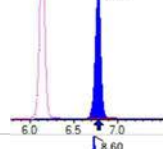
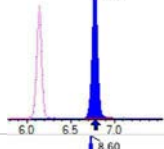
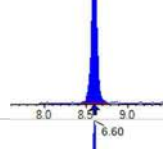
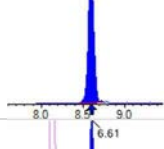
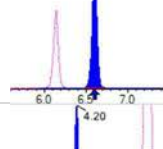
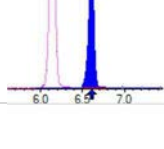
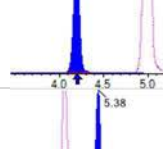
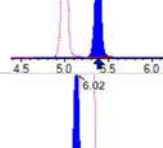
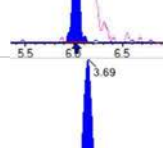
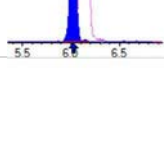
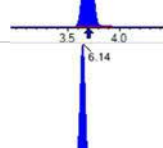
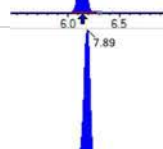
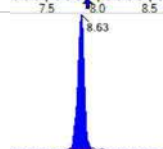
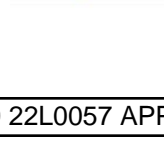
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

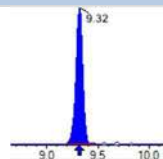
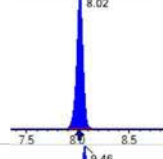
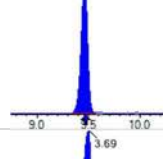
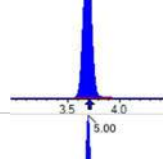
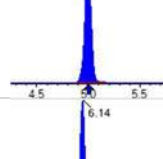
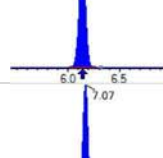
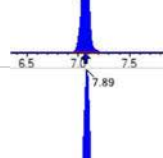
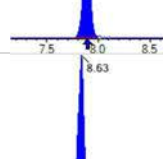
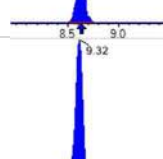
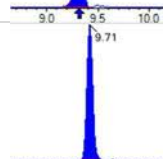
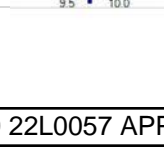
Sample I.D.: SB03845-CCV1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

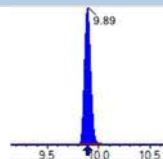
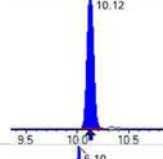
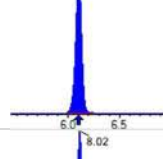
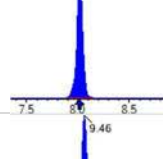
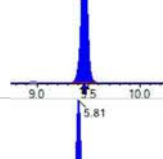
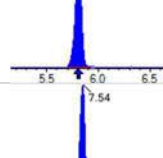
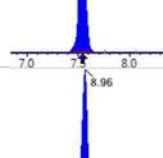
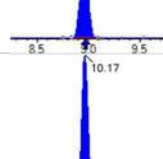
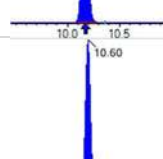
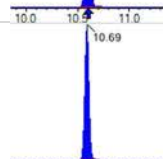
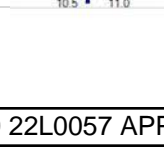
Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (3)
 Acquired: 2022/12/14 - 23:51

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 397745 (298.9 / 99.0) 242525	(6.11, 1.00) (0.00, N/A, 0.0)	939.2 556.2	0.6097 84.6 100.0	1.8038 [1.7695]	101.9%			
PFPeS	(349.0 / 80.0) 716677 (349.0 / 99.0) 269549	(7.15, 0.89) (N/A, 0.00, 0.0)	886.0 706.0	0.3761 100.4 100.0	1.9571 [1.8768]	104.3%			
PFHxS	(399.0 / 80.0) 591100 (399.0 / 99.0) 199292	(8.02, 1.00) (0.00, N/A, 0.3)	4482.8 5324318.3	0.3372 104.5 100.0	1.7684 [1.8220]	97.1%			
PFHpS	(449.0 / 80.0) 521425 (449.0 / 99.0) 117212	(8.79, 0.93) (N/A, 0.00, -0.2)	576.8 403.5	0.2248 73.2 100.0	1.9349 [1.9028]	101.7%			
PFOS	(499.0 / 80.0) 606198 (499.0 / 99.0) 137378	(9.46, 1.00) (0.00, N/A, 0.2)	83.4 121.5	0.2266 98.7 100.0	1.8511 [1.8550]	99.8%			
PFNS	(549.0 / 80.0) 774237 (549.0 / 99.0) 197159	(9.76, 1.03) (N/A, 0.00, 0.0)	783.8 490.9	0.2546 98.2 100.0	1.9188 [1.9198]	99.9%			
PFDS	(599.0 / 80.0) 1086862 (599.0 / 99.0) 272480	(9.91, 1.05) (N/A, 0.00, 0.0)	985.1 576.9	0.2507 111.4 100.0	2.0489 [1.9262]	106.4%			
PFDoS	(698.9 / 80.0) 574697 (698.9 / 99.0) 118092	(10.11, 1.07) (N/A, 0.00, 0.0)	1754.5 403.3	0.2055 101.5 100.0	2.1417 [1.9391]	110.4%			
4:2FTS	(327.0 / 307.0) 528029 (327.0 / 81.0) 281944	(5.81, 1.00) (0.00, N/A, 0.0)	987.8 787.1	0.5340 88.0 100.0	7.3335 [7.4762]	98.1%			
6:2FTS	(427.0 / 407.0) 320647 (427.0 / 81.0) 215826	(7.54, 1.00) (0.00, N/A, -0.3)	686.7 521.9	0.6731 103.6 100.0	6.8071 [7.5923]	89.7%			
8:2FTS	(527.0 / 507.0) 314310 (527.0 / 81.0) 187859	(8.96, 1.00) (0.00, N/A, 0.3)	540.0 497.8	0.5977 95.3 100.0	8.2525 [7.6663]	107.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 1090711 (498.0 / 478.0) 20233	(10.17, 1.00) (0.00, N/A, 0.3)	739.8 46609.1	0.0186 81.5 100.0	2.4707 [2.0000]	123.5%			
NMeFOSA	(511.9 / 219.0) 913714 (511.9 / 169.0) 649659	(10.60, 1.00) (0.00, N/A, 0.0)	942.7 780.6	0.7110 111.4 100.0	8.7420 [8.0000]	109.3%			
NEtFOSA	(526.0 / 219.0) 787597 (526.0 / 169.0) 882190	(10.69, 1.00) (0.00, N/A, 0.0)	1727.8 1955.3	1.1201 104.9 100.0	7.6619 [8.0000]	95.8%			
NMeFOSAA	(570.0 / 419.0) 119146 (570.0 / 483.0) 64340	(9.51, 1.00) (0.00, N/A, 0.3)	364.2 6393.8	0.5400 94.1 100.0	2.3174 [2.0000]	115.9%			
NEtFOSAA	(584.0 / 419.0) 128247 (584.0 / 526.0) 58214	(9.68, 1.00) (0.00, N/A, -0.1)	3596.2 1529751.0	0.4539 80.1 100.0	2.3632 [2.0000]	118.2%			
NMeFOSE	(616.1 / 59.0) 263631	(10.57, 1.00) (0.01, N/A, 0.0)	769.6	N/A 0.0 0.0	7.6505 [8.0000]	95.6%			
NEtFOSE	(630.0 / 59.0) 70211	(10.67, 1.00) (0.01, N/A, 0.0)	946.7	N/A 0.0 0.0	8.3097 [8.0000]	103.9%			
HFPO-DA	(285.0 / 169.0) 215684 (285.0 / 185.0) 679206	(6.49, 1.00) (0.00, N/A, -0.2)	615.5 784.6	3.1491 119.7 100.0	4.0513 [4.0000]	101.3%			
ADONA	(377.0 / 85.0) 882810 (377.0 / 251.0) 115097	(7.39, 1.14) (N/A, 0.00, 0.0)	841.8 336.8	0.1304 110.6 100.0	3.8885 [3.7708]	103.1%			
9CI-Pf3ONS	(531.0 / 351.0) 2465762 (533.0 / 353.0) 858890	(9.71, 1.50) (N/A, 0.00, -0.1)	708.5 1016.0	0.3483 120.1 100.0	3.8304 [3.7330]	102.6%			
11CI-PF3OUDS	(631.0 / 451.0) 1834896 (633.0 / 453.0) 570167	(10.00, 1.54) (N/A, 0.00, 0.0)	918.6 867.0	0.3107 98.5 100.0	4.4478 [3.7728]	117.9%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 28178 (241.0 / 117.0) 50863	(4.48, 0.90) (N/A, 0.00, -0.1)	507.6 444.4	1.8051 110.1 100.0	7.8946 [8.0000]	98.7%			
5:3FTCA	(341.0 / 236.7) 212402 (341.0 / 217.0) 379491	(6.78, 1.10) (N/A, 0.00, 0.2)	517.0 689.7	1.7867 113.4 100.0	8.2082 [8.0000]	102.6%			
7:3FTCA	(441.0 / 317.0) 257021 (441.0 / 337.0) 204609	(8.60, 1.40) (N/A, 0.00, 0.2)	283.1 406.5	0.7961 95.0 100.0	7.9384 [8.0000]	99.2%			
PFEESA	(315.0 / 135.0) 496697 (315.0 / 83.0) 152600	(6.60, 1.08) (N/A, 0.00, -0.2)	930.1 486.2	0.3072 100.2 100.0	3.5269 [3.5698]	98.8%			
PFMPA	(229.0 / 85.0) 84573	(4.20, 0.84) (N/A, 0.00, 0.0)	904.2	N/A 0.0 0.0	3.6685 [4.0000]	91.7%			
PFMBA	(279.0 / 85.0) 299946	(5.38, 1.08) (N/A, 0.00, 0.0)	998.8	N/A 0.0 0.0	3.8875 [4.0000]	97.2%			
NFDHA	(201.0 / 85.0) 11509 (295.0 / 201.0) 73028	(6.02, 0.98) (N/A, 0.00, 0.1)	236.9 491.6	6.3450 96.3 100.0	4.2652 [4.0000]	106.6%			
13C3_PFBA_IIS	(216.0 / 172.0) 98464	(3.69, N/A) (N/A, 0.00, N/A)	620.6	N/A	0.8115 [1.0000]	81.2% { 100.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 176440	(6.14, N/A) (N/A, 0.00, N/A)	591.3	N/A	0.9669 [1.0000]	96.7% { 100.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 174972	(7.89, N/A) (N/A, 0.00, N/A)	522.3	N/A	1.0023 [1.0000]	100.2% { 100.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 136164	(8.63, N/A) (N/A, 0.00, N/A)	291.0	N/A	1.0020 [1.0000]	100.2% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 114184	(9.32, N/A) (N/A, 0.00, N/A)	276.1	N/A	0.8229 [1.0000]	82.3% { 100.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 293481	(8.02, N/A) (N/A, 0.00, N/A)	1130.0	N/A	0.9093 [1.0000]	90.9% { 100.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 231337	(9.46, N/A) (N/A, 0.00, N/A)	329.3	N/A	0.9187 [1.0000]	91.9% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 645934	(3.69, N/A) (N/A, 0.00, N/A)	654.2	N/A	8.6061 [8.0000]	107.6% { 100.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 382719	(5.00, N/A) (N/A, 0.00, N/A)	740.7	N/A	3.9169 [4.0000]	97.9% { 100.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 291861	(6.14, N/A) (N/A, 0.00, N/A)	644.7	N/A	1.9628 [2.0000]	98.1% { 100.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 244449	(7.07, N/A) (N/A, 0.00, N/A)	675.8	N/A	1.8938 [2.0000]	94.7% { 100.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 260011	(7.89, N/A) (N/A, 0.00, N/A)	698.3	N/A	1.9379 [2.0000]	96.9% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 98915	(8.63, N/A) (N/A, 0.00, N/A)	537.9	N/A	0.9429 [1.0000]	94.3% { 100.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 138171	(9.32, N/A) (N/A, 0.00, N/A)	278.6	N/A	1.2617 [1.0000]	126.2% { 100.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 183170	(9.71, N/A) (N/A, 0.00, N/A)	412.3	N/A	1.2178 [1.0000]	121.8% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 257692	(9.89, N/A) (N/A, 0.00, N/A)	567.9	N/A	1.3932 [1.0000]	139.3% { 100.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 159981	(10.12, N/A) (N/A, 0.00, N/A)	331.8	N/A	1.3776 [1.0000]	137.8% { 100.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 780521	(6.10, N/A) (N/A, 0.00, N/A)	940.0	N/A	2.3114 [2.0000]	115.6% { 100.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 416235	(8.02, N/A) (N/A, 0.00, N/A)	995.6	N/A	2.1903 [2.0000]	109.5% { 100.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 595642	(9.46, N/A) (N/A, 0.00, N/A)	465.8	N/A	2.0680 [2.0000]	103.4% { 100.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 88328	(5.81, N/A) (N/A, 0.00, N/A)	587.5	N/A	4.4754 [4.0000]	111.9% { 100.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 115599	(7.54, N/A) (N/A, 0.00, N/A)	591.0	N/A	4.7904 [4.0000]	119.8% { 100.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 106972	(8.96, N/A) (N/A, 0.00, N/A)	433.7	N/A	4.4432 [4.0000]	111.1% { 100.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 900094	(10.17, N/A) (N/A, 0.00, N/A)	730.9	N/A	2.0660 [2.0000]	103.3% { 100.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 251266	(10.60, N/A) (N/A, 0.00, N/A)	939.1	N/A	2.2468 [2.0000]	112.3% { 100.0% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 222409	(10.69, N/A) (N/A, 0.00, N/A)	1230.8	N/A	2.2922 [2.0000]	114.6% { 100.0% }			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCV1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (3)
 Acquired: 2022/12/14 - 23:51

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 266043	(9.50 , N/A) (N/A , 0.00 , N/A)	319.6	N/A	3.9025 [4.0000]	97.6% { 100.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 249367	(9.68 , N/A) (N/A , 0.00 , N/A)	354.7	N/A	4.0425 [4.0000]	101.1% { 100.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 510832	(10.56 , N/A) (N/A , 0.00 , N/A)	893.3	N/A	23.8266 [20.0000]	119.1% { 100.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 249774	(10.66 , N/A) (N/A , 0.00 , N/A)	1522.8	N/A	23.2502 [20.0000]	116.3% { 100.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 688707	(6.49 , N/A) (N/A , 0.00 , N/A)	793.1	N/A	7.5613 [8.0000]	94.5% { 100.0% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03845

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03845-CCV2	PFBA	8.00	8.22	103	ng/mL	+/- 30.00%
	PFPEA	4.00	4.00	100	ng/mL	+/- 30.00%
	PFHXA	2.00	2.18	109	ng/mL	+/- 30.00%
	PFHPA	2.00	2.13	107	ng/mL	+/- 30.00%
	PFOA	2.00	2.09	104	ng/mL	+/- 30.00%
	PFNA	2.00	2.18	109	ng/mL	+/- 30.00%
	PFDA	2.00	1.91	95.6	ng/mL	+/- 30.00%
	PFUnA	2.00	1.99	99.4	ng/mL	+/- 30.00%
	PFDOA	2.00	1.81	90.3	ng/mL	+/- 30.00%
	PFTRDA	2.00	1.91	95.6	ng/mL	+/- 30.00%
	PFTEDA	2.00	1.85	92.6	ng/mL	+/- 30.00%
	PFBS	1.77	1.86	105	ng/mL	+/- 30.00%
	PFPEs	1.88	2.16	115	ng/mL	+/- 30.00%
	PFHXS	1.83	1.97	108	ng/mL	+/- 30.00%
	PFHPS	1.91	1.54	80.8	ng/mL	+/- 30.00%
	PFOS	1.86	1.77	95.4	ng/mL	+/- 30.00%
	PFNS	1.92	1.77	92.4	ng/mL	+/- 30.00%
	PFDS	1.93	1.69	87.3	ng/mL	+/- 30.00%
	PFDOS	1.94	1.85	95.4	ng/mL	+/- 30.00%
	4:2FTS	7.50	7.87	105	ng/mL	+/- 30.00%
	6:2FTS	7.60	8.06	106	ng/mL	+/- 30.00%
	8:2FTS	7.68	8.86	115	ng/mL	+/- 30.00%
	PFOSA	2.00	1.91	95.5	ng/mL	+/- 30.00%
	NMeFOSA	8.00	8.09	101	ng/mL	+/- 30.00%
	NEtFOSA	8.00	8.70	109	ng/mL	+/- 30.00%
	NMeFOSAA	2.00	2.21	111	ng/mL	+/- 30.00%
	NEtFOSAA	2.00	2.26	113	ng/mL	+/- 30.00%
	NMeFOSE	8.00	7.85	98.1	ng/mL	+/- 30.00%
	NEtFOSE	8.00	7.61	95.1	ng/mL	+/- 30.00%
	HFPO-DA	4.00	3.96	99.0	ng/mL	+/- 30.00%

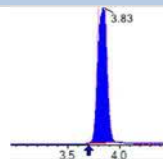
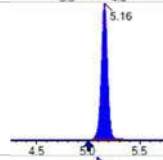
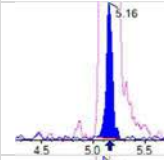
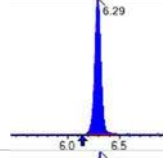
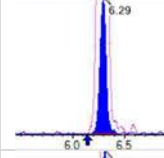
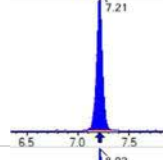
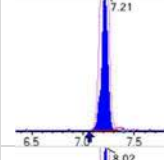
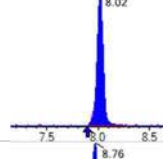
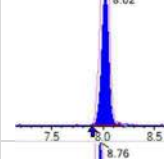
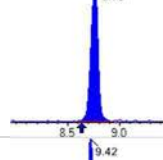
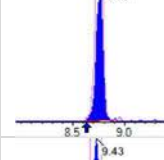
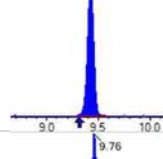
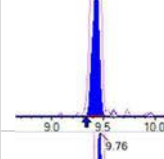
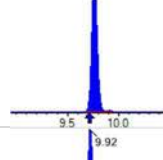
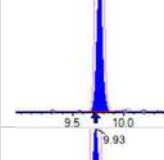
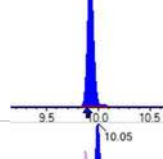
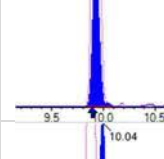
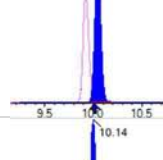
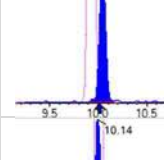
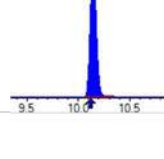
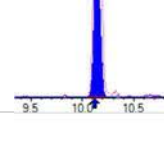
INITIAL AND CONTINUING CALIBRATION CHECK

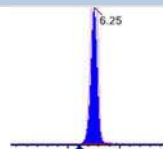
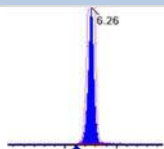
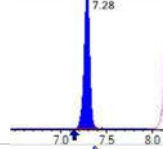
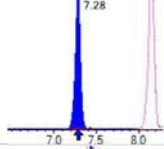
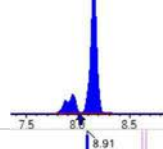
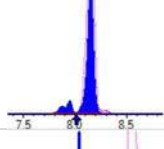
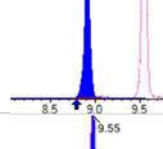
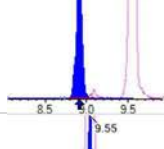
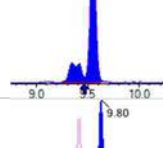
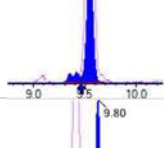
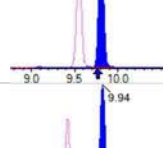
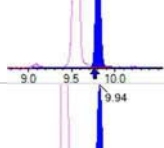
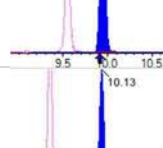
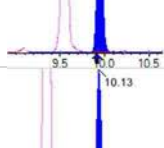
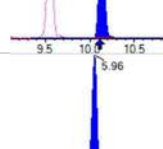
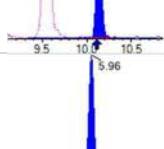
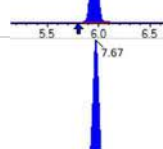
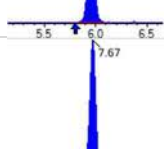
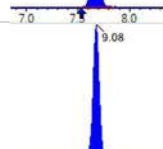
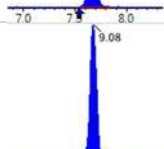
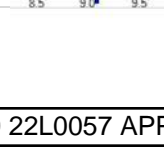
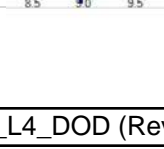
EPA 1633

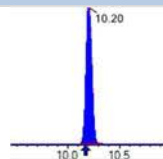
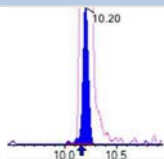
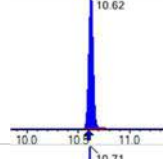
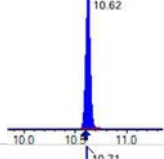
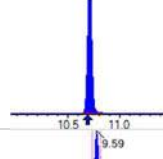
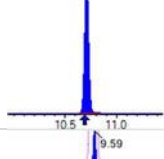
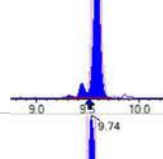
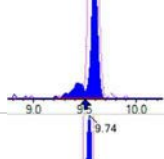
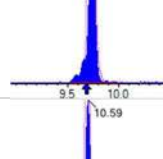
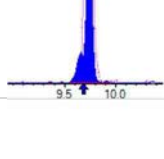
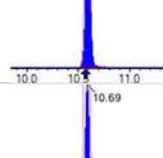
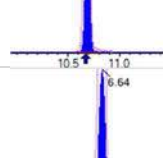
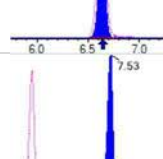
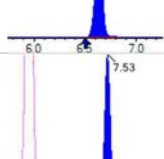
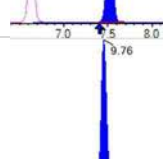
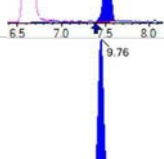
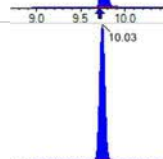
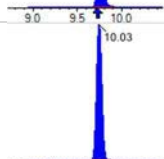
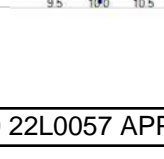
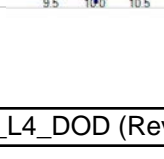
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 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

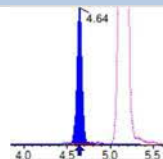
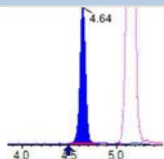
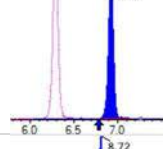
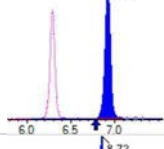
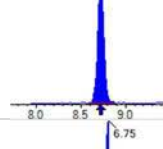
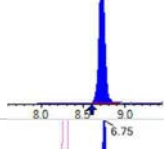
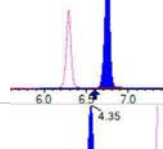
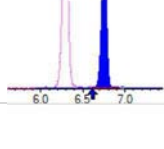
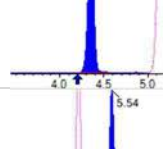
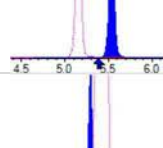
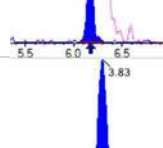
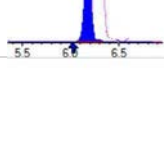
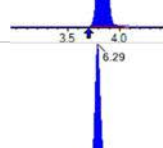
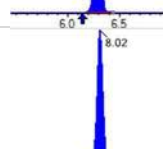
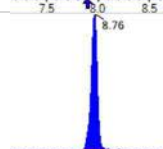
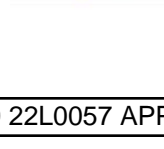
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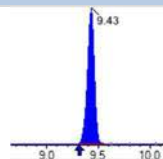
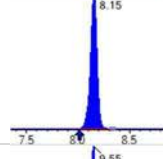
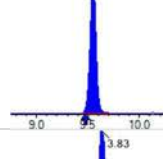
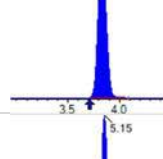
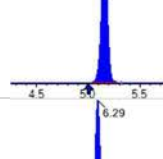
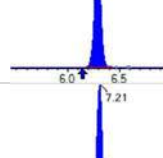
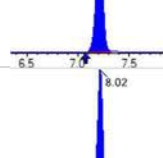
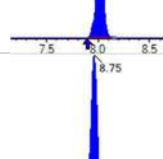
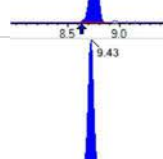
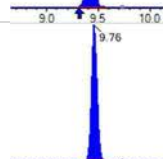
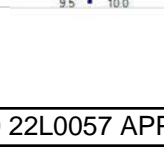
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03845-CCV2	ADONA	3.78	3.65	96.5	ng/mL	+/- 30.00%
	PFEESA	3.56	3.56	99.9	ng/mL	+/- 30.00%
	PFMPA	4.00	3.82	95.4	ng/mL	+/- 30.00%
	PFMBA	4.00	4.13	103	ng/mL	+/- 30.00%
	NFDHA	4.00	4.32	108	ng/mL	+/- 30.00%
	9CL-PF3ONS	3.74	3.64	97.4	ng/mL	+/- 30.00%
	11CL-PF3OUDS	3.78	4.01	106	ng/mL	+/- 30.00%
	3:3FTCA	8.00	7.80	97.6	ng/mL	+/- 30.00%
	5:3FTCA	8.00	8.41	105	ng/mL	+/- 30.00%
	7:3FTCA	8.00	8.42	105	ng/mL	+/- 30.00%

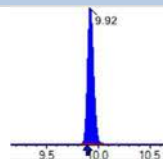
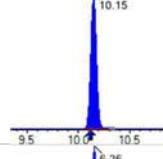
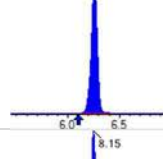
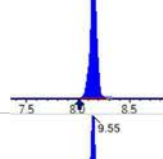
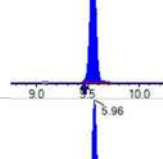
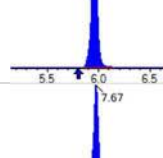
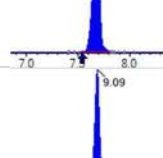
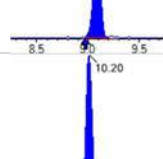
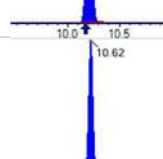
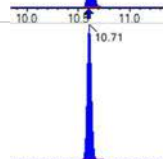
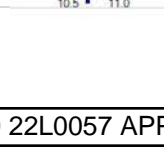
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 487702	(3.83, 1.00) (0.00, N/A, 0.0)	57.6	N/A 0.0 0.0	8.2163 [8.0000]	102.7%			
PFPeA	(262.9 / 219.0) 330012 (262.9 / 69.0) 3573	(5.16, 1.00) (0.00, N/A, 0.1)	712.4 126.1	0.0108 86.2 103.3	4.0050 [4.0000]	100.1%			
PFHxA	(313.0 / 269.0) 261033 (313.0 / 119.0) 23116	(6.29, 1.00) (0.00, N/A, -0.2)	495.5 236.6	0.0886 95.7 85.0	2.1811 [2.0000]	109.1%			
PFHpA	(363.0 / 319.0) 233294 (363.0 / 169.0) 72105	(7.21, 1.00) (0.00, N/A, -0.2)	449.3 400.0	0.3091 99.3 96.0	2.1321 [2.0000]	106.6%			
PFOA	(413.0 / 369.0) 264978 (413.0 / 169.0) 78205	(8.02, 1.00) (0.00, N/A, 0.0)	541.3 357.0	0.2951 87.9 94.4	2.0891 [2.0000]	104.5%			
PFNA	(463.0 / 419.0) 185577 (463.0 / 169.0) 41682	(8.76, 1.00) (0.00, N/A, 0.0)	283.1 86.5	0.2246 128.0 113.0	2.1828 [2.0000]	109.1%			
PFDA	(513.0 / 469.0) 281755 (513.0 / 169.0) 24045	(9.42, 1.00) (0.00, N/A, -0.2)	440.6 657.1	0.0853 84.8 91.0	1.9113 [2.0000]	95.6%			
PFUnA	(563.0 / 519.0) 348292 (563.0 / 169.0) 39110	(9.76, 1.00) (0.00, N/A, -0.1)	400.0 224.4	0.1123 122.7 121.5	1.9885 [2.0000]	99.4%			
PFDoA	(613.0 / 569.0) 366690 (613.0 / 169.0) 49262	(9.92, 1.00) (0.00, N/A, -0.2)	782.3 238.5	0.1343 104.8 91.3	1.8055 [2.0000]	90.3%			
PFTrDA	(663.0 / 619.0) 320212 (663.0 / 169.0) 63290	(10.05, 1.01) (N/A, 0.03, 0.1)	690.2 275.2	0.1976 90.0 81.6	1.9124 [2.0000]	95.6%			
PFTeDA	(713.0 / 669.0) 262395 (713.0 / 169.0) 43873	(10.14, 1.00) (0.00, N/A, 0.1)	629.0 225.0	0.1672 89.9 79.5	1.8526 [2.0000]	92.6%			

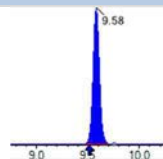
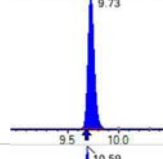
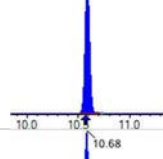
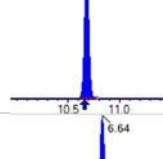
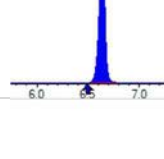
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 355104 (298.9 / 99.0) 252432	(6.25, 1.00) (0.00, N/A, 0.0)	653.4 855.9	0.7109 98.7 116.6	1.8605 [1.7695]	105.1%			
PFPeS	(349.0 / 80.0) 665783 (349.0 / 99.0) 234211	(7.28, 0.89) (N/A, 0.14, 0.2)	761.1 711.8	0.3518 93.9 93.5	2.1581 [1.8768]	115.0%			
PFHxS	(399.0 / 80.0) 555666 (399.0 / 99.0) 183661	(8.15, 1.00) (0.00, N/A, 0.1)	7131.9 683.9	0.3305 102.5 98.0	1.9732 [1.8220]	108.3%			
PFHpS	(449.0 / 80.0) 478665 (449.0 / 99.0) 133898	(8.91, 0.93) (N/A, 0.12, 0.0)	538.2 496.3	0.2797 91.1 124.4	1.5441 [1.9028]	81.1%			
PFOS	(499.0 / 80.0) 668629 (499.0 / 99.0) 144345	(9.55, 1.00) (0.00, N/A, 0.0)	148.9 235.7	0.2159 94.1 95.3	1.7749 [1.8550]	95.7%			
PFNS	(549.0 / 80.0) 823653 (549.0 / 99.0) 229517	(9.80, 1.03) (N/A, 0.04, 0.1)	645.3 571.8	0.2787 107.5 109.4	1.7745 [1.9198]	92.4%			
PFDS	(599.0 / 80.0) 1028723 (599.0 / 99.0) 238825	(9.94, 1.04) (N/A, 0.03, 0.0)	685.8 441.9	0.2322 103.1 92.6	1.6858 [1.9262]	87.5%			
PFDoS	(698.9 / 80.0) 571124 (698.9 / 99.0) 119691	(10.13, 1.06) (N/A, 0.02, -0.1)	1026.8 450.3	0.2096 103.5 102.0	1.8502 [1.9391]	95.4%			
4:2FTS	(327.0 / 307.0) 545761 (327.0 / 81.0) 294260	(5.96, 1.00) (0.00, N/A, 0.1)	889.7 677.2	0.5392 88.8 101.0	7.8677 [7.4762]	105.2%			
6:2FTS	(427.0 / 407.0) 331830 (427.0 / 81.0) 226486	(7.67, 1.00) (0.00, N/A, 0.1)	716.1 582.0	0.6825 105.1 101.4	8.0620 [7.5923]	106.2%			
8:2FTS	(527.0 / 507.0) 266122 (527.0 / 81.0) 193762	(9.08, 1.00) (-0.01, N/A, 0.0)	415.0 311.2	0.7281 116.1 121.8	8.8589 [7.6663]	115.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 912169 (498.0 / 478.0) 20502	(10.20, 1.00) (0.00, N/A, 0.0)	1011.7 388.6	0.0225 98.7 121.2	1.9105 [2.0000]	95.5%			
NMeFOSA	(511.9 / 219.0) 830586 (511.9 / 169.0) 539367	(10.62, 1.00) (0.00, N/A, 0.0)	1214.9 712.9	0.6494 101.8 91.3	8.0941 [8.0000]	101.2%			
NEIFOSA	(526.0 / 219.0) 798699 (526.0 / 169.0) 848454	(10.71, 1.00) (0.00, N/A, 0.0)	1049.9 1301.0	1.0623 99.5 94.8	8.7031 [8.0000]	108.8%			
NMeFOSAA	(570.0 / 419.0) 136844 (570.0 / 483.0) 70071	(9.59, 1.00) (0.00, N/A, -0.4)	422.7 813.9	0.5120 89.2 94.8	2.2146 [2.0000]	110.7%			
NEIFOSAA	(584.0 / 419.0) 142709 (584.0 / 526.0) 94860	(9.74, 1.00) (0.01, N/A, -0.2)	1091.9 16046.7	0.6647 117.3 146.4	2.2574 [2.0000]	112.9%			
NMeFOSE	(616.1 / 59.0) 268427	(10.59, 1.00) (0.01, N/A, 0.0)	765.5	N/A 0.0 0.0	7.8452 [8.0000]	98.1%			
NEtFOSE	(630.0 / 59.0) 63380	(10.69, 1.00) (0.01, N/A, 0.0)	850.7	N/A 0.0 0.0	7.6090 [8.0000]	95.1%			
HFPO-DA	(285.0 / 169.0) 221890 (285.0 / 185.0) 607896	(6.64, 1.00) (0.00, N/A, 0.0)	636.9 880.4	2.7396 104.2 87.0	3.9606 [4.0000]	99.0%			
ADONA	(377.0 / 85.0) 871604 (377.0 / 251.0) 118889	(7.53, 1.13) (N/A, 0.13, 0.0)	926.1 315.8	0.1364 115.7 104.6	3.6482 [3.7708]	96.7%			
9CI-Pf3ONS	(531.0 / 351.0) 2468221 (533.0 / 353.0) 833859	(9.76, 1.47) (N/A, 0.05, -0.2)	905.0 926.4	0.3378 116.5 97.0	3.6436 [3.7330]	97.6%			
11CI-PF3OUDS	(631.0 / 451.0) 1741951 (633.0 / 453.0) 483789	(10.03, 1.51) (N/A, 0.03, 0.1)	1146.4 1177.4	0.2777 88.0 89.4	4.0125 [3.7728]	106.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 27027 (241.0 / 117.0) 51748	(4.64, 0.90) (N/A, 0.16, 0.0)	462.3 535.7	1.9147 116.8 106.1	7.8045 [8.0000]	97.6%			
5:3FTCA	(341.0 / 236.7) 201275 (341.0 / 217.0) 370199	(6.92, 1.10) (N/A, 0.14, 0.1)	387.7 440.3	1.8393 116.7 102.9	8.4050 [8.0000]	105.1%			
7:3FTCA	(441.0 / 317.0) 252161 (441.0 / 337.0) 211571	(8.72, 1.39) (N/A, 0.12, 0.1)	394.1 469.7	0.8390 100.1 105.4	8.4160 [8.0000]	105.2%			
PFEESA	(315.0 / 135.0) 463344 (315.0 / 83.0) 142958	(6.75, 1.07) (N/A, 0.15, 0.1)	691.9 572.4	0.3085 100.6 100.4	3.5552 [3.5698]	99.6%			
PFMPA	(229.0 / 85.0) 85364	(4.35, 0.84) (N/A, 0.16, 0.0)	958.8	N/A 0.0 0.0	3.8164 [4.0000]	95.4%			
PFMBA	(279.0 / 85.0) 309321	(5.54, 1.07) (N/A, 0.16, 0.0)	1134.7	N/A 0.0 0.0	4.1321 [4.0000]	103.3%			
NFDHA	(201.0 / 85.0) 10782 (295.0 / 201.0) 73333	(6.17, 0.98) (N/A, 0.15, -0.2)	197.6 621.0	6.8013 103.3 107.2	4.3192 [4.0000]	108.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 111067	(3.83, N/A) (N/A, 0.14, N/A)	729.4	N/A	0.9154 [1.0000]	91.5% { 112.8% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 174218	(6.29, N/A) (N/A, 0.15, N/A)	732.9	N/A	0.9547 [1.0000]	95.5% { 98.7% }			
13C4_PFOA_IIS	(417.0 / 372.0) 162918	(8.02, N/A) (N/A, 0.13, N/A)	757.6	N/A	0.9333 [1.0000]	93.3% { 93.1% }			
13C5_PFNA_IIS	(468.0 / 423.0) 125668	(8.76, N/A) (N/A, 0.12, N/A)	391.1	N/A	0.9248 [1.0000]	92.5% { 92.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 125058	(9.43, N/A) (N/A, 0.11, N/A)	351.5	N/A	0.9013 [1.0000]	90.1% { 109.5% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 290390	(8.15, N/A) (N/A, 0.13, N/A)	631.7	N/A	0.8998 [1.0000]	90.0% { 98.9% }			
13C4_PFOS_IIS	(502.8 / 79.9) 264747	(9.55, N/A) (N/A, 0.09, N/A)	666.3	N/A	1.0513 [1.0000]	105.1% { 114.4% }			
13C4_PFBA_EIS	(217.0 / 172.0) 676007	(3.83, N/A) (N/A, 0.14, N/A)	1032.3	N/A	7.9848 [8.0000]	99.8% { 104.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 371323	(5.15, N/A) (N/A, 0.16, N/A)	932.4	N/A	3.8487 [4.0000]	96.2% { 97.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 270095	(6.29, N/A) (N/A, 0.15, N/A)	601.8	N/A	1.8396 [2.0000]	92.0% { 92.5% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 236454	(7.21, N/A) (N/A, 0.14, N/A)	517.8	N/A	1.8552 [2.0000]	92.8% { 96.7% }			
13C8_PFOA_EIS	(421.0 / 376.0) 253858	(8.02, N/A) (N/A, 0.13, N/A)	759.8	N/A	2.0321 [2.0000]	101.6% { 97.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 93255	(8.75, N/A) (N/A, 0.12, N/A)	413.2	N/A	0.9632 [1.0000]	96.3% { 94.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 145791	(9.43, N/A) (N/A, 0.11, N/A)	373.3	N/A	1.2155 [1.0000]	121.6% { 105.5% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 201910	(9.76, N/A) (N/A, 0.05, N/A)	512.1	N/A	1.2257 [1.0000]	122.6% { 110.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 234529	(9.92, N/A) (N/A, 0.03, N/A)	778.8	N/A	1.1578 [1.0000]	115.8% { 91.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 154982	(10.15, N/A) (N/A, 0.02, N/A)	628.9	N/A	1.2185 [1.0000]	121.8% { 96.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 675591	(6.26, N/A) (N/A, 0.15, N/A)	787.7	N/A	2.0220 [2.0000]	101.1% { 86.6% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 350673	(8.15, N/A) (N/A, 0.13, N/A)	691.3	N/A	1.8649 [2.0000]	93.2% { 84.2% }			
13C8_PFOS_EIS	(507.0 / 80.0) 685196	(9.55, N/A) (N/A, 0.09, N/A)	473.5	N/A	2.0787 [2.0000]	103.9% { 115.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 85095	(5.96, N/A) (N/A, 0.15, N/A)	664.2	N/A	4.3575 [4.0000]	108.9% { 96.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 101009	(7.67, N/A) (N/A, 0.13, N/A)	446.8	N/A	4.2304 [4.0000]	105.8% { 87.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 84372	(9.09, N/A) (N/A, 0.12, N/A)	306.3	N/A	3.5418 [4.0000]	88.5% { 78.9% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 973504	(10.20, N/A) (N/A, 0.04, N/A)	1014.4	N/A	1.9525 [2.0000]	97.6% { 108.2% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 246688	(10.62, N/A) (N/A, 0.02, N/A)	1071.1	N/A	1.9275 [2.0000]	96.4% { 98.2% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 198561	(10.71, N/A) (N/A, 0.02, N/A)	1034.0	N/A	1.7882 [2.0000]	89.4% { 89.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 319733	(9.58, N/A) (N/A, 0.08, N/A)	460.0	N/A	4.0982 [4.0000]	102.5% { 120.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 290489	(9.73, N/A) (N/A, 0.05, N/A)	332.7	N/A	4.1149 [4.0000]	102.9% { 116.5% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 507213	(10.59, N/A) (N/A, 0.02, N/A)	1212.8	N/A	20.6723 [20.0000]	103.4% { 99.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 246235	(10.68, N/A) (N/A, 0.02, N/A)	1251.3	N/A	20.0284 [20.0000]	100.1% { 98.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 724751	(6.64, N/A) (N/A, 0.15, N/A)	939.7	N/A	8.0586 [8.0000]	100.7% { 105.2% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0179

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2251013
 Sequence: SB03845

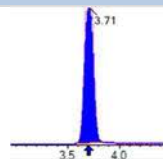
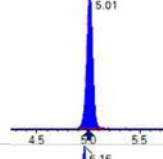
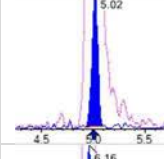
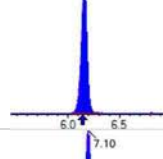
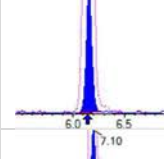
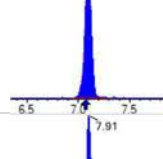
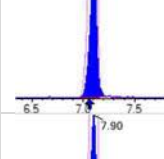
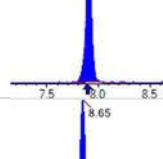
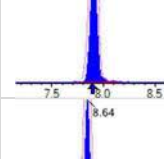
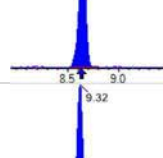
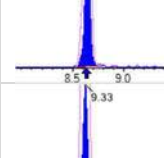
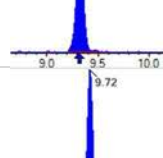
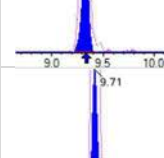
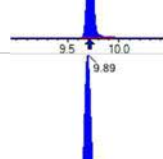
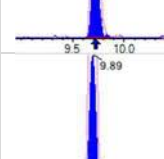
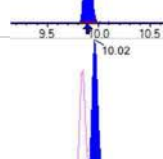
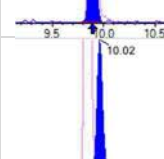
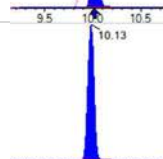
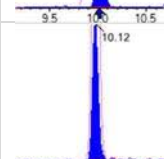
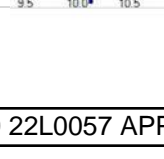
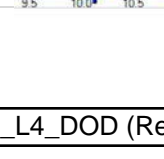
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03845-CCV3	PFBA	8.00	7.91	98.8	ng/mL	+/- 30.00%
	PFPEA	4.00	4.14	103	ng/mL	+/- 30.00%
	PFHXA	2.00	2.20	110	ng/mL	+/- 30.00%
	PFHPA	2.00	1.96	97.9	ng/mL	+/- 30.00%
	PFOA	2.00	1.97	98.4	ng/mL	+/- 30.00%
	PFNA	2.00	2.16	108	ng/mL	+/- 30.00%
	PFDA	2.00	1.80	90.1	ng/mL	+/- 30.00%
	PFUnA	2.00	2.00	100	ng/mL	+/- 30.00%
	PFDOA	2.00	2.25	113	ng/mL	+/- 30.00%
	PFTRDA	2.00	1.80	89.9	ng/mL	+/- 30.00%
	PFTEDA	2.00	1.80	90.0	ng/mL	+/- 30.00%
	PFBS	1.77	1.96	111	ng/mL	+/- 30.00%
	PFPEs	1.88	1.87	99.5	ng/mL	+/- 30.00%
	PFHXS	1.83	1.88	103	ng/mL	+/- 30.00%
	PFHPS	1.91	1.90	99.4	ng/mL	+/- 30.00%
	PFOS	1.86	1.83	98.6	ng/mL	+/- 30.00%
	PFNS	1.92	1.87	97.6	ng/mL	+/- 30.00%
	PFDS	1.93	1.87	96.9	ng/mL	+/- 30.00%
	PFDOS	1.94	2.04	105	ng/mL	+/- 30.00%
	4:2FTS	7.50	7.50	100	ng/mL	+/- 30.00%
	6:2FTS	7.60	7.44	97.9	ng/mL	+/- 30.00%
	8:2FTS	7.68	8.45	110	ng/mL	+/- 30.00%
	PFOSA	2.00	1.92	95.8	ng/mL	+/- 30.00%
	NMeFOSA	8.00	7.89	98.6	ng/mL	+/- 30.00%
	NEtFOSA	8.00	8.21	103	ng/mL	+/- 30.00%
	NMeFOSAA	2.00	1.99	99.7	ng/mL	+/- 30.00%
	NEtFOSAA	2.00	1.71	85.7	ng/mL	+/- 30.00%
	NMeFOSE	8.00	7.73	96.6	ng/mL	+/- 30.00%
	NEtFOSE	8.00	8.31	104	ng/mL	+/- 30.00%
	HFPO-DA	4.00	3.64	90.9	ng/mL	+/- 30.00%

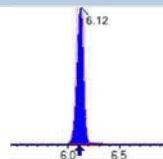
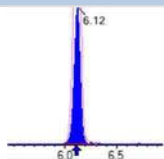
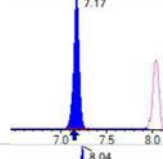
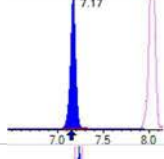
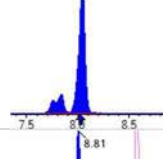
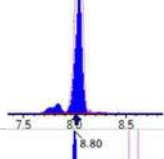
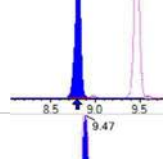
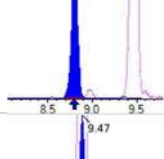
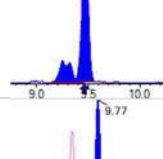
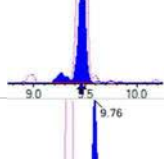
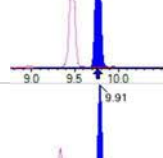
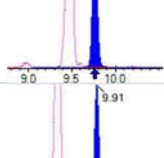
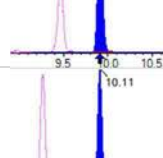
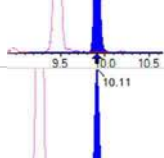
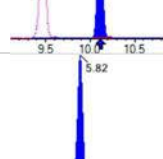
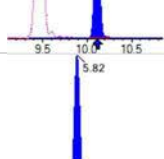
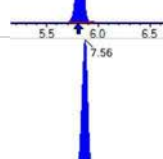
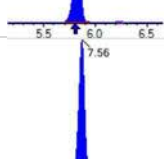
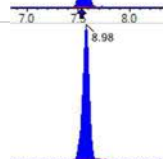
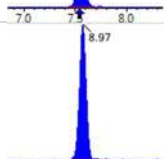
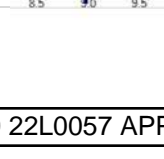
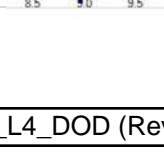
INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Instrument ID:	Saphira	Calibration:	2251013
Standard ID:	22L0179	Sequence:	SB03845

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03845-CCV3	ADONA	3.78	3.95	105	ng/mL	+/- 30.00%
	PFEESA	3.56	3.72	105	ng/mL	+/- 30.00%
	PFMPA	4.00	4.03	101	ng/mL	+/- 30.00%
	PFMBA	4.00	4.03	101	ng/mL	+/- 30.00%
	NFDHA	4.00	4.78	120	ng/mL	+/- 30.00%
	9CL-PF3ONS	3.74	4.16	111	ng/mL	+/- 30.00%
	11CL-PF3OUDS	3.78	4.40	116	ng/mL	+/- 30.00%
	3:3FTCA	8.00	8.14	102	ng/mL	+/- 30.00%
	5:3FTCA	8.00	8.99	112	ng/mL	+/- 30.00%
	7:3FTCA	8.00	8.31	104	ng/mL	+/- 30.00%

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 468042	(3.71, 1.00) (0.00, N/A, 0.0)	60.4	N/A 0.0 0.0	7.9057 [8.0000]	98.8%			
PFPeA	(262.9 / 219.0) 337953 (262.9 / 69.0) 4391	(5.01, 1.00) (0.00, N/A, -0.1)	731.7 119.3	0.0130 103.5 124.0	4.1396 [4.0000]	103.5%			
PFHxA	(313.0 / 269.0) 269799 (313.0 / 119.0) 22281	(6.16, 1.00) (0.00, N/A, 0.2)	612.9 227.4	0.0826 89.2 79.2	2.1992 [2.0000]	110.0%			
PFHpA	(363.0 / 319.0) 230677 (363.0 / 169.0) 68534	(7.10, 1.00) (0.00, N/A, -0.2)	503.3 349.1	0.2971 95.5 92.3	1.9571 [2.0000]	97.9%			
PFOA	(413.0 / 369.0) 247421 (413.0 / 169.0) 78873	(7.91, 1.00) (0.00, N/A, 0.1)	517.9 473.3	0.3188 95.0 102.0	1.9684 [2.0000]	98.4%			
PFNA	(463.0 / 419.0) 189386 (463.0 / 169.0) 40952	(8.65, 1.00) (0.00, N/A, 0.2)	360.1 110.5	0.2162 123.2 108.8	2.1564 [2.0000]	107.8%			
PFDA	(513.0 / 469.0) 252461 (513.0 / 169.0) 31591	(9.32, 1.00) (0.00, N/A, -0.3)	329.5 132.0	0.1251 124.3 133.4	1.8014 [2.0000]	90.1%			
PFUnA	(563.0 / 519.0) 332166 (563.0 / 169.0) 33525	(9.72, 1.00) (0.00, N/A, 0.2)	420.8 225.8	0.1009 110.3 109.2	2.0018 [2.0000]	100.1%			
PFDoA	(613.0 / 569.0) 441489 (613.0 / 169.0) 58835	(9.89, 1.00) (0.00, N/A, 0.0)	658.1 214.0	0.1333 104.0 90.5	2.2532 [2.0000]	112.7%			
PFTrDA	(663.0 / 619.0) 290564 (663.0 / 169.0) 65075	(10.02, 1.01) (N/A, 0.00, 0.1)	659.0 321.0	0.2240 102.0 92.5	1.7987 [2.0000]	89.9%			
PFTeDA	(713.0 / 669.0) 261843 (713.0 / 169.0) 49499	(10.13, 1.00) (0.00, N/A, 0.4)	728.2 167.7	0.1890 101.6 89.9	1.7999 [2.0000]	90.0%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 393176 (298.9 / 99.0) 239534	(6.12, 1.00) (0.00, N/A, 0.0)	678.2 639.4	0.6092 84.6 99.9	1.9572 [1.7695]	110.6%			
PFPeS	(349.0 / 80.0) 634493 (349.0 / 99.0) 238300	(7.17, 0.89) (N/A, 0.02, 0.0)	725.2 699.9	0.3756 100.3 99.9	1.8710 [1.8768]	99.7%			
PFHxS	(399.0 / 80.0) 582259 (399.0 / 99.0) 202682	(8.04, 1.00) (0.00, N/A, 0.1)	1849.3 10754.3	0.3481 107.9 103.2	1.8810 [1.8220]	103.2%			
PFHpS	(449.0 / 80.0) 523437 (449.0 / 99.0) 140727	(8.81, 0.93) (N/A, 0.02, 0.4)	777.3 380.2	0.2689 87.6 119.6	1.8984 [1.9028]	99.8%			
PFOS	(499.0 / 80.0) 614244 (499.0 / 99.0) 144196	(9.47, 1.00) (0.00, N/A, 0.1)	118.2 150.6	0.2348 102.3 103.6	1.8331 [1.8550]	98.8%			
PFNS	(549.0 / 80.0) 773949 (549.0 / 99.0) 207742	(9.77, 1.03) (N/A, 0.00, 0.1)	480.6 575.3	0.2684 103.5 105.4	1.8746 [1.9198]	97.6%			
PFDS	(599.0 / 80.0) 1015084 (599.0 / 99.0) 251469	(9.91, 1.05) (N/A, 0.00, 0.1)	858.6 672.0	0.2477 110.1 98.8	1.8702 [1.9262]	97.1%			
PFDoS	(698.9 / 80.0) 560143 (698.9 / 99.0) 136255	(10.11, 1.07) (N/A, 0.00, 0.0)	870.6 645.2	0.2433 120.1 118.4	2.0401 [1.9391]	105.2%			
4:2FTS	(327.0 / 307.0) 523734 (327.0 / 81.0) 298518	(5.82, 1.00) (0.00, N/A, 0.1)	586.6 714.5	0.5700 93.9 106.7	7.4993 [7.4762]	100.3%			
6:2FTS	(427.0 / 407.0) 320211 (427.0 / 81.0) 217366	(7.56, 1.00) (0.00, N/A, 0.0)	733.3 630.8	0.6788 104.5 100.9	7.4407 [7.5923]	98.0%			
8:2FTS	(527.0 / 507.0) 294963 (527.0 / 81.0) 176559	(8.98, 1.00) (0.00, N/A, 0.2)	392.4 291.3	0.5986 95.5 100.1	8.4503 [7.6663]	110.2%			

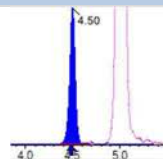
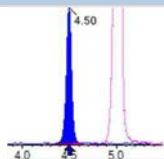
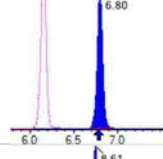
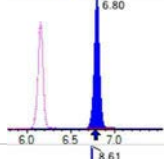
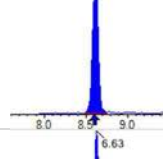
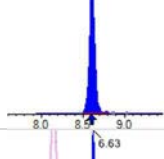
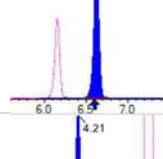
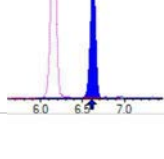
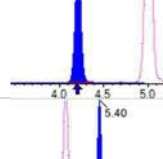
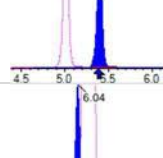
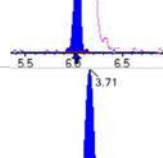
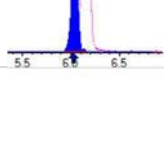
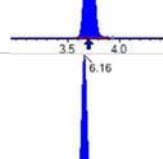
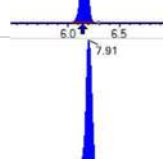
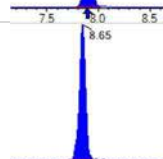
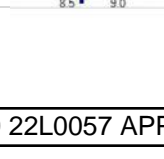


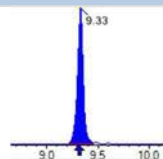
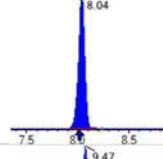
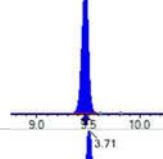
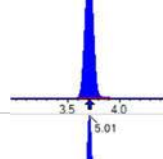
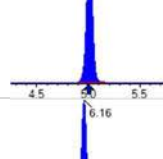
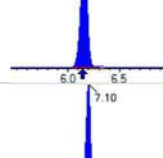
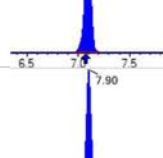
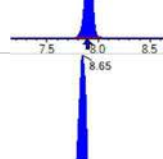
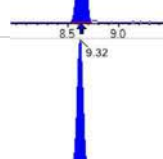
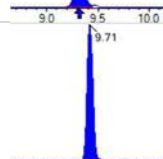
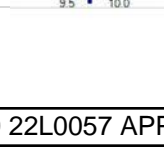
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

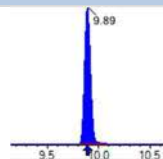
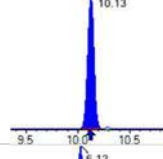
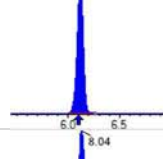
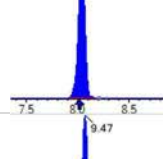
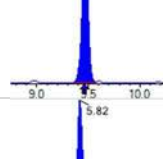
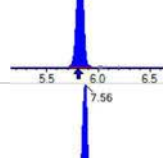
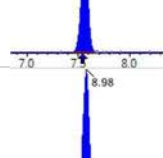
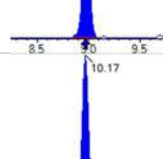
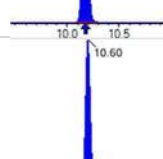
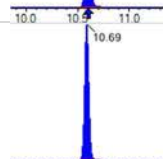
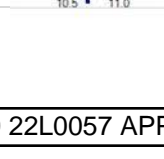
Sample I.D.: SB03845-CCV3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

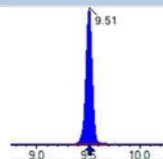
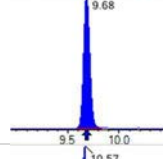
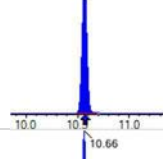
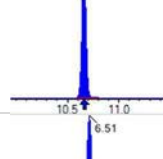
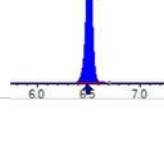
Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (53)
 Acquired: 2022/12/15 - 10:52

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 824744 (498.0 / 478.0) 18177	(10.17, 1.00) (0.00, N/A, -0.1)	864.9 4143.9	0.0220 96.8 118.8	1.9158 [2.0000]	95.8%			
NMeFOSA	(511.9 / 219.0) 803656 (511.9 / 169.0) 568176	(10.60, 1.00) (0.00, N/A, -0.1)	1145.0 1077.0	0.7070 110.8 99.4	7.8912 [8.0000]	98.6%			
NEIFOSA	(526.0 / 219.0) 776142 (526.0 / 169.0) 829250	(10.69, 1.00) (0.00, N/A, 0.0)	1399.4 1287.6	1.0684 100.1 95.4	8.2075 [8.0000]	102.6%			
NMeFOSAA	(570.0 / 419.0) 132695 (570.0 / 483.0) 58516	(9.51, 1.00) (0.01, N/A, 0.1)	439.7 10219.0	0.4410 76.8 81.7	1.9939 [2.0000]	99.7%			
NEIFOSAA	(584.0 / 419.0) 119279 (584.0 / 526.0) 81442	(9.69, 1.00) (0.00, N/A, -0.4)	942.0 126191.3	0.6828 120.4 150.4	1.7149 [2.0000]	85.7%			IR2,
NMeFOSE	(616.1 / 59.0) 221926	(10.57, 1.00) (0.01, N/A, 0.0)	733.4	N/A 0.0 0.0	7.7260 [8.0000]	96.6%			
NEtFOSE	(630.0 / 59.0) 68979	(10.67, 1.00) (0.01, N/A, 0.0)	1140.4	N/A 0.0 0.0	8.3052 [8.0000]	103.8%			
HFPO-DA	(285.0 / 169.0) 189278 (285.0 / 185.0) 653033	(6.51, 1.00) (0.00, N/A, 0.1)	726.3 815.0	3.4501 131.2 109.6	3.6351 [4.0000]	90.9%			
ADONA	(377.0 / 85.0) 877443 (377.0 / 251.0) 114269	(7.41, 1.14) (N/A, 0.02, 0.0)	895.2 359.0	0.1302 110.5 99.9	3.9516 [3.7708]	104.8%			
9CI-Pf3ONS	(531.0 / 351.0) 2615979 (533.0 / 353.0) 806836	(9.72, 1.49) (N/A, 0.00, 0.1)	647.9 647.9	0.3084 106.4 88.5	4.1550 [3.7330]	111.3%			
11CI-PF3OUDS	(631.0 / 451.0) 1775416 (633.0 / 453.0) 520433	(10.00, 1.54) (N/A, 0.00, -0.1)	972.9 666.0	0.2931 92.9 94.3	4.4003 [3.7728]	116.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 27937 (241.0 / 117.0) 51139	(4.50, 0.90) (N/A, 0.02, 0.1)	543.4 461.7	1.8305 111.7 101.4	8.1425 [8.0000]	101.8%			
5:3FTCA	(341.0 / 236.7) 220681 (341.0 / 217.0) 346569	(6.80, 1.10) (N/A, 0.02, 0.0)	684.0 713.5	1.5705 99.6 87.9	8.9898 [8.0000]	112.4%			
7:3FTCA	(441.0 / 317.0) 255377 (441.0 / 337.0) 209723	(8.61, 1.40) (N/A, 0.02, 0.2)	350.4 351.4	0.8212 98.0 103.2	8.3147 [8.0000]	103.9%			
PFEESA	(315.0 / 135.0) 497358 (315.0 / 83.0) 153869	(6.63, 1.08) (N/A, 0.02, 0.0)	874.7 552.3	0.3094 100.9 100.7	3.7228 [3.5698]	104.3%			
PFMPA	(229.0 / 85.0) 89340	(4.21, 0.84) (N/A, 0.02, 0.0)	1099.5	N/A 0.0 0.0	4.0314 [4.0000]	100.8%			
PFMBA	(279.0 / 85.0) 298993	(5.40, 1.08) (N/A, 0.02, 0.0)	816.4	N/A 0.0 0.0	4.0314 [4.0000]	100.8%			
NFDHA	(201.0 / 85.0) 12204 (295.0 / 201.0) 78074	(6.04, 0.98) (N/A, 0.01, 0.0)	269.1 439.9	6.3975 97.1 100.8	4.7820 [4.0000]	119.5%			
13C3_PFBA_IIS	(216.0 / 172.0) 102750	(3.71, N/A) (N/A, 0.02, N/A)	742.7	N/A	0.8468 [1.0000]	84.7% { 104.4% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 195003	(6.16, N/A) (N/A, 0.02, N/A)	892.8	N/A	1.0686 [1.0000]	106.9% { 110.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 163232	(7.91, N/A) (N/A, 0.02, N/A)	680.6	N/A	0.9351 [1.0000]	93.5% { 93.3% }			
13C5_PFNA_IIS	(468.0 / 423.0) 138736	(8.65, N/A) (N/A, 0.01, N/A)	400.1	N/A	1.0210 [1.0000]	102.1% { 101.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 129871	(9.33, N/A) (N/A, 0.01, N/A)	403.3	N/A	0.9360 [1.0000]	93.6% { 113.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 297845	(8.04, N/A) (N/A, 0.02, N/A)	780.8	N/A	0.9229 [1.0000]	92.3% { 101.5% }			
13C4_PFOS_IIS	(502.8 / 79.9) 267363	(9.47, N/A) (N/A, 0.01, N/A)	338.2	N/A	1.0617 [1.0000]	106.2% { 115.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 674247	(3.71, N/A) (N/A, 0.02, N/A)	953.1	N/A	8.6086 [8.0000]	107.6% { 104.4% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 367890	(5.01, N/A) (N/A, 0.01, N/A)	766.0	N/A	3.4067 [4.0000]	85.2% { 96.1% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 276872	(6.16, N/A) (N/A, 0.02, N/A)	656.8	N/A	1.6847 [2.0000]	84.2% { 94.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 254716	(7.10, N/A) (N/A, 0.03, N/A)	588.3	N/A	1.7855 [2.0000]	89.3% { 104.2% }			
13C8_PFOA_EIS	(421.0 / 376.0) 251567	(7.90, N/A) (N/A, 0.02, N/A)	847.2	N/A	2.0099 [2.0000]	100.5% { 96.8% }			
13C9_PFNA_EIS	(472.0 / 427.0) 96335	(8.65, N/A) (N/A, 0.01, N/A)	314.5	N/A	0.9013 [1.0000]	90.1% { 97.4% }			
13C6_PFDA_EIS	(519.0 / 474.0) 138602	(9.32, N/A) (N/A, 0.01, N/A)	332.4	N/A	1.1128 [1.0000]	111.3% { 100.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 191282	(9.71, N/A) (N/A, 0.00, N/A)	614.3	N/A	1.1182 [1.0000]	111.8% { 104.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 226261	(9.89, N/A) (N/A, 0.00, N/A)	470.3	N/A	1.0755 [1.0000]	107.6% { 87.8% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 159185	(10.13, N/A) (N/A, 0.00, N/A)	606.7	N/A	1.2051 [1.0000]	120.5% { 99.5% }			
13C3_PFBs_EIS	(302.0 / 80.0) 711082	(6.12, N/A) (N/A, 0.02, N/A)	807.4	N/A	2.0749 [2.0000]	103.7% { 91.1% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 385470	(8.04, N/A) (N/A, 0.02, N/A)	772.6	N/A	1.9986 [2.0000]	99.9% { 92.6% }			
13C8_PFOS_EIS	(507.0 / 80.0) 609461	(9.47, N/A) (N/A, 0.01, N/A)	309.2	N/A	1.8309 [2.0000]	91.5% { 102.3% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 85672	(5.82, N/A) (N/A, 0.01, N/A)	618.7	N/A	4.2772 [4.0000]	106.9% { 97.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 105610	(7.56, N/A) (N/A, 0.02, N/A)	523.4	N/A	4.3124 [4.0000]	107.8% { 91.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 98038	(8.98, N/A) (N/A, 0.01, N/A)	263.3	N/A	4.0124 [4.0000]	100.3% { 91.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 877743	(10.17, N/A) (N/A, 0.01, N/A)	722.0	N/A	1.7432 [2.0000]	87.2% { 97.5% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 244827	(10.60, N/A) (N/A, 0.00, N/A)	852.3	N/A	1.8942 [2.0000]	94.7% { 97.4% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 204604	(10.69, N/A) (N/A, 0.00, N/A)	943.0	N/A	1.8246 [2.0000]	91.2% { 92.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 344355	(9.51, N/A) (N/A, 0.00, N/A)	364.8	N/A	4.3706 [4.0000]	109.3% { 129.4% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 319606	(9.68, N/A) (N/A, 0.00, N/A)	292.5	N/A	4.4830 [4.0000]	112.1% { 128.2% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 425815	(10.57, N/A) (N/A, 0.00, N/A)	972.8	N/A	17.1850 [20.0000]	85.9% { 83.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 245525	(10.66, N/A) (N/A, 0.00, N/A)	1630.8	N/A	19.7752 [20.0000]	98.9% { 98.3% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 673587	(6.51, N/A) (N/A, 0.02, N/A)	665.8	N/A	6.6913 [8.0000]	83.6% { 97.8% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03951

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03951-CCV1	PFBA	20.0	21.0	105	ng/mL	+/- 30.00%
	PFPEA	10.0	10.4	104	ng/mL	+/- 30.00%
	PFHXA	5.00	5.11	102	ng/mL	+/- 30.00%
	PFHPA	5.00	5.12	102	ng/mL	+/- 30.00%
	PFOA	5.00	4.41	88.2	ng/mL	+/- 30.00%
	PFNA	5.00	4.89	97.8	ng/mL	+/- 30.00%
	PFDA	5.00	4.74	94.9	ng/mL	+/- 30.00%
	PFUnA	5.00	4.61	92.3	ng/mL	+/- 30.00%
	PFDOA	5.00	4.93	98.7	ng/mL	+/- 30.00%
	PFTRDA	5.00	4.19	83.8	ng/mL	+/- 30.00%
	PFTEDA	5.00	4.85	97.0	ng/mL	+/- 30.00%
	PFBS	4.42	4.71	107	ng/mL	+/- 30.00%
	PFPEs	4.70	4.49	95.4	ng/mL	+/- 30.00%
	PFHXS	4.58	4.46	97.4	ng/mL	+/- 30.00%
	PFHPS	4.78	5.15	108	ng/mL	+/- 30.00%
	PFOS	4.65	4.43	95.3	ng/mL	+/- 30.00%
	PFNS	4.80	4.87	101	ng/mL	+/- 30.00%
	PFDS	4.82	4.73	98.2	ng/mL	+/- 30.00%
	PFDOS	4.85	5.55	114	ng/mL	+/- 30.00%
	4:2FTS	18.8	19.1	102	ng/mL	+/- 30.00%
	6:2FTS	19.0	17.4	91.8	ng/mL	+/- 30.00%
	8:2FTS	19.2	19.1	99.5	ng/mL	+/- 30.00%
	PFOSA	5.00	5.32	106	ng/mL	+/- 30.00%
	NMeFOSA	20.0	21.7	109	ng/mL	+/- 30.00%
	NEtFOSA	20.0	21.4	107	ng/mL	+/- 30.00%
	NMeFOSAA	5.00	5.32	106	ng/mL	+/- 30.00%
	NEtFOSAA	5.00	4.61	92.2	ng/mL	+/- 30.00%
	NMeFOSE	20.0	21.4	107	ng/mL	+/- 30.00%
	NEtFOSE	20.0	20.6	103	ng/mL	+/- 30.00%
	HFPO-DA	10.0	9.69	96.9	ng/mL	+/- 30.00%

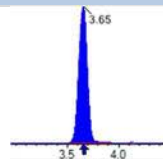
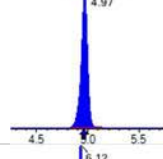
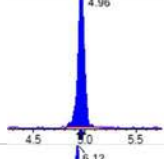
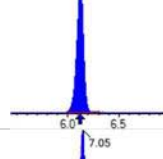
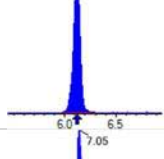
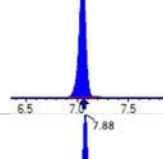
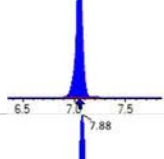
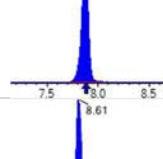
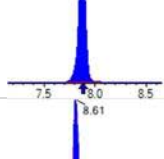
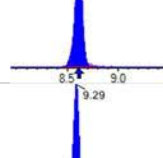
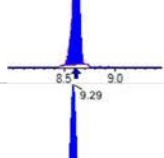
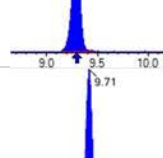
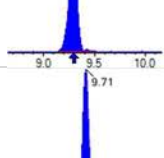
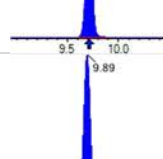
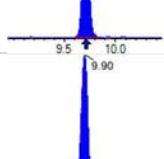
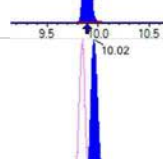
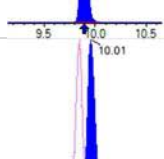
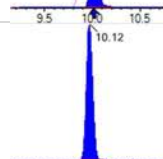
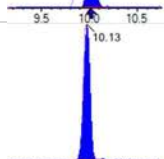
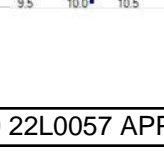
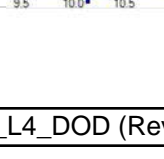
INITIAL AND CONTINUING CALIBRATION CHECK

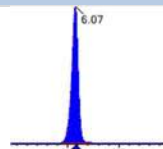
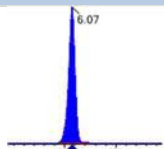
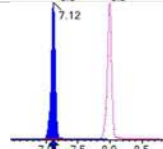
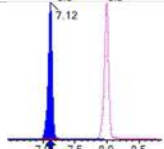
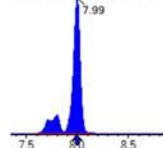
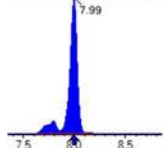
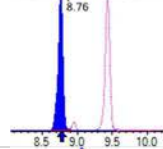
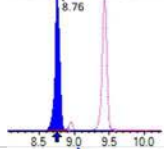
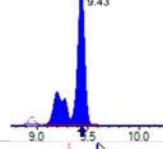
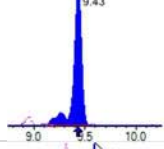
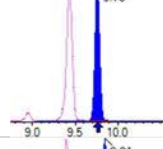
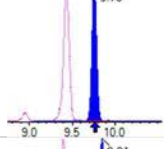
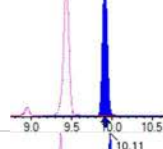
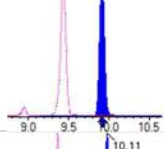
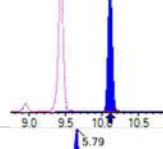
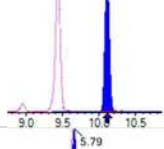
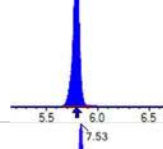
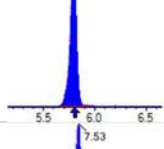
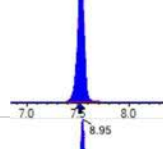
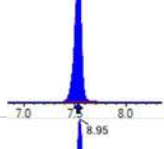
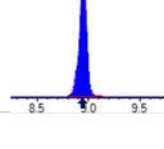
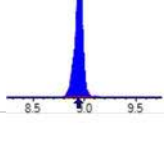
EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03951

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03951-CCV1	ADONA	9.45	9.03	95.5	ng/mL	+/- 30.00%
	PFEESA	8.90	8.98	101	ng/mL	+/- 30.00%
	PFMPA	10.0	10.5	105	ng/mL	+/- 30.00%
	PFMBA	10.0	10.0	100	ng/mL	+/- 30.00%
	NFDHA	10.0	11.3	113	ng/mL	+/- 30.00%
	9CL-PF3ONS	9.35	8.53	91.2	ng/mL	+/- 30.00%
	11CL-PF3OUDS	9.45	8.36	88.5	ng/mL	+/- 30.00%
	3:3FTCA	20.0	21.4	107	ng/mL	+/- 30.00%
	5:3FTCA	20.0	19.2	96.0	ng/mL	+/- 30.00%
	7:3FTCA	20.0	22.4	112	ng/mL	+/- 30.00%

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 2154129	(3.65, 1.00) (0.00, N/A, 0.0)	64.9	N/A 0.0 0.0	21.0367 [20.0000]	105.2%			
PFPeA	(262.9 / 219.0) 1554031 (262.9 / 69.0) 16157	(4.97, 1.00) (0.00, N/A, 0.2)	683.0 222.9	0.0104 92.9 100.0	10.4106 [10.0000]	104.1%			
PFHxA	(313.0 / 269.0) 1175354 (313.0 / 119.0) 105025	(6.12, 1.00) (0.00, N/A, 0.3)	562.2 479.3	0.0894 91.4 100.0	5.1058 [5.0000]	102.1%			
PFHpA	(363.0 / 319.0) 1048582 (363.0 / 169.0) 323239	(7.05, 1.00) (0.00, N/A, 0.2)	690.7 564.0	0.3083 99.0 100.0	5.1153 [5.0000]	102.3%			
PFOA	(413.0 / 369.0) 1291864 (413.0 / 169.0) 382216	(7.88, 1.00) (0.00, N/A, 0.0)	788.3 627.4	0.2959 90.5 100.0	4.4112 [5.0000]	88.2%			
PFNA	(463.0 / 419.0) 972648 (463.0 / 169.0) 202653	(8.61, 1.00) (0.00, N/A, -0.1)	482.3 137.7	0.2084 108.1 100.0	4.8916 [5.0000]	97.8%			
PFDA	(513.0 / 469.0) 1242523 (513.0 / 169.0) 122058	(9.29, 1.00) (0.00, N/A, 0.0)	537.9 297.6	0.0982 102.8 100.0	4.7434 [5.0000]	94.9%			
PFUnA	(563.0 / 519.0) 1356919 (563.0 / 169.0) 121676	(9.71, 1.00) (0.00, N/A, 0.3)	795.6 343.8	0.0897 103.3 100.0	4.6144 [5.0000]	92.3%			
PFDoA	(613.0 / 569.0) 1558339 (613.0 / 169.0) 204949	(9.89, 1.00) (0.00, N/A, -0.4)	763.3 482.7	0.1315 94.5 100.0	4.9347 [5.0000]	98.7%			
PFTrDA	(663.0 / 619.0) 1146816 (663.0 / 169.0) 262166	(10.02, 1.01) (N/A, 0.00, 0.1)	754.3 589.3	0.2286 111.7 100.0	4.1915 [5.0000]	83.8%			
PFTeDA	(713.0 / 669.0) 1097292 (713.0 / 169.0) 225203	(10.12, 1.00) (0.00, N/A, -0.4)	778.9 510.8	0.2052 100.9 100.0	4.8503 [5.0000]	97.0%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1719634 (298.9 / 99.0) 1126162	(6.07, 1.00) (0.00, N/A, 0.1)	661.5 702.7	0.6549 106.4 100.0	4.7073 [4.4237]	106.4%			
PFPeS	(349.0 / 80.0) 3076212 (349.0 / 99.0) 1181734	(7.12, 0.89) (N/A, 0.00, 0.0)	784.8 967.1	0.3842 107.9 100.0	4.4854 [4.6919]	95.6%			
PFHxS	(399.0 / 80.0) 2661196 (399.0 / 99.0) 880872	(7.99, 1.00) (0.00, N/A, 0.1)	2961.8 13543.7	0.3310 98.5 100.0	4.4618 [4.5549]	98.0%			
PFHpS	(449.0 / 80.0) 2510606 (449.0 / 99.0) 638303	(8.76, 0.93) (N/A, 0.00, 0.3)	690.2 645.6	0.2542 92.9 100.0	5.1514 [4.7570]	108.3%			
PFOS	(499.0 / 80.0) 2685738 (499.0 / 99.0) 614269	(9.43, 1.00) (0.00, N/A, 0.0)	93.8 145.8	0.2287 94.0 100.0	4.4299 [4.6375]	95.5%			
PFNS	(549.0 / 80.0) 3272209 (549.0 / 99.0) 835098	(9.76, 1.03) (N/A, 0.00, 0.0)	766.3 864.1	0.2552 104.6 100.0	4.8654 [4.7994]	101.4%			
PFDS	(599.0 / 80.0) 3533112 (599.0 / 99.0) 826737	(9.91, 1.05) (N/A, 0.00, -0.1)	938.8 1176.9	0.2340 104.0 100.0	4.7321 [4.8155]	98.3%			
PFDoS	(698.9 / 80.0) 1732426 (698.9 / 99.0) 336296	(10.11, 1.07) (N/A, 0.00, 0.0)	1430.4 1036.4	0.1941 79.3 100.0	5.5516 [4.8478]	114.5%			
4:2FTS	(327.0 / 307.0) 3560853 (327.0 / 81.0) 2038787	(5.79, 1.00) (0.00, N/A, -0.1)	728.9 733.2	0.5726 115.9 100.0	19.1366 [18.6906]	102.4%			
6:2FTS	(427.0 / 407.0) 2253960 (427.0 / 81.0) 1571501	(7.53, 1.00) (0.00, N/A, -0.2)	722.9 646.0	0.6972 89.6 100.0	17.4345 [18.9808]	91.9%			
8:2FTS	(527.0 / 507.0) 2389487 (527.0 / 81.0) 1315672	(8.95, 1.00) (0.00, N/A, -0.1)	525.5 684.3	0.5506 97.3 100.0	19.0958 [19.1658]	99.6%			

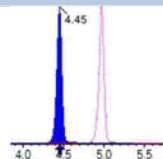
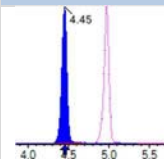
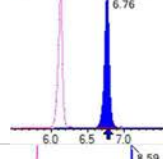
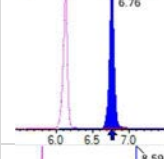
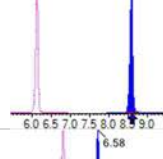
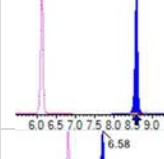
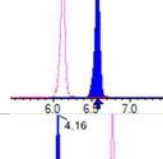
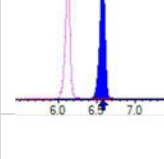
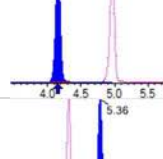
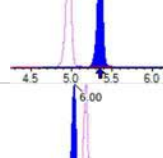
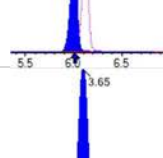
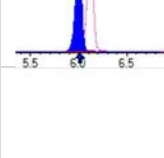
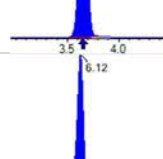
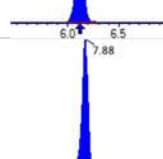
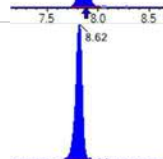
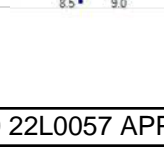


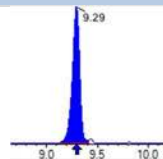
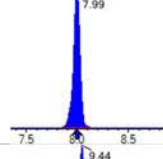
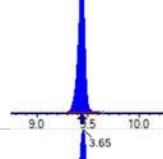
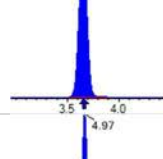
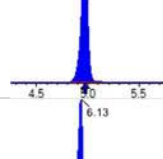
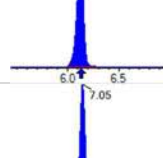
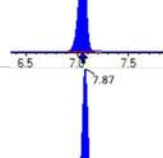
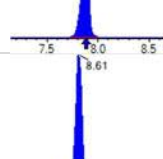
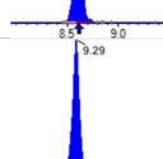
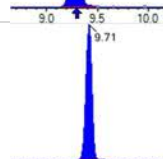
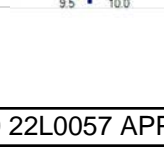
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

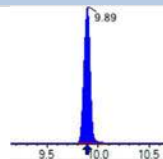
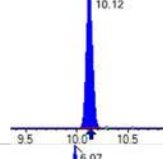
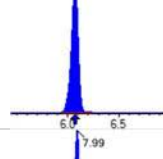
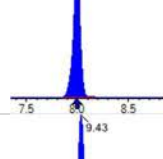
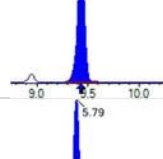
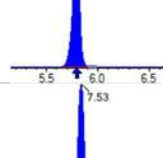
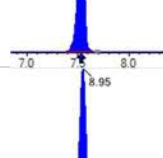
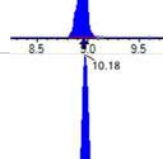
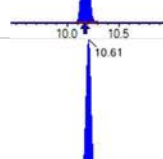
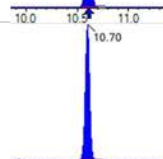
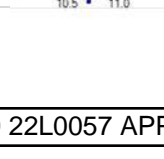
Sample I.D.: SB03951-CCV1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

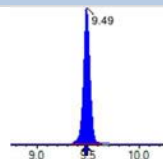
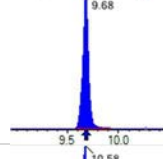
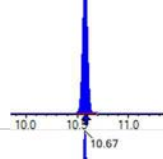
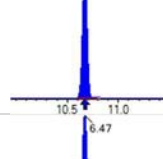
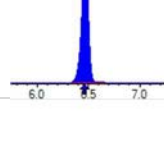
Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (3)
 Acquired: 2022/12/22 - 11:26

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 3428117 (498.0 / 478.0) 83154	(10.18 , 1.00) (0.00 , N/A , 0.0)	763.2 679.7	0.0243 116.4 100.0	5.3181 [5.0000]	106.4%			
NMeFOSA	(511.9 / 219.0) 2543194 (511.9 / 169.0) 1719715	(10.61 , 1.00) (0.00 , N/A , 0.0)	1285.6 1114.3	0.6762 93.9 100.0	21.7307 [20.0000]	108.7%			
NEIFOSA	(526.0 / 219.0) 2929342 (526.0 / 169.0) 3106262	(10.70 , 1.00) (0.00 , N/A , 0.1)	1455.2 1391.4	1.0604 100.3 100.0	21.3735 [20.0000]	106.9%			
NMeFOSAA	(570.0 / 419.0) 547786 (570.0 / 483.0) 273872	(9.49 , 1.00) (0.00 , N/A , 0.1)	449.1 332.1	0.5000 81.3 100.0	5.3192 [5.0000]	106.4%			
NEIFOSAA	(584.0 / 419.0) 429443 (584.0 / 526.0) 312027	(9.68 , 1.00) (0.00 , N/A , 0.0)	783.8 831.4	0.7266 99.1 100.0	4.6112 [5.0000]	92.2%			
NMeFOSE	(616.1 / 59.0) 588115	(10.58 , 1.00) (0.01 , N/A , 0.0)	930.0	N/A 0.0 0.0	21.4368 [20.0000]	107.2%			
NEtFOSE	(630.0 / 59.0) 104293	(10.68 , 1.00) (0.01 , N/A , 0.0)	1039.0	N/A 0.0 0.0	20.5599 [20.0000]	102.8%			
HFPO-DA	(285.0 / 169.0) 896427 (285.0 / 185.0) 2332694	(6.47 , 1.00) (0.00 , N/A , 0.0)	820.4 784.6	2.6022 94.8 100.0	9.6929 [10.0000]	96.9%			
ADONA	(377.0 / 85.0) 3708989 (377.0 / 251.0) 473572	(7.38 , 1.14) (N/A , 0.00 , 0.1)	717.9 589.3	0.1277 102.5 100.0	9.0292 [9.4270]	95.8%			
9CI-Pf3ONS	(531.0 / 351.0) 9542968 (533.0 / 353.0) 2769472	(9.71 , 1.50) (N/A , 0.00 , 0.1)	841.1 822.2	0.2902 98.1 100.0	8.5279 [9.3325]	91.4%			
11CI-PF3OUDS	(631.0 / 451.0) 4800455 (633.0 / 453.0) 1542741	(10.00 , 1.55) (N/A , 0.00 , 0.3)	681.4 800.2	0.3214 97.1 100.0	8.3612 [9.4321]	88.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 110439 (241.0 / 117.0) 185455	(4.45, 0.89) (N/A, 0.00, -0.1)	609.5 582.5	1.6793 100.3 100.0	21.4369 [20.0000]	107.2%			
5:3FTCA	(341.0 / 236.7) 781378 (341.0 / 217.0) 1255633	(6.76, 1.10) (N/A, 0.00, 0.2)	641.9 545.8	1.6069 109.8 100.0	19.2098 [20.0000]	96.0%			
7:3FTCA	(441.0 / 317.0) 1048539 (441.0 / 337.0) 874782	(8.59, 1.40) (N/A, 0.00, 0.0)	437.2 460.1	0.8343 99.6 100.0	22.4032 [20.0000]	112.0%			
PFEESA	(315.0 / 135.0) 2262176 (315.0 / 83.0) 668430	(6.58, 1.07) (N/A, 0.00, 0.0)	842.5 781.6	0.2955 96.2 100.0	8.9758 [8.9246]	100.6%			
PFMPA	(229.0 / 85.0) 431797	(4.16, 0.84) (N/A, 0.00, 0.0)	1012.2	N/A 0.0 0.0	10.5396 [10.0000]	105.4%			
PFMBA	(279.0 / 85.0) 1417072	(5.36, 1.08) (N/A, 0.00, 0.0)	947.1	N/A 0.0 0.0	10.0069 [10.0000]	100.1%			
NFDHA	(295.0 / 201.0) 1316880 (295.0 / 85.0) 1153530	(6.00, 0.98) (N/A, 0.00, 0.0)	700.7 1120.2	0.8760 99.2 100.0	11.3450 [10.0000]	113.5%			
13C3_PFBA_IIS	(216.0 / 172.0) 157058	(3.65, N/A) (N/A, 0.00, N/A)	654.7	N/A	1.1283 [1.0000]	112.8% { 100.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 235960	(6.12, N/A) (N/A, 0.00, N/A)	572.0	N/A	1.0218 [1.0000]	102.2% { 100.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 256865	(7.88, N/A) (N/A, 0.00, N/A)	493.1	N/A	1.1684 [1.0000]	116.8% { 100.0% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 234538	(8.62, N/A) (N/A, 0.00, N/A)	305.4	N/A	1.2665 [1.0000]	126.7% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 187181	(9.29, N/A) (N/A, 0.00, N/A)	349.6	N/A	1.0128 [1.0000]	101.3% { 100.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 446223	(7.99, N/A) (N/A, 0.00, N/A)	1026.4	N/A	1.1053 [1.0000]	110.5% { 100.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 346561	(9.44, N/A) (N/A, 0.00, N/A)	424.1	N/A	1.0858 [1.0000]	108.6% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1255682	(3.65, N/A) (N/A, 0.00, N/A)	744.1	N/A	7.7681 [8.0000]	97.1% { 100.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 679867	(4.97, N/A) (N/A, 0.00, N/A)	654.2	N/A	4.1410 [4.0000]	103.5% { 100.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 536085	(6.13, N/A) (N/A, 0.00, N/A)	604.6	N/A	1.9743 [2.0000]	98.7% { 100.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 449767	(7.05, N/A) (N/A, 0.00, N/A)	519.7	N/A	1.8987 [2.0000]	94.9% { 100.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 595626	(7.87, N/A) (N/A, 0.00, N/A)	933.6	N/A	2.1144 [2.0000]	105.7% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 231730	(8.61, N/A) (N/A, 0.00, N/A)	407.0	N/A	0.8985 [1.0000]	89.9% { 100.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 275199	(9.29, N/A) (N/A, 0.00, N/A)	338.1	N/A	1.0337 [1.0000]	103.4% { 100.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 372096	(9.71, N/A) (N/A, 0.00, N/A)	452.0	N/A	0.9827 [1.0000]	98.3% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 366314	(9.89, N/A) (N/A, 0.00, N/A)	634.0	N/A	0.9692 [1.0000]	96.9% { 100.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 255262	(10.12, N/A) (N/A, 0.00, N/A)	364.1	N/A	1.0170 [1.0000]	101.7% { 100.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1332644	(6.07, N/A) (N/A, 0.00, N/A)	646.0	N/A	1.7664 [2.0000]	88.3% { 100.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 767810	(7.99, N/A) (N/A, 0.00, N/A)	714.1	N/A	1.9127 [2.0000]	95.6% { 100.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1117104	(9.43, N/A) (N/A, 0.00, N/A)	237.3	N/A	1.8782 [2.0000]	93.9% { 100.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 225103	(5.79, N/A) (N/A, 0.00, N/A)	498.3	N/A	3.5227 [4.0000]	88.1% { 100.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 336334	(7.53, N/A) (N/A, 0.00, N/A)	641.8	N/A	4.3717 [4.0000]	109.3% { 100.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 315927	(8.95, N/A) (N/A, 0.00, N/A)	416.9	N/A	4.1022 [4.0000]	102.6% { 100.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1364137	(10.18, N/A) (N/A, 0.00, N/A)	750.8	N/A	1.8144 [2.0000]	90.7% { 100.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 287141	(10.61, N/A) (N/A, 0.00, N/A)	1425.3	N/A	1.7492 [2.0000]	87.5% { 100.0% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 303885	(10.70, N/A) (N/A, 0.00, N/A)	1191.4	N/A	2.0054 [2.0000]	100.3% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 528609	(9.49, N/A) (N/A, 0.00, N/A)	496.4	N/A	3.7375 [4.0000]	93.4% { 100.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 414934	(9.68, N/A) (N/A, 0.00, N/A)	361.3	N/A	3.3284 [4.0000]	83.2% { 100.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 434712	(10.58, N/A) (N/A, 0.00, N/A)	1025.6	N/A	18.8600 [20.0000]	94.3% { 100.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 198139	(10.67, N/A) (N/A, 0.00, N/A)	1023.3	N/A	18.8825 [20.0000]	94.4% { 100.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1217258	(6.47, N/A) (N/A, 0.00, N/A)	619.0	N/A	8.4316 [8.0000]	105.4% { 100.0% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03951

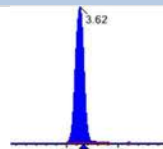
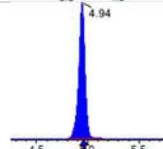
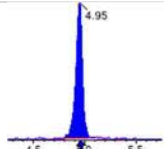
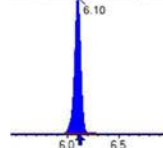
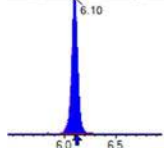
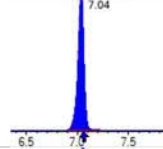
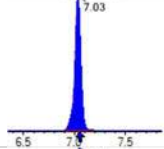
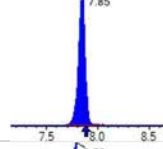
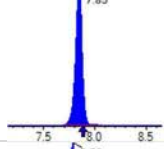
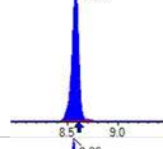
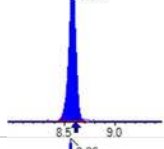
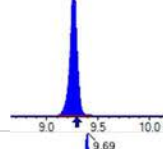
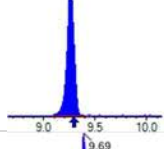
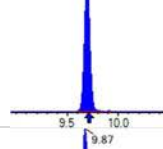
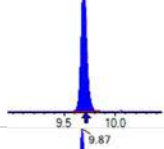
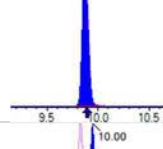
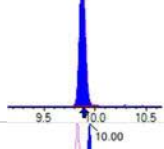
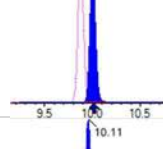
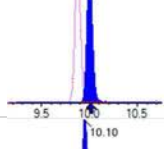
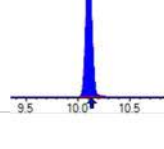
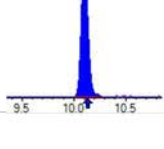
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03951-CCV2	PFBA	20.0	20.3	102	ng/mL	+/- 30.00%
	PFPEA	10.0	9.58	95.8	ng/mL	+/- 30.00%
	PFHXA	5.00	5.39	108	ng/mL	+/- 30.00%
	PFHPA	5.00	4.94	98.9	ng/mL	+/- 30.00%
	PFOA	5.00	4.83	96.6	ng/mL	+/- 30.00%
	PFNA	5.00	5.04	101	ng/mL	+/- 30.00%
	PFDA	5.00	4.71	94.2	ng/mL	+/- 30.00%
	PFUnA	5.00	5.41	108	ng/mL	+/- 30.00%
	PFDOA	5.00	5.49	110	ng/mL	+/- 30.00%
	PFTRDA	5.00	5.21	104	ng/mL	+/- 30.00%
	PFTEDA	5.00	4.27	85.4	ng/mL	+/- 30.00%
	PFBS	4.42	4.32	97.7	ng/mL	+/- 30.00%
	PFPEs	4.70	5.03	107	ng/mL	+/- 30.00%
	PFHXS	4.58	4.51	98.5	ng/mL	+/- 30.00%
	PFHPS	4.78	4.28	89.6	ng/mL	+/- 30.00%
	PFOS	4.65	4.47	96.1	ng/mL	+/- 30.00%
	PFNS	4.80	4.39	91.5	ng/mL	+/- 30.00%
	PFDS	4.82	4.42	91.6	ng/mL	+/- 30.00%
	PFDOS	4.85	4.71	97.1	ng/mL	+/- 30.00%
	4:2FTS	18.8	20.7	110	ng/mL	+/- 30.00%
	6:2FTS	19.0	18.8	98.8	ng/mL	+/- 30.00%
	8:2FTS	19.2	18.7	97.2	ng/mL	+/- 30.00%
	PFOSA	5.00	5.73	115	ng/mL	+/- 30.00%
	NMeFOSA	20.0	20.1	101	ng/mL	+/- 30.00%
	NEtFOSA	20.0	21.1	106	ng/mL	+/- 30.00%
	NMeFOSAA	5.00	5.85	117	ng/mL	+/- 30.00%
	NEtFOSAA	5.00	4.92	98.4	ng/mL	+/- 30.00%
	NMeFOSE	20.0	19.4	96.8	ng/mL	+/- 30.00%
	NEtFOSE	20.0	18.5	92.4	ng/mL	+/- 30.00%
	HFPO-DA	10.0	9.87	98.7	ng/mL	+/- 30.00%

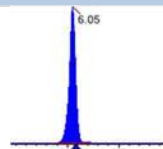
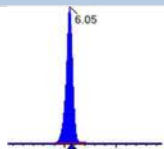
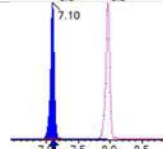
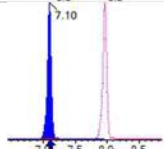
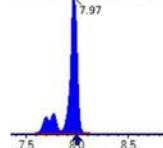
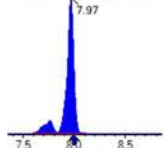
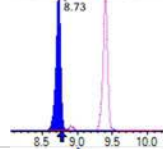
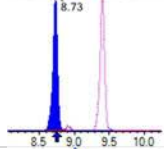
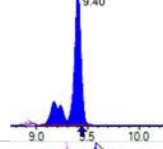
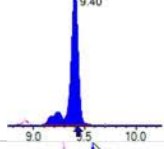
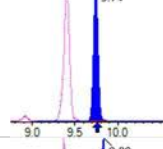
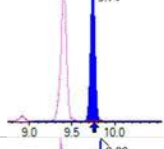
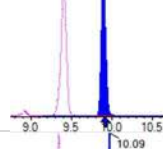
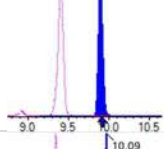
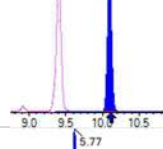
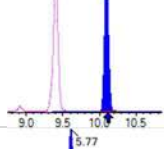
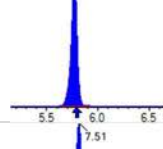
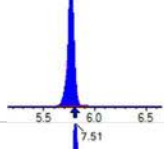
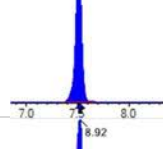
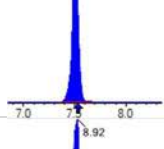
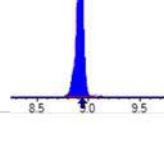
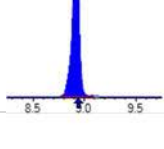
INITIAL AND CONTINUING CALIBRATION CHECK

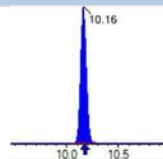
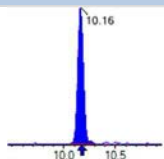
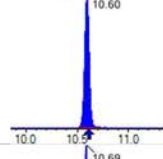
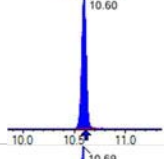
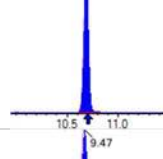
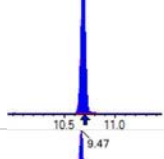
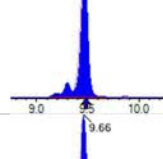
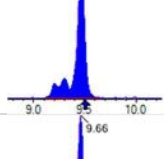
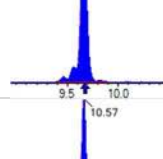
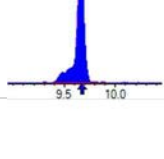
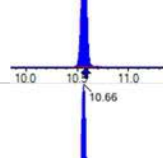
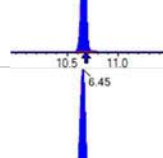
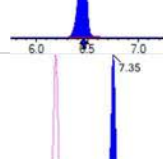
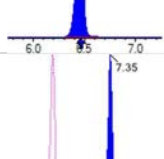
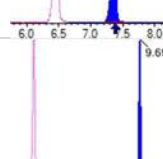
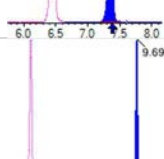
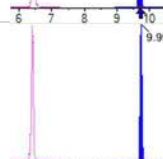
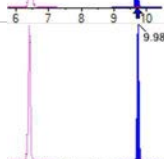
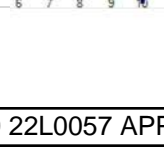
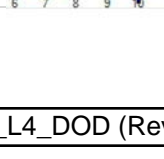
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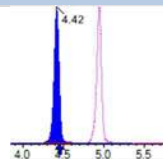
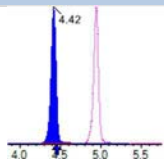
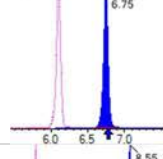
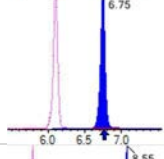
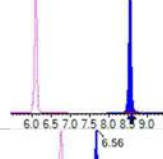
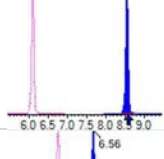
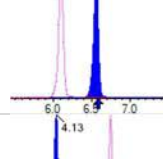
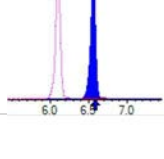
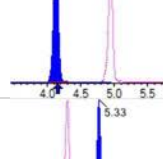
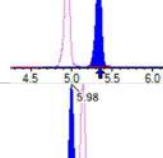
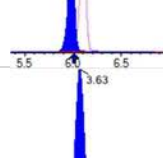
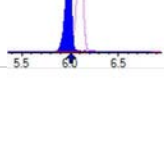
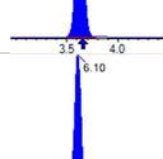
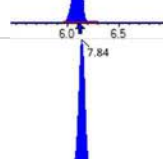
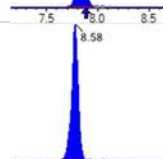
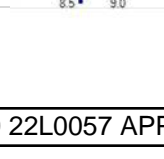
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Instrument ID:	Saphira	Calibration:	2252011
Standard ID:	22L0304	Sequence:	SB03951

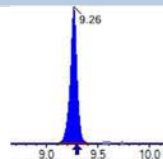
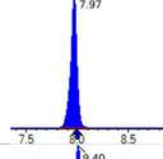
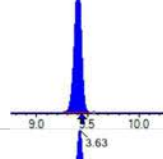
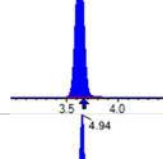
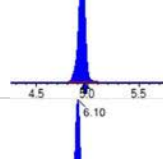
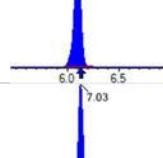
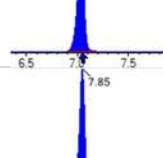
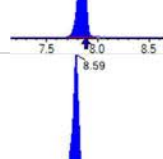
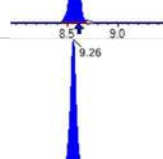
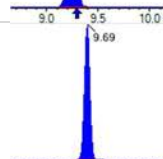
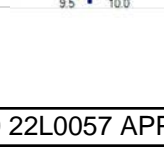
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03951-CCV2	ADONA	9.45	9.04	95.6	ng/mL	+/- 30.00%
	PFEESA	8.90	9.16	103	ng/mL	+/- 30.00%
	PFMPA	10.0	10.5	105	ng/mL	+/- 30.00%
	PFMBA	10.0	9.84	98.4	ng/mL	+/- 30.00%
	NFDHA	10.0	11.5	115	ng/mL	+/- 30.00%
	9CL-PF3ONS	9.35	8.42	90.0	ng/mL	+/- 30.00%
	11CL-PF3OUDS	9.45	9.60	102	ng/mL	+/- 30.00%
	3:3FTCA	20.0	23.2	116	ng/mL	+/- 30.00%
	5:3FTCA	20.0	22.3	111	ng/mL	+/- 30.00%
	7:3FTCA	20.0	23.2	116	ng/mL	+/- 30.00%

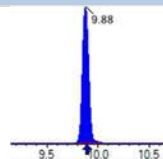
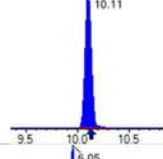
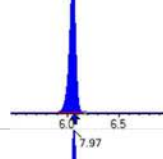
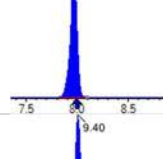
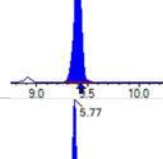
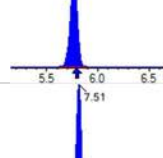
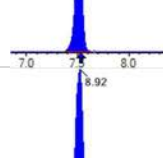
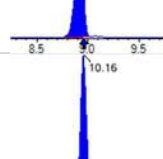
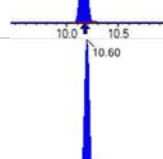
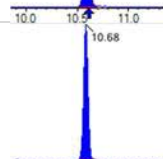
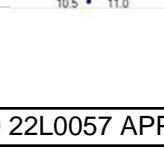
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 2353894	(3.62, 1.00) (0.00, N/A, 0.0)	66.6	N/A 0.0 0.0	20.3367 [20.0000]	101.7%			
PFPeA	(262.9 / 219.0) 1542175 (262.9 / 69.0) 15598	(4.94, 1.00) (0.00, N/A, -0.2)	723.3 241.1	0.0101 90.4 97.3	9.5756 [10.0000]	95.8%			
PFHxA	(313.0 / 269.0) 1279127 (313.0 / 119.0) 120390	(6.10, 1.00) (0.00, N/A, 0.0)	718.2 449.1	0.0941 96.3 105.3	5.3946 [5.0000]	107.9%			
PFHpA	(363.0 / 319.0) 1207342 (363.0 / 169.0) 341501	(7.04, 1.00) (0.01, N/A, 0.1)	655.5 649.4	0.2829 90.8 91.8	4.9444 [5.0000]	98.9%			
PFOA	(413.0 / 369.0) 1339728 (413.0 / 169.0) 423939	(7.85, 1.00) (0.00, N/A, 0.0)	817.0 676.4	0.3164 96.8 107.0	4.8318 [5.0000]	96.6%			
PFNA	(463.0 / 419.0) 940243 (463.0 / 169.0) 218020	(8.58, 1.00) (0.00, N/A, 0.0)	626.5 97.0	0.2319 120.3 111.3	5.0405 [5.0000]	100.8%			
PFDA	(513.0 / 469.0) 1286654 (513.0 / 169.0) 131797	(9.26, 1.00) (0.00, N/A, 0.0)	542.9 356.7	0.1024 107.2 104.3	4.7087 [5.0000]	94.2%			
PFUnA	(563.0 / 519.0) 1518770 (563.0 / 169.0) 153517	(9.69, 1.00) (0.00, N/A, 0.2)	566.6 350.1	0.1011 116.4 112.7	5.4097 [5.0000]	108.2%			
PFDoA	(613.0 / 569.0) 1810490 (613.0 / 169.0) 207740	(9.87, 1.00) (0.00, N/A, 0.0)	615.8 426.5	0.1147 82.4 87.2	5.4868 [5.0000]	109.7%			
PFTrDA	(663.0 / 619.0) 1489270 (663.0 / 169.0) 271591	(10.00, 1.01) (N/A, -0.01, 0.1)	800.5 488.8	0.1824 89.1 79.8	5.2093 [5.0000]	104.2%			
PFTeDA	(713.0 / 669.0) 1137436 (713.0 / 169.0) 167389	(10.11, 1.00) (0.00, N/A, 0.2)	909.7 267.9	0.1472 72.4 71.7	4.2692 [5.0000]	85.4%			

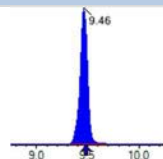
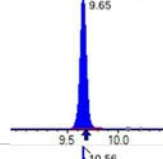
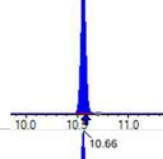
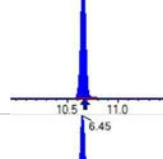
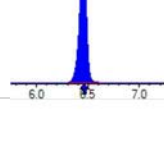
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1774945 (298.9 / 99.0) 1098290	(6.05, 1.00) (0.00, N/A, 0.0)	575.2 674.9	0.6188 100.5 94.5	4.3167 [4.4237]	97.6%			
PFPeS	(349.0 / 80.0) 3514660 (349.0 / 99.0) 1261990	(7.10, 0.89) (N/A, -0.02, 0.1)	842.9 713.8	0.3591 100.9 93.5	5.0307 [4.6919]	107.2%			
PFHxS	(399.0 / 80.0) 2741271 (399.0 / 99.0) 932563	(7.97, 1.00) (0.00, N/A, 0.1)	2993.3 17173.0	0.3402 101.2 102.8	4.5118 [4.5549]	99.1%			
PFHpS	(449.0 / 80.0) 2390966 (449.0 / 99.0) 712726	(8.73, 0.93) (N/A, -0.03, 0.1)	612.2 635.6	0.2981 108.9 117.2	4.2843 [4.7570]	90.1%			
PFOS	(499.0 / 80.0) 3102735 (499.0 / 99.0) 654418	(9.40, 1.00) (0.00, N/A, 0.0)	103.6 121.8	0.2109 86.7 92.2	4.4693 [4.6375]	96.4%			
PFNS	(549.0 / 80.0) 3383274 (549.0 / 99.0) 911710	(9.74, 1.04) (N/A, -0.02, 0.0)	862.5 933.5	0.2695 110.4 105.6	4.3931 [4.7994]	91.5%			
PFDS	(599.0 / 80.0) 3776713 (599.0 / 99.0) 913382	(9.89, 1.05) (N/A, -0.02, -0.1)	1018.9 546.5	0.2418 107.4 103.4	4.4174 [4.8155]	91.7%			
PFDoS	(698.9 / 80.0) 1682735 (698.9 / 99.0) 358973	(10.09, 1.07) (N/A, -0.01, 0.1)	1168.6 610.5	0.2133 87.2 109.9	4.7091 [4.8478]	97.1%			
4:2FTS	(327.0 / 307.0) 3805750 (327.0 / 81.0) 1988641	(5.77, 1.00) (0.00, N/A, 0.2)	820.6 732.9	0.5225 105.8 91.3	20.6590 [18.6906]	110.5%			
6:2FTS	(427.0 / 407.0) 2411225 (427.0 / 81.0) 1781168	(7.51, 1.00) (0.00, N/A, 0.3)	944.6 859.2	0.7387 94.9 105.9	18.7649 [18.9808]	98.9%			
8:2FTS	(527.0 / 507.0) 2054619 (527.0 / 81.0) 1183564	(8.92, 1.00) (0.00, N/A, 0.1)	555.5 395.1	0.5761 101.8 104.6	18.6579 [19.1658]	97.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 4093972 (498.0 / 478.0) 71584	(10.16 , 1.00) (0.00 , N/A , -0.1)	958.5 295.3	0.0175 83.9 72.1	5.7294 [5.0000]	114.6%			
NMeFOSA	(511.9 / 219.0) 2655774 (511.9 / 169.0) 1911600	(10.60 , 1.00) (0.00 , N/A , 0.0)	990.5 978.3	0.7198 99.9 106.4	20.1100 [20.0000]	100.6%			
NEIFOSA	(526.0 / 219.0) 2788650 (526.0 / 169.0) 2942224	(10.69 , 1.00) (0.00 , N/A , 0.0)	1409.4 1627.5	1.0551 99.8 99.5	21.1104 [20.0000]	105.6%			
NMeFOSAA	(570.0 / 419.0) 522530 (570.0 / 483.0) 290563	(9.47 , 1.00) (0.01 , N/A , 0.2)	474.4 353.5	0.5561 90.5 111.2	5.8470 [5.0000]	116.9%			
NEIFOSAA	(584.0 / 419.0) 484480 (584.0 / 526.0) 318236	(9.66 , 1.00) (0.01 , N/A , 0.0)	666.2 23248.7	0.6569 89.6 90.4	4.9198 [5.0000]	98.4%			
NMeFOSE	(616.1 / 59.0) 617715	(10.57 , 1.00) (0.01 , N/A , 0.0)	913.0	N/A 0.0 0.0	19.3557 [20.0000]	96.8%			
NEtFOSE	(630.0 / 59.0) 109538	(10.66 , 1.00) (0.01 , N/A , 0.0)	1164.1	N/A 0.0 0.0	18.4772 [20.0000]	92.4%			
HFPO-DA	(285.0 / 169.0) 947231 (285.0 / 185.0) 2579833	(6.45 , 1.00) (0.00 , N/A , 0.1)	723.0 660.4	2.7236 99.2 104.7	9.8671 [10.0000]	98.7%			
ADONA	(377.0 / 85.0) 3852795 (377.0 / 251.0) 488034	(7.35 , 1.14) (N/A , -0.03 , 0.0)	822.2 608.5	0.1267 101.7 99.2	9.0357 [9.4270]	95.8%			
9CI-Pf3ONS	(531.0 / 351.0) 9783701 (533.0 / 353.0) 3295968	(9.69 , 1.50) (N/A , -0.01 , 0.0)	853.8 692.2	0.3369 113.8 116.1	8.4191 [9.3325]	90.2%			
11CI-PF3OUDS	(631.0 / 451.0) 5722418 (633.0 / 453.0) 1886170	(9.99 , 1.55) (N/A , -0.02 , 0.1)	1202.3 1345.8	0.3296 99.6 102.6	9.6020 [9.4321]	101.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 129146 (241.0 / 117.0) 200477	(4.42, 0.89) (N/A, -0.03, 0.0)	697.6 492.6	1.5523 92.8 92.4	23.2348 [20.0000]	116.2%			
5:3FTCA	(341.0 / 236.7) 932913 (341.0 / 217.0) 1418978	(6.75, 1.11) (N/A, -0.02, 0.0)	646.6 613.3	1.5210 103.9 94.7	22.2668 [20.0000]	111.3%			
7:3FTCA	(441.0 / 317.0) 1119323 (441.0 / 337.0) 879582	(8.55, 1.40) (N/A, -0.03, 0.0)	503.9 478.8	0.7858 93.8 94.2	23.2186 [20.0000]	116.1%			
PFEESA	(315.0 / 135.0) 2376917 (315.0 / 83.0) 710002	(6.56, 1.07) (N/A, -0.02, -0.1)	651.4 660.6	0.2987 97.3 101.1	9.1562 [8.9246]	102.6%			
PFMPA	(229.0 / 85.0) 465746	(4.13, 0.83) (N/A, -0.03, 0.0)	792.9	N/A 0.0 0.0	10.5368 [10.0000]	105.4%			
PFMBA	(279.0 / 85.0) 1503254	(5.33, 1.08) (N/A, -0.02, 0.0)	731.2	N/A 0.0 0.0	9.8392 [10.0000]	98.4%			
NFDHA	(295.0 / 201.0) 1375282 (295.0 / 85.0) 1242998	(5.98, 0.98) (N/A, -0.02, 0.0)	863.9 1184.5	0.9038 102.4 103.2	11.5029 [10.0000]	115.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 170602	(3.63, N/A) (N/A, -0.03, N/A)	612.3	N/A	1.2256 [1.0000]	122.6% { 108.6% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 260602	(6.10, N/A) (N/A, -0.02, N/A)	587.7	N/A	1.1285 [1.0000]	112.9% { 110.4% }			
13C4_PFOA_IIS	(417.0 / 372.0) 262468	(7.84, N/A) (N/A, -0.03, N/A)	511.9	N/A	1.1939 [1.0000]	119.4% { 102.2% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 227138	(8.58, N/A) (N/A, -0.04, N/A)	400.2	N/A	1.2266 [1.0000]	122.7% { 96.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 221652	(9.26, N/A) (N/A, -0.03, N/A)	364.0	N/A	1.1994 [1.0000]	119.9% { 118.4% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 480320	(7.97, N/A) (N/A, -0.03, N/A)	1068.4	N/A	1.1898 [1.0000]	119.0% { 107.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 429100	(9.40, N/A) (N/A, -0.03, N/A)	616.6	N/A	1.3444 [1.0000]	134.4% { 123.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1419353	(3.63, N/A) (N/A, -0.03, N/A)	858.0	N/A	8.0835 [8.0000]	101.0% { 113.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 733511	(4.94, N/A) (N/A, -0.02, N/A)	727.8	N/A	4.0453 [4.0000]	101.1% { 107.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 552178	(6.10, N/A) (N/A, -0.02, N/A)	838.4	N/A	1.8413 [2.0000]	92.1% { 103.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 535767	(7.03, N/A) (N/A, -0.02, N/A)	647.3	N/A	2.0479 [2.0000]	102.4% { 119.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 563924	(7.85, N/A) (N/A, -0.03, N/A)	567.3	N/A	1.9592 [2.0000]	98.0% { 94.7% }			
13C9_PFNA_EIS	(472.0 / 427.0) 217392	(8.59, N/A) (N/A, -0.03, N/A)	444.5	N/A	0.8704 [1.0000]	87.0% { 93.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 287072	(9.26, N/A) (N/A, -0.03, N/A)	512.7	N/A	0.9106 [1.0000]	91.1% { 104.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 355253	(9.69, N/A) (N/A, -0.02, N/A)	588.0	N/A	0.7923 [1.0000]	79.2% { 95.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min] , R.R.T.) (Δ RT-I[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 382764	(9.88, N/A) (N/A, -0.01, N/A)	679.6	N/A	0.8552 [1.0000]	85.5% { 104.5% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 300619	(10.11, N/A) (N/A, -0.01, N/A)	628.3	N/A	1.0114 [1.0000]	101.1% { 117.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1499978	(6.05, N/A) (N/A, -0.02, N/A)	731.3	N/A	1.8470 [2.0000]	92.4% { 112.6% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 782161	(7.97, N/A) (N/A, -0.03, N/A)	736.7	N/A	1.8102 [2.0000]	90.5% { 101.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1279191	(9.40, N/A) (N/A, -0.03, N/A)	215.3	N/A	1.7370 [2.0000]	86.8% { 114.5% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 222854	(5.77, N/A) (N/A, -0.02, N/A)	608.9	N/A	3.2400 [4.0000]	81.0% { 99.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 334292	(7.51, N/A) (N/A, -0.02, N/A)	833.7	N/A	4.0367 [4.0000]	100.9% { 99.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 278027	(8.92, N/A) (N/A, -0.03, N/A)	348.4	N/A	3.3538 [4.0000]	83.8% { 88.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1512132	(10.16, N/A) (N/A, -0.02, N/A)	940.6	N/A	1.6244 [2.0000]	81.2% { 110.8% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 324017	(10.60, N/A) (N/A, -0.01, N/A)	937.1	N/A	1.5942 [2.0000]	79.7% { 112.8% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 292895	(10.68, N/A) (N/A, -0.01, N/A)	899.7	N/A	1.5610 [2.0000]	78.1% { 96.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 458718	(9.46 , N/A) (N/A , -0.03 , N/A)	937.2	N/A	2.6194 [4.0000]	65.5% { 86.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 438747	(9.65 , N/A) (N/A , -0.02 , N/A)	358.6	N/A	2.8425 [4.0000]	71.1% { 105.7% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 505683	(10.56 , N/A) (N/A , -0.01 , N/A)	1002.6	N/A	17.7191 [20.0000]	88.6% { 116.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 231561	(10.66 , N/A) (N/A , -0.02 , N/A)	1491.4	N/A	17.8229 [20.0000]	89.1% { 116.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1263536	(6.45 , N/A) (N/A , -0.02 , N/A)	792.1	N/A	7.9246 [8.0000]	99.1% { 103.8% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03951

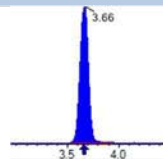
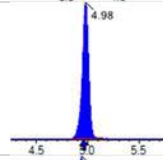
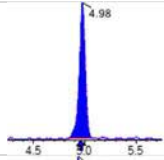
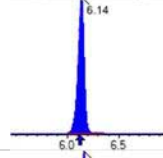
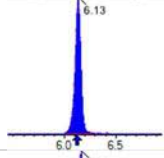
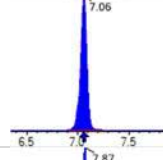
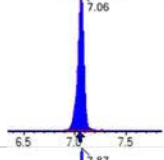
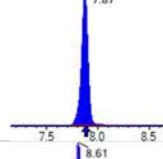
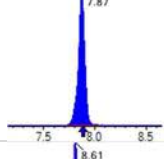
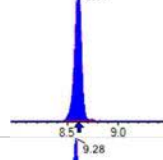
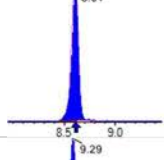
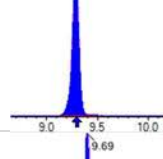
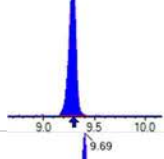
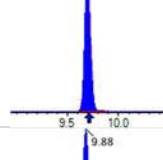
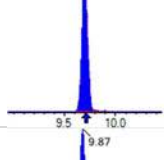
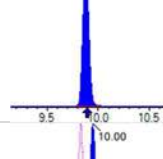
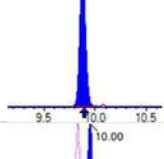
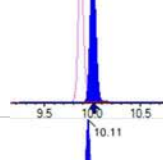
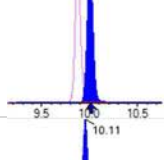
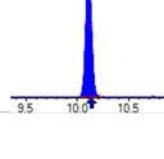
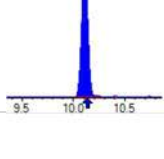
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03951-CCV3	PFBA	20.0	21.4	107	ng/mL	+/- 30.00%
	PFPEA	10.0	10.1	101	ng/mL	+/- 30.00%
	PFHXA	5.00	5.14	103	ng/mL	+/- 30.00%
	PFHPA	5.00	4.81	96.1	ng/mL	+/- 30.00%
	PFOA	5.00	4.75	95.0	ng/mL	+/- 30.00%
	PFNA	5.00	4.82	96.4	ng/mL	+/- 30.00%
	PFDA	5.00	4.94	98.8	ng/mL	+/- 30.00%
	PFUnA	5.00	5.31	106	ng/mL	+/- 30.00%
	PFDOA	5.00	5.04	101	ng/mL	+/- 30.00%
	PFTRDA	5.00	4.56	91.2	ng/mL	+/- 30.00%
	PFTEDA	5.00	5.88	118	ng/mL	+/- 30.00%
	PFBS	4.42	4.28	96.8	ng/mL	+/- 30.00%
	PFPEs	4.70	4.73	101	ng/mL	+/- 30.00%
	PFHXS	4.58	4.45	97.1	ng/mL	+/- 30.00%
	PFHPS	4.78	5.82	122	ng/mL	+/- 30.00%
	PFOS	4.65	4.84	104	ng/mL	+/- 30.00%
	PFNS	4.80	5.13	107	ng/mL	+/- 30.00%
	PFDS	4.82	5.61	116	ng/mL	+/- 30.00%
	PFDOS	4.85	5.63	116	ng/mL	+/- 30.00%
	4:2FTS	18.8	17.5	93.2	ng/mL	+/- 30.00%
	6:2FTS	19.0	17.2	90.8	ng/mL	+/- 30.00%
	8:2FTS	19.2	15.7	81.6	ng/mL	+/- 30.00%
	PFOSA	5.00	5.50	110	ng/mL	+/- 30.00%
	NMeFOSA	20.0	20.8	104	ng/mL	+/- 30.00%
	NEtFOSA	20.0	19.9	99.6	ng/mL	+/- 30.00%
	NMeFOSAA	5.00	5.26	105	ng/mL	+/- 30.00%
	NEtFOSAA	5.00	4.52	90.5	ng/mL	+/- 30.00%
	NMeFOSE	20.0	20.8	104	ng/mL	+/- 30.00%
	NEtFOSE	20.0	19.6	98.1	ng/mL	+/- 30.00%
	HFPO-DA	10.0	9.71	97.1	ng/mL	+/- 30.00%

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Instrument ID:	Saphira	Calibration:	2252011
Standard ID:	22L0304	Sequence:	SB03951

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03951-CCV3	ADONA	9.45	9.06	95.9	ng/mL	+/- 30.00%
	PFEESA	8.90	8.77	98.5	ng/mL	+/- 30.00%
	PFMPA	10.0	10.7	107	ng/mL	+/- 30.00%
	PFMBA	10.0	10.0	100	ng/mL	+/- 30.00%
	NFDHA	10.0	10.8	108	ng/mL	+/- 30.00%
	9CL-PF3ONS	9.35	8.87	94.9	ng/mL	+/- 30.00%
	11CL-PF3OUDS	9.45	9.32	98.6	ng/mL	+/- 30.00%
	3:3FTCA	20.0	23.1	116	ng/mL	+/- 30.00%
	5:3FTCA	20.0	20.2	101	ng/mL	+/- 30.00%
	7:3FTCA	20.0	21.9	110	ng/mL	+/- 30.00%

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 2329567	(3.66, 1.00) (0.00, N/A, 0.0)	74.1	N/A 0.0 0.0	21.3534 [20.0000]	106.8%			
PFPeA	(262.9 / 219.0) 1588778 (262.9 / 69.0) 16368	(4.98, 1.00) (0.00, N/A, 0.2)	742.9 266.9	0.0103 92.0 99.1	10.0730 [10.0000]	100.7%			
PFHxA	(313.0 / 269.0) 1265100 (313.0 / 119.0) 123682	(6.14, 1.00) (0.00, N/A, 0.1)	482.2 523.1	0.0978 100.0 109.4	5.1424 [5.0000]	102.8%			
PFHpA	(363.0 / 319.0) 1106860 (363.0 / 169.0) 316230	(7.06, 1.00) (0.00, N/A, -0.3)	556.8 583.1	0.2857 91.7 92.7	4.8062 [5.0000]	96.1%			
PFOA	(413.0 / 369.0) 1314240 (413.0 / 169.0) 413034	(7.87, 1.00) (0.00, N/A, 0.1)	686.5 668.7	0.3143 96.2 106.2	4.7522 [5.0000]	95.0%			
PFNA	(463.0 / 419.0) 1057815 (463.0 / 169.0) 207817	(8.61, 1.00) (0.00, N/A, 0.0)	549.8 113.5	0.1965 101.9 94.3	4.8214 [5.0000]	96.4%			
PFDA	(513.0 / 469.0) 1295759 (513.0 / 169.0) 135325	(9.28, 1.00) (0.00, N/A, -0.1)	522.9 395.8	0.1044 109.3 106.3	4.9419 [5.0000]	98.8%			
PFUnA	(563.0 / 519.0) 1462777 (563.0 / 169.0) 144281	(9.69, 1.00) (-0.01, N/A, -0.2)	753.4 416.8	0.0986 113.6 110.0	5.3095 [5.0000]	106.2%			
PFDoA	(613.0 / 569.0) 1754907 (613.0 / 169.0) 201901	(9.88, 1.00) (0.00, N/A, 0.2)	804.7 485.0	0.1150 82.6 87.5	5.0383 [5.0000]	100.8%			
PFTrDA	(663.0 / 619.0) 1376291 (663.0 / 169.0) 305542	(10.00, 1.01) (N/A, -0.01, -0.1)	881.9 519.4	0.2220 108.5 97.1	4.5606 [5.0000]	91.2%			
PFTeDA	(713.0 / 669.0) 1389894 (713.0 / 169.0) 266394	(10.11, 1.00) (0.00, N/A, -0.2)	833.2 648.0	0.1917 94.2 93.4	5.8755 [5.0000]	117.5%			

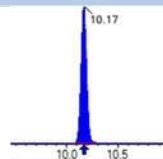
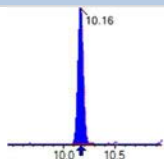
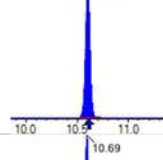
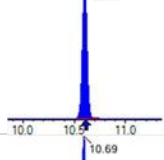
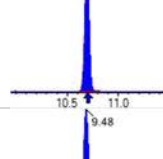
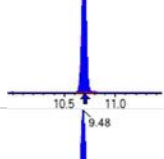
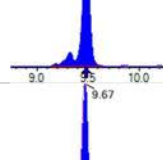
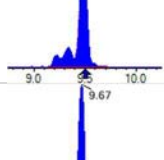
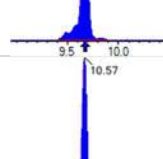
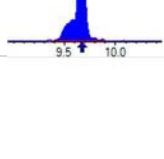
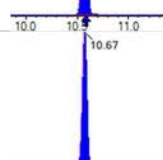
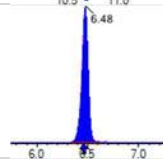
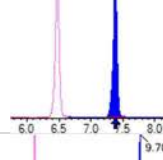
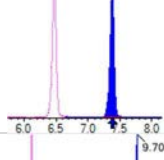

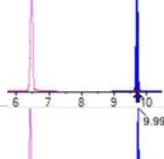
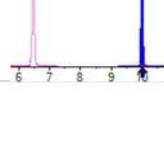
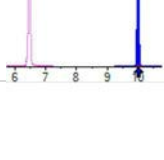
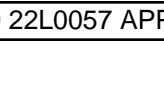
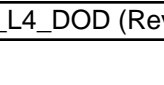


Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCV3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (33)
 Acquired: 2022/12/22 - 18:13

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1770464 (298.9 / 99.0) 1243235	(6.08, 1.00) (0.00, N/A, 0.0)	658.5 669.6	0.7022 114.1 107.2	4.2801 [4.4237]	96.8%			
PFPeS	(349.0 / 80.0) 3355149 (349.0 / 99.0) 1155562	(7.12, 0.89) (N/A, 0.01, -0.1)	891.1 678.6	0.3444 96.8 89.7	4.7342 [4.6919]	100.9%			
PFHxS	(399.0 / 80.0) 2740948 (399.0 / 99.0) 930351	(7.99, 1.00) (0.00, N/A, 0.1)	2730.6 3069.8	0.3394 101.0 102.5	4.4472 [4.5549]	97.6%			
PFHpS	(449.0 / 80.0) 2771477 (449.0 / 99.0) 697823	(8.76, 0.93) (N/A, -0.01, 0.2)	613.3 463.0	0.2518 92.0 99.0	5.8180 [4.7570]	122.3%			
PFOS	(499.0 / 80.0) 2869152 (499.0 / 99.0) 718374	(9.43, 1.00) (0.00, N/A, 0.0)	104.3 167.0	0.2504 103.0 109.5	4.8418 [4.6375]	104.4%			
PFNS	(549.0 / 80.0) 3370808 (549.0 / 99.0) 861335	(9.75, 1.03) (N/A, -0.01, -0.1)	656.2 864.2	0.2555 104.7 100.1	5.1278 [4.7994]	106.8%			
PFDS	(599.0 / 80.0) 4095524 (599.0 / 99.0) 1029395	(9.90, 1.05) (N/A, -0.01, 0.0)	952.3 850.4	0.2513 111.7 107.4	5.6120 [4.8155]	116.5%			
PFDoS	(698.9 / 80.0) 1715967 (698.9 / 99.0) 418660	(10.10, 1.07) (N/A, -0.01, 0.2)	950.7 1204.5	0.2440 99.7 125.7	5.6259 [4.8478]	116.1%			
4:2FTS	(327.0 / 307.0) 3504022 (327.0 / 81.0) 1969471	(5.80, 1.00) (0.00, N/A, 0.1)	849.1 862.4	0.5621 113.8 98.2	17.5197 [18.6906]	93.7%			
6:2FTS	(427.0 / 407.0) 2241523 (427.0 / 81.0) 1456278	(7.53, 1.00) (0.00, N/A, -0.2)	995.1 969.6	0.6497 83.5 93.2	17.2454 [18.9808]	90.9%			
8:2FTS	(527.0 / 507.0) 1871197 (527.0 / 81.0) 1111280	(8.94, 1.00) (0.00, N/A, -0.1)	571.1 506.2	0.5939 104.9 107.9	15.6670 [19.1658]	81.7%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 4154372 (498.0 / 478.0) 86834	(10.17 , 1.00) (0.00 , N/A , 0.2)	911.5 352.4	0.0209 100.3 86.2	5.4994 [5.0000]	110.0%			
NMeFOSA	(511.9 / 219.0) 3089993 (511.9 / 169.0) 1929702	(10.60 , 1.00) (0.00 , N/A , 0.1)	1291.5 1124.1	0.6245 86.7 92.4	20.8314 [20.0000]	104.2%			
NEIFOSA	(526.0 / 219.0) 3121180 (526.0 / 169.0) 3483795	(10.69 , 1.00) (0.00 , N/A , 0.0)	1079.3 1304.0	1.1162 105.5 105.3	19.9228 [20.0000]	99.6%			
NMeFOSAA	(570.0 / 419.0) 527197 (570.0 / 483.0) 280214	(9.48 , 1.00) (0.00 , N/A , -0.1)	422.9 504.9	0.5315 86.5 106.3	5.2646 [5.0000]	105.3%			
NEIFOSAA	(584.0 / 419.0) 455415 (584.0 / 526.0) 289550	(9.67 , 1.00) (0.01 , N/A , 0.4)	842.8 388032.7	0.6358 86.7 87.5	4.5229 [5.0000]	90.5%			
NMeFOSE	(616.1 / 59.0) 688149	(10.57 , 1.00) (0.01 , N/A , 0.0)	1101.7	N/A 0.0 0.0	20.8386 [20.0000]	104.2%			
NEIFOSE	(630.0 / 59.0) 122249	(10.67 , 1.00) (0.01 , N/A , 0.0)	980.7	N/A 0.0 0.0	19.6110 [20.0000]	98.1%			
HFPO-DA	(285.0 / 169.0) 944262 (285.0 / 185.0) 2581735	(6.48 , 1.00) (0.00 , N/A , 0.0)	611.5 912.5	2.7341 99.6 105.1	9.7065 [10.0000]	97.1%			
ADONA	(377.0 / 85.0) 3914647 (377.0 / 251.0) 517903	(7.38 , 1.14) (N/A , 0.00 , 0.1)	778.0 706.6	0.1323 106.2 103.6	9.0597 [9.4270]	96.1%			
9CI-Pf3ONS	(531.0 / 351.0) 10425825 (533.0 / 353.0) 3291787	(9.70 , 1.50) (N/A , -0.01 , -0.1)	1199.2 1073.9	0.3157 106.7 108.8	8.8697 [9.3325]	95.0%			
11CI-PF3OUDS	(631.0 / 451.0) 5629636 (633.0 / 453.0) 1837885	(9.99 , 1.54) (N/A , -0.02 , -0.1)	847.8 619.7	0.3265 98.7 101.6	9.3218 [9.4321]	98.8%			

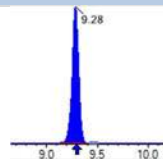
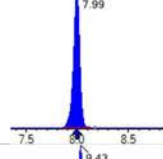
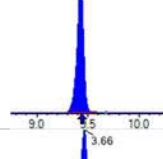
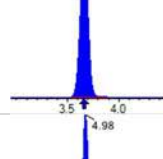
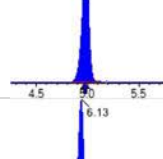
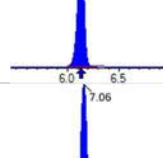
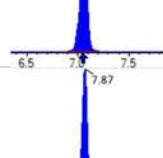
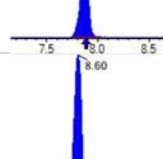
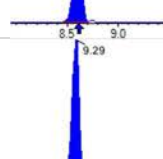
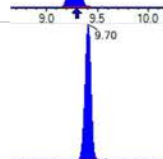
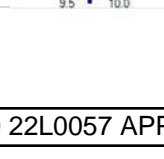


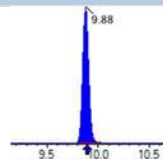
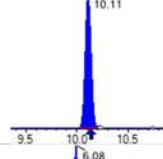
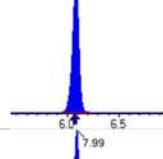
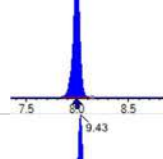
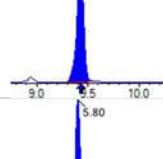
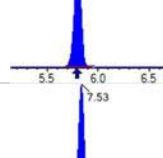
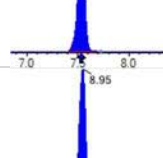
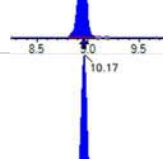
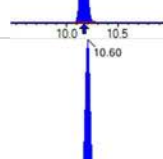
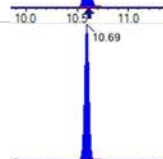
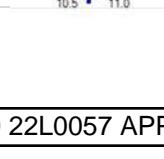
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 Instrument: Saphira
 Type: Sciex Q3 5500

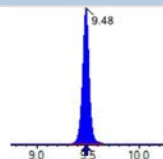
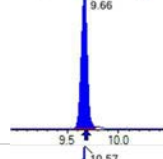
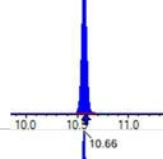
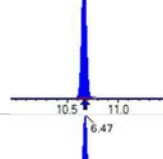
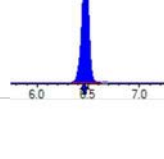
Sample I.D.: SB03951-CCV3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (33)
 Acquired: 2022/12/22 - 18:13

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 125980 (241.0 / 117.0) 205696	(4.46, 0.90) (N/A, 0.02, 0.0)	750.7 620.5	1.6328 97.6 97.2	23.1433 [20.0000]	115.7%			
5:3FTCA	(341.0 / 236.7) 879247 (341.0 / 217.0) 1433265	(6.77, 1.10) (N/A, 0.01, -0.1)	479.0 621.9	1.6301 111.4 101.4	20.2264 [20.0000]	101.1%			
7:3FTCA	(441.0 / 317.0) 1095640 (441.0 / 337.0) 951207	(8.58, 1.40) (N/A, -0.01, 0.0)	484.0 483.1	0.8682 103.7 104.1	21.9049 [20.0000]	109.5%			
PFEESA	(315.0 / 135.0) 2361207 (315.0 / 83.0) 730225	(6.58, 1.07) (N/A, 0.00, -0.1)	892.7 784.8	0.3093 100.7 104.7	8.7666 [8.9246]	98.2%			
PFMPA	(229.0 / 85.0) 461480	(4.16, 0.84) (N/A, 0.01, 0.0)	923.3	N/A 0.0 0.0	10.6605 [10.0000]	106.6%			
PFMBA	(279.0 / 85.0) 1500223	(5.37, 1.08) (N/A, 0.02, 0.0)	925.3	N/A 0.0 0.0	10.0264 [10.0000]	100.3%			
NFDHA	(295.0 / 201.0) 1344733 (295.0 / 85.0) 1200999	(6.01, 0.98) (N/A, 0.01, 0.0)	752.3 1049.1	0.8931 101.2 102.0	10.8404 [10.0000]	108.4%			
13C3_PFBA_IIS	(216.0 / 172.0) 167706	(3.66, N/A) (N/A, 0.01, N/A)	642.3	N/A	1.2048 [1.0000]	120.5% { 106.8% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 250241	(6.13, N/A) (N/A, 0.01, N/A)	631.9	N/A	1.0837 [1.0000]	108.4% { 106.1% }			
13C4_PFOA_IIS	(417.0 / 372.0) 258166	(7.87, N/A) (N/A, 0.00, N/A)	497.3	N/A	1.1743 [1.0000]	117.4% { 100.5% }			
13C5_PFNA_IIS	(468.0 / 423.0) 207452	(8.60, N/A) (N/A, -0.01, N/A)	334.9	N/A	1.1203 [1.0000]	112.0% { 88.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 199799	(9.28, N/A) (N/A, -0.01, N/A)	314.0	N/A	1.0811 [1.0000]	108.1% { 106.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 462355	(7.99, N/A) (N/A, 0.00, N/A)	799.7	N/A	1.1453 [1.0000]	114.5% { 103.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 386574	(9.43, N/A) (N/A, -0.01, N/A)	419.6	N/A	1.2112 [1.0000]	121.1% { 111.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1337805	(3.66, N/A) (N/A, 0.01, N/A)	726.3	N/A	7.7506 [8.0000]	96.9% { 106.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 718361	(4.98, N/A) (N/A, 0.01, N/A)	631.9	N/A	4.1258 [4.0000]	103.1% { 105.7% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 572910	(6.13, N/A) (N/A, 0.01, N/A)	597.5	N/A	1.9895 [2.0000]	99.5% { 106.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 505300	(7.06, N/A) (N/A, 0.01, N/A)	635.7	N/A	2.0114 [2.0000]	100.6% { 112.3% }			
13C8_PFOA_EIS	(421.0 / 376.0) 562459	(7.87, N/A) (N/A, 0.00, N/A)	805.1	N/A	1.9866 [2.0000]	99.3% { 94.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 255691	(8.60, N/A) (N/A, -0.01, N/A)	410.6	N/A	1.1209 [1.0000]	112.1% { 110.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 275465	(9.29, N/A) (N/A, 0.00, N/A)	467.2	N/A	0.9694 [1.0000]	96.9% { 100.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 348613	(9.70, N/A) (N/A, -0.01, N/A)	419.3	N/A	0.8625 [1.0000]	86.2% { 93.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 404039	(9.88, N/A) (N/A, -0.02, N/A)	461.4	N/A	1.0015 [1.0000]	100.2% { 110.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 266914	(10.11, N/A) (N/A, -0.01, N/A)	435.0	N/A	0.9962 [1.0000]	99.6% { 104.6% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1508996	(6.08, N/A) (N/A, 0.01, N/A)	676.0	N/A	1.9303 [2.0000]	96.5% { 113.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 793420	(7.99, N/A) (N/A, 0.00, N/A)	787.3	N/A	1.9076 [2.0000]	95.4% { 103.3% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1091884	(9.43, N/A) (N/A, -0.01, N/A)	244.6	N/A	1.6457 [2.0000]	82.3% { 97.7% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 241953	(5.80, N/A) (N/A, 0.01, N/A)	634.7	N/A	3.6543 [4.0000]	91.4% { 107.5% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 338147	(7.53, N/A) (N/A, 0.00, N/A)	668.6	N/A	4.2420 [4.0000]	106.0% { 100.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 301545	(8.95, N/A) (N/A, 0.00, N/A)	398.8	N/A	3.7788 [4.0000]	94.5% { 95.4% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1598613	(10.17, N/A) (N/A, -0.01, N/A)	905.8	N/A	1.9062 [2.0000]	95.3% { 117.2% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 363940	(10.60, N/A) (N/A, -0.01, N/A)	1281.0	N/A	1.9876 [2.0000]	99.4% { 126.7% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 347362	(10.69, N/A) (N/A, -0.01, N/A)	956.5	N/A	2.0550 [2.0000]	102.8% { 114.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 514015	(9.48, N/A) (N/A, -0.01, N/A)	436.0	N/A	3.2581 [4.0000]	81.5% { 97.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 448621	(9.66, N/A) (N/A, -0.01, N/A)	460.3	N/A	3.2262 [4.0000]	80.7% { 108.1% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 523257	(10.57, N/A) (N/A, -0.01, N/A)	783.0	N/A	20.3519 [20.0000]	101.8% { 120.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 243492	(10.66, N/A) (N/A, -0.01, N/A)	1302.1	N/A	20.8028 [20.0000]	104.0% { 122.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1280418	(6.47, N/A) (N/A, 0.00, N/A)	658.1	N/A	8.3630 [8.0000]	104.5% { 105.2% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03823
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03823-ICB1	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.0345	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.0142	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.0853	ng/mL	0.40	U
	NEtFOSE	0.0806	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
PFMPA	0.00	ng/mL	0.20	U	

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03823
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03823-ICB1	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	8.83	ng/mL		
	13C5-PFPEA	4.42	ng/mL		
	13C5-PFHXA	2.31	ng/mL		
	13C4-PFHPA	2.21	ng/mL		
	13C8-PFOA	2.36	ng/mL		
	13C9-PFNA	1.15	ng/mL		
	13C6-PFDA	1.17	ng/mL		
	13C7-PFUnA	1.27	ng/mL		
	13C2-PFDOA	1.29	ng/mL		
	13C2-PFTEDA	1.27	ng/mL		
	13C3-PFBS	2.47	ng/mL		
	13C3-PFHXS	2.05	ng/mL		
	13C8-PFOS	2.29	ng/mL		
	13C2-4:2FTS	4.09	ng/mL		
	13C2-6:2FTS	4.05	ng/mL		
	13C2-8:2FTS	3.83	ng/mL		
	13C8-PFOSA	2.12	ng/mL		
	D5-NETFOSA	2.36	ng/mL		
	D3-NMEFOSA	2.25	ng/mL		
	D3-NMEFOSAA	3.92	ng/mL		
	D5-NETFOSAA	4.48	ng/mL		
	D7-NMEFOSE	21.1	ng/mL		
	D9-NETFOSAE	22.5	ng/mL		
	13C3-HFPO-DA	8.26	ng/mL		



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03823-ICB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-13B013.wiff-0
 Acquired: 2022/12/13 - 21:45

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) 6236 (713.0 / 169.0) 2827	(10.13, 1.00) (-0.01, N/A, 0.8)	54.7 60.4	0.4533 243.7 243.7	0.0345	N/A			IR2,



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03823-ICB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-13B013.wiff-0
 Acquired: 2022/12/13 - 21:45

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

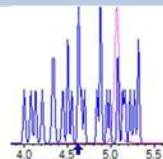
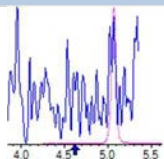
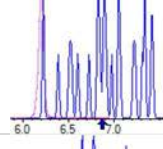
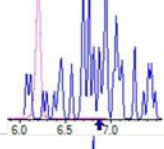
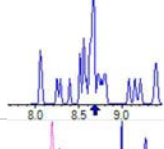
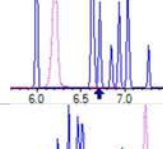
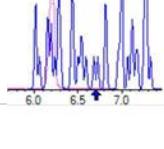
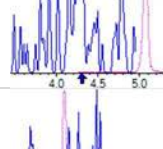
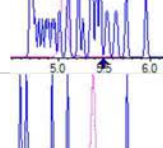
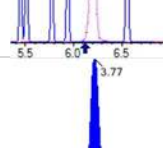
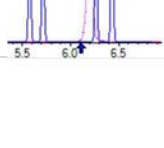
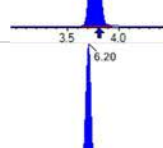
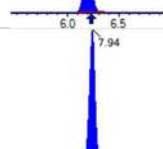
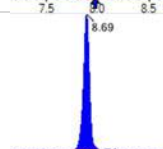
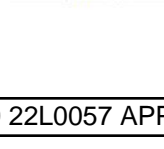


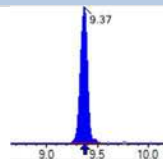
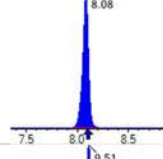
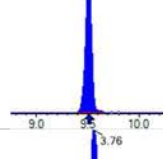
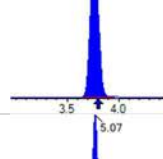
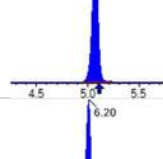
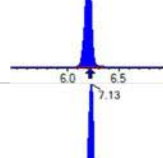
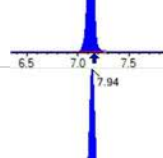
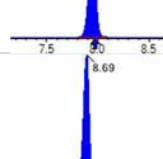
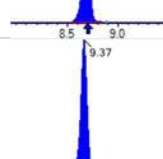
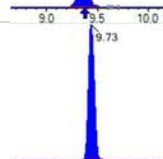
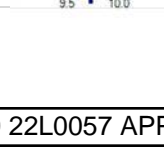
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

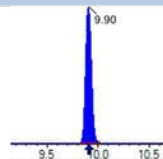
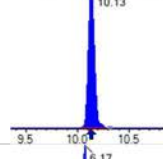
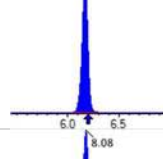
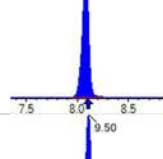
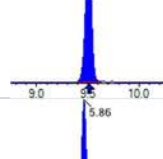
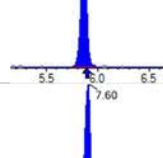
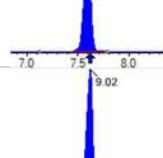
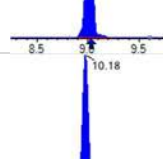
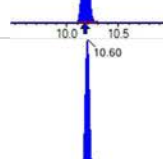
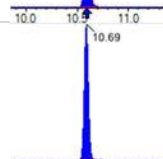

Sample I.D.: SB03823-ICB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

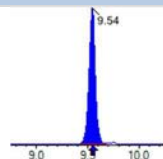
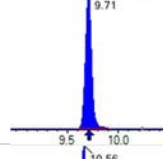
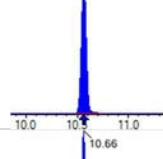
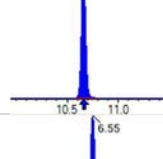
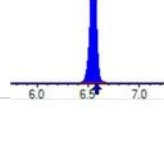
Quant Method: 1633 - 2022-12-13
 Path: S2022-12-13B013.wiff-0
 Acquired: 2022/12/13 - 21:45

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 8009 (498.0 / 478.0) 919	(10.18, 1.00) (0.01, N/A, 1.4)	21.4 68711.7	0.1148 504.1 504.1	0.0142	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) 3257	(10.57, 1.00) (0.00, N/A, 0.0)	47.5	N/A 0.0 0.0	0.0853	N/A			
NEIFOSE	(630.0 / 59.0) 824	(10.67, 1.00) (0.01, N/A, 0.0)	21.2	N/A 0.0 0.0	0.0806	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pr3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 134866	(3.77, N/A) (N/A, -0.04, N/A)	720.2	N/A	1.1115 [1.0000]	111.2% { 106.5% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 206317	(6.20, N/A) (N/A, -0.03, N/A)	608.5	N/A	1.1306 [1.0000]	113.1% { 105.4% }			
13C4_PFOA_IIS	(417.0 / 372.0) 187514	(7.94, N/A) (N/A, -0.02, N/A)	472.9	N/A	1.0742 [1.0000]	107.4% { 106.4% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 158249	(8.69, N/A) (N/A, -0.02, N/A)	391.9	N/A	1.1646 [1.0000]	116.5% { 119.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 153438	(9.37, N/A) (N/A, -0.01, N/A)	360.8	N/A	1.1058 [1.0000]	110.6% { 108.6% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 372412	(8.08, N/A) (N/A, -0.02, N/A)	726.9	N/A	1.1539 [1.0000]	115.4% { 111.1% }			
13C4_PFOS_IIS	(502.8 / 79.9) 289279	(9.51, N/A) (N/A, 0.00, N/A)	393.2	N/A	1.1487 [1.0000]	114.9% { 104.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 908255	(3.76, N/A) (N/A, -0.04, N/A)	770.5	N/A	8.8349 [8.0000]	110.4% { 114.2% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 504536	(5.07, N/A) (N/A, -0.04, N/A)	763.6	N/A	4.4159 [4.0000]	110.4% { 118.3% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 401333	(6.20, N/A) (N/A, -0.02, N/A)	620.0	N/A	2.3082 [2.0000]	115.4% { 126.8% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 333936	(7.13, N/A) (N/A, -0.02, N/A)	689.3	N/A	2.2124 [2.0000]	110.6% { 115.7% }			
13C8_PFOA_EIS	(421.0 / 376.0) 339328	(7.94, N/A) (N/A, -0.02, N/A)	1014.1	N/A	2.3600 [2.0000]	118.0% { 125.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 140093	(8.69, N/A) (N/A, -0.01, N/A)	383.5	N/A	1.1490 [1.0000]	114.9% { 129.9% }			
13C6_PFDA_EIS	(519.0 / 474.0) 171598	(9.37, N/A) (N/A, -0.01, N/A)	333.0	N/A	1.1661 [1.0000]	116.6% { 141.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 257418	(9.73, N/A) (N/A, 0.00, N/A)	534.9	N/A	1.2737 [1.0000]	127.4% { 138.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 319752	(9.90, N/A) (N/A, 0.00, N/A)	561.4	N/A	1.2865 [1.0000]	128.7% { 130.8% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 197540	(10.13, N/A) (N/A, 0.00, N/A)	345.4	N/A	1.2658 [1.0000]	126.6% { 132.7% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1060125	(6.17, N/A) (N/A, -0.03, N/A)	1017.4	N/A	2.4740 [2.0000]	123.7% { 137.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 494540	(8.08, N/A) (N/A, -0.02, N/A)	748.5	N/A	2.0507 [2.0000]	102.5% { 110.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 824634	(9.50, N/A) (N/A, 0.00, N/A)	592.8	N/A	2.2896 [2.0000]	114.5% { 129.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 102491	(5.86, N/A) (N/A, -0.03, N/A)	529.9	N/A	4.0924 [4.0000]	102.3% { 109.8% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 124018	(7.60, N/A) (N/A, -0.02, N/A)	583.5	N/A	4.0500 [4.0000]	101.3% { 111.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 117086	(9.02, N/A) (N/A, -0.01, N/A)	349.5	N/A	3.8325 [4.0000]	95.8% { 105.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1152362	(10.18, N/A) (N/A, 0.01, N/A)	1025.9	N/A	2.1152 [2.0000]	105.8% { 111.3% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 314976	(10.60, N/A) (N/A, 0.00, N/A)	956.5	N/A	2.2524 [2.0000]	112.6% { 134.6% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 286579	(10.69, N/A) (N/A, 0.00, N/A)	1156.5	N/A	2.3620 [2.0000]	118.1% { 133.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 333864	(9.54, N/A) (N/A, 0.00, N/A)	278.0	N/A	3.9164 [4.0000]	97.9% { 105.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 345380	(9.71, N/A) (N/A, 0.00, N/A)	355.3	N/A	4.4775 [4.0000]	111.9% { 116.6% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 566318	(10.56, N/A) (N/A, 0.01, N/A)	1440.8	N/A	21.1239 [20.0000]	105.6% { 124.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 302329	(10.66, N/A) (N/A, 0.01, N/A)	1820.0	N/A	22.5056 [20.0000]	112.5% { 126.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 880191	(6.55, N/A) (N/A, -0.03, N/A)	878.5	N/A	8.2642 [8.0000]	103.3% { 117.5% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB1	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB1	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	10.5	ng/mL		
	13C5-PFPEA	4.64	ng/mL		
	13C5-PFHXA	2.18	ng/mL		
	13C4-PFHPA	2.20	ng/mL		
	13C8-PFOA	2.65	ng/mL		
	13C9-PFNA	1.19	ng/mL		
	13C6-PFDA	1.26	ng/mL		
	13C7-PFUnA	1.44	ng/mL		
	13C2-PFDOA	1.02	ng/mL		
	13C2-PFTEDA	1.41	ng/mL		
	13C3-PFBS	2.59	ng/mL		
	13C3-PFHXS	2.45	ng/mL		
	13C8-PFOS	2.69	ng/mL		
	13C2-4:2FTS	4.37	ng/mL		
	13C2-6:2FTS	4.03	ng/mL		
	13C2-8:2FTS	3.56	ng/mL		
	13C8-PFOSA	2.45	ng/mL		
	D5-NETFOSA	2.38	ng/mL		
	D3-NMEFOSA	2.16	ng/mL		
	D3-NMEFOSAA	4.12	ng/mL		
	D5-NETFOSAA	4.11	ng/mL		
	D7-NMEFOSE	19.3	ng/mL		
	D9-NETFOSE	21.0	ng/mL		
	13C3-HFPO-DA	9.79	ng/mL		



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A02.wiff-
 Acquired: 2022/12/14 - 10:56

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A02.wiff-
 Acquired: 2022/12/14 - 10:56

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A02.wiff-
 Acquired: 2022/12/14 - 10:56

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

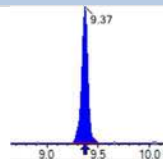
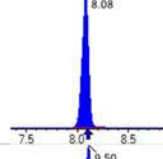
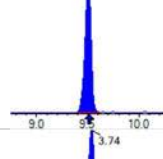
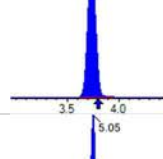
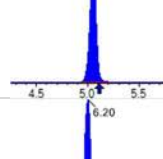
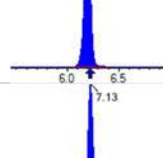
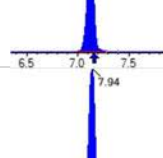
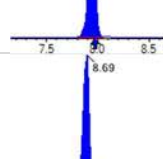
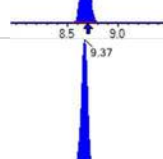
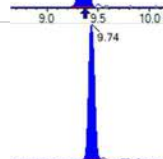
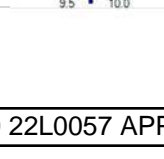


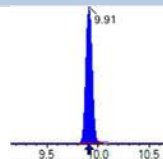
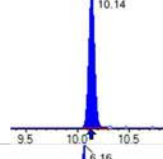
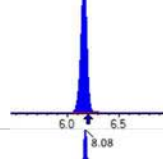
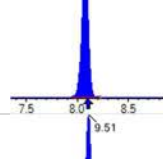
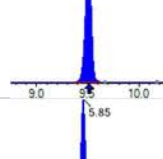
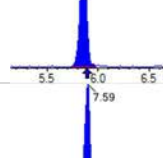
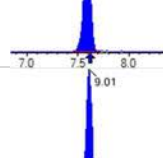
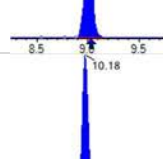
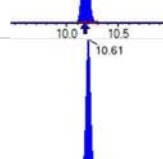
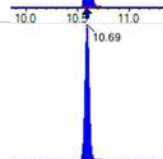
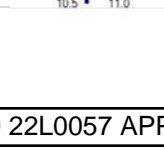
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A02.wiff-
 Acquired: 2022/12/14 - 10:56

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 78642	(3.74, N/A) (N/A, 0.02, N/A)	703.3	N/A	0.6482 [1.0000]	64.8% { 81.7% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 124570	(6.19, N/A) (N/A, 0.02, N/A)	773.8	N/A	0.6826 [1.0000]	68.3% { 71.1% }			
13C4_PFOA_IIS	(417.0 / 372.0) 107576	(7.94, N/A) (N/A, 0.02, N/A)	517.9	N/A	0.6162 [1.0000]	61.6% { 74.2% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 81915	(8.69, N/A) (N/A, 0.02, N/A)	333.8	N/A	0.6028 [1.0000]	60.3% { 69.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 94385	(9.37, N/A) (N/A, 0.02, N/A)	441.7	N/A	0.6802 [1.0000]	68.0% {72.1%}			
18O2_PFHxS_IIS	(403.0 / 83.9) 207588	(8.08, N/A) (N/A, 0.02, N/A)	853.8	N/A	0.6432 [1.0000]	64.3% {73.3%}			
13C4_PFOS_IIS	(502.8 / 79.9) 173456	(9.50, N/A) (N/A, 0.01, N/A)	304.7	N/A	0.6888 [1.0000]	68.9% {68.1%}			
13C4_PFBA_EIS	(217.0 / 172.0) 628706	(3.74, N/A) (N/A, 0.02, N/A)	882.0	N/A	10.4879 [8.0000]	131.1% {98.2%}			
13C5_PFPeA_EIS	(267.9 / 223.0) 320053	(5.05, N/A) (N/A, 0.02, N/A)	845.5	N/A	4.6395 [4.0000]	116.0% {98.0%}			
13C5_PFHxA_EIS	(318.0 / 273.0) 229356	(6.20, N/A) (N/A, 0.02, N/A)	717.9	N/A	2.1847 [2.0000]	109.2% {82.9%}			
13C4_PFHpA_EIS	(367.0 / 322.0) 200698	(7.13, N/A) (N/A, 0.02, N/A)	587.4	N/A	2.2022 [2.0000]	110.1% {86.3%}			
13C8_PFOA_EIS	(421.0 / 376.0) 218510	(7.94, N/A) (N/A, 0.02, N/A)	467.0	N/A	2.6490 [2.0000]	132.4% {94.3%}			
13C9_PFNA_EIS	(472.0 / 427.0) 75297	(8.69, N/A) (N/A, 0.02, N/A)	13406.7	N/A	1.1931 [1.0000]	119.3% {73.2%}			
13C6_PFDA_EIS	(519.0 / 474.0) 113755	(9.37, N/A) (N/A, 0.02, N/A)	332.8	N/A	1.2567 [1.0000]	125.7% {93.2%}			
13C7_PFUnA_EIS	(570.0 / 525.0) 178467	(9.74, N/A) (N/A, 0.01, N/A)	237.6	N/A	1.4355 [1.0000]	143.5% {102.2%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 155247	(9.91, N/A) (N/A, 0.01, N/A)	398.1	N/A	1.0154 [1.0000]	101.5% {74.2%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 135658	(10.14, N/A) (N/A, 0.00, N/A)	349.7	N/A	1.4131 [1.0000]	141.3% {100.6%}			
13C3_PFBs_EIS	(302.0 / 80.0) 617691	(6.16, N/A) (N/A, 0.02, N/A)	709.0	N/A	2.5861 [2.0000]	129.3% {90.8%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 329075	(8.08, N/A) (N/A, 0.02, N/A)	848.2	N/A	2.4481 [2.0000]	122.4% {87.2%}			
13C8_PFOS_EIS	(507.0 / 80.0) 580739	(9.51, N/A) (N/A, 0.01, N/A)	484.1	N/A	2.6891 [2.0000]	134.5% {97.6%}			
13C2_4:2FTS_EIS	(329.0 / 81.0) 61023	(5.85, N/A) (N/A, 0.02, N/A)	357.1	N/A	4.3713 [4.0000]	109.3% {81.5%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 68769	(7.59, N/A) (N/A, 0.02, N/A)	541.9	N/A	4.0289 [4.0000]	100.7% {68.1%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 60575	(9.01, N/A) (N/A, 0.01, N/A)	331.0	N/A	3.5571 [4.0000]	88.9% {62.5%}			
13C8_PFOsa_EIS	(506.0 / 78.0) 800573	(10.18, N/A) (N/A, 0.00, N/A)	1283.5	N/A	2.4507 [2.0000]	122.5% {90.7%}			
D3_NMeFOSA_EIS	(515.0 / 169.0) 180858	(10.61, N/A) (N/A, 0.01, N/A)	1024.1	N/A	2.1569 [2.0000]	107.8% {77.3%}			
D5_NEiFOSA_EIS	(531.1 / 169.0) 172986	(10.69, N/A) (N/A, 0.00, N/A)	1193.9	N/A	2.3778 [2.0000]	118.9% {91.4%}			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A02.wiff-
 Acquired: 2022/12/14 - 10:56

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 210505	(9.54, N/A) (N/A, 0.01, N/A)	397.0	N/A	4.1182 [4.0000]	103.0% {82.9%}			
D5_EtFOSAA_EIS	(589.0 / 419.0) 190123	(9.71, N/A) (N/A, 0.01, N/A)	310.4	N/A	4.1106 [4.0000]	102.8% {77.4%}			
D7_NMeFOSE_EIS	(623.2 / 58.9) 310432	(10.57, N/A) (N/A, 0.00, N/A)	823.1	N/A	19.3111 [20.0000]	96.6% {76.5%}			
D9_NEtFOSE_EIS	(639.2 / 58.9) 168854	(10.67, N/A) (N/A, 0.00, N/A)	1011.2	N/A	20.9628 [20.0000]	104.8% {77.4%}			
13C3_HFPODA_EIS	(287.0 / 169.0) 629253	(6.54, N/A) (N/A, 0.02, N/A)	982.7	N/A	9.7852 [8.0000]	122.3% {94.7%}			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB2	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0146	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB2	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	10.3	ng/mL		
	13C5-PFPEA	4.35	ng/mL		
	13C5-PFHXA	2.53	ng/mL		
	13C4-PFHPA	2.19	ng/mL		
	13C8-PFOA	2.51	ng/mL		
	13C9-PFNA	1.35	ng/mL		
	13C6-PFDA	1.42	ng/mL		
	13C7-PFUnA	1.47	ng/mL		
	13C2-PFDOA	1.20	ng/mL		
	13C2-PFTEDA	1.26	ng/mL		
	13C3-PFBS	2.50	ng/mL		
	13C3-PFHXS	2.43	ng/mL		
	13C8-PFOS	2.80	ng/mL		
	13C2-4:2FTS	5.34	ng/mL		
	13C2-6:2FTS	5.19	ng/mL		
	13C2-8:2FTS	4.79	ng/mL		
	13C8-PFOSA	2.53	ng/mL		
	D5-NETFOSA	2.69	ng/mL		
	D3-NMEFOSA	2.53	ng/mL		
	D3-NMEFOSAA	5.34	ng/mL		
	D5-NETFOSAA	5.05	ng/mL		
	D7-NMEFOSE	24.1	ng/mL		
	D9-NETFOSAA	25.1	ng/mL		
	13C3-HFPO-DA	8.96	ng/mL		



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A07.wiff-
 Acquired: 2022/12/14 - 11:59

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A07.wiff-
 Acquired: 2022/12/14 - 11:59

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 4952 (499.0 / 99.0) 1095	(9.52 , 1.00) (0.00 , N/A , -0.2)	40.4 524.0	0.2212 96.4 86.7	0.0146	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A07.wiff-
 Acquired: 2022/12/14 - 11:59

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A07.wiff-
 Acquired: 2022/12/14 - 11:59

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 81062	(3.80, N/A) (N/A, 0.08, N/A)	602.4	N/A	0.6681 [1.0000]	66.8% { 84.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 136381	(6.26, N/A) (N/A, 0.08, N/A)	520.5	N/A	0.7474 [1.0000]	74.7% { 77.8% }			
13C4_PFOA_IIS	(417.0 / 372.0) 121284	(7.98, N/A) (N/A, 0.05, N/A)	672.6	N/A	0.6948 [1.0000]	69.5% { 83.7% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 91557	(8.71, N/A) (N/A, 0.04, N/A)	294.2	N/A	0.6738 [1.0000]	67.4% { 78.1% }			

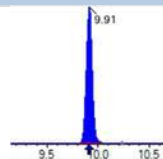
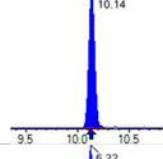
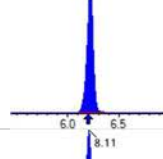
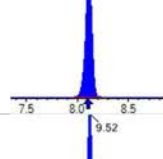
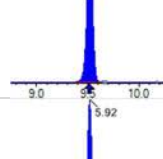
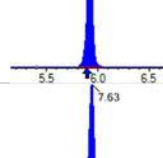
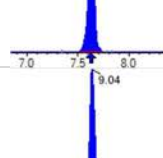
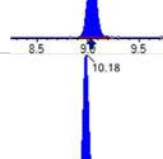
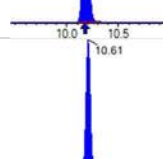
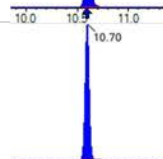



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A07.wiff-
 Acquired: 2022/12/14 - 11:59

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 90675	(9.39, N/A) (N/A, 0.04, N/A)	185.4	N/A	0.6535 [1.0000]	65.3% { 69.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 228770	(8.11, N/A) (N/A, 0.05, N/A)	869.8	N/A	0.7088 [1.0000]	70.9% { 80.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 177265	(9.52, N/A) (N/A, 0.03, N/A)	445.7	N/A	0.7039 [1.0000]	70.4% { 69.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 638254	(3.80, N/A) (N/A, 0.08, N/A)	928.2	N/A	10.3294 [8.0000]	129.1% { 99.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 328234	(5.11, N/A) (N/A, 0.09, N/A)	809.4	N/A	4.3460 [4.0000]	108.6% { 100.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 291099	(6.25, N/A) (N/A, 0.08, N/A)	891.5	N/A	2.5327 [2.0000]	126.6% { 105.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 218804	(7.17, N/A) (N/A, 0.06, N/A)	475.7	N/A	2.1930 [2.0000]	109.7% { 94.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 233233	(7.98, N/A) (N/A, 0.05, N/A)	596.1	N/A	2.5079 [2.0000]	125.4% { 100.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 95053	(8.71, N/A) (N/A, 0.04, N/A)	389.3	N/A	1.3475 [1.0000]	134.8% { 92.4% }			
13C6_PFDA_EIS	(519.0 / 474.0) 123149	(9.38, N/A) (N/A, 0.04, N/A)	320.1	N/A	1.4161 [1.0000]	141.6% { 100.9% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 175716	(9.74, N/A) (N/A, 0.01, N/A)	409.5	N/A	1.4712 [1.0000]	147.1% { 100.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDaA_EIS	(615.0 / 570.0) 176122	(9.91, N/A) (N/A, 0.01, N/A)	829.1	N/A	1.1991 [1.0000]	119.9% { 84.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 116471	(10.14, N/A) (N/A, 0.00, N/A)	452.8	N/A	1.2629 [1.0000]	126.3% { 86.4% }			
13C3_PFBs_EIS	(302.0 / 80.0) 657485	(6.22, N/A) (N/A, 0.08, N/A)	962.4	N/A	2.4978 [2.0000]	124.9% { 96.7% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 360165	(8.11, N/A) (N/A, 0.05, N/A)	728.7	N/A	2.4313 [2.0000]	121.6% { 95.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 618881	(9.52, N/A) (N/A, 0.03, N/A)	324.1	N/A	2.8041 [2.0000]	140.2% { 104.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 82184	(5.92, N/A) (N/A, 0.09, N/A)	645.1	N/A	5.3420 [4.0000]	133.5% { 109.8% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 97584	(7.63, N/A) (N/A, 0.06, N/A)	656.3	N/A	5.1877 [4.0000]	129.7% { 96.7% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 89825	(9.04, N/A) (N/A, 0.04, N/A)	307.3	N/A	4.7863 [4.0000]	119.7% { 92.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 844788	(10.18, N/A) (N/A, 0.01, N/A)	685.7	N/A	2.5305 [2.0000]	126.5% { 95.7% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 216736	(10.61, N/A) (N/A, 0.01, N/A)	852.3	N/A	2.5292 [2.0000]	126.5% { 92.7% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 200157	(10.70, N/A) (N/A, 0.01, N/A)	1097.5	N/A	2.6922 [2.0000]	134.6% { 105.7% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A07.wiff-
 Acquired: 2022/12/14 - 11:59

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 278909	(9.55 , N/A) (N/A , 0.02 , N/A)	342.6	N/A	5.3391 [4.0000]	133.5% { 109.9% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 238885	(9.71 , N/A) (N/A , 0.02 , N/A)	420.2	N/A	5.0538 [4.0000]	126.3% { 97.2% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 395712	(10.57 , N/A) (N/A , 0.01 , N/A)	955.7	N/A	24.0872 [20.0000]	120.4% { 97.5% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 206221	(10.67 , N/A) (N/A , 0.01 , N/A)	1068.0	N/A	25.0516 [20.0000]	125.3% { 94.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 630812	(6.60 , N/A) (N/A , 0.07 , N/A)	761.9	N/A	8.9600 [8.0000]	112.0% { 94.9% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB3	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB3	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	9.68	ng/mL		
	13C5-PFPEA	4.89	ng/mL		
	13C5-PFHXA	2.41	ng/mL		
	13C4-PFHPA	2.78	ng/mL		
	13C8-PFOA	2.54	ng/mL		
	13C9-PFNA	1.09	ng/mL		
	13C6-PFDA	1.58	ng/mL		
	13C7-PFUnA	1.80	ng/mL		
	13C2-PFDOA	1.41	ng/mL		
	13C2-PFTEDA	1.72	ng/mL		
	13C3-PFBS	2.57	ng/mL		
	13C3-PFHXS	2.59	ng/mL		
	13C8-PFOS	2.44	ng/mL		
	13C2-4:2FTS	4.49	ng/mL		
	13C2-6:2FTS	5.06	ng/mL		
	13C2-8:2FTS	4.74	ng/mL		
	13C8-PFOSA	2.55	ng/mL		
	D5-NETFOSA	2.98	ng/mL		
	D3-NMEFOSA	2.55	ng/mL		
	D3-NMEFOSAA	5.35	ng/mL		
	D5-NETFOSAA	5.56	ng/mL		
	D7-NMEFOSE	26.3	ng/mL		
	D9-NETFOSAE	29.7	ng/mL		
	13C3-HFPO-DA	10.2	ng/mL		

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (25)
 Acquired: 2022/12/14 - 16:26

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

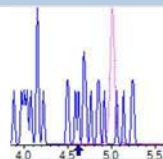
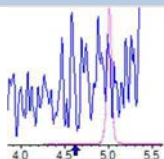
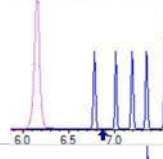
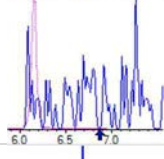
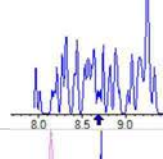
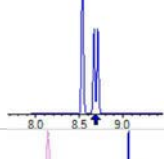
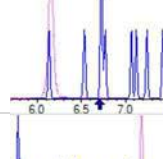
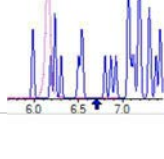
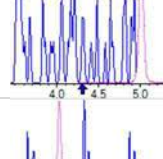
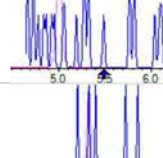
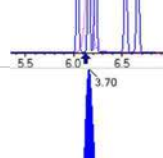
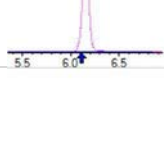
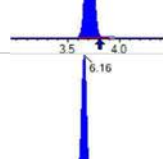
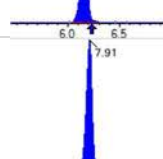
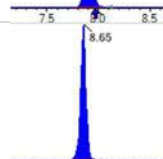
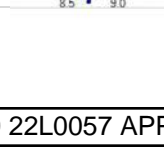


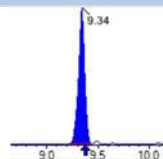
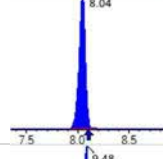
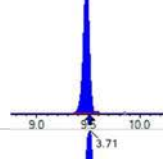
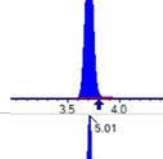
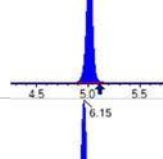
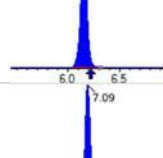
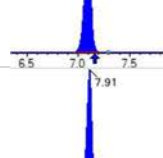
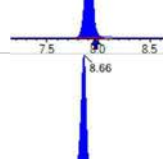
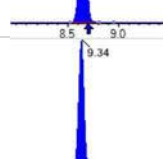
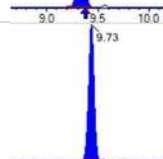

Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

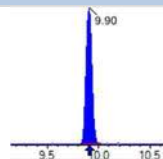
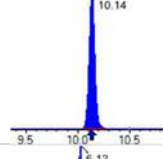
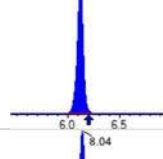
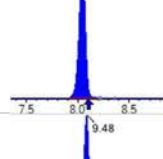
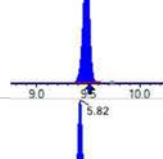
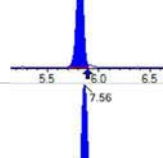
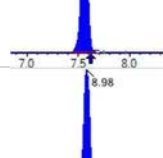
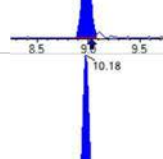
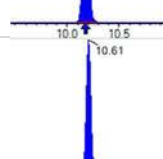
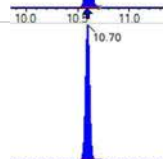
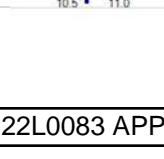
Sample I.D.: SB03835-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

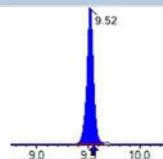
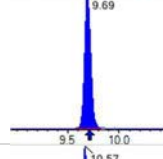
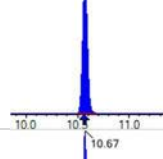
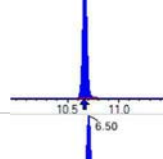
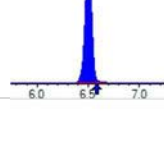
Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (25)
 Acquired: 2022/12/14 - 16:26

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 81261	(3.70, N/A) (N/A, -0.01, N/A)	736.0	N/A	0.6697 [1.0000]	67.0% { 84.4% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 125160	(6.16, N/A) (N/A, -0.02, N/A)	579.7	N/A	0.6859 [1.0000]	68.6% { 71.4% }			
13C4_PFOA_IIS	(417.0 / 372.0) 129783	(7.91, N/A) (N/A, -0.01, N/A)	731.0	N/A	0.7435 [1.0000]	74.3% { 89.5% }			
13C5_PFNA_IIS	(468.0 / 423.0) 114177	(8.65, N/A) (N/A, -0.02, N/A)	371.6	N/A	0.8402 [1.0000]	84.0% { 97.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 88998	(9.34, N/A) (N/A, 0.00, N/A)	296.2	N/A	0.6414 [1.0000]	64.1% { 67.9% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 231716	(8.04, N/A) (N/A, -0.02, N/A)	843.0	N/A	0.7180 [1.0000]	71.8% { 81.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 187715	(9.48, N/A) (N/A, -0.01, N/A)	366.0	N/A	0.7454 [1.0000]	74.5% { 73.7% }			
13C4_PFBA_EIS	(217.0 / 172.0) 599810	(3.71, N/A) (N/A, -0.01, N/A)	1025.7	N/A	9.6833 [8.0000]	121.0% { 93.6% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 339169	(5.01, N/A) (N/A, -0.02, N/A)	792.9	N/A	4.8934 [4.0000]	122.3% { 103.8% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 253699	(6.15, N/A) (N/A, -0.02, N/A)	461.4	N/A	2.4052 [2.0000]	120.3% { 91.6% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 254796	(7.09, N/A) (N/A, -0.01, N/A)	639.5	N/A	2.7827 [2.0000]	139.1% { 109.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 253264	(7.91, N/A) (N/A, -0.01, N/A)	538.3	N/A	2.5449 [2.0000]	127.2% { 109.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 96079	(8.66, N/A) (N/A, -0.01, N/A)	337.9	N/A	1.0922 [1.0000]	109.2% { 93.4% }			
13C6_PFDA_EIS	(519.0 / 474.0) 135115	(9.34, N/A) (N/A, -0.01, N/A)	364.2	N/A	1.5830 [1.0000]	158.3% { 110.7% }			S2,
13C7_PFUnA_EIS	(570.0 / 525.0) 211111	(9.73, N/A) (N/A, 0.00, N/A)	589.0	N/A	1.8008 [1.0000]	180.1% { 120.8% }			S2,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 203667	(9.90, N/A) (N/A, 0.00, N/A)	483.9	N/A	1.4128 [1.0000]	141.3% { 97.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 155794	(10.14, N/A) (N/A, 0.00, N/A)	449.8	N/A	1.7211 [1.0000]	172.1% { 115.5% }			S2,
13C3_PFBs_EIS	(302.0 / 80.0) 686151	(6.12, N/A) (N/A, -0.02, N/A)	662.4	N/A	2.5736 [2.0000]	128.7% { 100.9% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 388702	(8.04, N/A) (N/A, -0.02, N/A)	721.5	N/A	2.5906 [2.0000]	129.5% { 103.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 570879	(9.48, N/A) (N/A, -0.01, N/A)	574.2	N/A	2.4426 [2.0000]	122.1% { 95.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 70019	(5.82, N/A) (N/A, -0.02, N/A)	516.1	N/A	4.4934 [4.0000]	112.3% { 93.6% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 96313	(7.56, N/A) (N/A, -0.01, N/A)	680.7	N/A	5.0551 [4.0000]	126.4% { 95.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 90193	(8.98, N/A) (N/A, -0.01, N/A)	295.4	N/A	4.7448 [4.0000]	118.6% { 93.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 903119	(10.18, N/A) (N/A, 0.01, N/A)	978.8	N/A	2.5546 [2.0000]	127.7% { 102.3% }			
D3_NMeFOsa_EIS	(515.0 / 169.0) 231818	(10.61, N/A) (N/A, 0.01, N/A)	1137.1	N/A	2.5546 [2.0000]	127.7% { 99.1% }			
D5_NEtFOsa_EIS	(531.1 / 169.0) 234416	(10.70, N/A) (N/A, 0.01, N/A)	1078.0	N/A	2.9774 [2.0000]	148.9% { 123.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 296006	(9.52, N/A) (N/A, -0.01, N/A)	264.8	N/A	5.3510 [4.0000]	133.8% { 116.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 278184	(9.69, N/A) (N/A, -0.01, N/A)	418.6	N/A	5.5576 [4.0000]	138.9% { 113.2% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 456921	(10.57, N/A) (N/A, 0.01, N/A)	1180.7	N/A	26.2647 [20.0000]	131.3% { 112.5% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 258780	(10.67, N/A) (N/A, 0.01, N/A)	1154.2	N/A	29.6865 [20.0000]	148.4% { 118.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 657508	(6.50, N/A) (N/A, -0.02, N/A)	1256.0	N/A	10.1765 [8.0000]	127.2% { 98.9% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB4	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB4	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	10.3	ng/mL		
	13C5-PFPEA	5.01	ng/mL		
	13C5-PFHXA	2.62	ng/mL		
	13C4-PFHPA	2.80	ng/mL		
	13C8-PFOA	2.64	ng/mL		
	13C9-PFNA	1.35	ng/mL		
	13C6-PFDA	1.26	ng/mL		
	13C7-PFUnA	1.43	ng/mL		
	13C2-PFDOA	1.27	ng/mL		
	13C2-PFTEDA	1.44	ng/mL		
	13C3-PFBS	2.34	ng/mL		
	13C3-PFHXS	2.57	ng/mL		
	13C8-PFOS	2.87	ng/mL		
	13C2-4:2FTS	4.81	ng/mL		
	13C2-6:2FTS	5.24	ng/mL		
	13C2-8:2FTS	5.09	ng/mL		
	13C8-PFOSA	2.64	ng/mL		
	D5-NETFOSA	3.05	ng/mL		
	D3-NMEFOSA	2.73	ng/mL		
	D3-NMEFOSAA	5.37	ng/mL		
	D5-NETFOSAA	5.18	ng/mL		
	D7-NMEFOSE	27.0	ng/mL		
	D9-NETFOSSE	29.5	ng/mL		
	13C3-HFPO-DA	10.2	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (39)
 Acquired: 2022/12/14 - 19:24

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (39)
 Acquired: 2022/12/14 - 19:24

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

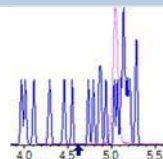
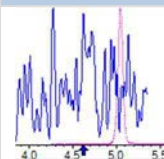
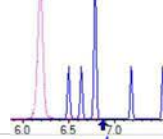
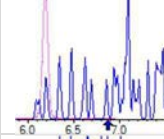
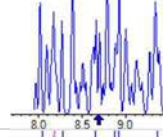
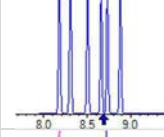
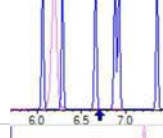
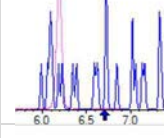
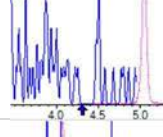
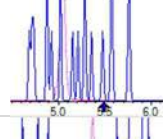
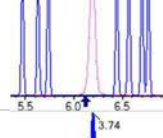
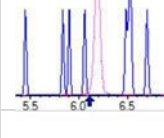
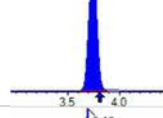
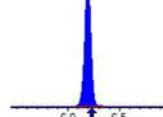
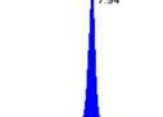
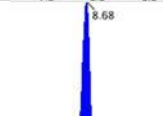


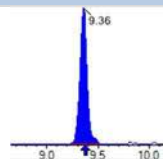
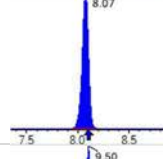
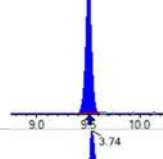
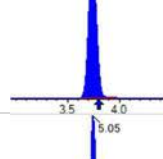
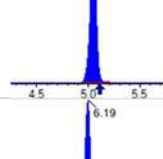
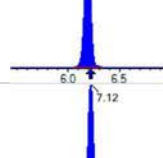
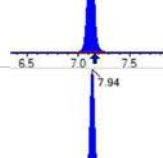
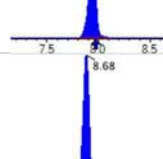
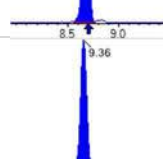
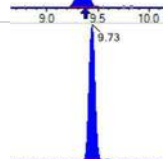

Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

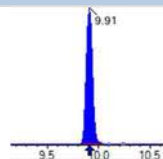
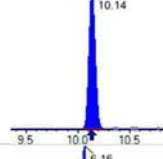
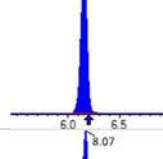
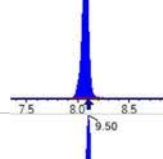
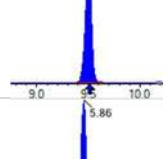
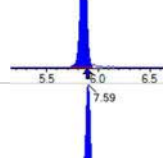
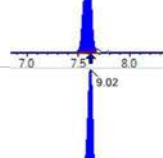
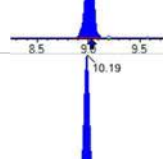
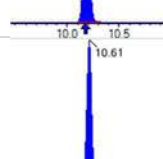
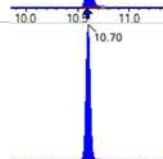
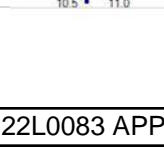
Sample I.D.: SB03835-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (39)
 Acquired: 2022/12/14 - 19:24

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 81038	(3.74, N/A) (N/A, 0.03, N/A)	588.6	N/A	0.6679 [1.0000]	66.8% { 84.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 122671	(6.19, N/A) (N/A, 0.02, N/A)	887.2	N/A	0.6722 [1.0000]	67.2% { 70.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 120808	(7.94, N/A) (N/A, 0.01, N/A)	466.7	N/A	0.6920 [1.0000]	69.2% { 83.3% }			
13C5_PFNA_IIS	(468.0 / 423.0) 90135	(8.68, N/A) (N/A, 0.01, N/A)	403.9	N/A	0.6633 [1.0000]	66.3% { 76.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 97340	(9.36, N/A) (N/A, 0.01, N/A)	223.7	N/A	0.7015 [1.0000]	70.2% { 74.3% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 225745	(8.07, N/A) (N/A, 0.01, N/A)	938.8	N/A	0.6995 [1.0000]	69.9% { 79.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 177978	(9.50, N/A) (N/A, 0.01, N/A)	479.0	N/A	0.7068 [1.0000]	70.7% { 69.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 637280	(3.74, N/A) (N/A, 0.03, N/A)	925.0	N/A	10.3166 [8.0000]	129.0% { 99.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 340278	(5.05, N/A) (N/A, 0.02, N/A)	650.5	N/A	5.0090 [4.0000]	125.2% { 104.2% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 270968	(6.19, N/A) (N/A, 0.02, N/A)	631.9	N/A	2.6210 [2.0000]	131.1% { 97.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 251658	(7.12, N/A) (N/A, 0.02, N/A)	706.4	N/A	2.8042 [2.0000]	140.2% { 108.3% }			
13C8_PFOA_EIS	(421.0 / 376.0) 244596	(7.94, N/A) (N/A, 0.02, N/A)	690.2	N/A	2.6404 [2.0000]	132.0% { 105.5% }			
13C9_PFNA_EIS	(472.0 / 427.0) 93911	(8.68, N/A) (N/A, 0.02, N/A)	239.1	N/A	1.3523 [1.0000]	135.2% { 91.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 117386	(9.36, N/A) (N/A, 0.01, N/A)	438.2	N/A	1.2574 [1.0000]	125.7% { 96.2% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 183031	(9.73, N/A) (N/A, 0.00, N/A)	434.7	N/A	1.4275 [1.0000]	142.8% { 104.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 200649	(9.91, N/A) (N/A, 0.00, N/A)	392.8	N/A	1.2726 [1.0000]	127.3% { 95.9% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 142155	(10.14, N/A) (N/A, 0.00, N/A)	275.6	N/A	1.4359 [1.0000]	143.6% { 105.4% }			
13C3_PFBs_EIS	(302.0 / 80.0) 608618	(6.16, N/A) (N/A, 0.01, N/A)	738.7	N/A	2.3431 [2.0000]	117.2% { 89.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 376036	(8.07, N/A) (N/A, 0.01, N/A)	909.4	N/A	2.5724 [2.0000]	128.6% { 99.6% }			
13C8_PFOS_EIS	(507.0 / 80.0) 635346	(9.50, N/A) (N/A, 0.01, N/A)	303.7	N/A	2.8672 [2.0000]	143.4% { 106.7% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 73030	(5.86, N/A) (N/A, 0.02, N/A)	476.9	N/A	4.8106 [4.0000]	120.3% { 97.6% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 97315	(7.59, N/A) (N/A, 0.02, N/A)	835.5	N/A	5.2428 [4.0000]	131.1% { 96.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 94227	(9.02, N/A) (N/A, 0.02, N/A)	393.6	N/A	5.0882 [4.0000]	127.2% { 97.1% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 884546	(10.19, N/A) (N/A, 0.01, N/A)	1227.7	N/A	2.6390 [2.0000]	131.9% { 100.2% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 234747	(10.61, N/A) (N/A, 0.01, N/A)	827.0	N/A	2.7284 [2.0000]	136.4% { 100.4% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 227508	(10.70, N/A) (N/A, 0.01, N/A)	1417.8	N/A	3.0478 [2.0000]	152.4% { 120.1% }			S2,



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (39)
 Acquired: 2022/12/14 - 19:24

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 281518	(9.53, N/A) (N/A, 0.01, N/A)	409.5	N/A	5.3675 [4.0000]	134.2% { 110.9% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 245755	(9.71, N/A) (N/A, 0.01, N/A)	294.4	N/A	5.1783 [4.0000]	129.5% { 100.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 445534	(10.58, N/A) (N/A, 0.01, N/A)	743.3	N/A	27.0112 [20.0000]	135.1% { 109.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 243746	(10.67, N/A) (N/A, 0.01, N/A)	889.5	N/A	29.4915 [20.0000]	147.5% { 111.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 645502	(6.54, N/A) (N/A, 0.02, N/A)	894.1	N/A	10.1934 [8.0000]	127.4% { 97.1% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB5	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0115	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03835-CCB5	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	10.1	ng/mL		
	13C5-PFPEA	4.99	ng/mL		
	13C5-PFHXA	2.65	ng/mL		
	13C4-PFHPA	2.73	ng/mL		
	13C8-PFOA	2.61	ng/mL		
	13C9-PFNA	1.24	ng/mL		
	13C6-PFDA	1.26	ng/mL		
	13C7-PFUnA	1.37	ng/mL		
	13C2-PFDOA	1.45	ng/mL		
	13C2-PFTEDA	1.46	ng/mL		
	13C3-PFBS	2.60	ng/mL		
	13C3-PFHXS	2.24	ng/mL		
	13C8-PFOS	2.32	ng/mL		
	13C2-4:2FTS	4.42	ng/mL		
	13C2-6:2FTS	4.80	ng/mL		
	13C2-8:2FTS	5.10	ng/mL		
	13C8-PFOSA	2.54	ng/mL		
	D5-NETFOSA	2.94	ng/mL		
	D3-NMEFOSA	2.38	ng/mL		
	D3-NMEFOSAA	4.80	ng/mL		
	D5-NETFOSAA	5.30	ng/mL		
	D7-NMEFOSE	29.4	ng/mL		
	D9-NETFOSAE	28.5	ng/mL		
	13C3-HFPO-DA	11.2	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB5
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (54)
 Acquired: 2022/12/14 - 22:34

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB5
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (54)
 Acquired: 2022/12/14 - 22:34

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 3572 (499.0 / 99.0) 546	(9.50 , 1.00) (-0.01 , N/A , -2.7)	22.8 352.9	0.1529 66.6 60.0	0.0115	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB5
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (54)
 Acquired: 2022/12/14 - 22:34

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

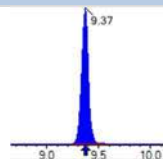
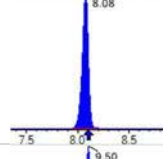
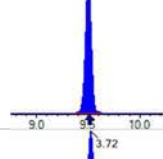
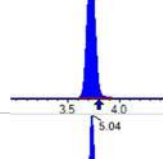
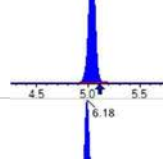
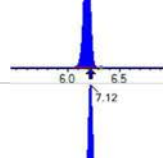
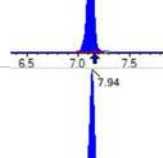
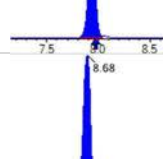
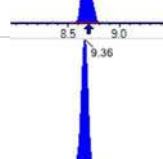
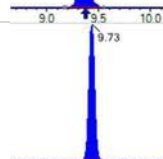
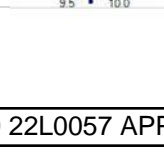


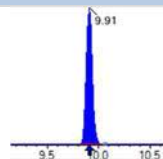
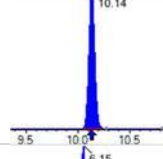
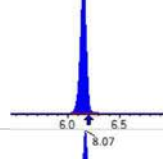
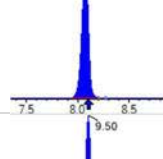
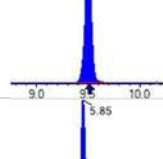
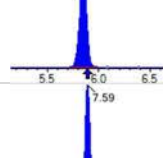
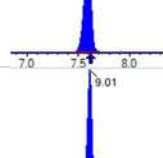
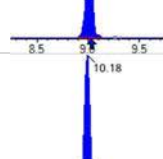
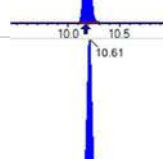
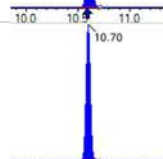
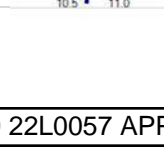
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB5
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (54)
 Acquired: 2022/12/14 - 22:34

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 81554	(3.73, N/A) (N/A, 0.01, N/A)	808.4	N/A	0.6722 [1.0000]	67.2% { 84.7% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 124402	(6.18, N/A) (N/A, 0.01, N/A)	497.0	N/A	0.6817 [1.0000]	68.2% { 71.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 121074	(7.94, N/A) (N/A, 0.02, N/A)	614.6	N/A	0.6936 [1.0000]	69.4% { 83.5% }			
13C5_PFNA_IIS	(468.0 / 423.0) 99985	(8.68, N/A) (N/A, 0.01, N/A)	349.2	N/A	0.7358 [1.0000]	73.6% { 85.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 97189	(9.37, N/A) (N/A, 0.02, N/A)	547.3	N/A	0.7004 [1.0000]	70.0% { 74.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 248721	(8.08, N/A) (N/A, 0.02, N/A)	827.5	N/A	0.7707 [1.0000]	77.1% { 87.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 195660	(9.50, N/A) (N/A, 0.01, N/A)	437.7	N/A	0.7770 [1.0000]	77.7% { 76.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 624886	(3.72, N/A) (N/A, 0.01, N/A)	916.8	N/A	10.0520 [8.0000]	125.6% { 97.6% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 343667	(5.04, N/A) (N/A, 0.01, N/A)	810.7	N/A	4.9885 [4.0000]	124.7% { 105.2% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 277388	(6.18, N/A) (N/A, 0.01, N/A)	754.4	N/A	2.6458 [2.0000]	132.3% { 100.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 248177	(7.12, N/A) (N/A, 0.01, N/A)	480.7	N/A	2.7269 [2.0000]	136.3% { 106.8% }			
13C8_PFOA_EIS	(421.0 / 376.0) 242543	(7.94, N/A) (N/A, 0.02, N/A)	616.2	N/A	2.6125 [2.0000]	130.6% { 104.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 95770	(8.68, N/A) (N/A, 0.02, N/A)	437.8	N/A	1.2432 [1.0000]	124.3% { 93.1% }			
13C6_PFDA_EIS	(519.0 / 474.0) 117147	(9.36, N/A) (N/A, 0.01, N/A)	276.6	N/A	1.2568 [1.0000]	125.7% { 96.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 175805	(9.73, N/A) (N/A, 0.00, N/A)	446.9	N/A	1.3733 [1.0000]	137.3% { 100.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 228715	(9.91, N/A) (N/A, 0.00, N/A)	530.8	N/A	1.4528 [1.0000]	145.3% { 109.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 144497	(10.14, N/A) (N/A, 0.00, N/A)	496.2	N/A	1.4618 [1.0000]	146.2% { 107.1% }			
13C3_PFBs_EIS	(302.0 / 80.0) 743679	(6.15, N/A) (N/A, 0.01, N/A)	875.6	N/A	2.5986 [2.0000]	129.9% { 109.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 360020	(8.07, N/A) (N/A, 0.01, N/A)	843.8	N/A	2.2354 [2.0000]	111.8% { 95.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 564546	(9.50, N/A) (N/A, 0.01, N/A)	490.7	N/A	2.3174 [2.0000]	115.9% { 94.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 73987	(5.85, N/A) (N/A, 0.01, N/A)	475.2	N/A	4.4234 [4.0000]	110.6% { 98.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 98160	(7.59, N/A) (N/A, 0.02, N/A)	696.0	N/A	4.7998 [4.0000]	120.0% { 97.3% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 104138	(9.01, N/A) (N/A, 0.02, N/A)	433.3	N/A	5.1039 [4.0000]	127.6% { 107.4% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 934647	(10.18, N/A) (N/A, 0.01, N/A)	921.5	N/A	2.5365 [2.0000]	126.8% { 105.8% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 225299	(10.61, N/A) (N/A, 0.01, N/A)	711.5	N/A	2.3820 [2.0000]	119.1% { 96.3% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 241321	(10.70, N/A) (N/A, 0.01, N/A)	1349.3	N/A	2.9407 [2.0000]	147.0% { 127.4% }			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03835-CCB5
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14A (54)
 Acquired: 2022/12/14 - 22:34

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 276862	(9.54 , N/A) (N/A , 0.01 , N/A)	432.3	N/A	4.8017 [4.0000]	120.0% { 109.1% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 276650	(9.71 , N/A) (N/A , 0.01 , N/A)	214.9	N/A	5.3025 [4.0000]	132.6% { 112.6% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 533985	(10.58 , N/A) (N/A , 0.01 , N/A)	1055.0	N/A	29.4480 [20.0000]	147.2% { 131.5% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 259014	(10.67 , N/A) (N/A , 0.01 , N/A)	1091.8	N/A	28.5067 [20.0000]	142.5% { 118.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 721741	(6.54 , N/A) (N/A , 0.01 , N/A)	1025.5	N/A	11.2387 [8.0000]	140.5% { 108.6% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03845-CCB1	PFBA	0.00	ng/mL	0.75	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03845-CCB1	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	9.89	ng/mL		
	13C5-PFPEA	4.06	ng/mL		
	13C5-PFHXA	2.45	ng/mL		
	13C4-PFHPA	2.32	ng/mL		
	13C8-PFOA	2.59	ng/mL		
	13C9-PFNA	1.20	ng/mL		
	13C6-PFDA	1.32	ng/mL		
	13C7-PFUnA	1.30	ng/mL		
	13C2-PFDOA	1.35	ng/mL		
	13C2-PFTEDA	1.40	ng/mL		
	13C3-PFBS	2.55	ng/mL		
	13C3-PFHXS	2.50	ng/mL		
	13C8-PFOS	2.44	ng/mL		
	13C2-4:2FTS	5.32	ng/mL		
	13C2-6:2FTS	5.14	ng/mL		
	13C2-8:2FTS	4.49	ng/mL		
	13C8-PFOSA	2.69	ng/mL		
	D5-NETFOSA	3.12	ng/mL		
	D3-NMEFOSA	2.69	ng/mL		
	D3-NMEFOSAA	4.70	ng/mL		
	D5-NETFOSAA	5.17	ng/mL		
	D7-NMEFOSE	26.2	ng/mL		
	D9-NETFOSAE	29.2	ng/mL		
	13C3-HFPO-DA	10.4	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (1)
 Acquired: 2022/12/14 - 23:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (1)
 Acquired: 2022/12/14 - 23:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

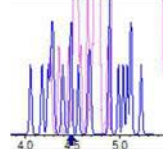
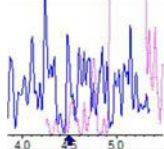
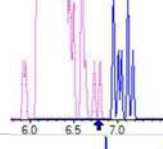
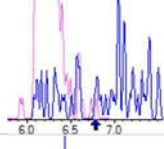
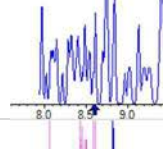
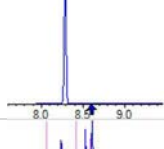
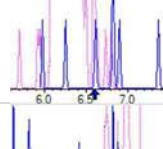
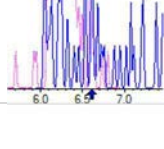
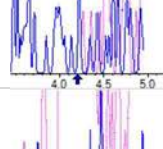
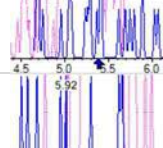
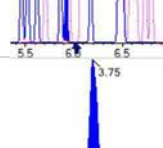
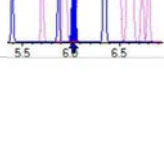
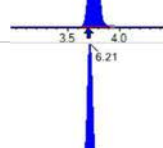
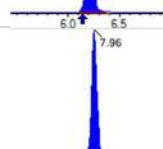
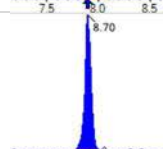
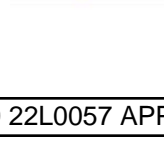


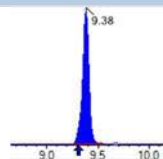
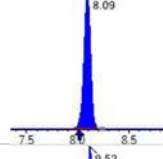
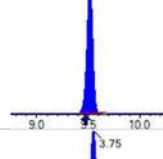
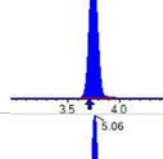
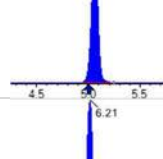
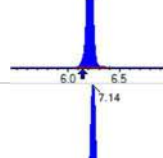
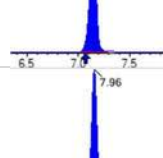
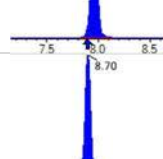
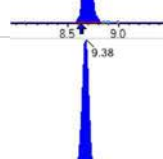
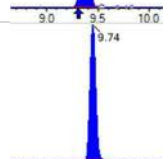
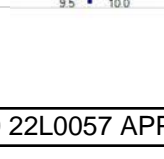
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

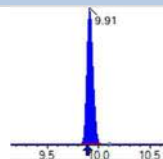
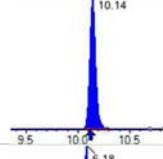
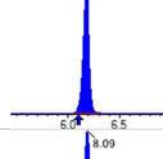
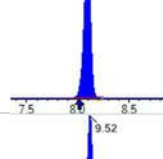
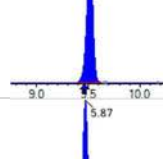
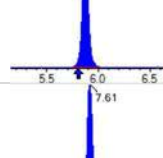
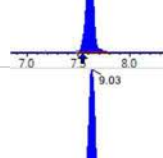
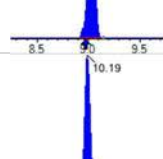
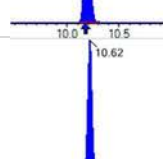
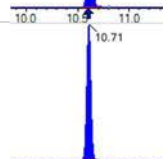
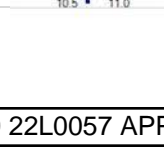
Sample I.D.: SB03845-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

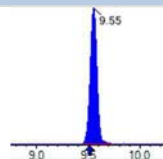
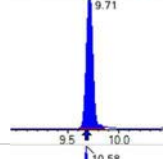
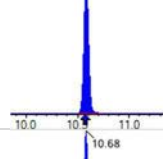
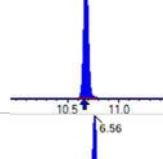
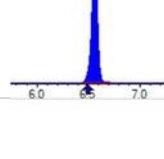
Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (1)
 Acquired: 2022/12/14 - 23:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) 63 (295.0 / 201.0) 138	(5.92, 0.95) (N/A, -0.11, -6.5)	12.4 55.3	2.1921 33.3 34.5	0.0000	N/A			IR1,
13C3_PFBA_IIS	(216.0 / 172.0) 81971	(3.75, N/A) (N/A, 0.06, N/A)	640.7	N/A	0.6756 [1.0000]	67.6% { 83.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 143951	(6.21, N/A) (N/A, 0.07, N/A)	496.0	N/A	0.7888 [1.0000]	78.9% { 81.6% }			
13C4_PFOA_IIS	(417.0 / 372.0) 124759	(7.96, N/A) (N/A, 0.07, N/A)	592.6	N/A	0.7147 [1.0000]	71.5% { 71.3% }			
13C5_PFNA_IIS	(468.0 / 423.0) 101892	(8.70, N/A) (N/A, 0.07, N/A)	281.9	N/A	0.7498 [1.0000]	75.0% { 74.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 107416	(9.38, N/A) (N/A, 0.06, N/A)	362.6	N/A	0.7741 [1.0000]	77.4% {94.1%}			
18O2_PFHxS_IIS	(403.0 / 83.9) 224647	(8.09, N/A) (N/A, 0.07, N/A)	698.4	N/A	0.6961 [1.0000]	69.6% {76.5%}			
13C4_PFOS_IIS	(502.8 / 79.9) 193165	(9.52, N/A) (N/A, 0.05, N/A)	465.5	N/A	0.7671 [1.0000]	76.7% {83.5%}			
13C4_PFBA_EIS	(217.0 / 172.0) 618098	(3.75, N/A) (N/A, 0.06, N/A)	803.6	N/A	9.8922 [8.0000]	123.7% {95.7%}			
13C5_PFPeA_EIS	(267.9 / 223.0) 324030	(5.06, N/A) (N/A, 0.06, N/A)	818.6	N/A	4.0647 [4.0000]	101.6% {84.7%}			
13C5_PFHxA_EIS	(318.0 / 273.0) 296841	(6.21, N/A) (N/A, 0.07, N/A)	636.7	N/A	2.4468 [2.0000]	122.3% {101.7%}			
13C4_PFHpA_EIS	(367.0 / 322.0) 244810	(7.14, N/A) (N/A, 0.07, N/A)	366.0	N/A	2.3246 [2.0000]	116.2% {100.1%}			
13C8_PFOA_EIS	(421.0 / 376.0) 248223	(7.96, N/A) (N/A, 0.07, N/A)	670.6	N/A	2.5947 [2.0000]	129.7% {95.5%}			
13C9_PFNA_EIS	(472.0 / 427.0) 94498	(8.70, N/A) (N/A, 0.07, N/A)	361.8	N/A	1.2038 [1.0000]	120.4% {95.5%}			
13C6_PFDA_EIS	(519.0 / 474.0) 135996	(9.38, N/A) (N/A, 0.06, N/A)	290.7	N/A	1.3201 [1.0000]	132.0% {98.4%}			
13C7_PFUnA_EIS	(570.0 / 525.0) 184627	(9.74, N/A) (N/A, 0.03, N/A)	753.7	N/A	1.3049 [1.0000]	130.5% {100.8%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 235297	(9.91, N/A) (N/A, 0.02, N/A)	574.2	N/A	1.3523 [1.0000]	135.2% {91.3%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 153436	(10.14, N/A) (N/A, 0.02, N/A)	357.5	N/A	1.4044 [1.0000]	140.4% {95.9%}			
13C3_PFBs_EIS	(302.0 / 80.0) 659373	(6.18, N/A) (N/A, 0.07, N/A)	793.5	N/A	2.5509 [2.0000]	127.5% {84.5%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 363100	(8.09, N/A) (N/A, 0.07, N/A)	770.1	N/A	2.4961 [2.0000]	124.8% {87.2%}			
13C8_PFOS_EIS	(507.0 / 80.0) 585936	(9.52, N/A) (N/A, 0.05, N/A)	442.1	N/A	2.4363 [2.0000]	121.8% {98.4%}			
13C2_4:2FTS_EIS	(329.0 / 81.0) 80361	(5.87, N/A) (N/A, 0.07, N/A)	717.3	N/A	5.3194 [4.0000]	133.0% {91.0%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 94949	(7.61, N/A) (N/A, 0.07, N/A)	597.8	N/A	5.1403 [4.0000]	128.5% {82.1%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 82662	(9.03, N/A) (N/A, 0.07, N/A)	12377.9	N/A	4.4855 [4.0000]	112.1% {77.3%}			
13C8_PFOsa_EIS	(506.0 / 78.0) 980114	(10.19, N/A) (N/A, 0.03, N/A)	826.6	N/A	2.6942 [2.0000]	134.7% {108.9%}			
D3_NMeFOsa_EIS	(515.0 / 169.0) 251649	(10.62, N/A) (N/A, 0.02, N/A)	946.0	N/A	2.6949 [2.0000]	134.7% {100.2%}			
D5_NEiFOsa_EIS	(531.1 / 169.0) 252515	(10.71, N/A) (N/A, 0.02, N/A)	1275.1	N/A	3.1168 [2.0000]	155.8% {113.5%}			S2,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 267294	(9.55, N/A) (N/A, 0.05, N/A)	381.3	N/A	4.6956 [4.0000]	117.4% {100.5%}			
D5_EtFOSAA_EIS	(589.0 / 419.0) 266439	(9.71, N/A) (N/A, 0.03, N/A)	380.1	N/A	5.1728 [4.0000]	129.3% {106.8%}			
D7_NMeFOSE_EIS	(623.2 / 58.9) 468189	(10.58, N/A) (N/A, 0.02, N/A)	1005.9	N/A	26.1531 [20.0000]	130.8% {91.7%}			
D9_NEtFOSE_EIS	(639.2 / 58.9) 261574	(10.68, N/A) (N/A, 0.02, N/A)	1194.5	N/A	29.1604 [20.0000]	145.8% {104.7%}			
13C3_HFPODA_EIS	(287.0 / 169.0) 774913	(6.56, N/A) (N/A, 0.07, N/A)	1138.8	N/A	10.4279 [8.0000]	130.3% {112.5%}			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03845-CCB2	PFBA	0.00	ng/mL	0.75	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.0187	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03845-CCB2	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	9.95	ng/mL		
	13C5-PFPEA	4.46	ng/mL		
	13C5-PFHXA	2.50	ng/mL		
	13C4-PFHPA	2.63	ng/mL		
	13C8-PFOA	2.48	ng/mL		
	13C9-PFNA	1.33	ng/mL		
	13C6-PFDA	1.06	ng/mL		
	13C7-PFUnA	1.33	ng/mL		
	13C2-PFDOA	1.24	ng/mL		
	13C2-PFTEDA	1.29	ng/mL		
	13C3-PFBS	2.78	ng/mL		
	13C3-PFHXS	2.48	ng/mL		
	13C8-PFOS	2.36	ng/mL		
	13C2-4:2FTS	5.02	ng/mL		
	13C2-6:2FTS	5.39	ng/mL		
	13C2-8:2FTS	4.77	ng/mL		
	13C8-PFOSA	2.66	ng/mL		
	D5-NETFOSA	2.89	ng/mL		
	D3-NMEFOSA	2.66	ng/mL		
	D3-NMEFOSAA	5.40	ng/mL		
	D5-NETFOSAA	4.97	ng/mL		
	D7-NMEFOSE	26.8	ng/mL		
	D9-NETFOSSE	29.8	ng/mL		
	13C3-HFPO-DA	9.94	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (4)
 Acquired: 2022/12/15 - 00:29

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 2525 (413.0 / 169.0) 589	(7.97, 1.00) (0.01, N/A, 1.2)	10.4 18.2	0.2332 69.5 74.6	0.0187	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (4)
 Acquired: 2022/12/15 - 00:29

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (4)
 Acquired: 2022/12/15 - 00:29

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (4)
 Acquired: 2022/12/15 - 00:29

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 78859	(3.73, N/A) (N/A, 0.04, N/A)	543.6	N/A	0.6499 [1.0000]	65.0% { 80.1% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 130745	(6.20, N/A) (N/A, 0.06, N/A)	770.6	N/A	0.7165 [1.0000]	71.6% { 74.1% }			
13C4_PFOA_IIS	(417.0 / 372.0) 142330	(7.96, N/A) (N/A, 0.08, N/A)	801.1	N/A	0.8153 [1.0000]	81.5% { 81.3% }			
13C5_PFNA_IIS	(468.0 / 423.0) 90766	(8.71, N/A) (N/A, 0.07, N/A)	401.2	N/A	0.6680 [1.0000]	66.8% { 66.7% }			

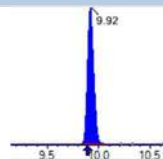
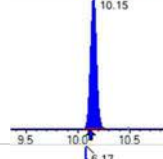
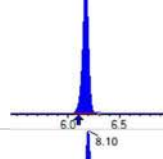
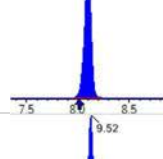
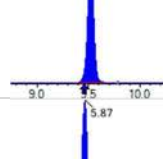
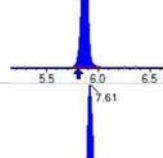
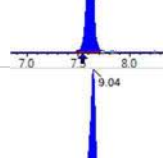
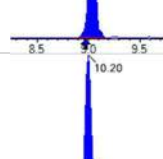
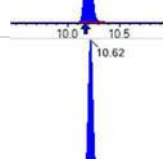
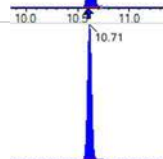
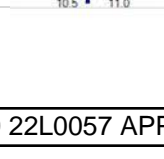


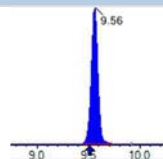
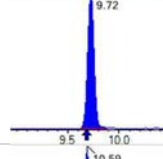
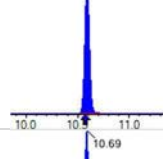
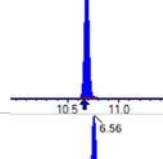
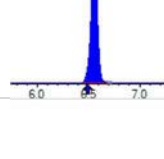
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (4)
 Acquired: 2022/12/15 - 00:29

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 108022	(9.39, N/A) (N/A, 0.07, N/A)	315.6	N/A	0.7785 [1.0000]	77.8% { 94.6% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 228113	(8.10, N/A) (N/A, 0.08, N/A)	892.2	N/A	0.7068 [1.0000]	70.7% { 77.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 181516	(9.52, N/A) (N/A, 0.06, N/A)	466.8	N/A	0.7208 [1.0000]	72.1% { 78.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 598177	(3.73, N/A) (N/A, 0.04, N/A)	730.9	N/A	9.9511 [8.0000]	124.4% { 92.6% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 322804	(5.05, N/A) (N/A, 0.05, N/A)	765.9	N/A	4.4583 [4.0000]	111.5% { 84.3% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 275821	(6.20, N/A) (N/A, 0.06, N/A)	519.7	N/A	2.5032 [2.0000]	125.2% { 94.5% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 251635	(7.14, N/A) (N/A, 0.07, N/A)	597.7	N/A	2.6308 [2.0000]	131.5% { 102.9% }			
13C8_PFOA_EIS	(421.0 / 376.0) 270734	(7.96, N/A) (N/A, 0.08, N/A)	821.1	N/A	2.4806 [2.0000]	124.0% { 104.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 93254	(8.71, N/A) (N/A, 0.07, N/A)	225.3	N/A	1.3335 [1.0000]	133.4% { 94.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 110243	(9.39, N/A) (N/A, 0.07, N/A)	283.1	N/A	1.0641 [1.0000]	106.4% { 79.8% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 189246	(9.75, N/A) (N/A, 0.04, N/A)	231.3	N/A	1.3300 [1.0000]	133.0% { 103.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 216602	(9.92, N/A) (N/A, 0.03, N/A)	356.9	N/A	1.2379 [1.0000]	123.8% { 84.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 141558	(10.15, N/A) (N/A, 0.03, N/A)	536.0	N/A	1.2885 [1.0000]	128.8% { 88.5% }			
13C3_PFBs_EIS	(302.0 / 80.0) 729029	(6.17, N/A) (N/A, 0.07, N/A)	683.1	N/A	2.7776 [2.0000]	138.9% { 93.4% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 366248	(8.10, N/A) (N/A, 0.08, N/A)	674.3	N/A	2.4795 [2.0000]	124.0% { 88.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 533321	(9.52, N/A) (N/A, 0.06, N/A)	468.9	N/A	2.3598 [2.0000]	118.0% { 89.5% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 77045	(5.87, N/A) (N/A, 0.06, N/A)	522.4	N/A	5.0224 [4.0000]	125.6% { 87.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 101111	(7.61, N/A) (N/A, 0.07, N/A)	551.0	N/A	5.3907 [4.0000]	134.8% { 87.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 89328	(9.04, N/A) (N/A, 0.08, N/A)	394.4	N/A	4.7735 [4.0000]	119.3% { 83.5% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 909808	(10.20, N/A) (N/A, 0.03, N/A)	1040.0	N/A	2.6615 [2.0000]	133.1% { 101.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 233849	(10.62, N/A) (N/A, 0.03, N/A)	973.1	N/A	2.6650 [2.0000]	133.2% { 93.1% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 219946	(10.71, N/A) (N/A, 0.03, N/A)	1168.7	N/A	2.8890 [2.0000]	144.5% { 98.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 289053	(9.56, N/A) (N/A, 0.06, N/A)	523.0	N/A	5.4037 [4.0000]	135.1% { 108.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 240398	(9.72, N/A) (N/A, 0.04, N/A)	279.3	N/A	4.9667 [4.0000]	124.2% { 96.4% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 450449	(10.59, N/A) (N/A, 0.03, N/A)	1177.2	N/A	26.7769 [20.0000]	133.9% { 88.2% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 250926	(10.69, N/A) (N/A, 0.02, N/A)	1235.6	N/A	29.7685 [20.0000]	148.8% { 100.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 670562	(6.56, N/A) (N/A, 0.07, N/A)	806.1	N/A	9.9351 [8.0000]	124.2% { 97.4% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03845-CCB3	PFBA	0.00	ng/mL	0.75	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0153	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03845-CCB3	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	9.81	ng/mL		
	13C5-PFPEA	5.13	ng/mL		
	13C5-PFHXA	2.55	ng/mL		
	13C4-PFHPA	2.75	ng/mL		
	13C8-PFOA	2.64	ng/mL		
	13C9-PFNA	1.33	ng/mL		
	13C6-PFDA	1.32	ng/mL		
	13C7-PFUnA	1.50	ng/mL		
	13C2-PFDOA	1.32	ng/mL		
	13C2-PFTEDA	1.42	ng/mL		
	13C3-PFBS	2.93	ng/mL		
	13C3-PFHXS	2.55	ng/mL		
	13C8-PFOS	2.83	ng/mL		
	13C2-4:2FTS	6.01	ng/mL		
	13C2-6:2FTS	5.47	ng/mL		
	13C2-8:2FTS	4.88	ng/mL		
	13C8-PFOSA	2.74	ng/mL		
	D5-NETFOSA	2.94	ng/mL		
	D3-NMEFOSA	2.50	ng/mL		
	D3-NMEFOSAA	5.87	ng/mL		
	D5-NETFOSAA	6.07	ng/mL		
	D7-NMEFOSE	27.9	ng/mL		
	D9-NETFOSAE	29.0	ng/mL		
	13C3-HFPO-DA	10.6	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (32)
 Acquired: 2022/12/15 - 06:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (32)
 Acquired: 2022/12/15 - 06:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 5243 (499.0 / 99.0) 1379	(9.48 , 1.00) (-0.01 , N/A , -1.7)	14.4 154.1	0.2630 114.6 116.1	0.0153	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

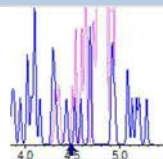
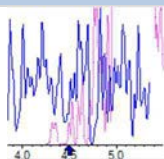
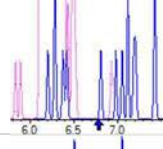
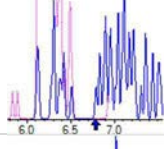
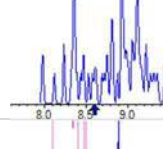
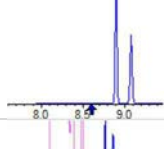
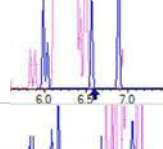
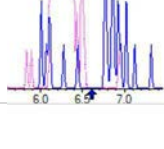
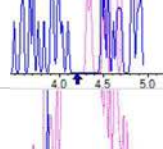
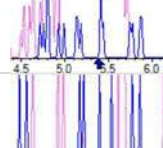
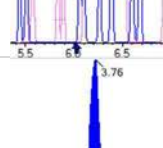
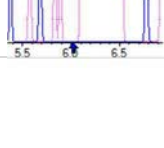
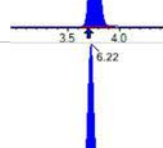
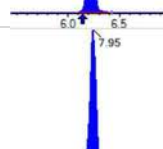
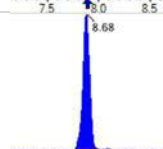
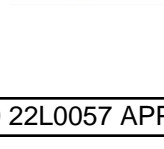


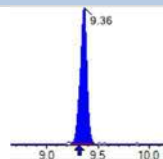
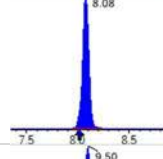
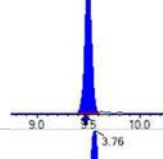
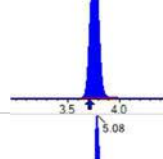
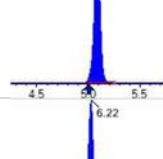
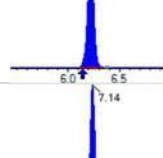
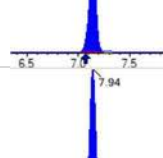
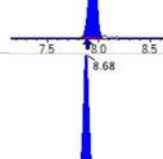
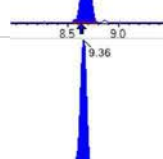
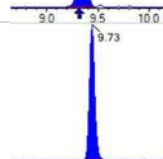
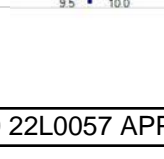
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (32)
 Acquired: 2022/12/15 - 06:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOFA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOFA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 87314	(3.76, N/A) (N/A, 0.07, N/A)	659.7	N/A	0.7196 [1.0000]	72.0% { 88.7% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 130319	(6.22, N/A) (N/A, 0.08, N/A)	672.4	N/A	0.7141 [1.0000]	71.4% { 73.9% }			
13C4_PFOA_IIS	(417.0 / 372.0) 129320	(7.95, N/A) (N/A, 0.06, N/A)	412.4	N/A	0.7408 [1.0000]	74.1% { 73.9% }			
13C5_PFNA_IIS	(468.0 / 423.0) 93678	(8.68, N/A) (N/A, 0.05, N/A)	284.3	N/A	0.6894 [1.0000]	68.9% { 68.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 94005	(9.36, N/A) (N/A, 0.04, N/A)	346.9	N/A	0.6775 [1.0000]	67.7% { 82.3% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 214523	(8.08, N/A) (N/A, 0.06, N/A)	628.0	N/A	0.6647 [1.0000]	66.5% { 73.1% }			
13C4_PFOS_IIS	(502.8 / 79.9) 177299	(9.50, N/A) (N/A, 0.03, N/A)	387.8	N/A	0.7041 [1.0000]	70.4% { 76.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 652616	(3.76, N/A) (N/A, 0.07, N/A)	946.7	N/A	9.8054 [8.0000]	122.6% { 101.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 370211	(5.08, N/A) (N/A, 0.09, N/A)	686.9	N/A	5.1298 [4.0000]	128.2% { 96.7% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 279571	(6.22, N/A) (N/A, 0.08, N/A)	753.8	N/A	2.5455 [2.0000]	127.3% { 95.8% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 262543	(7.14, N/A) (N/A, 0.07, N/A)	516.2	N/A	2.7538 [2.0000]	137.7% { 107.4% }			
13C8_PFOA_EIS	(421.0 / 376.0) 262114	(7.94, N/A) (N/A, 0.06, N/A)	592.5	N/A	2.6433 [2.0000]	132.2% { 100.8% }			
13C9_PFNA_EIS	(472.0 / 427.0) 95955	(8.68, N/A) (N/A, 0.05, N/A)	356.5	N/A	1.3295 [1.0000]	133.0% { 97.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 119299	(9.36, N/A) (N/A, 0.04, N/A)	325.9	N/A	1.3232 [1.0000]	132.3% { 86.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 185457	(9.73, N/A) (N/A, 0.02, N/A)	726.9	N/A	1.4977 [1.0000]	149.8% { 101.2% }			

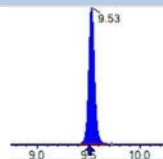
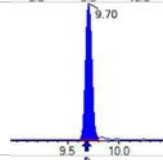
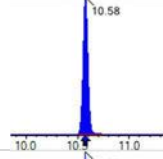
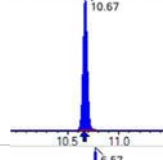
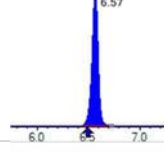


Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (32)
 Acquired: 2022/12/15 - 06:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 201465	(9.91, N/A) (N/A, 0.02, N/A)	474.6	N/A	1.3231 [1.0000]	132.3% { 78.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 135790	(10.14, N/A) (N/A, 0.01, N/A)	440.2	N/A	1.4202 [1.0000]	142.0% { 84.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 723181	(6.19, N/A) (N/A, 0.08, N/A)	952.2	N/A	2.9298 [2.0000]	146.5% { 92.7% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 353533	(8.08, N/A) (N/A, 0.06, N/A)	692.2	N/A	2.5450 [2.0000]	127.3% { 84.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 624192	(9.49, N/A) (N/A, 0.03, N/A)	649.9	N/A	2.8276 [2.0000]	141.4% { 104.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 86754	(5.89, N/A) (N/A, 0.08, N/A)	631.5	N/A	6.0136 [4.0000]	150.3% { 98.2% }			S2,
13C2_6:2FTS_EIS	(429.0 / 81.0) 96486	(7.60, N/A) (N/A, 0.06, N/A)	413.8	N/A	5.4701 [4.0000]	136.8% { 83.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 85872	(9.01, N/A) (N/A, 0.05, N/A)	255.5	N/A	4.8796 [4.0000]	122.0% { 80.3% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 913503	(10.19, N/A) (N/A, 0.02, N/A)	893.8	N/A	2.7358 [2.0000]	136.8% { 101.5% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 213971	(10.61, N/A) (N/A, 0.01, N/A)	687.2	N/A	2.4965 [2.0000]	124.8% { 85.2% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 218529	(10.70, N/A) (N/A, 0.01, N/A)	1308.6	N/A	2.9387 [2.0000]	146.9% { 98.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 306755	(9.53, N/A) (N/A, 0.03, N/A)	524.4	N/A	5.8711 [4.0000]	146.8% { 115.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 287083	(9.70, N/A) (N/A, 0.02, N/A)	421.2	N/A	6.0724 [4.0000]	151.8% { 115.1% }			S2,
D7_NMeFOSE_EIS	(623.2 / 58.9) 458607	(10.58, N/A) (N/A, 0.01, N/A)	1614.1	N/A	27.9103 [20.0000]	139.6% { 89.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 239110	(10.67, N/A) (N/A, 0.01, N/A)	1062.4	N/A	29.0414 [20.0000]	145.2% { 95.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 713512	(6.57, N/A) (N/A, 0.08, N/A)	760.2	N/A	10.6061 [8.0000]	132.6% { 103.6% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03845-CCB4	PFBA	0.00	ng/mL	0.75	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0132	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03845-CCB4	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	10.0	ng/mL		
	13C5-PFPEA	4.91	ng/mL		
	13C5-PFHXA	2.68	ng/mL		
	13C4-PFHPA	2.50	ng/mL		
	13C8-PFOA	2.47	ng/mL		
	13C9-PFNA	1.32	ng/mL		
	13C6-PFDA	1.36	ng/mL		
	13C7-PFUnA	1.64	ng/mL		
	13C2-PFDOA	1.46	ng/mL		
	13C2-PFTEDA	1.48	ng/mL		
	13C3-PFBS	2.57	ng/mL		
	13C3-PFHXS	2.32	ng/mL		
	13C8-PFOS	2.17	ng/mL		
	13C2-4:2FTS	5.20	ng/mL		
	13C2-6:2FTS	4.86	ng/mL		
	13C2-8:2FTS	4.81	ng/mL		
	13C8-PFOSA	2.07	ng/mL		
	D5-NETFOSA	2.26	ng/mL		
	D3-NMEFOSA	2.17	ng/mL		
	D3-NMEFOSAA	4.52	ng/mL		
	D5-NETFOSAA	4.05	ng/mL		
	D7-NMEFOSE	20.5	ng/mL		
	D9-NETFOSAE	21.7	ng/mL		
	13C3-HFPO-DA	9.45	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (54)
 Acquired: 2022/12/15 - 11:05

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
Instrument: Saphira
Type: Sciex Q3 5500

Sample I.D.: SB03845-CCB4
DF, IV: 1, 10.0µL
Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
Path: S2022-12-14B (54)
Acquired: 2022/12/15 - 11:05

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 4324 (499.0 / 99.0) 1392	(9.46 , 1.00) (0.01 , N/A , -0.9)	19.8 195.2	0.3220 140.3 142.1	0.0132	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

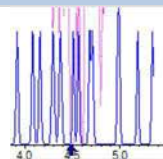
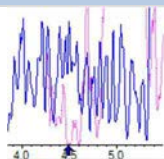
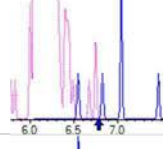
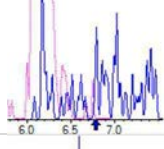
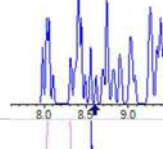
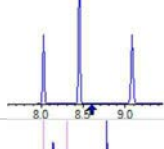
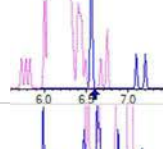
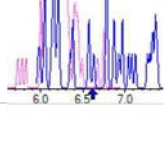
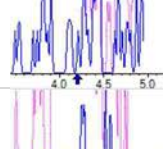
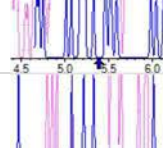
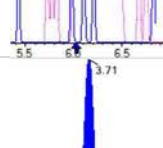
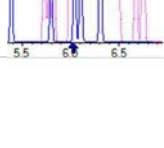
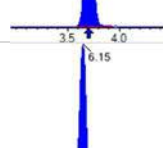
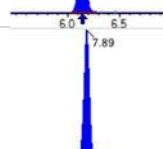
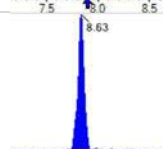
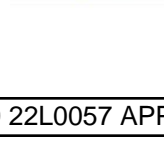


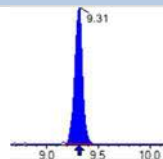
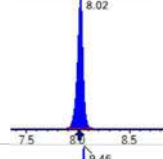
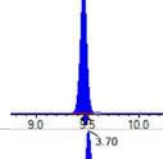
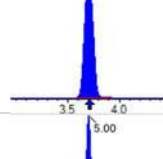
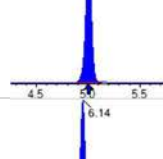
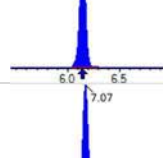
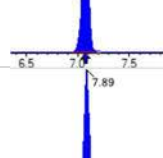
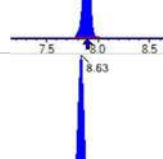
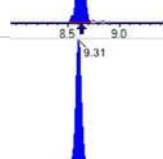
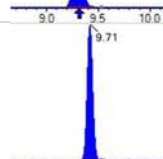
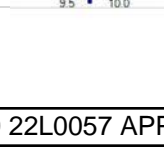
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

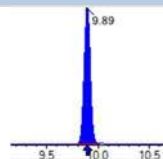
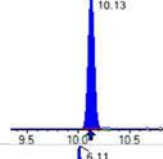
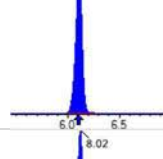
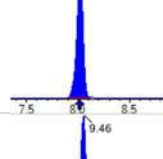
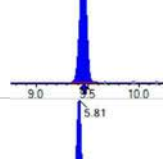
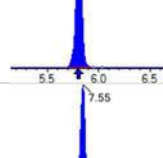
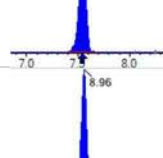
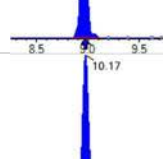
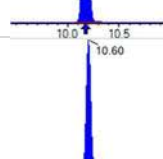
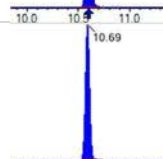
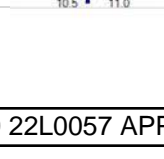
Sample I.D.: SB03845-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

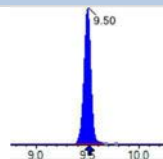
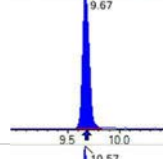
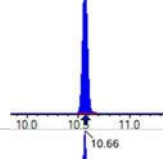
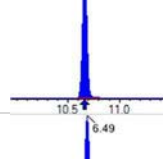
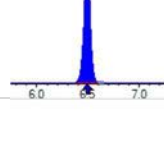
Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (54)
 Acquired: 2022/12/15 - 11:05

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 80173	(3.71, N/A) (N/A, 0.01, N/A)	665.4	N/A	0.6608 [1.0000]	66.1% { 81.4% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 127945	(6.15, N/A) (N/A, 0.00, N/A)	688.2	N/A	0.7011 [1.0000]	70.1% { 72.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 123978	(7.89, N/A) (N/A, 0.00, N/A)	741.0	N/A	0.7102 [1.0000]	71.0% { 70.9% }			
13C5_PFNA_IIS	(468.0 / 423.0) 88135	(8.63, N/A) (N/A, 0.00, N/A)	294.5	N/A	0.6486 [1.0000]	64.9% { 64.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 93849	(9.31, N/A) (N/A, -0.01, N/A)	334.3	N/A	0.6764 [1.0000]	67.6% { 82.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 219026	(8.02, N/A) (N/A, 0.00, N/A)	686.8	N/A	0.6786 [1.0000]	67.9% { 74.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 220221	(9.46, N/A) (N/A, 0.00, N/A)	449.6	N/A	0.8745 [1.0000]	87.5% { 95.2% }			
13C4_PFBA_EIS	(217.0 / 172.0) 610963	(3.70, N/A) (N/A, 0.01, N/A)	1020.4	N/A	9.9973 [8.0000]	125.0% { 94.6% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 347964	(5.00, N/A) (N/A, 0.01, N/A)	809.1	N/A	4.9110 [4.0000]	122.8% { 90.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 288787	(6.14, N/A) (N/A, 0.01, N/A)	814.0	N/A	2.6783 [2.0000]	133.9% { 98.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 234043	(7.07, N/A) (N/A, 0.00, N/A)	777.2	N/A	2.5004 [2.0000]	125.0% { 95.7% }			
13C8_PFOA_EIS	(421.0 / 376.0) 235135	(7.89, N/A) (N/A, 0.00, N/A)	896.4	N/A	2.4734 [2.0000]	123.7% { 90.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 89600	(8.63, N/A) (N/A, -0.01, N/A)	339.1	N/A	1.3195 [1.0000]	132.0% { 90.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 122519	(9.31, N/A) (N/A, -0.01, N/A)	455.4	N/A	1.3612 [1.0000]	136.1% { 88.7% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 202427	(9.71, N/A) (N/A, 0.00, N/A)	374.1	N/A	1.6375 [1.0000]	163.8% { 110.5% }			S2,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 221786	(9.89, N/A) (N/A, 0.00, N/A)	562.1	N/A	1.4589 [1.0000]	145.9% { 86.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 140806	(10.13, N/A) (N/A, 0.00, N/A)	274.1	N/A	1.4752 [1.0000]	147.5% { 88.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 648192	(6.11, N/A) (N/A, 0.01, N/A)	735.6	N/A	2.5720 [2.0000]	128.6% { 83.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 329043	(8.02, N/A) (N/A, 0.00, N/A)	843.1	N/A	2.3200 [2.0000]	116.0% { 79.1% }			
13C8_PFOS_EIS	(507.0 / 80.0) 594993	(9.46, N/A) (N/A, -0.01, N/A)	339.2	N/A	2.1700 [2.0000]	108.5% { 99.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 76580	(5.81, N/A) (N/A, 0.00, N/A)	613.9	N/A	5.1992 [4.0000]	130.0% { 86.7% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 87497	(7.55, N/A) (N/A, 0.01, N/A)	669.6	N/A	4.8584 [4.0000]	121.5% { 75.7% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 86473	(8.96, N/A) (N/A, 0.00, N/A)	300.3	N/A	4.8127 [4.0000]	120.3% { 80.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 857926	(10.17, N/A) (N/A, 0.01, N/A)	715.8	N/A	2.0686 [2.0000]	103.4% { 95.3% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 230910	(10.60, N/A) (N/A, 0.00, N/A)	904.8	N/A	2.1690 [2.0000]	108.5% { 91.9% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 208358	(10.69, N/A) (N/A, 0.00, N/A)	1059.2	N/A	2.2558 [2.0000]	112.8% { 93.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 293347	(9.50, N/A) (N/A, -0.01, N/A)	303.9	N/A	4.5202 [4.0000]	113.0% { 110.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 237901	(9.67, N/A) (N/A, -0.01, N/A)	261.6	N/A	4.0513 [4.0000]	101.3% { 95.4% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 418594	(10.57, N/A) (N/A, 0.00, N/A)	826.2	N/A	20.5100 [20.0000]	102.6% { 81.9% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 221990	(10.66, N/A) (N/A, 0.00, N/A)	1226.9	N/A	21.7071 [20.0000]	108.5% { 88.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 624070	(6.49, N/A) (N/A, 0.00, N/A)	972.6	N/A	9.4487 [8.0000]	118.1% { 90.6% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03941-ICB1	PFBA	0.00	ng/mL	0.75	U
	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.0144	ng/mL	0.10	U
	PFOA	0.0144	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0146	ng/mL	0.10	U
	PFOS	0.0146	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03941-ICB1	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.0124	ng/mL	0.10	U
	PFOSA	0.0124	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U
PFMPA	0.00	ng/mL	0.20	U	

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03941-ICB1	PFMBA	0.00	ng/mL	0.20	U
	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	8.24	ng/mL		
	13C4-PFBA	8.24	ng/mL		
	13C5-PFPEA	4.11	ng/mL		
	13C5-PFPEA	4.11	ng/mL		
	13C5-PFHXA	1.95	ng/mL		
	13C5-PFHXA	1.95	ng/mL		
	13C4-PFHPA	2.08	ng/mL		
	13C4-PFHPA	2.08	ng/mL		
	13C8-PFOA	2.18	ng/mL		
	13C8-PFOA	2.18	ng/mL		
	13C9-PFNA	1.04	ng/mL		
	13C9-PFNA	1.04	ng/mL		
	13C6-PFDA	1.03	ng/mL		
	13C6-PFDA	1.03	ng/mL		
	13C7-PFUnA	1.08	ng/mL		
	13C7-PFUnA	1.08	ng/mL		
	13C2-PFDOA	1.09	ng/mL		
	13C2-PFDOA	1.09	ng/mL		
	13C2-PFTEDA	1.15	ng/mL		

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03941-ICB1	13C2-PFTEDA	1.15	ng/mL		
	13C3-PFBS	2.21	ng/mL		
	13C3-PFBS	2.21	ng/mL		
	13C3-PFHXS	2.21	ng/mL		
	13C3-PFHXS	2.21	ng/mL		
	13C8-PFOS	2.47	ng/mL		
	13C8-PFOS	2.47	ng/mL		
	13C2-4:2FTS	4.05	ng/mL		
	13C2-4:2FTS	4.05	ng/mL		
	13C2-6:2FTS	4.81	ng/mL		
	13C2-6:2FTS	4.81	ng/mL		
	13C2-8:2FTS	4.00	ng/mL		
	13C2-8:2FTS	4.00	ng/mL		
	13C8-PFOSA	2.42	ng/mL		
	13C8-PFOSA	2.42	ng/mL		
	D5-NETFOSA	2.32	ng/mL		
	D5-NETFOSA	2.32	ng/mL		
	D3-NMEFOSA	2.31	ng/mL		
	D3-NMEFOSA	2.31	ng/mL		
	D3-NMEFOSAA	4.78	ng/mL		
	D3-NMEFOSAA	4.78	ng/mL		
	D5-NETFOSAA	4.58	ng/mL		
	D5-NETFOSAA	4.58	ng/mL		
	D7-NMEFOSE	21.9	ng/mL		
	D7-NMEFOSE	21.9	ng/mL		
	D9-NETFOSE	21.3	ng/mL		
	D9-NETFOSE	21.3	ng/mL		
	13C3-HFPO-DA	8.60	ng/mL		
	13C3-HFPO-DA	8.60	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03941-ICB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21A (9)
 Acquired: 2022/12/21 - 16:08

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 3496 (413.0 / 169.0) 986	(7.98, 1.00) (0.01, N/A, -0.4)	15.4 42.4	0.2821 86.3 86.3	0.0144	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

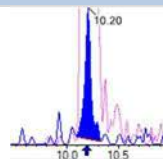
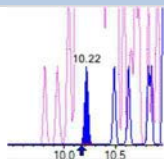
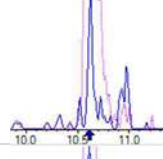
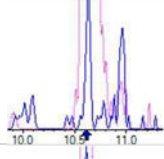
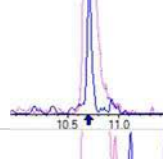
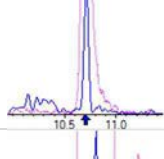
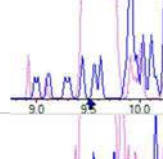
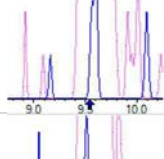
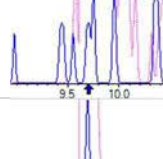
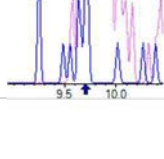
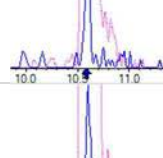
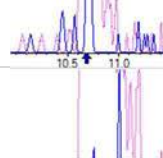
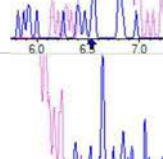
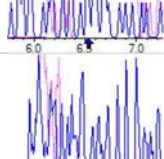
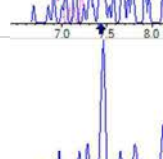
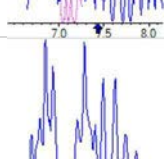
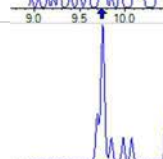
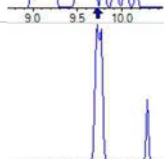
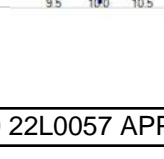
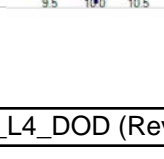


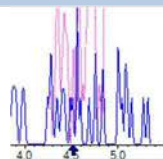
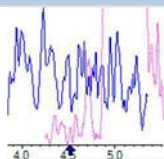
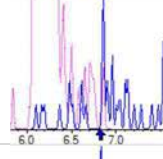
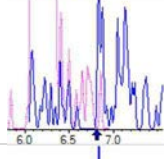
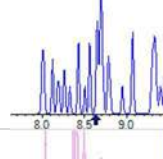
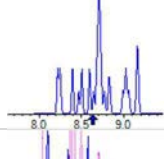
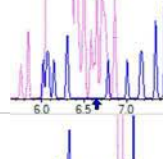
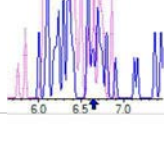
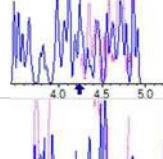
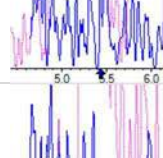
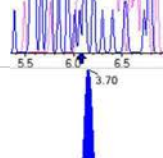
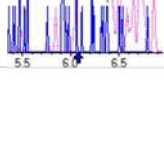
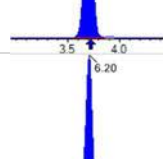
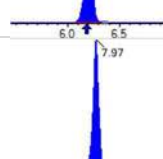
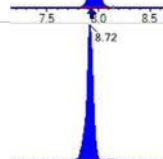
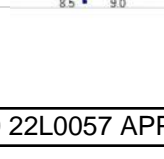
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

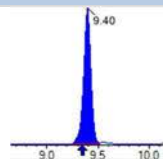
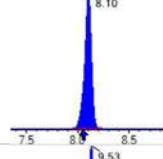
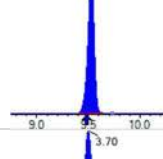
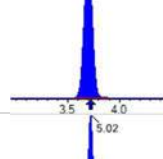
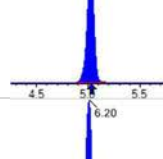
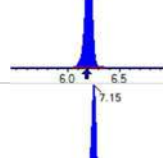
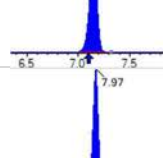
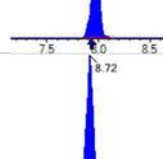
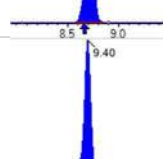
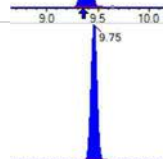
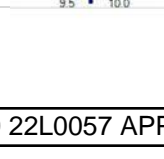
Sample I.D.: SB03941-ICB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

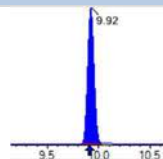
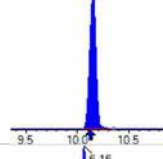
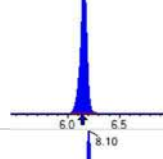
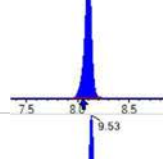
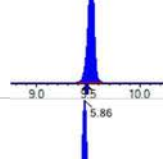
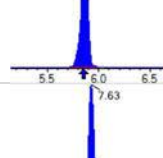
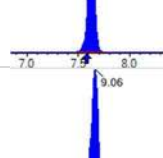
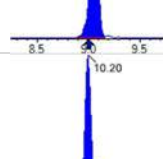
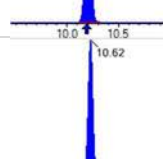
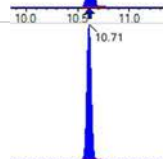
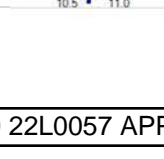
Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21A (9)
 Acquired: 2022/12/21 - 16:08

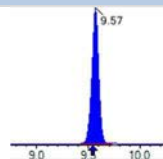
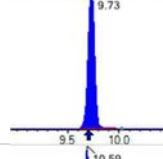
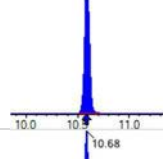
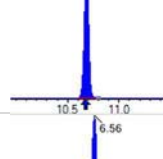
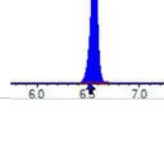
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 9898 (499.0 / 99.0) 1897	(9.52, 1.00) (0.00, N/A, -1.2)	48.5 19.3	0.1916 78.8 78.8	0.0146	N/A			MI5 DG 2022-12-21
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 9076 (498.0 / 478.0) 300	(10.20, 1.00) (0.00, N/A, -0.8)	34.8 12.4	0.0330 158.5 158.5	0.0124	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 137297	(3.70, N/A) (N/A, -0.02, N/A)	766.0	N/A	0.9864 [1.0000]	98.6% { 90.5% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 223416	(6.20, N/A) (N/A, 0.02, N/A)	460.7	N/A	0.9675 [1.0000]	96.8% { 95.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 206725	(7.97, N/A) (N/A, 0.05, N/A)	562.5	N/A	0.9403 [1.0000]	94.0% { 86.9% }			
13C5_PFNA_IIS	(468.0 / 423.0) 186093	(8.72, N/A) (N/A, 0.05, N/A)	497.6	N/A	1.0049 [1.0000]	100.5% { 92.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 184687	(9.40, N/A) (N/A, 0.05, N/A)	233.6	N/A	0.9993 [1.0000]	99.9% { 106.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 371811	(8.10, N/A) (N/A, 0.05, N/A)	662.9	N/A	0.9210 [1.0000]	92.1% { 88.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 294523	(9.53, N/A) (N/A, 0.05, N/A)	539.0	N/A	0.9228 [1.0000]	92.3% { 89.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1164618	(3.70, N/A) (N/A, -0.02, N/A)	949.7	N/A	8.2417 [8.0000]	103.0% { 97.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 639563	(5.02, N/A) (N/A, -0.01, N/A)	719.9	N/A	4.1143 [4.0000]	102.9% { 91.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 500638	(6.20, N/A) (N/A, 0.02, N/A)	697.9	N/A	1.9473 [2.0000]	97.4% { 92.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 466966	(7.15, N/A) (N/A, 0.04, N/A)	691.4	N/A	2.0820 [2.0000]	104.1% { 95.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 494304	(7.97, N/A) (N/A, 0.05, N/A)	917.1	N/A	2.1804 [2.0000]	109.0% { 99.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 213587	(8.72, N/A) (N/A, 0.05, N/A)	564.9	N/A	1.0438 [1.0000]	104.4% { 97.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 271082	(9.40, N/A) (N/A, 0.05, N/A)	432.0	N/A	1.0320 [1.0000]	103.2% { 96.4% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 404733	(9.75, N/A) (N/A, 0.03, N/A)	435.5	N/A	1.0833 [1.0000]	108.3% { 101.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 407883	(9.92, N/A) (N/A, 0.02, N/A)	595.7	N/A	1.0938 [1.0000]	109.4% { 105.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 285097	(10.15, N/A) (N/A, 0.02, N/A)	425.4	N/A	1.1512 [1.0000]	115.1% { 117.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1390129	(6.16, N/A) (N/A, 0.01, N/A)	781.9	N/A	2.2113 [2.0000]	110.6% { 101.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 737924	(8.10, N/A) (N/A, 0.05, N/A)	828.7	N/A	2.2062 [2.0000]	110.3% { 97.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1246594	(9.53, N/A) (N/A, 0.05, N/A)	598.1	N/A	2.4662 [2.0000]	123.3% { 104.7% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 215896	(5.86, N/A) (N/A, 0.01, N/A)	739.4	N/A	4.0548 [4.0000]	101.4% { 96.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 308341	(7.63, N/A) (N/A, 0.04, N/A)	911.4	N/A	4.8100 [4.0000]	120.3% { 112.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 256399	(9.06, N/A) (N/A, 0.06, N/A)	310.1	N/A	3.9955 [4.0000]	99.9% { 86.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1544524	(10.20, N/A) (N/A, 0.02, N/A)	1476.0	N/A	2.4173 [2.0000]	120.9% { 105.4% }			
D3_NMeFOsa_EIS	(515.0 / 169.0) 322844	(10.62, N/A) (N/A, 0.02, N/A)	1120.4	N/A	2.3142 [2.0000]	115.7% { 97.8% }			
D5_NEtFOsa_EIS	(531.1 / 169.0) 298222	(10.71, N/A) (N/A, 0.01, N/A)	1079.5	N/A	2.3157 [2.0000]	115.8% { 104.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 574276	(9.57, N/A) (N/A, 0.04, N/A)	542.0	N/A	4.7778 [4.0000]	119.4% { 112.5% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 485417	(9.73, N/A) (N/A, 0.03, N/A)	310.2	N/A	4.5818 [4.0000]	114.5% { 103.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 428343	(10.59, N/A) (N/A, 0.01, N/A)	811.6	N/A	21.8673 [20.0000]	109.3% { 99.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 189842	(10.68, N/A) (N/A, 0.01, N/A)	1103.1	N/A	21.2885 [20.0000]	106.4% { 104.1% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1175027	(6.56, N/A) (N/A, 0.03, N/A)	697.1	N/A	8.5961 [8.0000]	107.5% { 100.0% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03951-CCB1	PFBA	0.00	ng/mL	0.75	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03951-CCB1	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	7.88	ng/mL		
	13C5-PFPEA	4.33	ng/mL		
	13C5-PFHXA	2.02	ng/mL		
	13C4-PFHPA	2.14	ng/mL		
	13C8-PFOA	2.10	ng/mL		
	13C9-PFNA	0.941	ng/mL		
	13C6-PFDA	1.27	ng/mL		
	13C7-PFUnA	1.39	ng/mL		
	13C2-PFDOA	1.12	ng/mL		
	13C2-PFTEDA	1.13	ng/mL		
	13C3-PFBS	1.90	ng/mL		
	13C3-PFHXS	2.05	ng/mL		
	13C8-PFOS	2.01	ng/mL		
	13C2-4:2FTS	4.15	ng/mL		
	13C2-6:2FTS	4.76	ng/mL		
	13C2-8:2FTS	4.52	ng/mL		
	13C8-PFOSA	1.96	ng/mL		
	D5-NETFOSA	1.82	ng/mL		
	D3-NMEFOSA	1.84	ng/mL		
	D3-NMEFOSAA	3.67	ng/mL		
	D5-NETFOSAA	4.36	ng/mL		
	D7-NMEFOSE	18.8	ng/mL		
	D9-NETFOSAE	19.2	ng/mL		
	13C3-HFPO-DA	7.55	ng/mL		



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (1)
 Acquired: 2022/12/22 - 11:01

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (1)
 Acquired: 2022/12/22 - 11:01

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
Instrument: Saphira
Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB1
DF, IV: 1, 10.0µL
Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
Path: S2022-12-22A (1)
Acquired: 2022/12/22 - 11:01

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOFA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

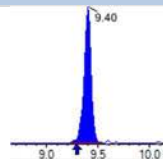
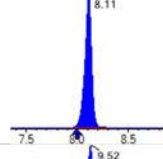
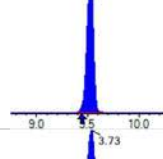
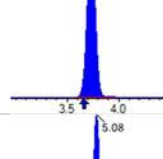
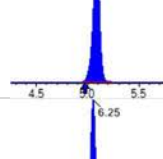
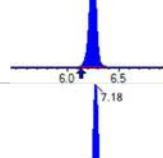
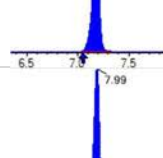
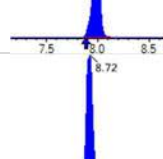
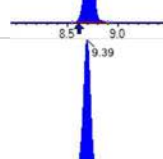
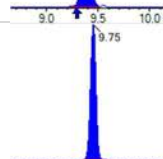
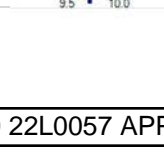


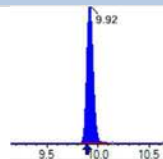
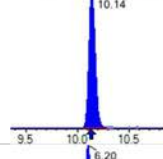
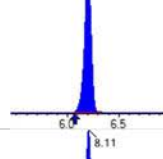
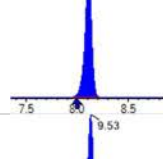
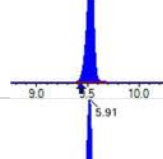
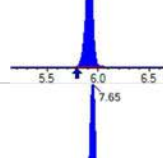
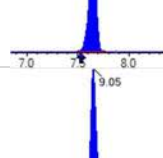
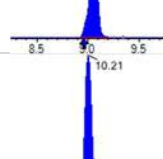
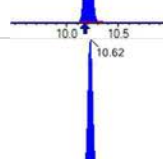
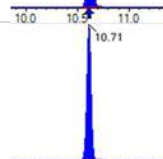
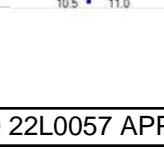
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

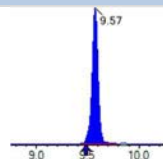
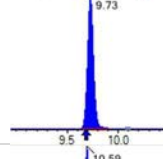
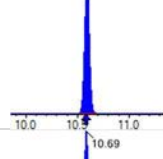
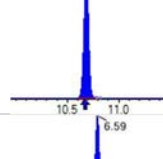
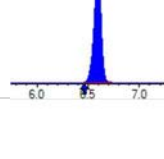
Sample I.D.: SB03951-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (1)
 Acquired: 2022/12/22 - 11:01

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 166872	(3.73, N/A) (N/A, 0.08, N/A)	668.9	N/A	1.1988 [1.0000]	119.9% { 106.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 248906	(6.25, N/A) (N/A, 0.12, N/A)	673.0	N/A	1.0779 [1.0000]	107.8% { 105.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 259912	(7.99, N/A) (N/A, 0.11, N/A)	622.9	N/A	1.1822 [1.0000]	118.2% { 101.2% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 205309	(8.72, N/A) (N/A, 0.11, N/A)	380.5	N/A	1.1087 [1.0000]	110.9% { 87.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 159980	(9.40, N/A) (N/A, 0.11, N/A)	275.2	N/A	0.8657 [1.0000]	86.6% {85.5%}			
18O2_PFHxS_IIS	(403.0 / 83.9) 436294	(8.11, N/A) (N/A, 0.12, N/A)	668.3	N/A	1.0807 [1.0000]	108.1% {97.8%}			
13C4_PFOS_IIS	(502.8 / 79.9) 345861	(9.52, N/A) (N/A, 0.09, N/A)	448.9	N/A	1.0836 [1.0000]	108.4% {99.8%}			
13C4_PFBA_EIS	(217.0 / 172.0) 1353571	(3.73, N/A) (N/A, 0.08, N/A)	770.7	N/A	7.8812 [8.0000]	98.5% {107.8%}			
13C5_PFPeA_EIS	(267.9 / 223.0) 749143	(5.08, N/A) (N/A, 0.12, N/A)	775.4	N/A	4.3256 [4.0000]	108.1% {110.2%}			
13C5_PFHxA_EIS	(318.0 / 273.0) 578389	(6.25, N/A) (N/A, 0.12, N/A)	869.5	N/A	2.0193 [2.0000]	101.0% {107.9%}			
13C4_PFHpA_EIS	(367.0 / 322.0) 534750	(7.18, N/A) (N/A, 0.12, N/A)	688.5	N/A	2.1401 [2.0000]	107.0% {118.9%}			
13C8_PFOA_EIS	(421.0 / 376.0) 598078	(7.99, N/A) (N/A, 0.12, N/A)	795.5	N/A	2.0983 [2.0000]	104.9% {100.4%}			
13C9_PFNA_EIS	(472.0 / 427.0) 212335	(8.72, N/A) (N/A, 0.10, N/A)	503.8	N/A	0.9405 [1.0000]	94.1% {91.6%}			
13C6_PFDA_EIS	(519.0 / 474.0) 288489	(9.39, N/A) (N/A, 0.10, N/A)	331.5	N/A	1.2679 [1.0000]	126.8% {104.8%}			
13C7_PFUnA_EIS	(570.0 / 525.0) 449096	(9.75, N/A) (N/A, 0.04, N/A)	458.9	N/A	1.3876 [1.0000]	138.8% {120.7%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 361260	(9.92, N/A) (N/A, 0.03, N/A)	419.7	N/A	1.1184 [1.0000]	111.8% {98.6%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 242892	(10.14, N/A) (N/A, 0.02, N/A)	421.7	N/A	1.1322 [1.0000]	113.2% {95.2%}			
13C3_PFBs_EIS	(302.0 / 80.0) 1399044	(6.20, N/A) (N/A, 0.13, N/A)	763.7	N/A	1.8966 [2.0000]	94.8% {105.0%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 804774	(8.11, N/A) (N/A, 0.12, N/A)	771.2	N/A	2.0505 [2.0000]	102.5% {104.8%}			
13C8_PFOS_EIS	(507.0 / 80.0) 1194659	(9.53, N/A) (N/A, 0.09, N/A)	445.4	N/A	2.0126 [2.0000]	100.6% {106.9%}			
13C2_4:2FTS_EIS	(329.0 / 81.0) 259168	(5.91, N/A) (N/A, 0.12, N/A)	692.8	N/A	4.1481 [4.0000]	103.7% {115.1%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 357811	(7.65, N/A) (N/A, 0.12, N/A)	683.0	N/A	4.7568 [4.0000]	118.9% {106.4%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 340459	(9.05, N/A) (N/A, 0.11, N/A)	515.4	N/A	4.5213 [4.0000]	113.0% {107.8%}			
13C8_PFOsa_EIS	(506.0 / 78.0) 1467261	(10.21, N/A) (N/A, 0.03, N/A)	633.7	N/A	1.9555 [2.0000]	97.8% {107.6%}			
D3_NMeFOSA_EIS	(515.0 / 169.0) 301625	(10.62, N/A) (N/A, 0.01, N/A)	878.6	N/A	1.8412 [2.0000]	92.1% {105.0%}			
D5_NEiFOSA_EIS	(531.1 / 169.0) 275802	(10.71, N/A) (N/A, 0.01, N/A)	1247.5	N/A	1.8237 [2.0000]	91.2% {90.8%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 517996	(9.57, N/A) (N/A, 0.08, N/A)	320.8	N/A	3.6698 [4.0000]	91.7% {98.0%}			
D5_EtFOSAA_EIS	(589.0 / 419.0) 542345	(9.73, N/A) (N/A, 0.05, N/A)	435.4	N/A	4.3593 [4.0000]	109.0% {130.7%}			
D7_NMeFOSE_EIS	(623.2 / 58.9) 432794	(10.59, N/A) (N/A, 0.02, N/A)	881.6	N/A	18.8149 [20.0000]	94.1% {99.6%}			
D9_NEtFOSE_EIS	(639.2 / 58.9) 200749	(10.69, N/A) (N/A, 0.01, N/A)	1035.5	N/A	19.1700 [20.0000]	95.8% {101.3%}			
13C3_HFPODA_EIS	(287.0 / 169.0) 1149495	(6.59, N/A) (N/A, 0.13, N/A)	803.1	N/A	7.5481 [8.0000]	94.4% {94.4%}			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03951-CCB2	PFBA	0.00	ng/mL	0.75	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.0142	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03951-CCB2	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	8.03	ng/mL		
	13C5-PFPEA	4.06	ng/mL		
	13C5-PFHXA	2.01	ng/mL		
	13C4-PFHPA	2.09	ng/mL		
	13C8-PFOA	2.14	ng/mL		
	13C9-PFNA	0.971	ng/mL		
	13C6-PFDA	1.17	ng/mL		
	13C7-PFUnA	0.932	ng/mL		
	13C2-PFDOA	1.05	ng/mL		
	13C2-PFTEDA	1.33	ng/mL		
	13C3-PFBS	2.01	ng/mL		
	13C3-PFHXS	1.96	ng/mL		
	13C8-PFOS	1.98	ng/mL		
	13C2-4:2FTS	3.99	ng/mL		
	13C2-6:2FTS	4.50	ng/mL		
	13C2-8:2FTS	3.56	ng/mL		
	13C8-PFOSA	1.71	ng/mL		
	D5-NETFOSA	1.91	ng/mL		
	D3-NMEFOSA	1.85	ng/mL		
	D3-NMEFOSAA	3.75	ng/mL		
	D5-NETFOSAA	3.70	ng/mL		
	D7-NMEFOSE	18.4	ng/mL		
	D9-NETFOSE	18.5	ng/mL		
	13C3-HFPO-DA	7.76	ng/mL		



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (4)
 Acquired: 2022/12/22 - 12:04

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 4232 (413.0 / 169.0) 1324	(7.96, 1.00) (0.00, N/A, 0.7)	18.2 24.9	0.3129 95.7 105.8	0.0142	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (4)
 Acquired: 2022/12/22 - 12:04

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (4)
 Acquired: 2022/12/22 - 12:04

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

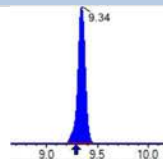
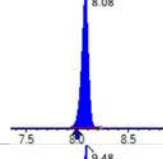
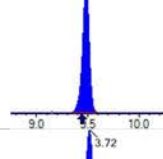
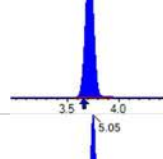
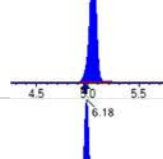
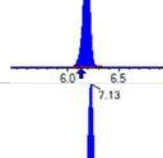
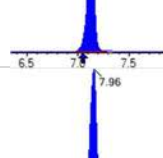
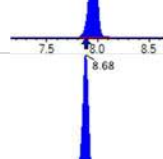
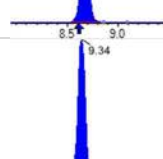
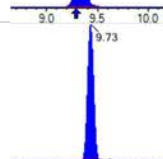
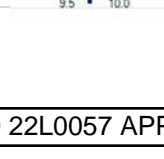


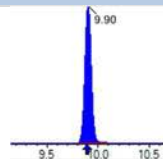
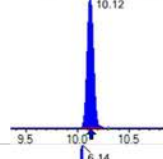
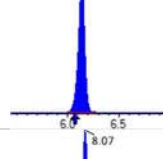
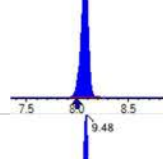
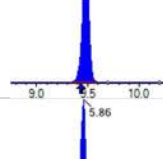
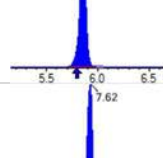
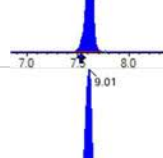
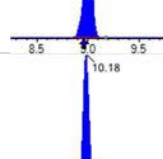
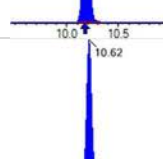
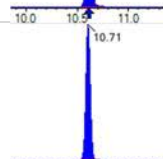
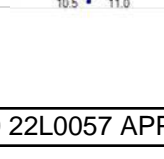
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (4)
 Acquired: 2022/12/22 - 12:04

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 157383	(3.72, N/A) (N/A, 0.06, N/A)	696.8	N/A	1.1307 [1.0000]	113.1% { 100.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 252369	(6.19, N/A) (N/A, 0.06, N/A)	857.5	N/A	1.0929 [1.0000]	109.3% { 107.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 257792	(7.96, N/A) (N/A, 0.08, N/A)	612.7	N/A	1.1726 [1.0000]	117.3% { 100.4% }			
13C5_PFNA_IIS	(468.0 / 423.0) 219901	(8.68, N/A) (N/A, 0.06, N/A)	417.5	N/A	1.1875 [1.0000]	118.7% { 93.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 194470	(9.34, N/A) (N/A, 0.05, N/A)	1231.2	N/A	1.0523 [1.0000]	105.2% { 103.9% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 445410	(8.08, N/A) (N/A, 0.08, N/A)	659.9	N/A	1.1033 [1.0000]	110.3% { 99.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 387697	(9.48, N/A) (N/A, 0.04, N/A)	440.2	N/A	1.2147 [1.0000]	121.5% { 111.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1300929	(3.72, N/A) (N/A, 0.06, N/A)	767.7	N/A	8.0313 [8.0000]	100.4% { 103.6% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 713599	(5.05, N/A) (N/A, 0.08, N/A)	621.4	N/A	4.0639 [4.0000]	101.6% { 105.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 583357	(6.18, N/A) (N/A, 0.06, N/A)	693.5	N/A	2.0087 [2.0000]	100.4% { 108.8% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 528761	(7.13, N/A) (N/A, 0.07, N/A)	588.0	N/A	2.0871 [2.0000]	104.4% { 117.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 604312	(7.96, N/A) (N/A, 0.08, N/A)	788.5	N/A	2.1376 [2.0000]	106.9% { 101.5% }			
13C9_PFNA_EIS	(472.0 / 427.0) 234804	(8.68, N/A) (N/A, 0.07, N/A)	394.8	N/A	0.9710 [1.0000]	97.1% { 101.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 323181	(9.34, N/A) (N/A, 0.05, N/A)	578.9	N/A	1.1685 [1.0000]	116.8% { 117.4% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 366574	(9.73, N/A) (N/A, 0.02, N/A)	464.6	N/A	0.9318 [1.0000]	93.2% { 98.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT-CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 413637	(9.90, N/A) (N/A, 0.01, N/A)	568.3	N/A	1.0534 [1.0000]	105.3% { 112.9% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 345583	(10.12, N/A) (N/A, 0.01, N/A)	442.4	N/A	1.3252 [1.0000]	132.5% { 135.4% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1514699	(6.14, N/A) (N/A, 0.07, N/A)	700.0	N/A	2.0113 [2.0000]	100.6% { 113.7% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 785408	(8.07, N/A) (N/A, 0.08, N/A)	749.1	N/A	1.9602 [2.0000]	98.0% { 102.3% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1314600	(9.48, N/A) (N/A, 0.05, N/A)	422.0	N/A	1.9757 [2.0000]	98.8% { 117.7% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 254483	(5.86, N/A) (N/A, 0.07, N/A)	572.1	N/A	3.9898 [4.0000]	99.7% { 113.1% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 345555	(7.62, N/A) (N/A, 0.09, N/A)	723.1	N/A	4.4998 [4.0000]	112.5% { 102.7% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 273673	(9.01, N/A) (N/A, 0.06, N/A)	502.0	N/A	3.5600 [4.0000]	89.0% { 86.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1435560	(10.18, N/A) (N/A, 0.01, N/A)	732.1	N/A	1.7068 [2.0000]	85.3% { 105.2% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 340399	(10.62, N/A) (N/A, 0.01, N/A)	957.6	N/A	1.8536 [2.0000]	92.7% { 118.5% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 323757	(10.71, N/A) (N/A, 0.01, N/A)	1137.1	N/A	1.9098 [2.0000]	95.5% { 106.5% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (4)
 Acquired: 2022/12/22 - 12:04

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 592584	(9.53, N/A) (N/A, 0.05, N/A)	373.2	N/A	3.7452 [4.0000]	93.6% { 112.1% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 516480	(9.70, N/A) (N/A, 0.02, N/A)	600.1	N/A	3.7034 [4.0000]	92.6% { 124.5% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 475480	(10.58, N/A) (N/A, 0.01, N/A)	887.6	N/A	18.4400 [20.0000]	92.2% { 109.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 216790	(10.68, N/A) (N/A, 0.00, N/A)	1384.1	N/A	18.4679 [20.0000]	92.3% { 109.4% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1198119	(6.54, N/A) (N/A, 0.07, N/A)	1140.6	N/A	7.7594 [8.0000]	97.0% { 98.4% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03951-CCB3	PFBA	0.00	ng/mL	0.75	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0201	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

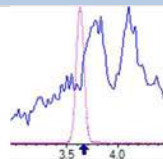
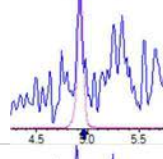
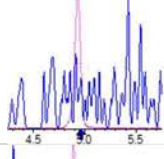
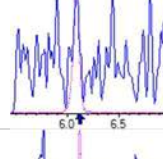
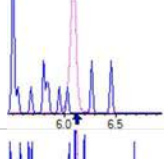
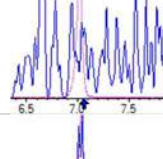
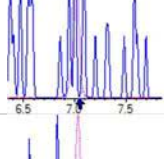
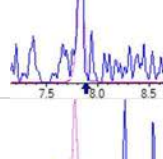
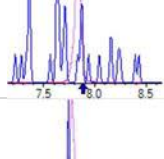
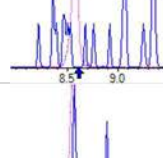
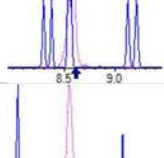
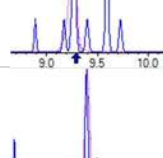
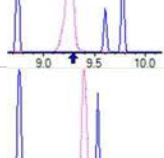
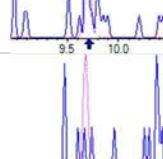
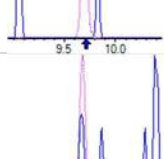
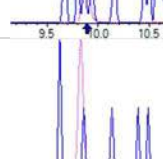
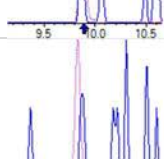
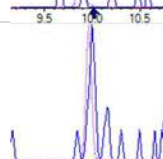
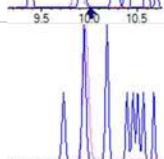
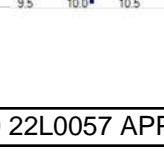
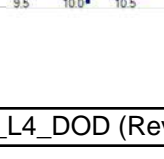
Lab Sample ID	Analyte	Found	Units	RL	C
SB03951-CCB3	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	7.93	ng/mL		
	13C5-PFPEA	4.27	ng/mL		
	13C5-PFHXA	2.01	ng/mL		
	13C4-PFHPA	2.09	ng/mL		
	13C8-PFOA	2.07	ng/mL		
	13C9-PFNA	0.975	ng/mL		
	13C6-PFDA	1.10	ng/mL		
	13C7-PFUnA	1.06	ng/mL		
	13C2-PFDOA	1.10	ng/mL		
	13C2-PFTEDA	1.25	ng/mL		
	13C3-PFBS	2.05	ng/mL		
	13C3-PFHXS	2.02	ng/mL		
	13C8-PFOS	1.64	ng/mL		
	13C2-4:2FTS	3.48	ng/mL		
	13C2-6:2FTS	4.47	ng/mL		
	13C2-8:2FTS	3.96	ng/mL		
	13C8-PFOSA	1.65	ng/mL		
	D5-NETFOSA	1.62	ng/mL		
	D3-NMEFOSA	1.66	ng/mL		
	D3-NMEFOSAA	2.77	ng/mL		
	D5-NETFOSAA	2.63	ng/mL		
	D7-NMEFOSE	17.0	ng/mL		
	D9-NETFOSAE	18.6	ng/mL		
	13C3-HFPO-DA	8.35	ng/mL		



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (17)
 Acquired: 2022/12/22 - 14:50

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (17)
 Acquired: 2022/12/22 - 14:50

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT-CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 13162 (499.0 / 99.0) 1431	(9.39 , 1.00) (-0.02 , N/A , 0.9)	280.3 18.3	0.1087 44.7 47.5	0.0201	N/A			IR1,
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

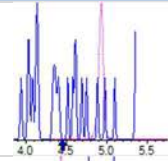
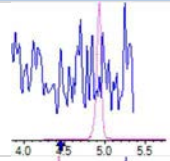
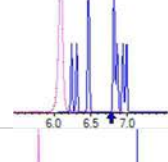
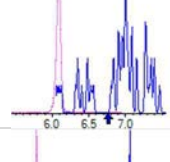
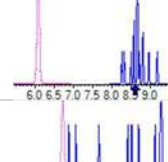
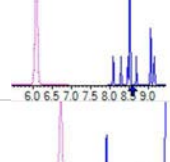
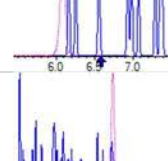
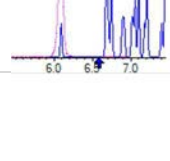
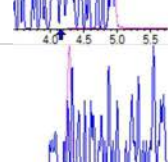
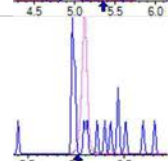
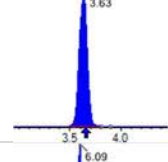

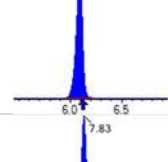
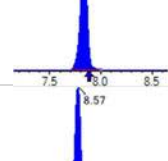
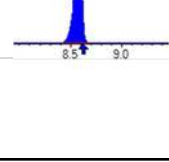
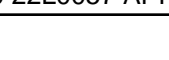


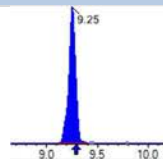
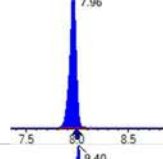
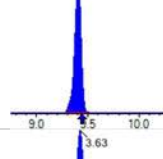
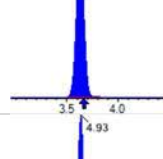
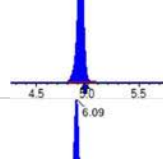
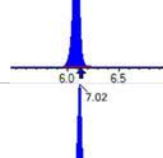
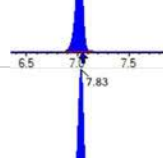
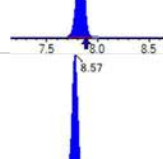
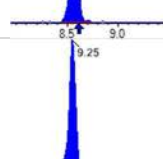
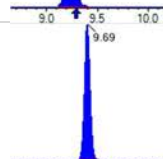
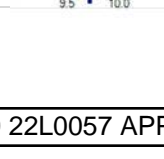
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

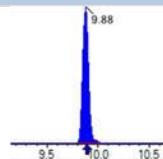
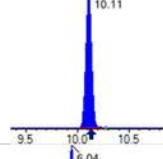
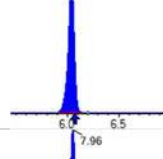
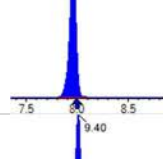
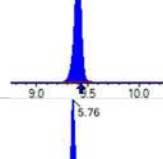
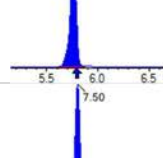
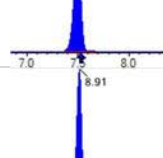
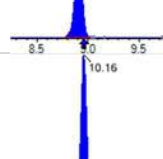
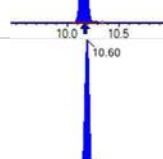
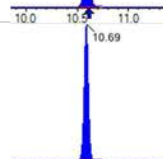
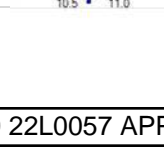
Sample I.D.: SB03951-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

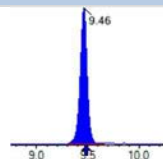
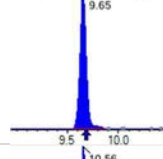
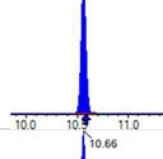
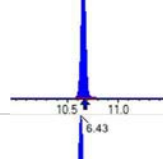
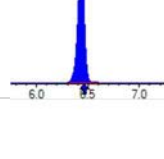
Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (17)
 Acquired: 2022/12/22 - 14:50

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 173488	(3.63, N/A) (N/A, -0.02, N/A)	742.6	N/A	1.2464 [1.0000]	124.6% { 110.5% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 254864	(6.09, N/A) (N/A, -0.03, N/A)	650.0	N/A	1.1037 [1.0000]	110.4% { 108.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 250555	(7.83, N/A) (N/A, -0.04, N/A)	680.9	N/A	1.1397 [1.0000]	114.0% { 97.5% }			
13C5_PFNA_IIS	(468.0 / 423.0) 219676	(8.57, N/A) (N/A, -0.04, N/A)	682.2	N/A	1.1863 [1.0000]	118.6% { 93.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 182295	(9.25, N/A) (N/A, -0.04, N/A)	401.5	N/A	0.9864 [1.0000]	98.6% { 97.4% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 434358	(7.96, N/A) (N/A, -0.04, N/A)	829.4	N/A	1.0759 [1.0000]	107.6% { 97.3% }			
13C4_PFOS_IIS	(502.8 / 79.9) 428768	(9.40, N/A) (N/A, -0.03, N/A)	464.1	N/A	1.3433 [1.0000]	134.3% { 123.7% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1415484	(3.63, N/A) (N/A, -0.02, N/A)	954.9	N/A	7.9274 [8.0000]	99.1% { 112.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 757997	(4.93, N/A) (N/A, -0.04, N/A)	803.7	N/A	4.2745 [4.0000]	106.9% { 111.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 588987	(6.09, N/A) (N/A, -0.04, N/A)	798.1	N/A	2.0082 [2.0000]	100.4% { 109.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 534343	(7.02, N/A) (N/A, -0.03, N/A)	708.2	N/A	2.0884 [2.0000]	104.4% { 118.8% }			
13C8_PFOA_EIS	(421.0 / 376.0) 567503	(7.83, N/A) (N/A, -0.04, N/A)	575.2	N/A	2.0653 [2.0000]	103.3% { 95.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 235412	(8.57, N/A) (N/A, -0.04, N/A)	345.2	N/A	0.9745 [1.0000]	97.5% { 101.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 285247	(9.25, N/A) (N/A, -0.03, N/A)	571.8	N/A	1.1002 [1.0000]	110.0% { 103.7% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 390930	(9.69, N/A) (N/A, -0.02, N/A)	467.7	N/A	1.0601 [1.0000]	106.0% { 105.1% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 404037	(9.88, N/A) (N/A, -0.02, N/A)	828.2	N/A	1.0977 [1.0000]	109.8% { 110.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 306344	(10.11, N/A) (N/A, -0.01, N/A)	537.0	N/A	1.2532 [1.0000]	125.3% { 120.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1508652	(6.04, N/A) (N/A, -0.03, N/A)	669.5	N/A	2.0543 [2.0000]	102.7% { 113.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 789666	(7.96, N/A) (N/A, -0.04, N/A)	856.2	N/A	2.0209 [2.0000]	101.0% { 102.8% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1205476	(9.40, N/A) (N/A, -0.03, N/A)	441.0	N/A	1.6382 [2.0000]	81.9% { 107.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 216699	(5.76, N/A) (N/A, -0.03, N/A)	577.8	N/A	3.4838 [4.0000]	87.1% { 96.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 334424	(7.50, N/A) (N/A, -0.03, N/A)	627.3	N/A	4.4657 [4.0000]	111.6% { 99.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 296806	(8.91, N/A) (N/A, -0.03, N/A)	445.0	N/A	3.9592 [4.0000]	99.0% { 93.9% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1536538	(10.16, N/A) (N/A, -0.01, N/A)	585.2	N/A	1.6519 [2.0000]	82.6% { 112.6% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 337118	(10.60, N/A) (N/A, -0.01, N/A)	675.8	N/A	1.6599 [2.0000]	83.0% { 117.4% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 304556	(10.69, N/A) (N/A, -0.01, N/A)	1006.9	N/A	1.6245 [2.0000]	81.2% { 100.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 484524	(9.46, N/A) (N/A, -0.03, N/A)	335.2	N/A	2.7689 [4.0000]	69.2% { 91.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 405638	(9.65, N/A) (N/A, -0.03, N/A)	276.4	N/A	2.6300 [4.0000]	65.8% { 97.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 485706	(10.56, N/A) (N/A, -0.01, N/A)	1046.7	N/A	17.0323 [20.0000]	85.2% { 111.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 241914	(10.66, N/A) (N/A, -0.01, N/A)	1400.0	N/A	18.6341 [20.0000]	93.2% { 122.1% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1301587	(6.43, N/A) (N/A, -0.03, N/A)	722.9	N/A	8.3470 [8.0000]	104.3% { 106.9% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03951-CCB4	PFBA	0.00	ng/mL	0.75	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.0122	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03951-CCB4	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	7.93	ng/mL		
	13C5-PFPEA	4.21	ng/mL		
	13C5-PFHXA	2.03	ng/mL		
	13C4-PFHPA	2.13	ng/mL		
	13C8-PFOA	2.06	ng/mL		
	13C9-PFNA	0.970	ng/mL		
	13C6-PFDA	1.19	ng/mL		
	13C7-PFUnA	1.09	ng/mL		
	13C2-PFDOA	1.12	ng/mL		
	13C2-PFTEDA	1.21	ng/mL		
	13C3-PFBS	2.08	ng/mL		
	13C3-PFHXS	1.95	ng/mL		
	13C8-PFOS	1.91	ng/mL		
	13C2-4:2FTS	3.78	ng/mL		
	13C2-6:2FTS	3.67	ng/mL		
	13C2-8:2FTS	3.69	ng/mL		
	13C8-PFOSA	2.05	ng/mL		
	D5-NETFOSA	2.08	ng/mL		
	D3-NMEFOSA	1.93	ng/mL		
	D3-NMEFOSAA	3.55	ng/mL		
	D5-NETFOSAA	3.75	ng/mL		
	D7-NMEFOSE	20.6	ng/mL		
	D9-NETFOSSE	21.6	ng/mL		
	13C3-HFPO-DA	8.16	ng/mL		



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (34)
 Acquired: 2022/12/22 - 18:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT-CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 3469 (413.0 / 169.0) 814	(7.87, 1.00) (0.01, N/A, -0.1)	15.7 26.2	0.2347 71.8 79.3	0.0122	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03951-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (34)
 Acquired: 2022/12/22 - 18:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

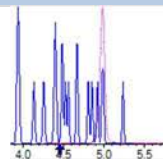
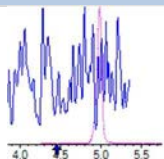
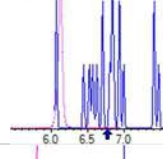
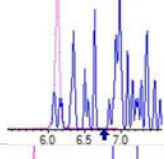
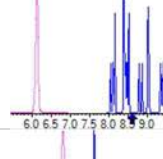
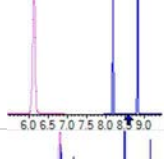
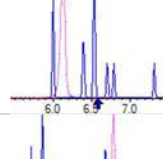
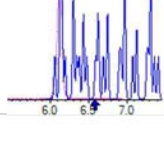
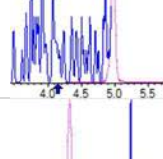
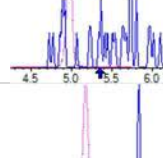
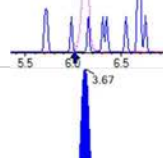
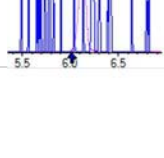
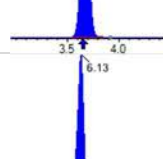
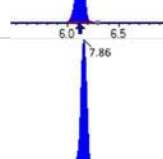
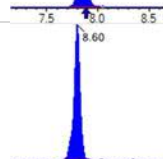
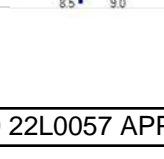


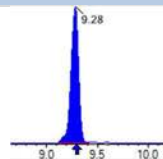
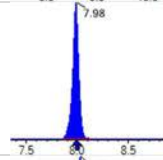
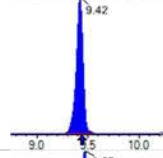
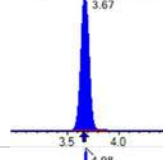
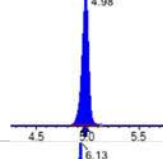
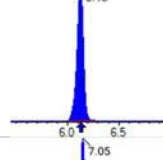
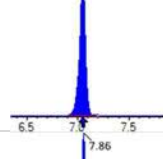
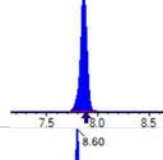
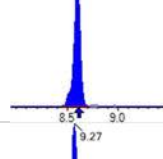
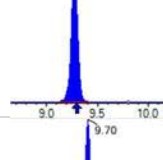
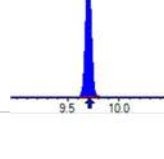
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

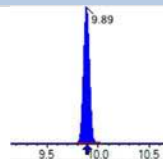
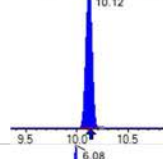
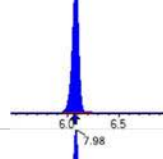
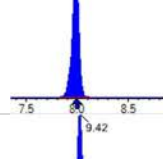
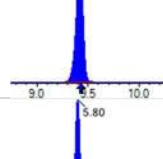
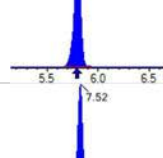
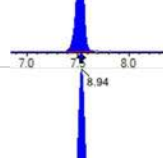
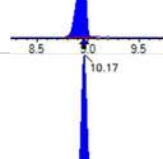
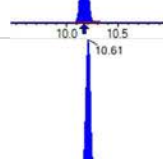
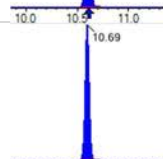
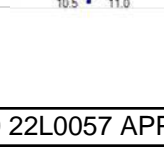
Sample I.D.: SB03951-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

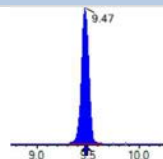
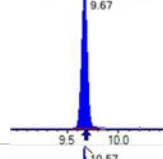
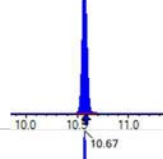
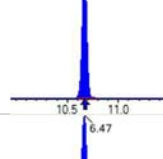
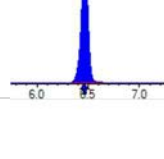
Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (34)
 Acquired: 2022/12/22 - 18:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 170566	(3.67, N/A) (N/A, 0.02, N/A)	728.5	N/A	1.2254 [1.0000]	122.5% { 108.6% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 251402	(6.13, N/A) (N/A, 0.01, N/A)	635.5	N/A	1.0887 [1.0000]	108.9% { 106.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 256265	(7.86, N/A) (N/A, -0.01, N/A)	618.6	N/A	1.1656 [1.0000]	116.6% { 99.8% }			
13C5_PFNA_IIS	(468.0 / 423.0) 208621	(8.60, N/A) (N/A, -0.02, N/A)	429.5	N/A	1.1266 [1.0000]	112.7% { 88.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 194804	(9.28, N/A) (N/A, -0.01, N/A)	302.4	N/A	1.0541 [1.0000]	105.4% { 104.1% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 458277	(7.98, N/A) (N/A, -0.01, N/A)	902.1	N/A	1.1352 [1.0000]	113.5% { 102.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 396363	(9.42, N/A) (N/A, -0.02, N/A)	445.6	N/A	1.2418 [1.0000]	124.2% { 114.4% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1391613	(3.67, N/A) (N/A, 0.02, N/A)	736.2	N/A	7.9272 [8.0000]	99.1% { 110.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 736201	(4.98, N/A) (N/A, 0.01, N/A)	907.0	N/A	4.2087 [4.0000]	105.2% { 108.3% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 587964	(6.13, N/A) (N/A, 0.00, N/A)	539.2	N/A	2.0323 [2.0000]	101.6% { 109.7% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 537138	(7.05, N/A) (N/A, 0.00, N/A)	514.9	N/A	2.1283 [2.0000]	106.4% { 119.4% }			
13C8_PFOA_EIS	(421.0 / 376.0) 578390	(7.86, N/A) (N/A, -0.01, N/A)	833.5	N/A	2.0581 [2.0000]	102.9% { 97.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 222417	(8.60, N/A) (N/A, -0.01, N/A)	471.8	N/A	0.9695 [1.0000]	97.0% { 96.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 330961	(9.27, N/A) (N/A, -0.02, N/A)	504.0	N/A	1.1945 [1.0000]	119.5% { 120.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 429552	(9.70, N/A) (N/A, -0.01, N/A)	940.6	N/A	1.0900 [1.0000]	109.0% { 115.4% }			

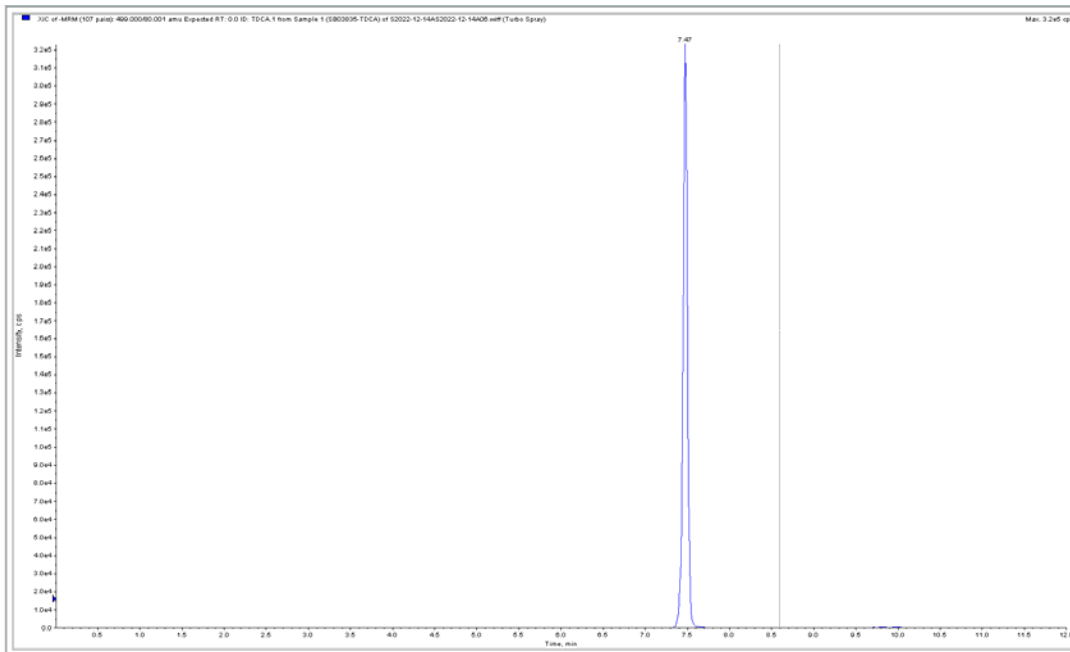
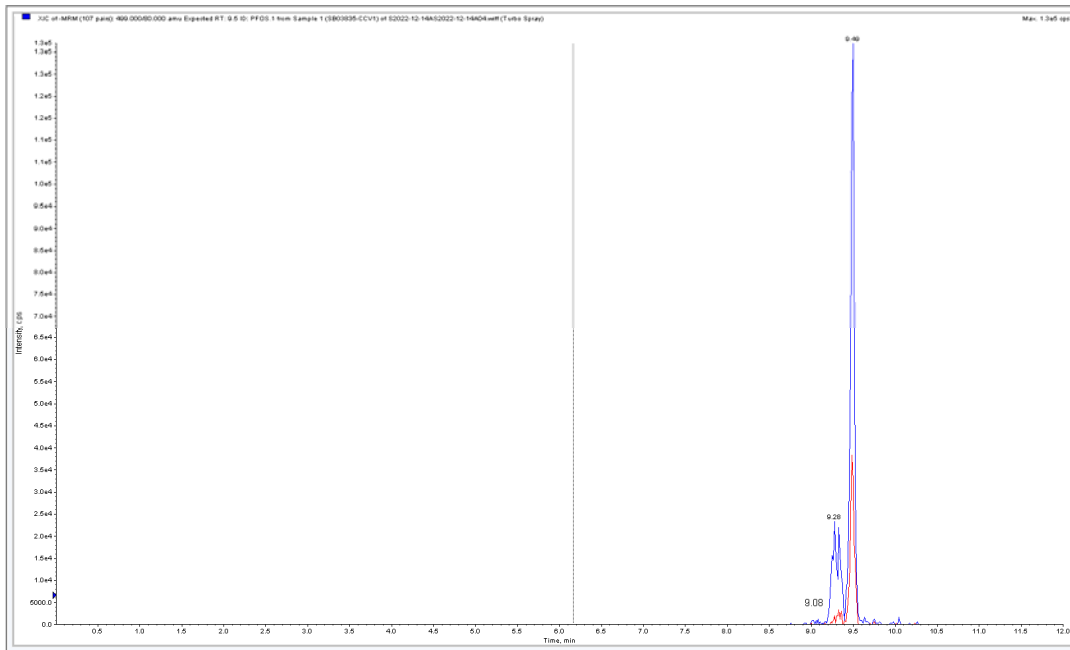
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 440640	(9.89, N/A) (N/A, -0.01, N/A)	593.1	N/A	1.1202 [1.0000]	112.0% { 120.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 315877	(10.12, N/A) (N/A, 0.00, N/A)	615.3	N/A	1.2092 [1.0000]	120.9% { 123.7% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1610648	(6.08, N/A) (N/A, 0.01, N/A)	595.6	N/A	2.0787 [2.0000]	103.9% { 120.9% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 802676	(7.98, N/A) (N/A, -0.01, N/A)	923.8	N/A	1.9470 [2.0000]	97.4% { 104.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1299719	(9.42, N/A) (N/A, -0.01, N/A)	497.2	N/A	1.9106 [2.0000]	95.5% { 116.3% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 248363	(5.80, N/A) (N/A, 0.01, N/A)	708.4	N/A	3.7845 [4.0000]	94.6% { 110.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 290113	(7.52, N/A) (N/A, -0.01, N/A)	603.3	N/A	3.6718 [4.0000]	91.8% { 86.3% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 291532	(8.94, N/A) (N/A, -0.01, N/A)	348.0	N/A	3.6859 [4.0000]	92.1% { 92.3% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1764289	(10.17, N/A) (N/A, -0.01, N/A)	884.4	N/A	2.0518 [2.0000]	102.6% { 129.3% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 362344	(10.61, N/A) (N/A, 0.00, N/A)	1087.4	N/A	1.9300 [2.0000]	96.5% { 126.2% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 360485	(10.69, N/A) (N/A, 0.00, N/A)	1426.8	N/A	2.0800 [2.0000]	104.0% { 118.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 573696	(9.47, N/A) (N/A, -0.02, N/A)	344.1	N/A	3.5466 [4.0000]	88.7% { 108.5% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 534612	(9.67, N/A) (N/A, -0.01, N/A)	417.4	N/A	3.7496 [4.0000]	93.7% { 128.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 541882	(10.57, N/A) (N/A, 0.00, N/A)	1203.6	N/A	20.5558 [20.0000]	102.8% { 124.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 259149	(10.67, N/A) (N/A, 0.00, N/A)	858.2	N/A	21.5937 [20.0000]	108.0% { 130.8% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1255716	(6.47, N/A) (N/A, 0.00, N/A)	711.9	N/A	8.1637 [8.0000]	102.0% { 103.2% }			

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BILE STANDARD CHECK

S2022-12-14A

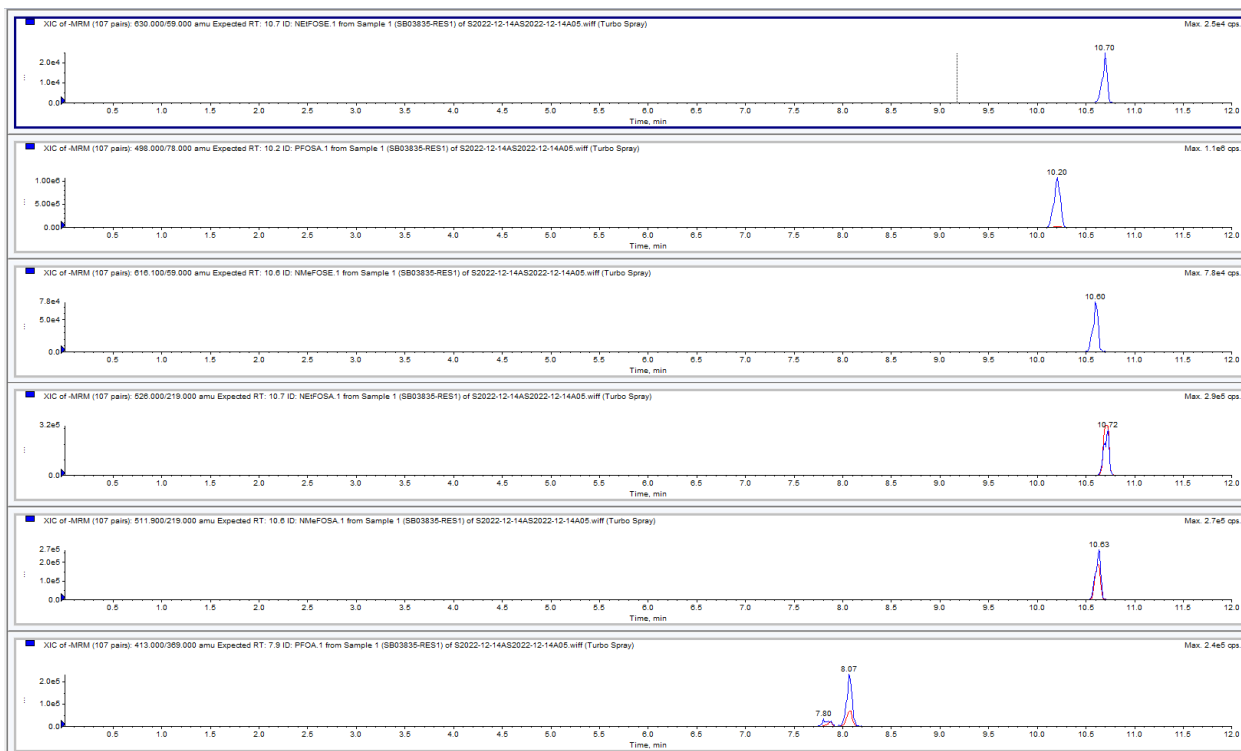


TDCA = 7.47

PFOS = 9.08

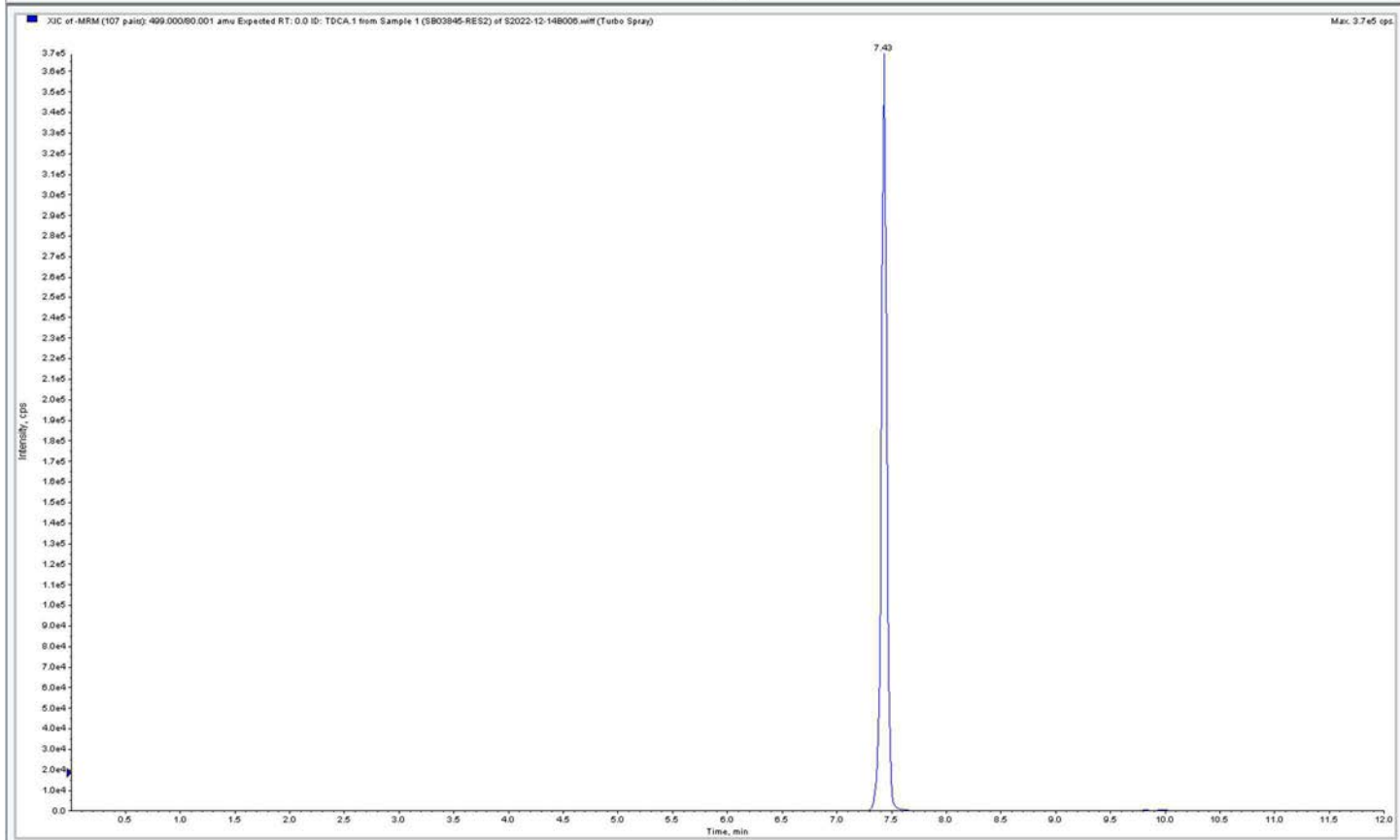
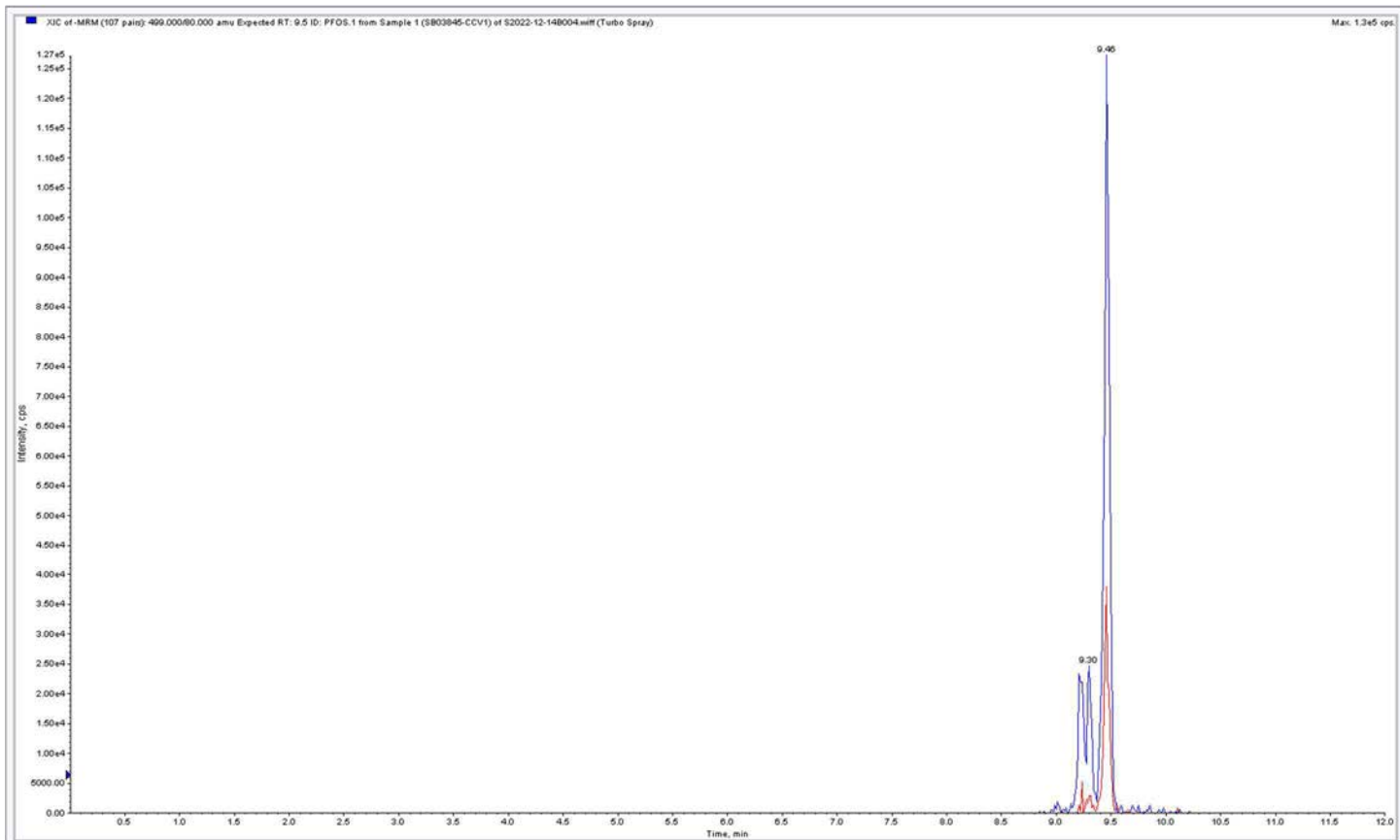
9.08-7.47=1.61 > 1.0 Pass

2022-12-14A Column Resolution

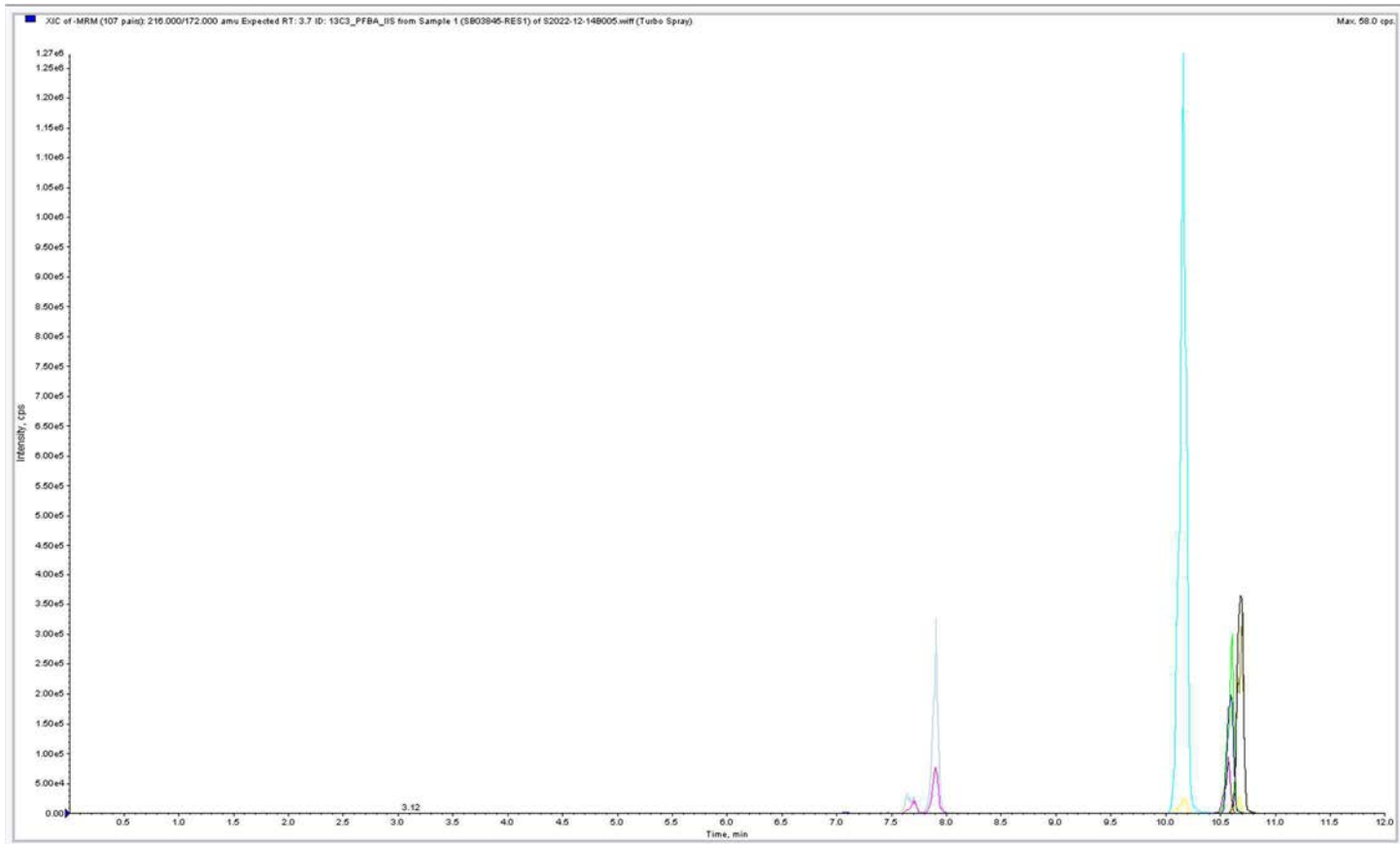


BILE STANDARD CHECK S2022-12-14B/SB03845

TDCA = 7.43
PFOS = 9.00
TDCA-PFOS = 1.57 > 1.0 PASS



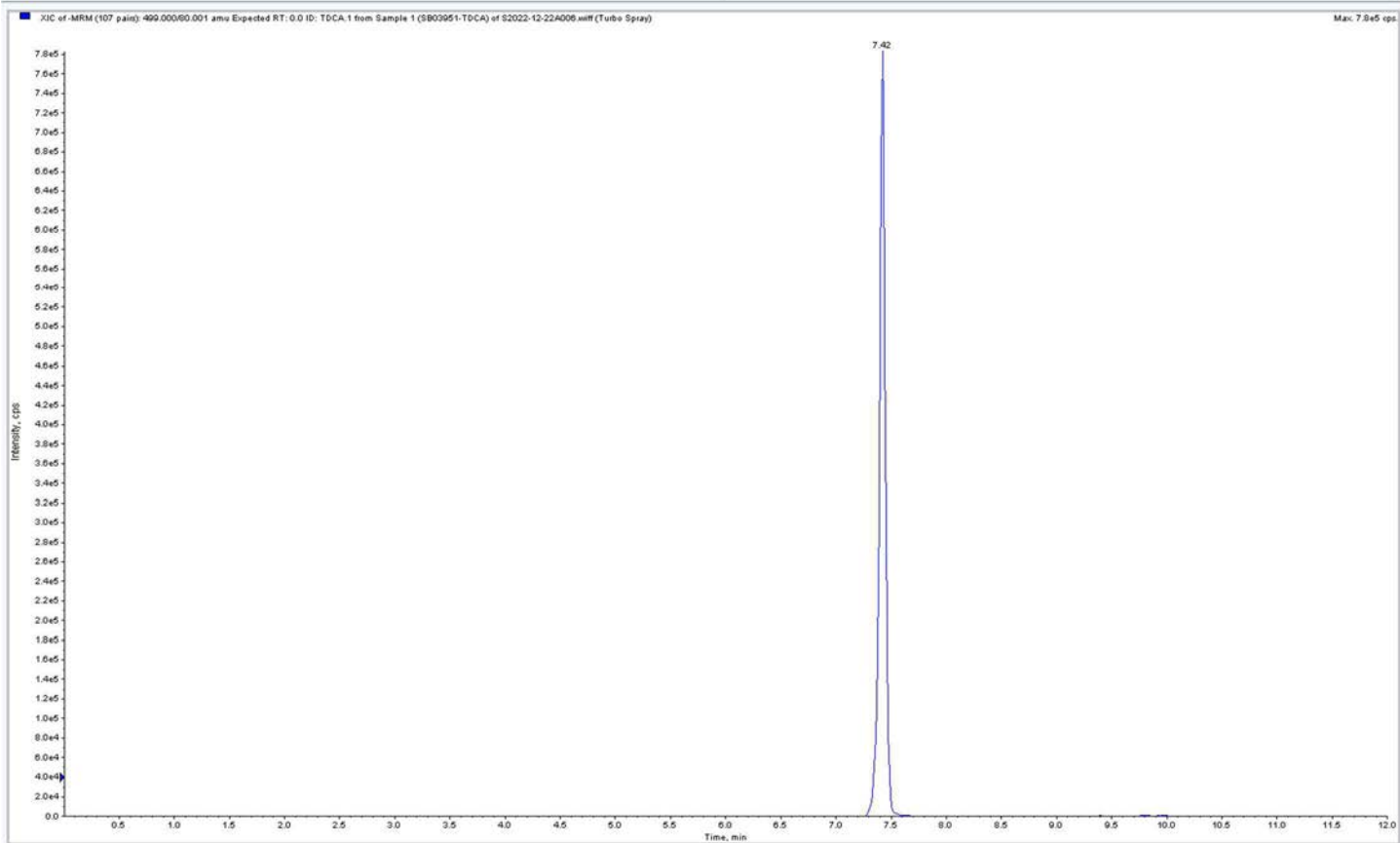
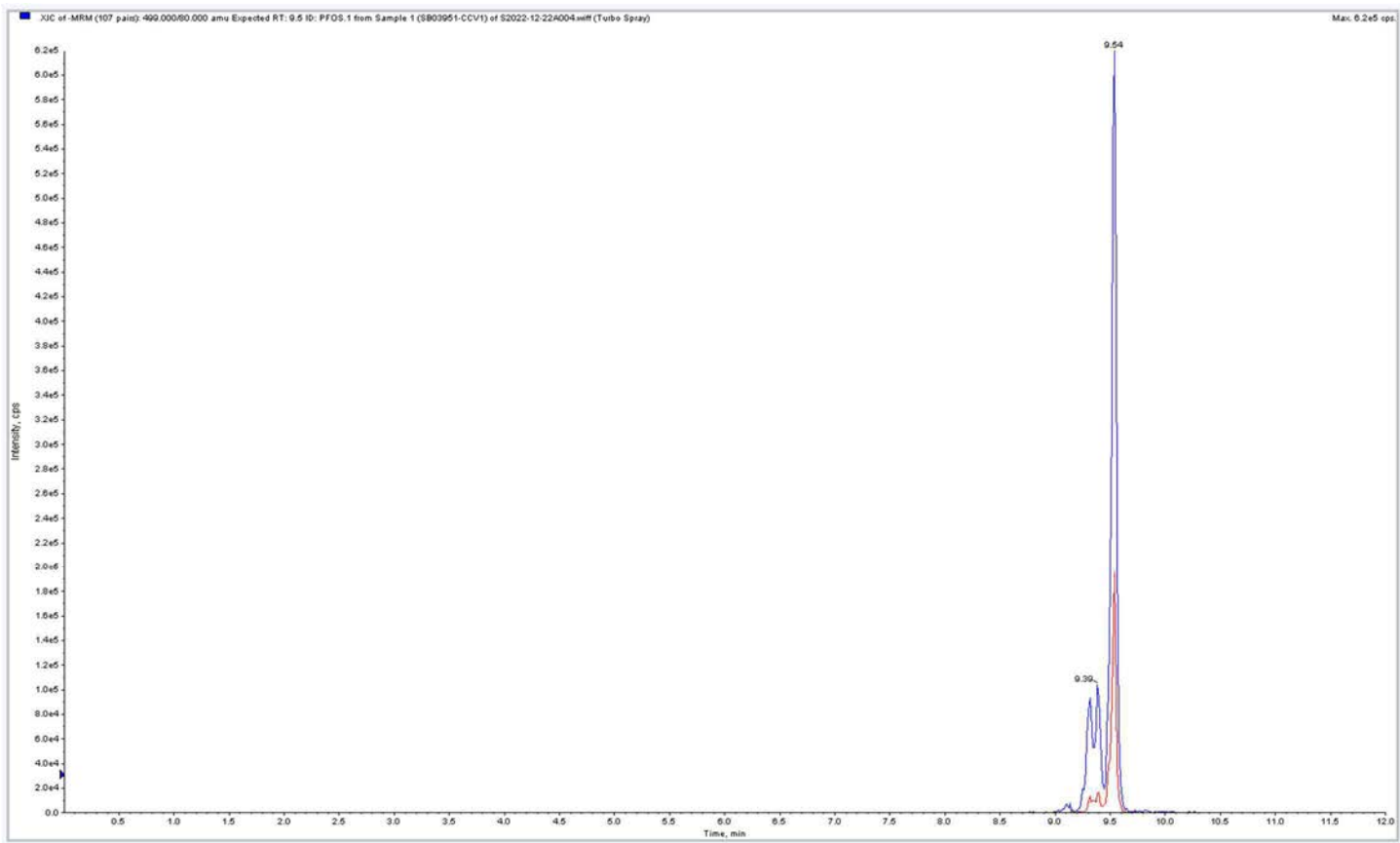
S2022-12-14B/SB03845 Column Resolution



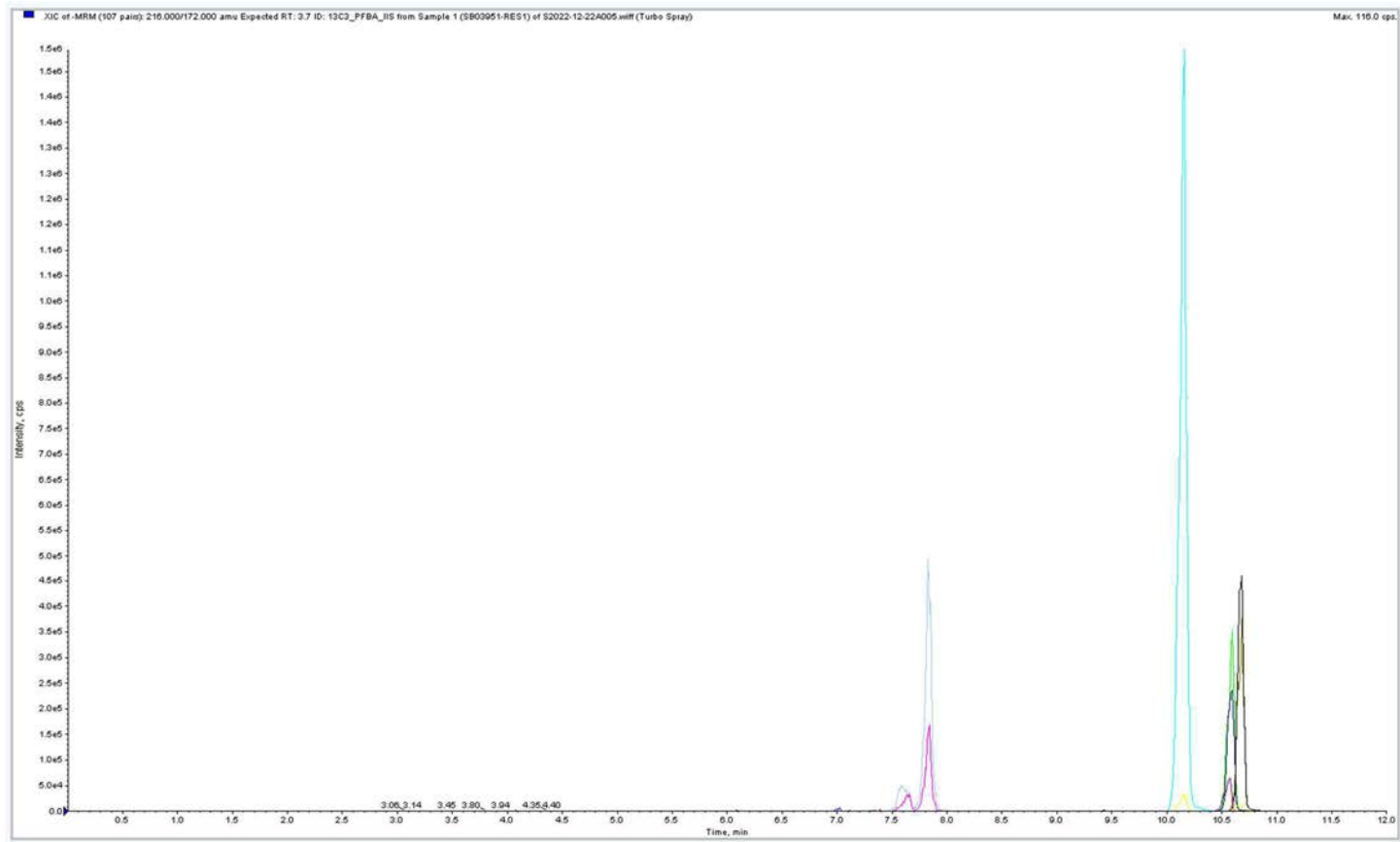
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BILE STANDARD CHECK S2022-12-22A/SB03951

TDCA = 7.42
PFOS = 9.12
TDCA-PFOS = 1.70 > 1.0 PASS



S2022-12-22A/SB03951 Column Resolution



QUALITY CONTROL RAW DATA

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	BBL0205-BLK1
Sampled:		Prepared:	12/09/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0205	Sequence:	SB03835
Column:	1	Calibration:	2251013
		Instrument:	Saphira
		File ID:	S2022-12-14A (5)
		Analyzed:	12/14/22 12:12
		Dilution:	1

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
PFBA	0.80 U	1.6	0.80	0.21	U
PFPEA	0.40 U	0.80	0.40	0.065	U
PFHXA	0.20 U	0.40	0.20	0.055	U
PFHPA	0.20 U	0.40	0.20	0.041	U
PFOA	0.20 U	0.40	0.20	0.15	U
PFNA	0.20 U	0.40	0.20	0.082	U
PFDA	0.20 U	0.40	0.20	0.10	U
PFUnA	0.20 U	0.40	0.20	0.16	U
PFDOA	0.20 U	0.40	0.20	0.11	U
PFTRDA	0.30 U	0.40	0.30	0.20	U
PFTEDA	0.20 U	0.40	0.20	0.20	U
PFBS	0.20 U	0.40	0.20	0.037	U
PFPEs	0.20 U	0.40	0.20	0.063	U
PFHXS	0.20 U	0.40	0.20	0.032	U
PFHPS	0.20 U	0.40	0.20	0.051	U
PFOS	0.0893 J	0.40	0.20	0.064	IR2, J
PFNS	0.20 U	0.40	0.20	0.12	U
PFDS	0.20 U	0.40	0.20	0.15	U
PFDOS	0.20 U	0.40	0.20	0.12	U
4:2FTS	0.80 U	1.6	0.80	0.29	U
6:2FTS	0.80 U	1.6	0.80	0.31	U
8:2FTS	0.80 U	1.6	0.80	0.082	U
PFOSA	0.20 U	0.40	0.20	0.10	U
NMeFOSA	0.80 U	1.6	0.80	0.47	U
NEtFOSA	0.80 U	1.6	0.80	0.41	U
NMeFOSAA	0.20 U	0.40	0.20	0.11	U
NEtFOSAA	0.20 U	0.40	0.20	0.11	U
NMeFOSE	1.2 U	1.6	1.2	1.0	U
NEtFOSE	1.2 U	1.6	1.2	1.0	U
HFPO-DA	0.40 U	0.80	0.40	0.17	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	BBL0205-BLK1
Sampled:		Prepared:	12/09/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0205	Sequence:	SB03835
Column:	1	Calibration:	2251013
			Instrument: Saphira

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
ADONA	0.40 U	0.80	0.40	0.12	U
PFEESA	0.40 U	0.80	0.40	0.11	U
PFMPA	0.40 U	0.80	0.40	0.054	U
PFMBA	0.40 U	0.80	0.40	0.091	U
NFDHA	0.40 U	0.80	0.40	0.30	U
9CL-PF3ONS	0.40 U	0.80	0.40	0.21	U
11CL-PF3OUDS	0.40 U	0.80	0.40	0.21	U
3:3FTCA	0.80 U	1.6	0.80	0.57	U
5:3FTCA	0.80 U	1.6	0.80	0.44	U
7:3FTCA	0.80 U	1.6	0.80	0.55	U



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A08.wiff-
 Acquired: 2022/12/14 - 12:12

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 3524 (413.0 / 169.0) 865	(7.93, 1.00) (0.01, N/A, 1.4)	19.6 18.7	0.2456 73.2 84.3	0.0303	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A08.wiff-
 Acquired: 2022/12/14 - 12:12

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT-CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 7442 (499.0 / 99.0) 2776	(9.48 , 1.00) (0.00 , N/A , -0.4)	27.5 300.3	0.3731 162.6 146.3	0.0223	N/A			IR2,
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A08.wiff-
 Acquired: 2022/12/14 - 12:12

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pr3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

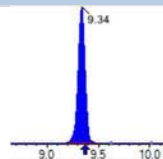
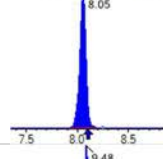
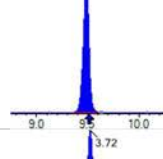
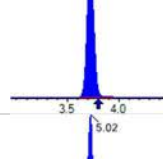
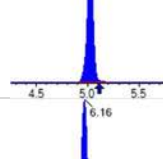
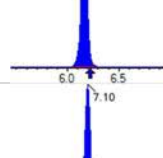
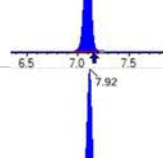
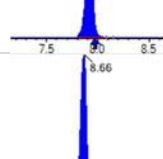
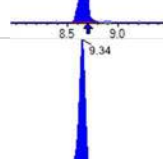
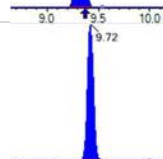
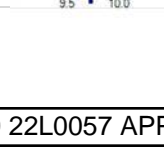


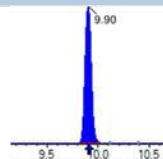
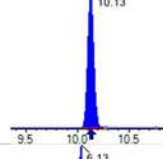
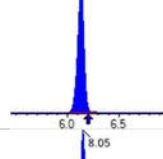
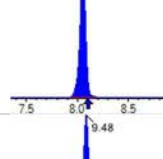
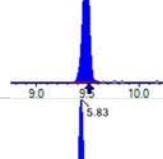
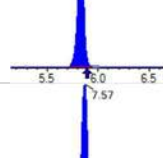
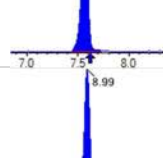
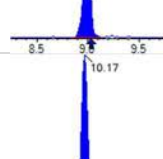
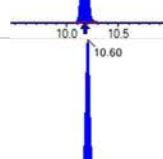
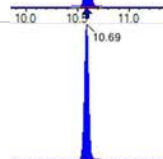
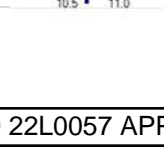
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A08.wiff-
 Acquired: 2022/12/14 - 12:12

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT-CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 83094	(3.72, N/A) (N/A, 0.01, N/A)	714.5	N/A	0.6848 [1.0000]	68.5% { 86.3% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 139638	(6.16, N/A) (N/A, -0.01, N/A)	601.9	N/A	0.7652 [1.0000]	76.5% { 79.7% }			
13C4_PFOA_IIS	(417.0 / 372.0) 129901	(7.92, N/A) (N/A, 0.00, N/A)	526.8	N/A	0.7441 [1.0000]	74.4% { 89.6% }			
13C5_PFNxA_IIS	(468.0 / 423.0) 101065	(8.66, N/A) (N/A, -0.01, N/A)	297.5	N/A	0.7437 [1.0000]	74.4% { 86.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 93694	(9.34, N/A) (N/A, -0.01, N/A)	423.8	N/A	0.6752 [1.0000]	67.5% { 71.5% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 236237	(8.05, N/A) (N/A, 0.00, N/A)	593.5	N/A	0.7320 [1.0000]	73.2% { 83.4% }			
13C4_PFOS_IIS	(502.8 / 79.9) 244568	(9.48, N/A) (N/A, -0.01, N/A)	559.7	N/A	0.9712 [1.0000]	97.1% { 96.1% }			
13C4_PFBA_EIS	(217.0 / 172.0) 666885	(3.72, N/A) (N/A, 0.01, N/A)	973.5	N/A	10.5288 [8.0000]	131.6% { 104.1% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 387023	(5.02, N/A) (N/A, 0.00, N/A)	811.6	N/A	5.0049 [4.0000]	125.1% { 118.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 296684	(6.16, N/A) (N/A, -0.01, N/A)	808.5	N/A	2.5211 [2.0000]	126.1% { 107.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 244524	(7.10, N/A) (N/A, -0.01, N/A)	588.7	N/A	2.3936 [2.0000]	119.7% { 105.2% }			
13C8_PFOA_EIS	(421.0 / 376.0) 232502	(7.92, N/A) (N/A, 0.00, N/A)	621.8	N/A	2.3342 [2.0000]	116.7% { 100.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 92043	(8.66, N/A) (N/A, 0.00, N/A)	448.8	N/A	1.1821 [1.0000]	118.2% { 89.5% }			
13C6_PFDA_EIS	(519.0 / 474.0) 136352	(9.34, N/A) (N/A, 0.00, N/A)	582.3	N/A	1.5174 [1.0000]	151.7% { 111.7% }			S2,
13C7_PFUnA_EIS	(570.0 / 525.0) 179292	(9.72, N/A) (N/A, -0.01, N/A)	470.0	N/A	1.4528 [1.0000]	145.3% { 102.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 202375	(9.90, N/A) (N/A, 0.00, N/A)	463.1	N/A	1.3335 [1.0000]	133.3% { 96.8% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 135774	(10.13, N/A) (N/A, -0.01, N/A)	451.2	N/A	1.4248 [1.0000]	142.5% { 100.7% }			
13C3_PFBs_EIS	(302.0 / 80.0) 678338	(6.13, N/A) (N/A, -0.01, N/A)	839.0	N/A	2.4956 [2.0000]	124.8% { 99.7% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 390143	(8.05, N/A) (N/A, 0.00, N/A)	1263.0	N/A	2.5504 [2.0000]	127.5% { 103.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 606469	(9.48, N/A) (N/A, -0.01, N/A)	387.4	N/A	1.9917 [2.0000]	99.6% { 101.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 79802	(5.83, N/A) (N/A, 0.00, N/A)	432.1	N/A	5.0232 [4.0000]	125.6% { 106.6% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 88325	(7.57, N/A) (N/A, -0.01, N/A)	451.1	N/A	4.5471 [4.0000]	113.7% { 87.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 94998	(8.99, N/A) (N/A, -0.01, N/A)	306.5	N/A	4.9020 [4.0000]	122.5% { 97.9% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 850819	(10.17, N/A) (N/A, 0.00, N/A)	1018.9	N/A	1.8472 [2.0000]	92.4% { 96.3% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 107304	(10.60, N/A) (N/A, 0.00, N/A)	2331.8	N/A	0.9076 [2.0000]	45.4% { 45.9% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 95081	(10.69, N/A) (N/A, 0.00, N/A)	864.4	N/A	0.9269 [2.0000]	46.3% { 50.2% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A08.wiff-
 n
 Acquired: 2022/12/14 - 12:12

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 260950	(9.52, N/A) (N/A, -0.01, N/A)	268.3	N/A	3.6207 [4.0000]	90.5% { 102.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 262400	(9.69, N/A) (N/A, 0.00, N/A)	370.6	N/A	4.0237 [4.0000]	100.6% { 106.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 279544	(10.56, N/A) (N/A, 0.00, N/A)	941.0	N/A	12.3333 [20.0000]	61.7% { 68.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 138261	(10.66, N/A) (N/A, 0.00, N/A)	1363.8	N/A	12.1738 [20.0000]	60.9% { 63.4% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 663986	(6.51, N/A) (N/A, -0.01, N/A)	699.4	N/A	9.2112 [8.0000]	115.1% { 99.9% }			

ANALYSIS DATA SHEET

LCS

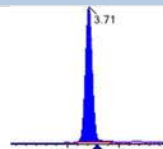
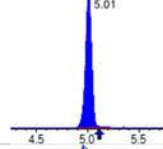
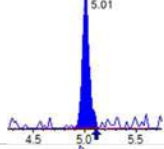
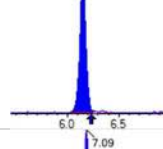
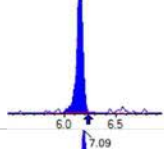
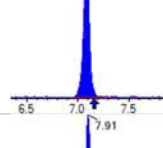
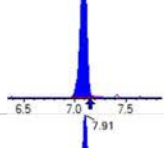
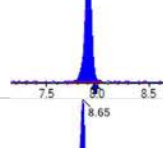
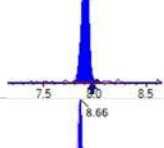
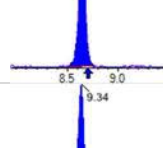
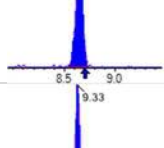
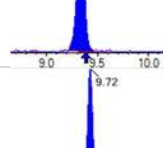
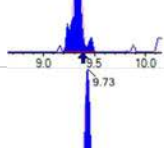
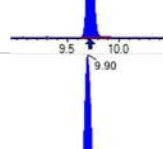
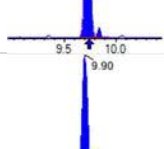
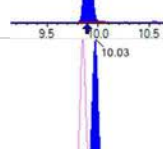
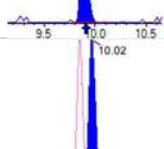
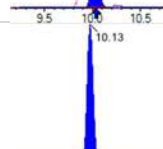
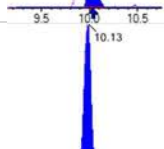
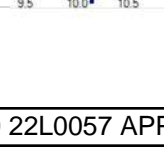
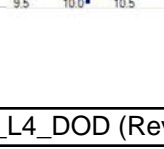
Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	BBL0205-BS1
Sampled:		File ID:	S2022-12-14A (6)
Solids:		Prepared:	12/09/22 14:19
Batch:	BBL0205	Analyzed:	12/14/22 12:25
Column:	1	Preparation:	1633
		Dilution:	1
		Calibration:	2251013
		Instrument:	Saphira
		Sequence:	SB03835

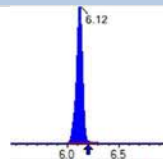
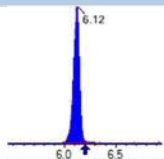
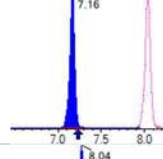
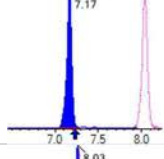
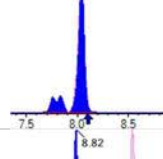
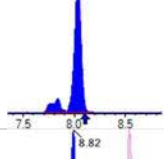
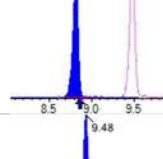
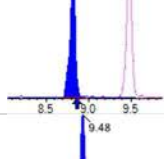
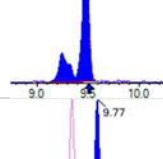
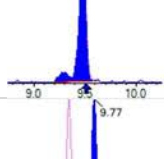
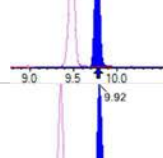
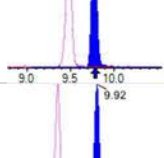
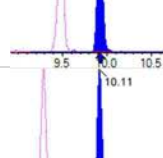
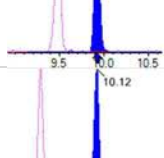
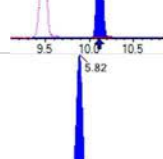
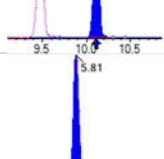
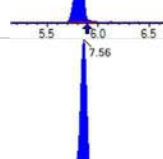
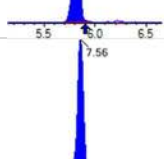
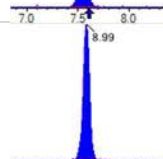
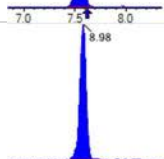
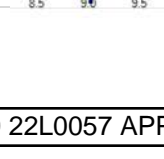
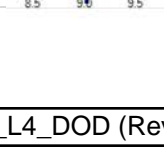
COMPOUND	CONC. (ng/L)	LOQ	DL	Q
PFBA	17.4	1.6	0.21	
PFPEA	8.75	0.80	0.065	
PFHXA	4.39	0.40	0.055	
PFHPA	4.63	0.40	0.041	
PFOA	4.19	0.40	0.15	
PFNA	4.99	0.40	0.082	
PFDA	4.14	0.40	0.10	
PFUnA	4.07	0.40	0.16	
PFDOA	3.94	0.40	0.11	
PFTRDA	3.74	0.40	0.20	
PFTEDA	4.30	0.40	0.20	
PFBS	4.12	0.40	0.037	
PFPEs	4.33	0.40	0.063	
PFHXS	3.94	0.40	0.032	
PFHPS	3.89	0.40	0.051	
PFOS	4.21	0.40	0.064	
PFNS	4.70	0.40	0.12	
PFDS	3.95	0.40	0.15	
PFDOS	3.98	0.40	0.12	
4:2FTS	16.9	1.6	0.29	
6:2FTS	18.0	1.6	0.31	
8:2FTS	18.6	1.6	0.082	
PFOSA	4.95	0.40	0.10	
NMeFOSA	19.3	1.6	0.47	
NEtFOSA	17.5	1.6	0.41	
NMeFOSAA	4.43	0.40	0.11	
NEtFOSAA	4.76	0.40	0.11	
NMeFOSE	18.1	1.6	1.0	
NEtFOSE	16.8	1.6	1.0	
HFPO-DA	7.91	0.80	0.17	

ANALYSIS DATA SHEET**LCS**

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	BBL0205-BS1
Sampled:		File ID:	S2022-12-14A (6)
Solids:		Prepared:	12/09/22 14:19
Batch:	BBL0205	Analyzed:	12/14/22 12:25
Column:	1	Preparation:	1633
		Dilution:	1
		Calibration:	2251013
		Instrument:	Saphira
		Sequence:	SB03835

COMPOUND	CONC. (ng/L)	LOQ	DL	Q
ADONA	8.06	0.80	0.12	
PFEESA	7.45	0.80	0.11	
PFMPA	8.55	0.80	0.054	
PFMBA	8.48	0.80	0.091	
NFDHA	8.68	0.80	0.30	
9CL-PF3ONS	8.33	0.80	0.21	
11CL-PF3OUDS	8.61	0.80	0.21	
3:3FTCA	17.5	1.6	0.57	
5:3FTCA	18.3	1.6	0.44	
7:3FTCA	16.3	1.6	0.55	

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 265061	(3.71, 1.00) (0.00, N/A, 0.0)	62.9	N/A 0.0 0.0	4.3585 [4.0000]	109.0%			
PFPeA	(262.9 / 219.0) 178511 (262.9 / 69.0) 2290	(5.01, 1.00) (0.00, N/A, 0.0)	688.5 51.1	0.0128 102.2 109.3	2.1871 [2.0000]	109.4%			
PFHxA	(313.0 / 269.0) 143291 (313.0 / 119.0) 13659	(6.15, 1.00) (0.00, N/A, -0.1)	396.6 152.0	0.0953 103.0 89.5	1.0966 [1.0000]	109.7%			
PFHpA	(363.0 / 319.0) 129407 (363.0 / 169.0) 36752	(7.09, 1.00) (0.00, N/A, -0.2)	368.9 473.5	0.2840 91.3 87.7	1.1583 [1.0000]	115.8%			
PFOA	(413.0 / 369.0) 139369 (413.0 / 169.0) 45612	(7.91, 1.00) (0.00, N/A, 0.0)	346.9 238.9	0.3273 97.5 112.3	1.0487 [1.0000]	104.9%			
PFNA	(463.0 / 419.0) 114850 (463.0 / 169.0) 21069	(8.65, 1.00) (0.00, N/A, -0.4)	293.3 68.0	0.1834 104.5 90.0	1.2468 [1.0000]	124.7%			
PFDA	(513.0 / 469.0) 129575 (513.0 / 169.0) 11540	(9.34, 1.00) (0.00, N/A, 0.3)	227.8 64.2	0.0891 88.5 68.0	1.0345 [1.0000]	103.4%			
PFUnA	(563.0 / 519.0) 188036 (563.0 / 169.0) 24214	(9.72, 1.00) (0.00, N/A, -0.4)	441.6 405.7	0.1288 140.7 148.3	1.0164 [1.0000]	101.6%			
PFDoA	(613.0 / 569.0) 198257 (613.0 / 169.0) 25846	(9.90, 1.00) (0.00, N/A, -0.1)	572.4 108.7	0.1304 101.7 91.6	0.9851 [1.0000]	98.5%			
PFTrDA	(663.0 / 619.0) 155205 (663.0 / 169.0) 33336	(10.03, 1.01) (N/A, 0.00, 0.2)	434.0 1133.0	0.2148 97.8 93.2	0.9354 [1.0000]	93.5%			
PFTeDA	(713.0 / 669.0) 123052 (713.0 / 169.0) 26626	(10.13, 1.00) (0.00, N/A, -0.4)	562.1 415.3	0.2164 116.3 123.3	1.0750 [1.0000]	107.5%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 189034 (298.9 / 99.0) 134718	(6.12, 1.00) (0.00, N/A, 0.0)	577.4 511.3	0.7127 98.9 107.2	1.0301 [0.8847]	116.4%			
PFPeS	(349.0 / 80.0) 364203 (349.0 / 99.0) 136811	(7.16, 0.89) (N/A, -0.02, -0.1)	739.7 482.5	0.3756 100.3 100.3	1.0834 [0.9384]	115.5%			
PFHxS	(399.0 / 80.0) 301960 (399.0 / 99.0) 102264	(8.04, 1.00) (0.00, N/A, 0.5)	4888.9 5065727.8	0.3387 105.0 97.9	0.9840 [0.9110]	108.0%			
PFHpS	(449.0 / 80.0) 268415 (449.0 / 99.0) 74007	(8.82, 0.93) (N/A, -0.01, -0.2)	471.1 286.2	0.2757 89.8 92.2	0.9730 [0.9514]	102.3%			
PFOS	(499.0 / 80.0) 352543 (499.0 / 99.0) 85190	(9.48, 1.00) (0.00, N/A, 0.1)	96.3 112.1	0.2416 105.3 94.7	1.0516 [0.9275]	113.4%			
PFNS	(549.0 / 80.0) 485736 (549.0 / 99.0) 115669	(9.77, 1.03) (N/A, -0.01, 0.0)	636.0 320.2	0.2381 91.8 100.6	1.1759 [0.9599]	122.5%			
PFDS	(599.0 / 80.0) 536419 (599.0 / 99.0) 116939	(9.92, 1.05) (N/A, -0.01, -0.2)	628.1 390.1	0.2180 96.8 88.4	0.9878 [0.9631]	102.6%			
PFDoS	(698.9 / 80.0) 273400 (698.9 / 99.0) 67672	(10.11, 1.07) (N/A, 0.00, -0.1)	731.7 418.5	0.2475 122.2 122.7	0.9953 [0.9696]	102.7%			
4:2FTS	(327.0 / 307.0) 266063 (327.0 / 81.0) 162768	(5.82, 1.00) (0.00, N/A, 0.4)	662.0 446.3	0.6118 100.8 107.1	4.2195 [3.7381]	112.9%			
6:2FTS	(427.0 / 407.0) 161623 (427.0 / 81.0) 128454	(7.56, 1.00) (0.00, N/A, 0.1)	653.3 721.4	0.7948 122.3 107.1	4.4957 [3.7962]	118.4%			
8:2FTS	(527.0 / 507.0) 160962 (527.0 / 81.0) 93157	(8.99, 1.00) (0.01, N/A, 0.3)	390.5 269.4	0.5788 92.3 84.1	4.6522 [3.8332]	121.4%			

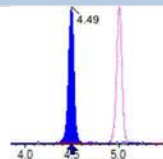
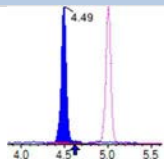
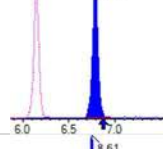
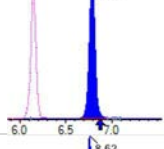
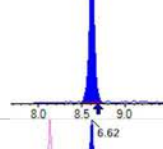
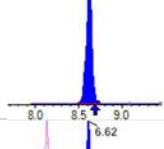
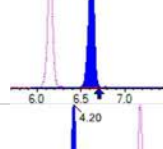
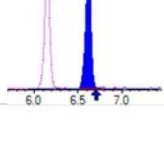
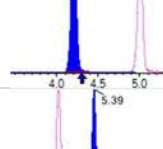
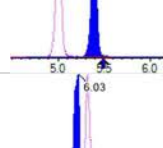
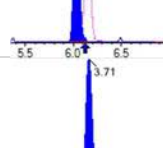
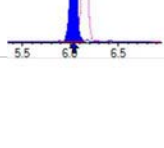
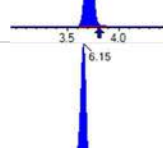
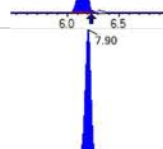
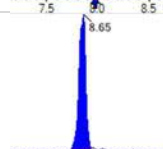
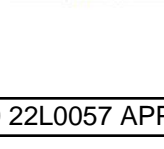


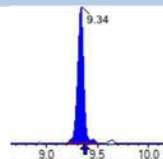
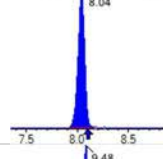
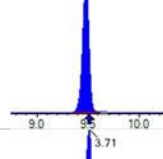
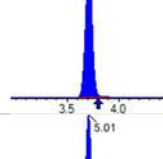
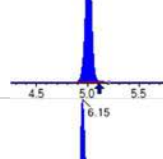
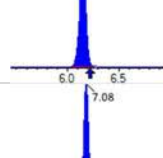
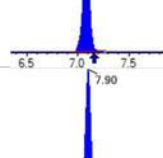
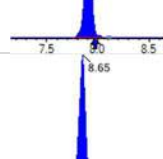
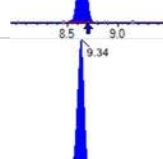
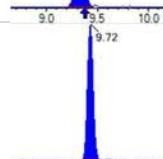
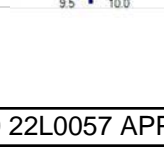
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-BS1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A09.wiff-
 Acquired: 2022/12/14 - 12:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 530005 (498.0 / 478.0) 9430	(10.17 , 1.00) (0.00 , N/A , -0.5)	1267.6 544.3	0.0178 78.2 64.4	1.2381 [1.0000]	123.8%			
NMeFOSA	(511.9 / 219.0) 241529 (511.9 / 169.0) 176918	(10.60 , 1.00) (0.00 , N/A , 0.0)	823.3 629.9	0.7325 114.8 114.8	4.8346 [4.0000]	120.9%			
NEIFOSA	(526.0 / 219.0) 214176 (526.0 / 169.0) 234217	(10.69 , 1.00) (0.00 , N/A , 0.1)	1347.0 1134.2	1.0936 102.4 100.7	4.3730 [4.0000]	109.3%			
NMeFOSAA	(570.0 / 419.0) 61278 (570.0 / 483.0) 29049	(9.52 , 1.00) (0.01 , N/A , -0.1)	562.4 870.3	0.4741 82.6 90.7	1.1083 [1.0000]	110.8%			
NEIFOSAA	(584.0 / 419.0) 69399 (584.0 / 526.0) 46701	(9.70 , 1.00) (0.01 , N/A , 0.1)	2434.4 897.0	0.6729 118.7 114.2	1.1908 [1.0000]	119.1%			
NMeFOSE	(616.1 / 59.0) 99772	(10.57 , 1.00) (0.01 , N/A , 0.0)	573.4	N/A 0.0 0.0	4.5291 [4.0000]	113.2%			
NEIFOSE	(630.0 / 59.0) 24191	(10.67 , 1.00) (0.01 , N/A , 0.0)	404.4	N/A 0.0 0.0	4.1920 [4.0000]	104.8%			
HFPO-DA	(285.0 / 169.0) 110663 (285.0 / 185.0) 369999	(6.50 , 1.00) (0.00 , N/A , 0.1)	386.6 788.7	3.3435 127.1 114.0	1.9766 [2.0000]	98.8%			
ADONA	(377.0 / 85.0) 480960 (377.0 / 251.0) 62790	(7.41 , 1.14) (N/A , -0.02 , 0.0)	633.7 225.2	0.1306 110.7 121.6	2.0144 [1.8854]	106.8%			
9CI-Pf3ONS	(531.0 / 351.0) 1410061 (533.0 / 353.0) 502137	(9.72 , 1.50) (N/A , 0.00 , 0.0)	778.9 704.4	0.3561 122.8 114.2	2.0829 [1.8665]	111.6%			
11CI-PF3OUDS	(631.0 / 451.0) 933676 (633.0 / 453.0) 312301	(10.01 , 1.54) (N/A , -0.01 , -0.1)	748.1 709.6	0.3345 106.0 96.5	2.1521 [1.8864]	114.1%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 14999 (241.0 / 117.0) 25254	(4.49, 0.90) (N/A, -0.02, 0.1)	421.6 310.8	1.6837 102.7 91.8	4.3727 [4.0000]	109.3%			
5:3FTCA	(341.0 / 236.7) 119439 (341.0 / 217.0) 192723	(6.79, 1.10) (N/A, -0.02, 0.2)	474.7 483.8	1.6136 102.4 104.3	4.5682 [4.0000]	114.2%			
7:3FTCA	(441.0 / 317.0) 133373 (441.0 / 337.0) 108185	(8.61, 1.40) (N/A, -0.02, -0.4)	291.5 344.6	0.8111 96.8 100.0	4.0771 [4.0000]	101.9%			
PFEESA	(315.0 / 135.0) 264846 (315.0 / 83.0) 82146	(6.62, 1.08) (N/A, -0.03, 0.2)	730.0 373.2	0.3102 101.2 101.1	1.8613 [1.7849]	104.3%			
PFMPA	(229.0 / 85.0) 47332	(4.20, 0.84) (N/A, -0.02, 0.0)	874.5	N/A 0.0 0.0	2.1363 [2.0000]	106.8%			
PFMBA	(279.0 / 85.0) 157122	(5.39, 1.08) (N/A, -0.03, 0.0)	845.3	N/A 0.0 0.0	2.1190 [2.0000]	106.0%			
NFDHA	(201.0 / 85.0) 6075 (295.0 / 201.0) 45705	(6.03, 0.98) (N/A, -0.02, 0.1)	372.6 324.1	7.5237 114.2 103.8	2.1689 [2.0000]	108.4%			
13C3_PFBA_IIS	(216.0 / 172.0) 92865	(3.71, N/A) (N/A, 0.00, N/A)	999.5	N/A	0.7654 [1.0000]	76.5% {96.5%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 124097	(6.15, N/A) (N/A, -0.02, N/A)	495.7	N/A	0.6800 [1.0000]	68.0% {70.8%}			
13C4_PFOA_IIS	(417.0 / 372.0) 128574	(7.90, N/A) (N/A, -0.02, N/A)	493.3	N/A	0.7365 [1.0000]	73.7% {88.7%}			
13C5_PFNxA_IIS	(468.0 / 423.0) 110689	(8.65, N/A) (N/A, -0.02, N/A)	447.4	N/A	0.8146 [1.0000]	81.5% {94.5%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 90001	(9.34, N/A) (N/A, -0.01, N/A)	241.5	N/A	0.6486 [1.0000]	64.9% { 68.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 224345	(8.04, N/A) (N/A, -0.02, N/A)	625.7	N/A	0.6951 [1.0000]	69.5% { 79.2% }			
13C4_PFOS_IIS	(502.8 / 79.9) 227149	(9.48, N/A) (N/A, -0.01, N/A)	283.0	N/A	0.9020 [1.0000]	90.2% { 89.2% }			
13C4_PFBA_EIS	(217.0 / 172.0) 692594	(3.71, N/A) (N/A, 0.00, N/A)	997.3	N/A	9.7841 [8.0000]	122.3% { 108.1% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 367800	(5.01, N/A) (N/A, -0.02, N/A)	829.4	N/A	5.3520 [4.0000]	133.8% { 112.6% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 294891	(6.15, N/A) (N/A, -0.03, N/A)	614.5	N/A	2.8197 [2.0000]	141.0% { 106.5% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 241423	(7.08, N/A) (N/A, -0.02, N/A)	631.3	N/A	2.6592 [2.0000]	133.0% { 103.9% }			
13C8_PFOA_EIS	(421.0 / 376.0) 265968	(7.90, N/A) (N/A, -0.02, N/A)	733.4	N/A	2.6977 [2.0000]	134.9% { 114.7% }			
13C9_PFNA_EIS	(472.0 / 427.0) 101044	(8.65, N/A) (N/A, -0.02, N/A)	436.4	N/A	1.1849 [1.0000]	118.5% { 98.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 123878	(9.34, N/A) (N/A, -0.01, N/A)	378.2	N/A	1.4351 [1.0000]	143.5% { 101.5% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 213264	(9.72, N/A) (N/A, -0.01, N/A)	510.3	N/A	1.7989 [1.0000]	179.9% { 122.1% }			S2,



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-BS1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A09.wiff-
 Acquired: 2022/12/14 - 12:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 232400	(9.90, N/A) (N/A, -0.01, N/A)	492.8	N/A	1.5941 [1.0000]	159.4% { 111.1% }			S2,
13C2_PFTeDA_EIS	(715.0 / 670.0) 125249	(10.13, N/A) (N/A, -0.01, N/A)	303.9	N/A	1.3683 [1.0000]	136.8% { 92.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 649550	(6.12, N/A) (N/A, -0.03, N/A)	718.2	N/A	2.5163 [2.0000]	125.8% { 95.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 382120	(8.04, N/A) (N/A, -0.02, N/A)	1021.1	N/A	2.6304 [2.0000]	131.5% { 101.2% }			
13C8_PFOS_EIS	(507.0 / 80.0) 609755	(9.48, N/A) (N/A, -0.01, N/A)	393.5	N/A	2.1560 [2.0000]	107.8% { 102.4% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 77353	(5.82, N/A) (N/A, -0.02, N/A)	496.7	N/A	5.1271 [4.0000]	128.2% { 103.4% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 88225	(7.56, N/A) (N/A, -0.02, N/A)	734.7	N/A	4.7827 [4.0000]	119.6% { 87.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 97177	(8.98, N/A) (N/A, -0.02, N/A)	332.6	N/A	5.2802 [4.0000]	132.0% { 100.2% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 872813	(10.17, N/A) (N/A, 0.00, N/A)	1051.2	N/A	2.0403 [2.0000]	102.0% { 98.8% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 120100	(10.60, N/A) (N/A, 0.00, N/A)	685.7	N/A	1.0937 [2.0000]	54.7% { 51.4% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 105967	(10.69, N/A) (N/A, 0.00, N/A)	793.3	N/A	1.1123 [2.0000]	55.6% { 56.0% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-BS1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A09.wiff-
 n
 Acquired: 2022/12/14 - 12:25

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 286103	(9.51 , N/A) (N/A , -0.02 , N/A)	332.1	N/A	4.2741 [4.0000]	106.9% { 112.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 267798	(9.69 , N/A) (N/A , -0.01 , N/A)	401.5	N/A	4.4213 [4.0000]	110.5% { 109.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 326564	(10.56 , N/A) (N/A , -0.01 , N/A)	824.3	N/A	15.5127 [20.0000]	77.6% { 80.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 170594	(10.66 , N/A) (N/A , 0.00 , N/A)	1738.7	N/A	16.1725 [20.0000]	80.9% { 78.2% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 724269	(6.50 , N/A) (N/A , -0.02 , N/A)	795.9	N/A	11.3058 [8.0000]	141.3% { 109.0% }			

ANALYSIS DATA SHEET**MRL Check**

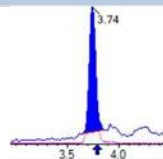
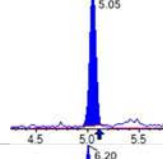
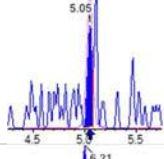
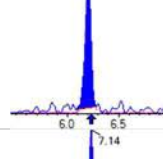
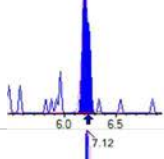
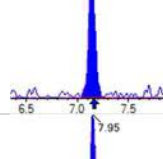
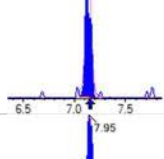
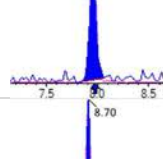
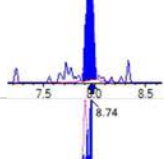
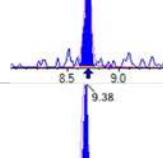
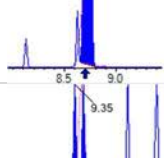
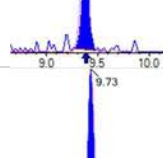
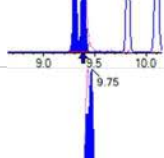
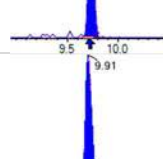
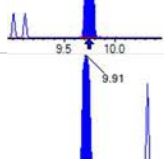
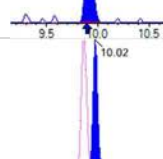
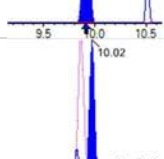
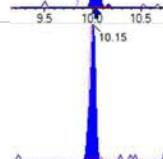
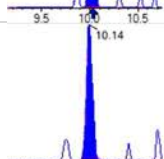
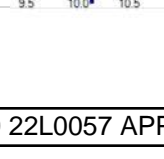
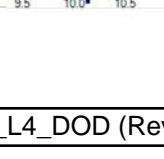
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	BBL0205-MRL1
Sampled:		Prepared:	12/09/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0205	Sequence:	SB03835
Column:	1	Calibration:	2251013
			Instrument: Saphira
			File ID: S2022-12-14A (7)
			Analyzed: 12/14/22 12:37
			Dilution: 1

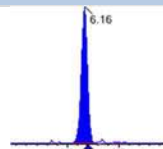
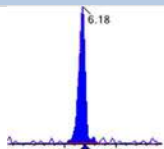
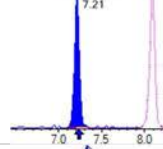
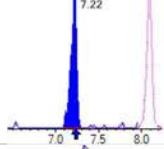
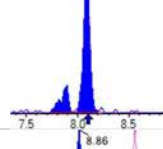
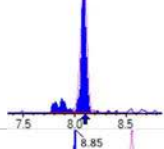
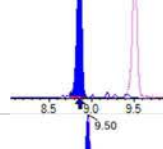
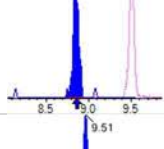
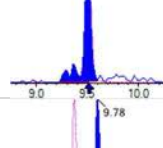
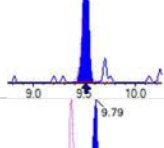
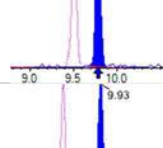
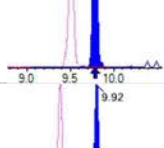
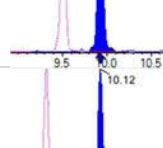
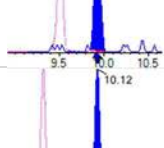
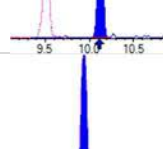
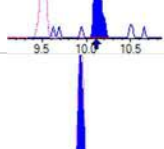
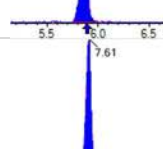
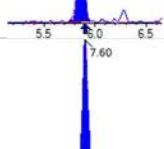
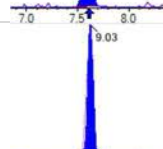
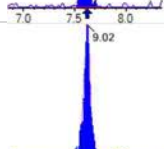
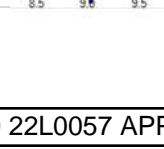

COMPOUND	CONC. (ng/L)	LOQ	DL	Q
PFBA	1.63	1.6	0.21	
PFPEA	0.858	0.80	0.065	
PFHXA	0.464	0.40	0.055	IR2
PFHPA	0.492	0.40	0.041	
PFOA	0.599	0.40	0.15	
PFNA	0.535	0.40	0.082	
PFDA	0.571	0.40	0.10	IR1
PFUnA	0.413	0.40	0.16	IR2
PFDOA	0.388	0.40	0.11	IR1, J
PFTRDA	0.509	0.40	0.20	
PFTEDA	0.402	0.40	0.20	IR2
PFBS	0.448	0.40	0.037	
PFPEs	0.363	0.40	0.063	J
PFHXS	0.414	0.40	0.032	MI5
PFHPS	0.337	0.40	0.051	J
PFOS	0.544	0.40	0.064	MI5
PFNS	0.388	0.40	0.12	J
PFDS	0.383	0.40	0.15	J
PFDOS	0.499	0.40	0.12	
4:2FTS	1.73	1.6	0.29	
6:2FTS	1.95	1.6	0.31	
8:2FTS	1.82	1.6	0.082	
PFOSA	0.542	0.40	0.10	
NMeFOSA	1.69	1.6	0.47	
NEtFOSA	1.63	1.6	0.41	
NMeFOSAA	0.446	0.40	0.11	IR2
NEtFOSAA	0.400	0.40	0.11	
NMeFOSE	1.74	1.6	1.0	
NEtFOSE	2.37	1.6	1.0	
HFPO-DA	0.910	0.88	0.17	

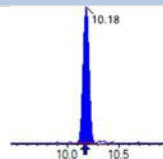
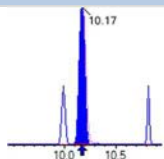
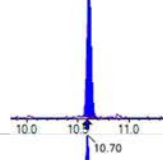
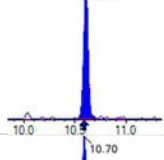
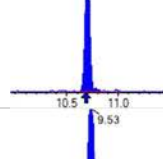
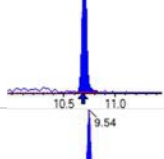
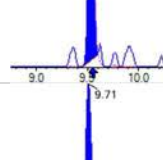
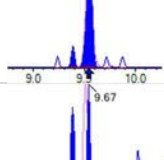
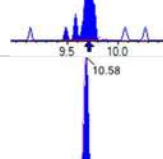
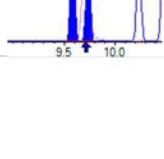
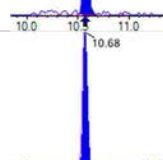
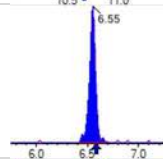
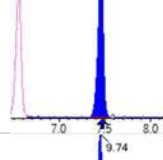
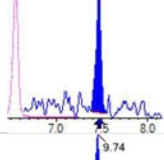
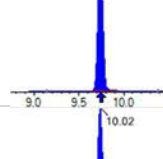
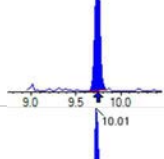
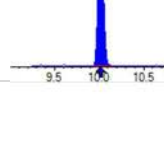
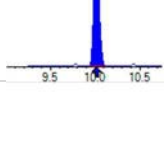
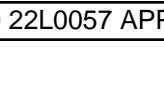
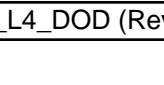
ANALYSIS DATA SHEET**MRL Check**

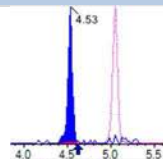
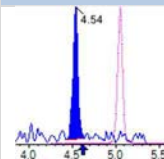
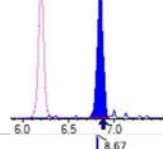
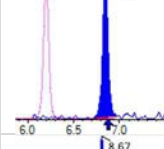
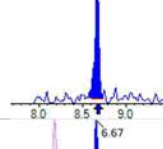
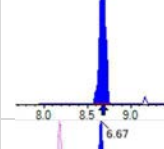
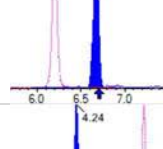
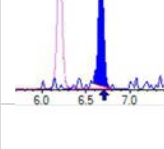
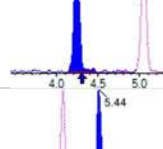
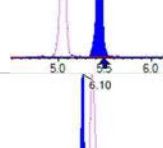
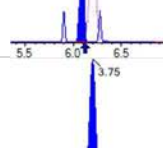
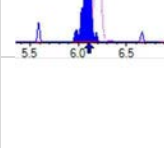
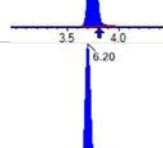
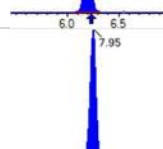
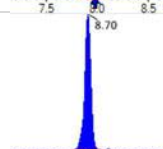
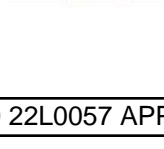
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Water	Laboratory ID:	BBL0205-MRL1
Sampled:		Prepared:	12/09/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0205	Sequence:	SB03835
Column:	1	Calibration:	2251013
			Instrument: Saphira

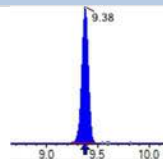
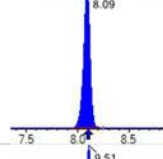
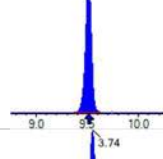
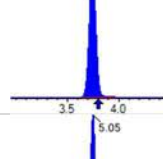
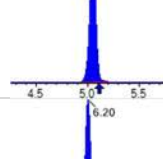
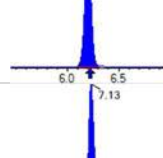
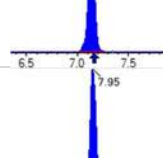
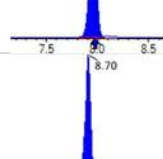
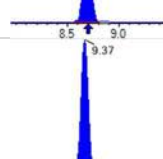
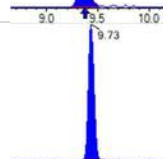
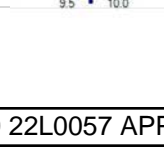
COMPOUND	CONC. (ng/L)	LOQ	DL	Q
ADONA	0.884	0.80	0.12	
PFEESA	0.718	0.80	0.11	J
PFMPA	0.957	0.80	0.054	
PFMBA	0.913	0.80	0.091	
NFDHA	0.282	0.80	0.20	BS1, J
9CL-PF3ONS	0.879	0.80	0.21	
11CL-PF3OUDS	0.917	0.80	0.21	
3:3FTCA	1.98	1.6	0.57	
5:3FTCA	2.26	1.6	0.44	
7:3FTCA	1.62	1.6	0.55	

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 22887	(3.74, 1.00) (0.00, N/A, 0.0)	41.4	N/A 0.0 0.0	0.4077 [0.4000]	101.9%			
PFPeA	(262.9 / 219.0) 16604 (262.9 / 69.0) 165	(5.05, 1.00) (0.00, N/A, -0.1)	141.3 8.0	0.0099 79.1 84.5	0.2145 [0.2000]	107.2%			
PFHxA	(313.0 / 269.0) 14911 (313.0 / 119.0) 2238	(6.20, 1.00) (0.00, N/A, -0.1)	65.3 44.6	0.1501 162.1 140.9	0.1161 [0.1000]	116.1%			IR2,
PFHpA	(363.0 / 319.0) 15036 (363.0 / 169.0) 4372	(7.14, 1.00) (0.00, N/A, 0.8)	63.1 85.4	0.2907 93.4 89.8	0.1231 [0.1000]	123.1%			
PFOA	(413.0 / 369.0) 20076 (413.0 / 169.0) 5598	(7.95, 1.00) (0.00, N/A, 0.0)	77.1 56.5	0.2788 83.1 95.7	0.1497 [0.1000]	149.7%			QC,
PFNA	(463.0 / 419.0) 13233 (463.0 / 169.0) 2042	(8.70, 1.00) (0.00, N/A, -2.3)	50.5 20.4	0.1543 87.9 75.7	0.1336 [0.1000]	133.6%			QC,
PFDA	(513.0 / 469.0) 16556 (513.0 / 169.0) 556	(9.38, 1.00) (0.01, N/A, 2.1)	51.2 47.9	0.0336 33.4 25.7	0.1428 [0.1000]	142.8%			QC,IR1,
PFUnA	(563.0 / 519.0) 17689 (563.0 / 169.0) 3115	(9.73, 1.00) (0.00, N/A, -1.4)	126.1 254.2	0.1761 192.4 202.8	0.1033 [0.1000]	103.3%			IR2,
PFDoA	(613.0 / 569.0) 19079 (613.0 / 169.0) 852	(9.91, 1.00) (0.00, N/A, -0.5)	98.0 4110.2	0.0446 34.8 31.4	0.0969 [0.1000]	96.9%			IR1,
PFTrDA	(663.0 / 619.0) 20643 (663.0 / 169.0) 3812	(10.02, 1.01) (N/A, 0.00, 0.2)	205.7 84.1	0.1846 84.1 80.1	0.1271 [0.1000]	127.1%			
PFTeDA	(713.0 / 669.0) 10973 (713.0 / 169.0) 4073	(10.15, 1.00) (0.02, N/A, 0.5)	142.8 80.5	0.3712 199.5 211.5	0.1006 [0.1000]	100.6%			IR2,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 21639 (298.9 / 99.0) 12886	(6.16, 1.00) (0.00, N/A, -0.6)	222.6 101.1	0.5955 82.7 89.6	0.1121 [0.0885]	126.7%			
PFPeS	(349.0 / 80.0) 31990 (349.0 / 99.0) 11757	(7.21, 0.89) (N/A, 0.03, -0.2)	249.9 154.4	0.3675 98.1 98.1	0.0908 [0.0938]	96.8%			
PFHxS	(399.0 / 80.0) 33272 (399.0 / 99.0) 12205	(8.09, 1.00) (0.00, N/A, 0.1)	952448.5 77799.1	0.3668 113.7 106.1	0.1035 [0.0911]	113.6%			MI5 DG 2022-12-14
PFHpS	(449.0 / 80.0) 25142 (449.0 / 99.0) 7530	(8.86, 0.93) (N/A, 0.03, 0.5)	111.7 180.4	0.2995 97.6 100.2	0.0843 [0.0951]	88.6%			
PFOS	(499.0 / 80.0) 49298 (499.0 / 99.0) 9901	(9.50, 1.00) (-0.01, N/A, -0.5)	7607.5 65.6	0.2008 87.5 78.7	0.1360 [0.0927]	146.6%			QC,MI5 DG 2022-12-14
PFNS	(549.0 / 80.0) 43376 (549.0 / 99.0) 12485	(9.78, 1.03) (N/A, 0.00, -0.4)	148.6 196.1	0.2878 111.0 121.6	0.0971 [0.0960]	101.1%			
PFDS	(599.0 / 80.0) 56196 (599.0 / 99.0) 10706	(9.93, 1.04) (N/A, 0.01, 0.6)	204.7 79.3	0.1905 84.6 77.2	0.0957 [0.0963]	99.3%			
PFDoS	(698.9 / 80.0) 37047 (698.9 / 99.0) 7248	(10.12, 1.06) (N/A, 0.00, 0.0)	220.5 64.1	0.1957 96.6 97.0	0.1247 [0.0970]	128.6%			
4:2FTS	(327.0 / 307.0) 27927 (327.0 / 81.0) 18800	(5.86, 1.00) (0.00, N/A, 0.2)	472.0 141.5	0.6732 110.9 117.9	0.4314 [0.3738]	115.4%			
6:2FTS	(427.0 / 407.0) 19239 (427.0 / 81.0) 14426	(7.61, 1.00) (0.00, N/A, 0.3)	207.9 117.9	0.7498 115.4 101.0	0.4874 [0.3796]	128.4%			
8:2FTS	(527.0 / 507.0) 14267 (527.0 / 81.0) 11007	(9.03, 1.00) (0.00, N/A, 0.1)	22.5 93.8	0.7715 123.1 112.1	0.4550 [0.3833]	118.7%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 58409 (498.0 / 478.0) 1227	(10.18, 1.00) (0.00, N/A, 0.7)	23.2 693.4	0.0210 92.3 76.0	0.1355 [0.1000]	135.5%			QC,
NMeFOSA	(511.9 / 219.0) 21078 (511.9 / 169.0) 12495	(10.61, 1.00) (0.00, N/A, 0.0)	252.1 191.8	0.5928 92.9 92.9	0.4221 [0.4000]	105.5%			
NEIFOSA	(526.0 / 219.0) 19299 (526.0 / 169.0) 20225	(10.70, 1.00) (0.00, N/A, 0.0)	333.1 165.1	1.0480 98.2 96.5	0.4079 [0.4000]	102.0%			
NMeFOSAA	(570.0 / 419.0) 6507 (570.0 / 483.0) 6283	(9.53, 1.00) (-0.01, N/A, -0.7)	10.0 2141.4	0.9655 168.2 184.7	0.1114 [0.1000]	111.4%			IR2,
NEIFOSAA	(584.0 / 419.0) 6622 (584.0 / 526.0) 2650	(9.71, 1.00) (0.00, N/A, 2.5)	369.9 555.6	0.4002 70.6 67.9	0.1001 [0.1000]	100.1%			
NMeFOSE	(616.1 / 59.0) 9259	(10.58, 1.00) (0.01, N/A, 0.0)	123.5	N/A 0.0 0.0	0.4350 [0.4000]	108.8%			
NEtFOSE	(630.0 / 59.0) 3290	(10.68, 1.00) (0.01, N/A, 0.0)	150.6	N/A 0.0 0.0	0.5919 [0.4000]	148.0%			QC,
HFPO-DA	(285.0 / 169.0) 12438 (285.0 / 185.0) 37766	(6.55, 1.00) (-0.01, N/A, -0.4)	220.0 196.6	3.0364 115.4 103.6	0.2274 [0.2000]	113.7%			
ADONA	(377.0 / 85.0) 51557 (377.0 / 251.0) 5810	(7.45, 1.14) (N/A, 0.03, -0.6)	373.1 32.9	0.1127 95.6 104.9	0.2211 [0.1885]	117.3%			
9CI-Pf3ONS	(531.0 / 351.0) 145331 (533.0 / 353.0) 43804	(9.74, 1.49) (N/A, 0.01, -0.1)	361.3 141.0	0.3014 104.0 96.7	0.2198 [0.1867]	117.8%			
11CI-PF3OUDS	(631.0 / 451.0) 97170 (633.0 / 453.0) 29212	(10.02, 1.53) (N/A, 0.00, 0.3)	879.5 1035.0	0.3006 95.3 86.8	0.2293 [0.1886]	121.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 1612 (241.0 / 117.0) 2773	(4.53, 0.90) (N/A, 0.02, -0.3)	104.7 50.6	1.7200 104.9 93.7	0.4954 [0.4000]	123.9%			
5:3FTCA	(341.0 / 236.7) 14495 (341.0 / 217.0) 24677	(6.84, 1.10) (N/A, 0.03, -0.1)	21.2 99.4	1.7025 108.0 110.0	0.5639 [0.4000]	141.0%			QC,
7:3FTCA	(441.0 / 317.0) 13043 (441.0 / 337.0) 9628	(8.67, 1.40) (N/A, 0.04, -0.1)	51.9 936.1	0.7382 88.1 91.0	0.4056 [0.4000]	101.4%			
PFEESA	(315.0 / 135.0) 25115 (315.0 / 83.0) 8341	(6.67, 1.08) (N/A, 0.03, 0.1)	280.7 58.9	0.3321 108.3 108.3	0.1795 [0.1785]	100.6%			
PFMPA	(229.0 / 85.0) 5030	(4.24, 0.84) (N/A, 0.02, 0.0)	178.1	N/A 0.0 0.0	0.2393 [0.2000]	119.7%			
PFMBA	(279.0 / 85.0) 16060	(5.44, 1.08) (N/A, 0.02, 0.0)	409.7	N/A 0.0 0.0	0.2283 [0.2000]	114.2%			
NFDHA	(201.0 / 85.0) 507 (295.0 / 201.0) 2726	(6.10, 0.98) (N/A, 0.04, 0.6)	1283.6 104.0	5.3815 81.7 74.3	0.0705 [0.2000]	35.3%			QC,
13C3_PFBa_IIS	(216.0 / 172.0) 88383	(3.75, N/A) (N/A, 0.03, N/A)	768.6	N/A	0.7284 [1.0000]	72.8% {91.8%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 148857	(6.20, N/A) (N/A, 0.02, N/A)	523.2	N/A	0.8157 [1.0000]	81.6% {85.0%}			
13C4_PFOA_IIS	(417.0 / 372.0) 132284	(7.95, N/A) (N/A, 0.03, N/A)	497.4	N/A	0.7578 [1.0000]	75.8% {91.3%}			
13C5_PFNAl_IIS	(468.0 / 423.0) 110723	(8.70, N/A) (N/A, 0.03, N/A)	364.2	N/A	0.8148 [1.0000]	81.5% {94.5%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 102562	(9.38, N/A) (N/A, 0.03, N/A)	371.1	N/A	0.7391 [1.0000]	73.9% { 78.3% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 248613	(8.09, N/A) (N/A, 0.03, N/A)	833.3	N/A	0.7703 [1.0000]	77.0% { 87.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 233000	(9.51, N/A) (N/A, 0.02, N/A)	387.6	N/A	0.9253 [1.0000]	92.5% { 91.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 639294	(3.74, N/A) (N/A, 0.03, N/A)	924.2	N/A	9.4891 [8.0000]	118.6% { 99.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 348897	(5.05, N/A) (N/A, 0.02, N/A)	823.7	N/A	4.2324 [4.0000]	105.8% { 106.8% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 289920	(6.20, N/A) (N/A, 0.03, N/A)	508.5	N/A	2.3110 [2.0000]	115.6% { 104.7% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 264059	(7.13, N/A) (N/A, 0.03, N/A)	873.1	N/A	2.4248 [2.0000]	121.2% { 113.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 268485	(7.95, N/A) (N/A, 0.03, N/A)	529.0	N/A	2.6469 [2.0000]	132.3% { 115.8% }			
13C9_PFNA_EIS	(472.0 / 427.0) 108613	(8.70, N/A) (N/A, 0.04, N/A)	446.0	N/A	1.2732 [1.0000]	127.3% { 105.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 114672	(9.37, N/A) (N/A, 0.02, N/A)	193.1	N/A	1.1658 [1.0000]	116.6% { 93.9% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 197381	(9.73, N/A) (N/A, 0.00, N/A)	352.8	N/A	1.4611 [1.0000]	146.1% { 113.0% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-MRL1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A10.wiff-
 Acquired: 2022/12/14 - 12:37

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 227410	(9.91, N/A) (N/A, 0.00, N/A)	538.0	N/A	1.3689 [1.0000]	136.9% { 108.7% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 119390	(10.13, N/A) (N/A, 0.00, N/A)	223.9	N/A	1.1445 [1.0000]	114.5% { 88.5% }			
13C3_PFBs_EIS	(302.0 / 80.0) 683404	(6.17, N/A) (N/A, 0.02, N/A)	779.9	N/A	2.3890 [2.0000]	119.5% { 100.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 400346	(8.09, N/A) (N/A, 0.03, N/A)	783.9	N/A	2.4868 [2.0000]	124.3% { 106.1% }			
13C8_PFOS_EIS	(507.0 / 80.0) 659513	(9.51, N/A) (N/A, 0.02, N/A)	390.3	N/A	2.2734 [2.0000]	113.7% { 110.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 79417	(5.86, N/A) (N/A, 0.03, N/A)	451.9	N/A	4.7501 [4.0000]	118.8% { 106.1% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 96865	(7.60, N/A) (N/A, 0.03, N/A)	531.7	N/A	4.7385 [4.0000]	118.5% { 96.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 88069	(9.02, N/A) (N/A, 0.03, N/A)	399.8	N/A	4.3182 [4.0000]	108.0% { 90.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 879146	(10.18, N/A) (N/A, 0.01, N/A)	719.1	N/A	2.0035 [2.0000]	100.2% { 99.6% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 120049	(10.61, N/A) (N/A, 0.01, N/A)	1012.1	N/A	1.0658 [2.0000]	53.3% { 51.3% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 102376	(10.70, N/A) (N/A, 0.01, N/A)	718.5	N/A	1.0476 [2.0000]	52.4% { 54.1% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0205-MRL1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - 2022-12-13
 Path: S2022-12-14AS2022-12-14A10.wiff-
 n
 Acquired: 2022/12/14 - 12:37

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 302196	(9.55, N/A) (N/A, 0.02, N/A)	540.5	N/A	4.4011 [4.0000]	110.0% { 119.1% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 304000	(9.71, N/A) (N/A, 0.01, N/A)	309.4	N/A	4.8930 [4.0000]	122.3% { 123.7% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 315506	(10.57, N/A) (N/A, 0.01, N/A)	1229.4	N/A	14.6110 [20.0000]	73.1% { 77.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 164340	(10.67, N/A) (N/A, 0.01, N/A)	1384.5	N/A	15.1884 [20.0000]	75.9% { 75.3% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 707433	(6.55, N/A) (N/A, 0.03, N/A)	921.5	N/A	9.2062 [8.0000]	115.1% { 106.5% }			

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-BLK1
Sampled:		Prepared:	12/09/22 15:06
Solids:		Analized:	12/15/22 00:42
Batch:	BBL0206	Preparation:	1633
Column:	1	Dilution:	1
		Sequence:	SB03845
		Calibration:	2251013
		Instrument:	Saphira

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
PFBA	0.20 U	0.30	0.20	0.15	U
PFPEA	0.040 U	0.080	0.040	0.022	U
PFHXA	0.020 U	0.040	0.020	0.015	U
PFHPA	0.020 U	0.040	0.020	0.015	U
PFOA	0.0293 J	0.040	0.030	0.021	B, J
PFNA	0.030 U	0.040	0.030	0.022	U
PFDA	0.030 U	0.040	0.030	0.022	U
PFUnA	0.020 U	0.040	0.020	0.020	U
PFDOA	0.030 U	0.040	0.030	0.023	U
PFTRDA	0.020 U	0.040	0.020	0.016	U
PFTEDA	0.030 U	0.040	0.030	0.025	U
PFBS	0.020 U	0.040	0.020	0.016	U
PFPEs	0.020 U	0.040	0.020	0.012	U
PFHXS	0.020 U	0.040	0.020	0.015	U
PFHPS	0.020 U	0.040	0.020	0.011	U
PFOS	0.0118 J	0.040	0.020	0.0097	J
PFNS	0.020 U	0.040	0.020	0.015	U
PFDS	0.020 U	0.040	0.020	0.014	U
PFDOS	0.020 U	0.040	0.020	0.013	U
4:2FTS	0.080 U	0.16	0.080	0.045	U
6:2FTS	0.080 U	0.16	0.080	0.061	U
8:2FTS	0.080 U	0.16	0.080	0.051	U
PFOSA	0.020 U	0.040	0.020	0.012	U
NMeFOSA	0.080 U	0.16	0.080	0.066	U
NEtFOSA	0.080 U	0.16	0.080	0.027	U
NMeFOSAA	0.020 U	0.040	0.020	0.010	U
NEtFOSAA	0.020 U	0.040	0.020	0.018	U
NMeFOSE	0.080 U	0.16	0.080	0.054	U
NEtFOSE	0.080 U	0.16	0.080	0.047	U
HFPO-DA	0.040 U	0.080	0.040	0.020	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-BLK1
Sampled:		File ID:	S2022-12-14B (5)
		Prepared:	12/09/22 15:06
Solids:		Analyzed:	12/15/22 00:42
		Preparation:	1633
Batch:	BBL0206	Dilution:	1
Column:	1	Sequence:	SB03845
		Calibration:	2251013
		Instrument:	Saphira

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
ADONA	0.040 U	0.080	0.040	0.026	U
PFEESA	0.040 U	0.080	0.040	0.017	U
PFMPA	0.040 U	0.080	0.040	0.028	U
PFMBA	0.040 U	0.080	0.040	0.032	U
NFDHA	0.060 U	0.080	0.060	0.049	U
9CL-PF3ONS	0.040 U	0.080	0.040	0.024	U
11CL-PF3OUDS	0.040 U	0.080	0.040	0.027	U
3:3FTCA	0.080 U	0.16	0.080	0.064	U
5:3FTCA	0.080 U	0.16	0.080	0.065	U
7:3FTCA	0.080 U	0.16	0.080	0.050	U



Chemist: ABK
Instrument: Saphira
Type: Sciex Q3 5500

Sample I.D.: BBL0206-BLK1
DF, IV: 1, 10.0µL
Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
Path: S2022-12-14B (5)
Acquired: 2022/12/15 - 00:42

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 9234 (413.0 / 169.0) 2501	(7.97, 1.00) (0.00, N/A, 0.5)	33.4 45.9	0.2709 80.7 86.7	0.0733	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0206-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (5)
 Acquired: 2022/12/15 - 00:42

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 10138 (499.0 / 99.0) 2477	(9.52 , 1.00) (0.00 , N/A , -0.4)	21.3 19.9	0.2443 106.5 107.8	0.0295	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

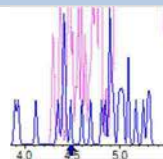
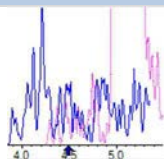
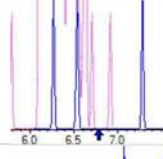
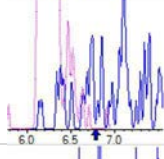
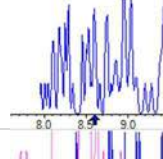
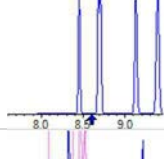
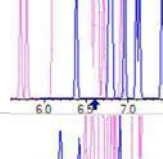
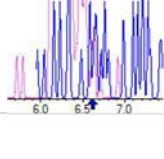
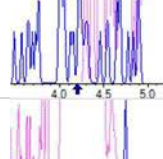
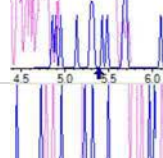
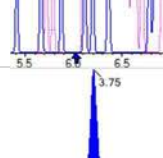
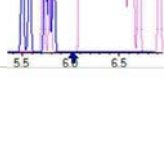
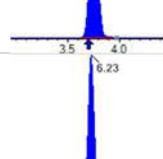
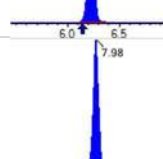
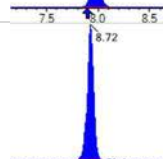
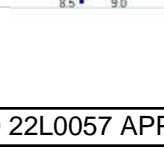


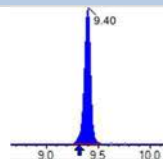
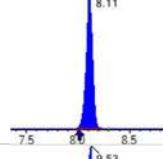
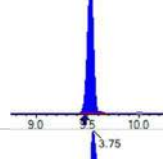
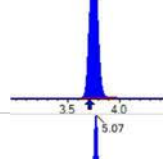
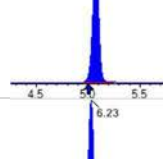
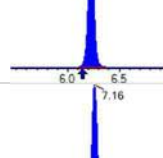
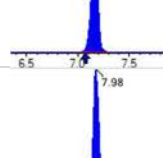
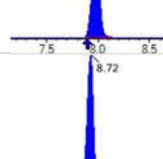
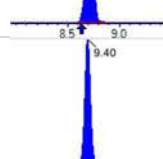
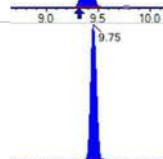
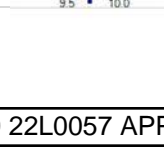
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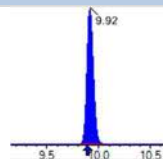
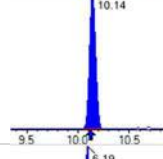
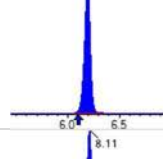
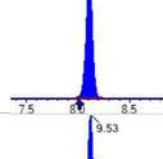
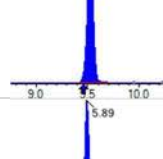
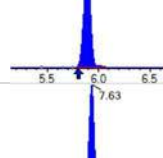
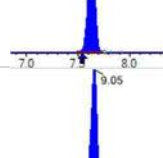
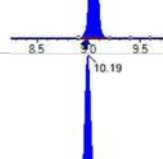
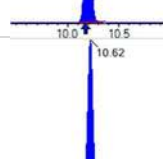
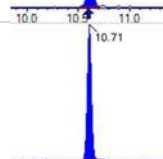
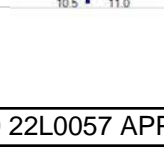
Sample I.D.: BBL0206-BLK1
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 Acquisition Method: 1633 2022-12-13.dam

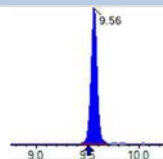
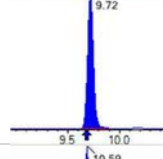
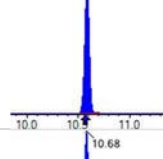
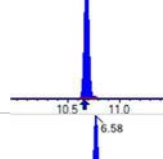
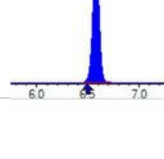
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 Path: S2022-12-14B (5)
 Acquired: 2022/12/15 - 00:42

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 7837 (498.0 / 478.0) 299	(10.20, 1.00) (0.00, N/A, -1.7)	114.1 53.2	0.0382 167.6 205.7	0.0202	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(201.0 / 85.0) N/A (295.0 / 201.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 87660	(3.75, N/A) (N/A, 0.06, N/A)	675.3	N/A	0.7225 [1.0000]	72.2% { 89.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 160645	(6.23, N/A) (N/A, 0.08, N/A)	689.0	N/A	0.8803 [1.0000]	88.0% { 91.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 131738	(7.98, N/A) (N/A, 0.09, N/A)	582.5	N/A	0.7547 [1.0000]	75.5% { 75.3% }			
13C5_PFNA_IIS	(468.0 / 423.0) 118644	(8.72, N/A) (N/A, 0.09, N/A)	340.8	N/A	0.8731 [1.0000]	87.3% { 87.1% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 108177	(9.40, N/A) (N/A, 0.08, N/A)	338.8	N/A	0.7796 [1.0000]	78.0% { 94.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 261424	(8.11, N/A) (N/A, 0.09, N/A)	996.3	N/A	0.8100 [1.0000]	81.0% { 89.1% }			
13C4_PFOS_IIS	(502.8 / 79.9) 219467	(9.53, N/A) (N/A, 0.06, N/A)	370.8	N/A	0.8715 [1.0000]	87.2% { 94.9% }			
13C4_PFBA_EIS	(217.0 / 172.0) 624711	(3.75, N/A) (N/A, 0.06, N/A)	861.9	N/A	9.3492 [8.0000]	116.9% { 96.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 350320	(5.07, N/A) (N/A, 0.08, N/A)	714.8	N/A	3.9378 [4.0000]	98.4% { 91.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 262796	(6.23, N/A) (N/A, 0.09, N/A)	806.3	N/A	1.9411 [2.0000]	97.1% { 90.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 236596	(7.16, N/A) (N/A, 0.09, N/A)	753.7	N/A	2.0132 [2.0000]	100.7% { 96.8% }			
13C8_PFOA_EIS	(421.0 / 376.0) 252258	(7.98, N/A) (N/A, 0.09, N/A)	790.1	N/A	2.4972 [2.0000]	124.9% { 97.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 97912	(8.72, N/A) (N/A, 0.09, N/A)	484.5	N/A	1.0711 [1.0000]	107.1% { 99.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 129983	(9.40, N/A) (N/A, 0.08, N/A)	305.8	N/A	1.2529 [1.0000]	125.3% { 94.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 212999	(9.75, N/A) (N/A, 0.04, N/A)	86087.4	N/A	1.4948 [1.0000]	149.5% { 116.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 188553	(9.92, N/A) (N/A, 0.03, N/A)	509.7	N/A	1.0760 [1.0000]	107.6% { 73.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 133414	(10.14, N/A) (N/A, 0.02, N/A)	350.5	N/A	1.2126 [1.0000]	121.3% { 83.4% }			
13C3_PFBs_EIS	(302.0 / 80.0) 730102	(6.19, N/A) (N/A, 0.09, N/A)	899.8	N/A	2.4272 [2.0000]	121.4% { 93.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 410428	(8.11, N/A) (N/A, 0.09, N/A)	804.7	N/A	2.4245 [2.0000]	121.2% { 98.6% }			
13C8_PFOS_EIS	(507.0 / 80.0) 625564	(9.53, N/A) (N/A, 0.06, N/A)	407.4	N/A	2.2894 [2.0000]	114.5% { 105.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 77297	(5.89, N/A) (N/A, 0.08, N/A)	431.0	N/A	4.3967 [4.0000]	109.9% { 87.5% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 100344	(7.63, N/A) (N/A, 0.09, N/A)	545.2	N/A	4.6682 [4.0000]	116.7% { 86.8% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 77444	(9.05, N/A) (N/A, 0.09, N/A)	351.4	N/A	3.6112 [4.0000]	90.3% { 72.4% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 790741	(10.19, N/A) (N/A, 0.03, N/A)	666.5	N/A	1.9132 [2.0000]	95.7% { 87.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 70833	(10.62, N/A) (N/A, 0.02, N/A)	447.5	N/A	0.6676 [2.0000]	33.4% { 28.2% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 66412	(10.71, N/A) (N/A, 0.02, N/A)	801.7	N/A	0.7215 [2.0000]	36.1% { 29.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 264799	(9.56, N/A) (N/A, 0.06, N/A)	423.9	N/A	4.0943 [4.0000]	102.4% { 99.5% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 308734	(9.72, N/A) (N/A, 0.04, N/A)	320.9	N/A	5.2756 [4.0000]	131.9% { 123.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 216962	(10.59, N/A) (N/A, 0.02, N/A)	837.6	N/A	10.6670 [20.0000]	53.3% { 42.5% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 136618	(10.68, N/A) (N/A, 0.02, N/A)	915.9	N/A	13.4049 [20.0000]	67.0% { 54.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 633973	(6.58, N/A) (N/A, 0.09, N/A)	876.9	N/A	7.6448 [8.0000]	95.6% { 92.1% }			

ANALYSIS DATA SHEET**LCS**

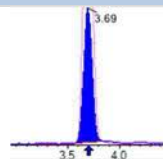
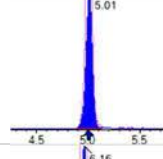
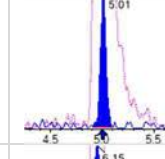
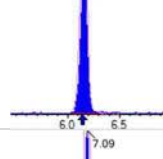
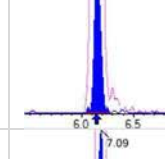
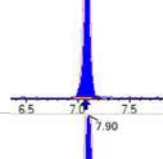
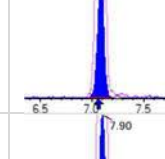
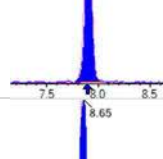
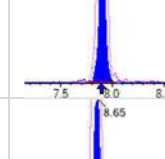
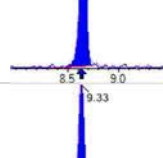
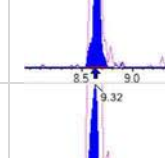
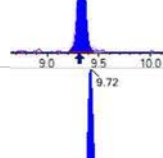
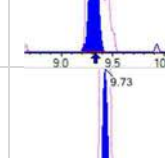
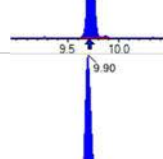
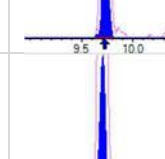
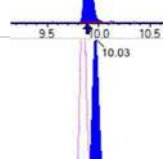
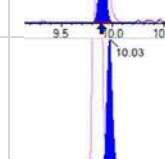
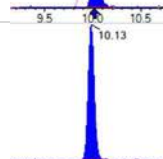
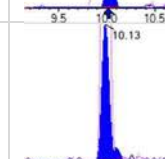
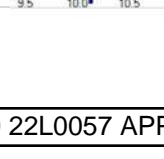
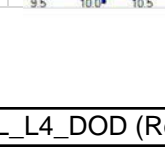
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Solids:		Analyzed:	12/15/22 00:55
		Preparation:	1633
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Column:	1	Calibration:	2251013
		Instrument:	Saphira

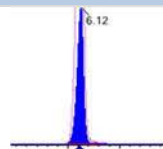
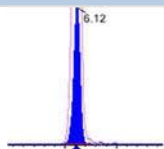
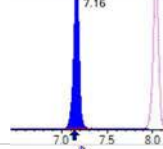
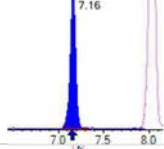
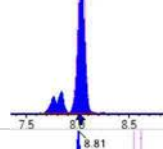
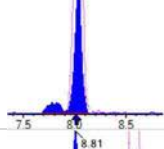
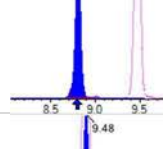
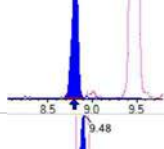
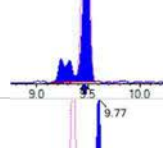
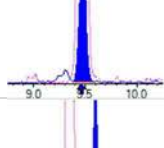
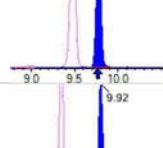
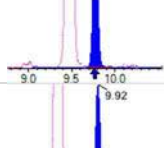
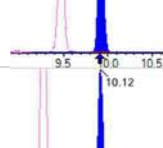
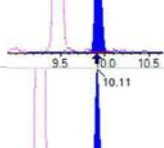
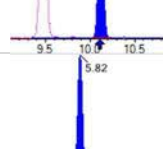
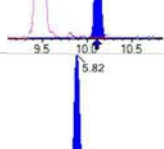
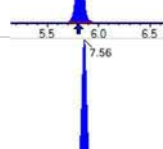
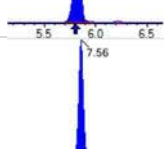
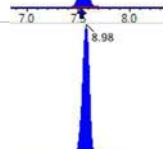
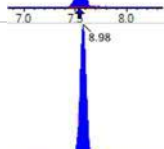
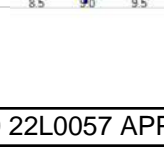
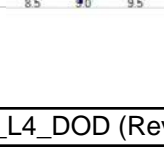
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
PFBA	1.79	0.30	0.15	
PFPEA	0.958	0.080	0.022	
PFHXA	0.456	0.040	0.015	
PFHPA	0.463	0.040	0.015	
PFOA	0.467	0.040	0.021	
PFNA	0.431	0.040	0.022	
PFDA	0.366	0.040	0.022	
PFUnA	0.504	0.040	0.020	
PFDOA	0.484	0.040	0.023	
PFTRDA	0.432	0.040	0.016	
PFTEDA	0.481	0.040	0.025	
PFBS	0.406	0.040	0.016	
PFPEs	0.427	0.040	0.012	
PFHXS	0.386	0.040	0.015	
PFHPS	0.398	0.040	0.011	
PFOS	0.386	0.040	0.0097	
PFNS	0.420	0.040	0.015	
PFDS	0.380	0.040	0.014	
PFDOS	0.423	0.040	0.013	
4:2FTS	1.70	0.16	0.045	
6:2FTS	1.86	0.16	0.061	
8:2FTS	1.85	0.16	0.051	
PFOSA	0.491	0.040	0.012	
NMeFOSA	2.09	0.16	0.066	
NEtFOSA	1.84	0.16	0.027	
NMeFOSAA	0.493	0.040	0.010	
NEtFOSAA	0.490	0.040	0.018	
NMeFOSE	1.68	0.16	0.054	
NEtFOSE	1.72	0.16	0.047	
HFPO-DA	0.950	0.080	0.022	

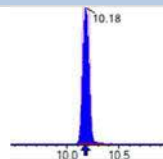
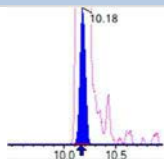
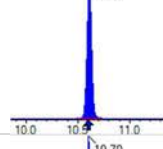
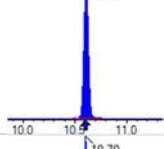
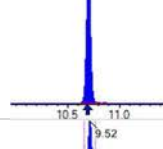
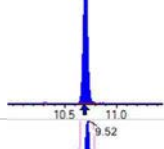
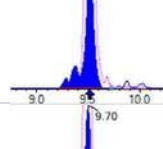
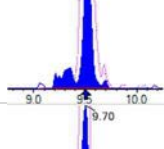
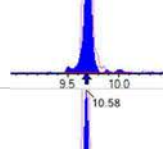
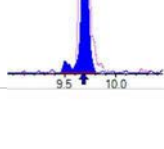
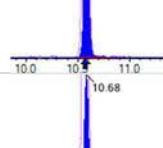
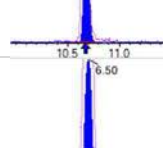
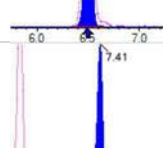
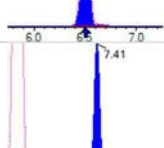
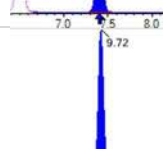
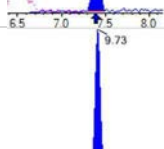
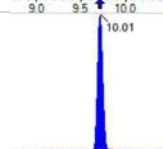
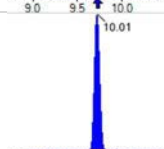
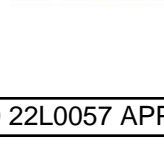
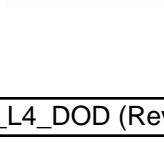
ANALYSIS DATA SHEET**LCS**

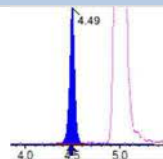
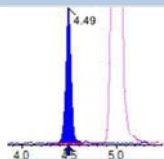
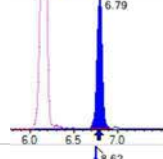
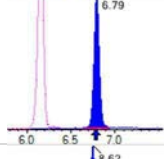
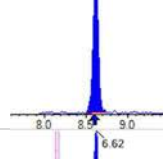
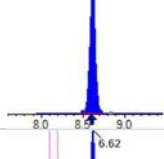
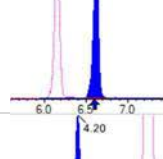
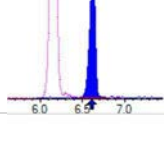
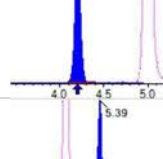
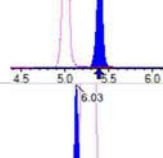
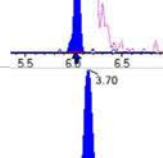
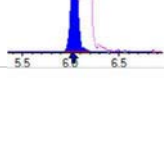
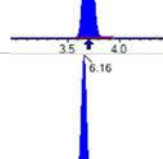
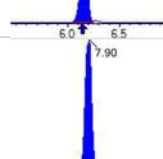
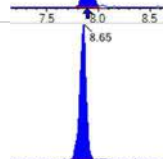
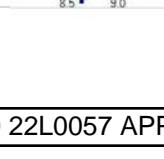
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-BS1
Sampled:		Prepared:	12/09/22 15:06
Solids:		Preparation:	1633
Batch:	BBL0206	Sequence:	SB03845
Column:	1	Calibration:	2251013
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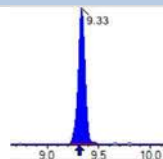
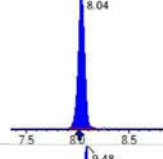
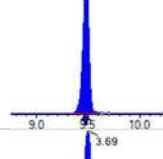
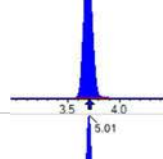
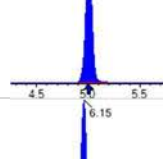
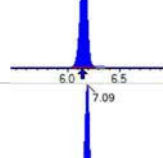
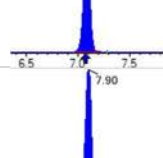
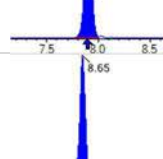
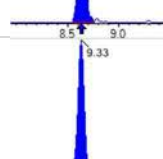
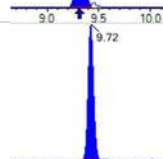
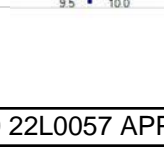
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
ADONA	0.841	0.080	0.026	
PFEESA	0.760	0.080	0.017	
PFMPA	0.870	0.080	0.028	
PFMBA	0.938	0.080	0.032	
NFDHA	0.977	0.080	0.049	
9CL-PF3ONS	0.884	0.080	0.024	
11CL-PF3OUDS	0.881	0.080	0.027	
3:3FTCA	1.78	0.16	0.064	
5:3FTCA	1.59	0.16	0.065	
7:3FTCA	1.53	0.16	0.050	

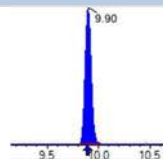
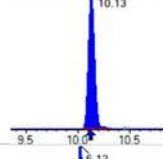
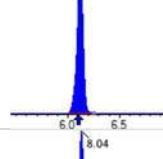
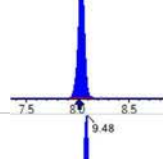
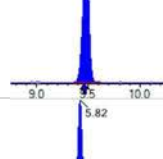
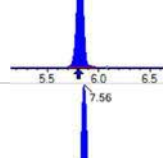
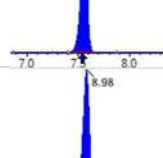
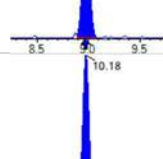
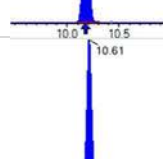
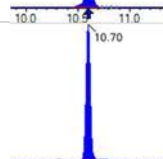
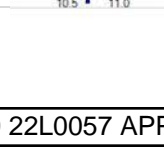
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 247155	(3.69, 1.00) (0.00, N/A, 0.0)	66.3	N/A 0.0 0.0	4.4837 [4.0000]	112.1%			
PFPeA	(262.9 / 219.0) 190711 (262.9 / 69.0) 2212	(5.01, 1.00) (0.00, N/A, 0.0)	694.1 74.8	0.0116 92.4 110.7	2.3941 [2.0000]	119.7%			
PFHxA	(313.0 / 269.0) 147425 (313.0 / 119.0) 17288	(6.16, 1.00) (0.00, N/A, 0.3)	429.0 184.2	0.1173 126.7 112.5	1.1391 [1.0000]	113.9%			
PFHpA	(363.0 / 319.0) 146215 (363.0 / 169.0) 41529	(7.09, 1.00) (0.00, N/A, 0.1)	374.4 381.5	0.2840 91.3 88.2	1.1582 [1.0000]	115.8%			
PFOA	(413.0 / 369.0) 152380 (413.0 / 169.0) 49027	(7.90, 1.00) (0.00, N/A, 0.1)	357.1 320.7	0.3217 95.9 102.9	1.1668 [1.0000]	116.7%			
PFNA	(463.0 / 419.0) 103181 (463.0 / 169.0) 24529	(8.65, 1.00) (0.01, N/A, 0.2)	160.5 54.4	0.2377 135.5 119.6	1.0777 [1.0000]	107.8%			
PFDA	(513.0 / 469.0) 136347 (513.0 / 169.0) 12135	(9.33, 1.00) (0.00, N/A, 0.8)	229.2 772.1	0.0877 87.1 93.5	0.9158 [1.0000]	91.6%			
PFUnA	(563.0 / 519.0) 214608 (563.0 / 169.0) 20271	(9.72, 1.00) (0.00, N/A, -0.4)	380.0 771118.6	0.0945 103.2 102.2	1.2601 [1.0000]	126.0%			
PFDoA	(613.0 / 569.0) 244240 (613.0 / 169.0) 28178	(9.90, 1.00) (0.00, N/A, -0.4)	620.2 142.5	0.1154 90.0 78.4	1.2098 [1.0000]	121.0%			
PFTrDA	(663.0 / 619.0) 179638 (663.0 / 169.0) 28595	(10.03, 1.01) (N/A, 0.01, -0.1)	414.4 499.8	0.1592 72.5 65.8	1.0792 [1.0000]	107.9%			
PFTeDA	(713.0 / 669.0) 150656 (713.0 / 169.0) 29354	(10.13, 1.00) (0.00, N/A, -0.1)	429.8 106.8	0.1948 104.7 92.6	1.2022 [1.0000]	120.2%			

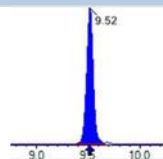
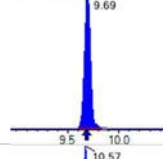
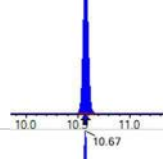
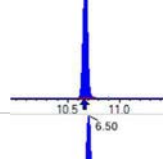
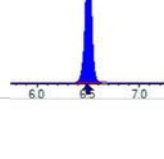
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 198458 (298.9 / 99.0) 130749	(6.12, 1.00) (0.00, N/A, 0.3)	542.1 582.1	0.6588 91.5 108.0	1.0153 [0.8847]	114.8%			
PFPeS	(349.0 / 80.0) 395553 (349.0 / 99.0) 139383	(7.16, 0.89) (N/A, 0.02, 0.0)	752.2 495.7	0.3524 94.1 93.7	1.0675 [0.9384]	113.8%			
PFHxS	(399.0 / 80.0) 326650 (399.0 / 99.0) 107814	(8.03, 1.00) (0.00, N/A, 0.0)	37758.5 32600.1	0.3301 102.3 97.9	0.9658 [0.9110]	106.0%			
PFHpS	(449.0 / 80.0) 300078 (449.0 / 99.0) 83003	(8.81, 0.93) (N/A, 0.02, -0.1)	546.1 348.9	0.2766 90.1 123.0	0.9956 [0.9514]	104.6%			
PFOS	(499.0 / 80.0) 353795 (499.0 / 99.0) 70456	(9.48, 1.00) (0.00, N/A, 0.1)	105.5 154.8	0.1991 86.8 87.9	0.9659 [0.9275]	104.1%			
PFNS	(549.0 / 80.0) 473681 (549.0 / 99.0) 97273	(9.77, 1.03) (N/A, 0.01, 0.1)	856.6 523.6	0.2054 79.2 80.6	1.0496 [0.9599]	109.3%			
PFDS	(599.0 / 80.0) 563845 (599.0 / 99.0) 116935	(9.92, 1.05) (N/A, 0.01, -0.3)	564.1 317.3	0.2074 92.1 82.7	0.9504 [0.9631]	98.7%			
PFDoS	(698.9 / 80.0) 317672 (698.9 / 99.0) 69629	(10.12, 1.07) (N/A, 0.01, 0.3)	389.2 369.6	0.2192 108.3 106.7	1.0585 [0.9696]	109.2%			
4:2FTS	(327.0 / 307.0) 329714 (327.0 / 81.0) 174989	(5.82, 1.00) (0.00, N/A, 0.1)	933.1 499.7	0.5307 87.5 99.4	4.2496 [3.7381]	113.7%			
6:2FTS	(427.0 / 407.0) 205655 (427.0 / 81.0) 154857	(7.56, 1.00) (0.00, N/A, 0.1)	903.0 661.9	0.7530 115.9 111.9	4.6467 [3.7962]	122.4%			
8:2FTS	(527.0 / 507.0) 165358 (527.0 / 81.0) 106939	(8.98, 1.00) (0.00, N/A, -0.1)	387.8 325.5	0.6467 103.2 108.2	4.6154 [3.8332]	120.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 455474 (498.0 / 478.0) 9110	(10.18 , 1.00) (0.00 , N/A , 0.1)	886.1 2341.3	0.0200 87.9 107.8	1.2274 [1.0000]	122.7%			
NMeFOSA	(511.9 / 219.0) 154249 (511.9 / 169.0) 108308	(10.61 , 1.00) (0.00 , N/A , 0.1)	1061.8 844.8	0.7022 110.1 98.8	5.2268 [4.0000]	130.7%			QC,
NEIFOSA	(526.0 / 219.0) 128761 (526.0 / 169.0) 139672	(10.70 , 1.00) (0.00 , N/A , 0.0)	963.8 757.7	1.0847 101.6 96.8	4.5927 [4.0000]	114.8%			
NMeFOSAA	(570.0 / 419.0) 72543 (570.0 / 483.0) 40285	(9.52 , 1.00) (0.00 , N/A , -0.3)	185.2 155.4	0.5553 96.7 102.8	1.2315 [1.0000]	123.1%			
NEIFOSAA	(584.0 / 419.0) 75927 (584.0 / 526.0) 49637	(9.70 , 1.00) (0.00 , N/A , -0.1)	1743.5 1222.3	0.6537 115.3 144.0	1.2251 [1.0000]	122.5%			
NMeFOSE	(616.1 / 59.0) 69547	(10.58 , 1.00) (0.01 , N/A , 0.0)	584.8	N/A 0.0 0.0	4.2051 [4.0000]	105.1%			
NEtFOSE	(630.0 / 59.0) 18532	(10.68 , 1.00) (0.01 , N/A , 0.0)	467.3	N/A 0.0 0.0	4.3095 [4.0000]	107.7%			
HFPO-DA	(285.0 / 169.0) 131402 (285.0 / 185.0) 335610	(6.50 , 1.00) (0.00 , N/A , -0.2)	612.6 635.4	2.5541 97.1 81.1	2.3761 [2.0000]	118.8%			
ADONA	(377.0 / 85.0) 495951 (377.0 / 251.0) 58895	(7.41 , 1.14) (N/A , 0.02 , 0.3)	688.4 180.2	0.1188 100.7 91.1	2.1029 [1.8854]	111.5%			
9CI-Pf3ONS	(531.0 / 351.0) 1477520 (533.0 / 353.0) 429708	(9.72 , 1.50) (N/A , 0.01 , -0.2)	888.5 492.1	0.2908 100.3 83.5	2.2096 [1.8665]	118.4%			
11CI-PF3OUDS	(631.0 / 451.0) 943752 (633.0 / 453.0) 281447	(10.01 , 1.54) (N/A , 0.01 , 0.1)	791.6 574.4	0.2982 94.5 96.0	2.2023 [1.8864]	116.7%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 14866 (241.0 / 117.0) 24140	(4.49, 0.90) (N/A, 0.01, 0.2)	460.3 318.3	1.6238 99.1 90.0	4.4405 [4.0000]	111.0%			
5:3FTCA	(341.0 / 236.7) 103014 (341.0 / 217.0) 172529	(6.79, 1.10) (N/A, 0.01, 0.0)	525.6 474.2	1.6748 106.3 93.7	3.9780 [4.0000]	99.5%			
7:3FTCA	(441.0 / 317.0) 124151 (441.0 / 337.0) 102937	(8.62, 1.40) (N/A, 0.02, 0.1)	215.5 306.4	0.8291 99.0 104.2	3.8317 [4.0000]	95.8%			
PFEESA	(315.0 / 135.0) 267734 (315.0 / 83.0) 82410	(6.62, 1.08) (N/A, 0.02, -0.1)	799.7 351.0	0.3078 100.4 100.2	1.8997 [1.7849]	106.4%			
PFMPA	(229.0 / 85.0) 47020	(4.20, 0.84) (N/A, 0.01, 0.0)	1068.9	N/A 0.0 0.0	2.1744 [2.0000]	108.7%			
PFMBA	(279.0 / 85.0) 169629	(5.39, 1.08) (N/A, 0.01, 0.0)	837.6	N/A 0.0 0.0	2.3440 [2.0000]	117.2%			
NFDHA	(201.0 / 85.0) 6737 (295.0 / 201.0) 46431	(6.03, 0.98) (N/A, 0.00, -0.6)	329.0 465.5	6.8924 104.6 108.6	2.4432 [2.0000]	122.2%			
13C3_PFBA_IIS	(216.0 / 172.0) 86464	(3.70, N/A) (N/A, 0.00, N/A)	737.2	N/A	0.7126 [1.0000]	71.3% {87.8%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 159922	(6.16, N/A) (N/A, 0.01, N/A)	757.4	N/A	0.8764 [1.0000]	87.6% {90.6%}			
13C4_PFOA_IIS	(417.0 / 372.0) 139756	(7.90, N/A) (N/A, 0.01, N/A)	416.3	N/A	0.8006 [1.0000]	80.1% {79.9%}			
13C5_PFNA_IIS	(468.0 / 423.0) 107146	(8.65, N/A) (N/A, 0.02, N/A)	363.4	N/A	0.7885 [1.0000]	78.8% {78.7%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 134039	(9.33, N/A) (N/A, 0.02, N/A)	379.5	N/A	0.9660 [1.0000]	96.6% { 117.4% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 259751	(8.04, N/A) (N/A, 0.02, N/A)	1009.2	N/A	0.8048 [1.0000]	80.5% { 88.5% }			
13C4_PFOS_IIS	(502.8 / 79.9) 222165	(9.48, N/A) (N/A, 0.02, N/A)	350.1	N/A	0.8822 [1.0000]	88.2% { 96.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 627780	(3.69, N/A) (N/A, 0.00, N/A)	912.8	N/A	9.5250 [8.0000]	119.1% { 97.2% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 358974	(5.01, N/A) (N/A, 0.01, N/A)	866.6	N/A	4.0534 [4.0000]	101.3% { 93.8% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 292074	(6.15, N/A) (N/A, 0.02, N/A)	390.8	N/A	2.1671 [2.0000]	108.4% { 100.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 272817	(7.09, N/A) (N/A, 0.02, N/A)	672.2	N/A	2.3319 [2.0000]	116.6% { 111.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 261370	(7.90, N/A) (N/A, 0.02, N/A)	822.8	N/A	2.4390 [2.0000]	121.9% { 100.5% }			
13C9_PFNA_EIS	(472.0 / 427.0) 105020	(8.65, N/A) (N/A, 0.01, N/A)	238.1	N/A	1.2722 [1.0000]	127.2% { 106.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 149410	(9.33, N/A) (N/A, 0.01, N/A)	435.0	N/A	1.1623 [1.0000]	116.2% { 108.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 196333	(9.72, N/A) (N/A, 0.01, N/A)	328.4	N/A	1.1120 [1.0000]	111.2% { 107.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 233133	(9.90, N/A) (N/A, 0.01, N/A)	664.5	N/A	1.0738 [1.0000]	107.4% { 90.5% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 137132	(10.13, N/A) (N/A, 0.01, N/A)	441.4	N/A	1.0059 [1.0000]	100.6% { 85.7% }			
13C3_PFBs_EIS	(302.0 / 80.0) 691897	(6.12, N/A) (N/A, 0.02, N/A)	652.8	N/A	2.3150 [2.0000]	115.8% { 88.6% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 421186	(8.04, N/A) (N/A, 0.02, N/A)	740.0	N/A	2.5041 [2.0000]	125.2% { 101.2% }			
13C8_PFOS_EIS	(507.0 / 80.0) 666182	(9.48, N/A) (N/A, 0.02, N/A)	440.5	N/A	2.4084 [2.0000]	120.4% { 111.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 95178	(5.82, N/A) (N/A, 0.01, N/A)	622.5	N/A	5.4487 [4.0000]	136.2% { 107.8% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 108612	(7.56, N/A) (N/A, 0.02, N/A)	575.1	N/A	5.0853 [4.0000]	127.1% { 94.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 100626	(8.98, N/A) (N/A, 0.02, N/A)	294.2	N/A	4.7223 [4.0000]	118.1% { 94.1% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 756602	(10.18, N/A) (N/A, 0.01, N/A)	694.9	N/A	1.8083 [2.0000]	90.4% { 84.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 70945	(10.61, N/A) (N/A, 0.01, N/A)	513.8	N/A	0.6606 [2.0000]	33.0% { 28.2% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 60661	(10.70, N/A) (N/A, 0.01, N/A)	564.5	N/A	0.6510 [2.0000]	32.6% { 27.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 304807	(9.52, N/A) (N/A, 0.01, N/A)	344.1	N/A	4.6557 [4.0000]	116.4% { 114.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 284784	(9.69, N/A) (N/A, 0.01, N/A)	613.4	N/A	4.8073 [4.0000]	120.2% { 114.2% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 245171	(10.57, N/A) (N/A, 0.01, N/A)	1025.5	N/A	11.9076 [20.0000]	59.5% { 48.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 127124	(10.67, N/A) (N/A, 0.01, N/A)	1011.4	N/A	12.3219 [20.0000]	61.6% { 50.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 715413	(6.50, N/A) (N/A, 0.02, N/A)	750.1	N/A	8.6658 [8.0000]	108.3% { 103.9% }			

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-BSD1
Sampled:		File ID:	S2022-12-14B (7)
		Prepared:	12/09/22 15:06
Solids:		Analyzed:	12/15/22 01:07
		Preparation:	1633
Batch:	BBL0206	Dilution:	1
Column:	1	Sequence:	SB03845
		Calibration:	2251013
		Instrument:	Saphira

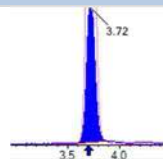
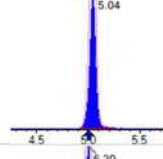
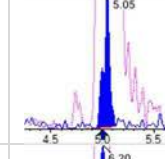
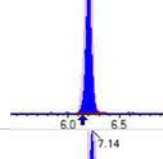
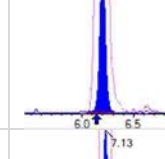
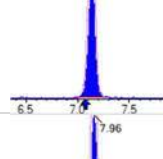
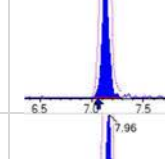
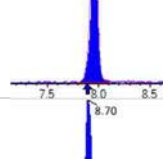
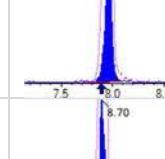
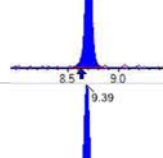
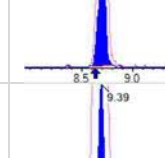
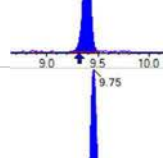
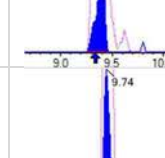
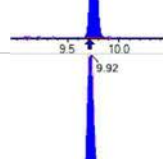
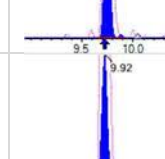
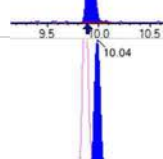
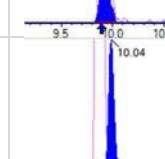
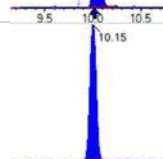
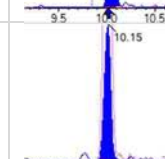
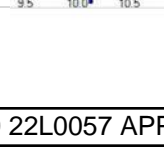
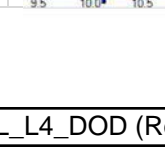
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
PFBA	1.82	0.30	0.15	
PFPEA	0.852	0.080	0.022	
PFHXA	0.426	0.040	0.015	
PFHPA	0.424	0.040	0.015	
PFOA	0.449	0.040	0.021	
PFNA	0.446	0.040	0.022	
PFDA	0.459	0.040	0.022	
PFUnA	0.442	0.040	0.020	
PFDOA	0.379	0.040	0.023	
PFTRDA	0.429	0.040	0.016	
PFTEDA	0.443	0.040	0.025	
PFBS	0.352	0.040	0.016	
PFPEs	0.433	0.040	0.012	
PFHXS	0.391	0.040	0.015	
PFHPS	0.392	0.040	0.011	
PFOS	0.415	0.040	0.0097	
PFNS	0.430	0.040	0.015	
PFDS	0.395	0.040	0.014	
PFDOS	0.424	0.040	0.013	
4:2FTS	1.80	0.16	0.045	
6:2FTS	1.57	0.16	0.061	
8:2FTS	2.22	0.16	0.051	
PFOSA	0.427	0.040	0.012	
NMeFOSA	1.88	0.16	0.066	
NEtFOSA	1.78	0.16	0.027	
NMeFOSAA	0.425	0.040	0.010	
NEtFOSAA	0.403	0.040	0.018	
NMeFOSE	1.68	0.16	0.054	
NEtFOSE	1.68	0.16	0.047	
HFPO-DA	0.894	0.080	0.022	

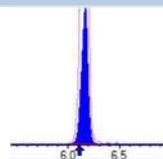
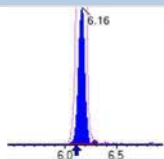
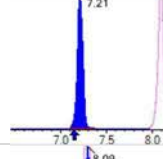
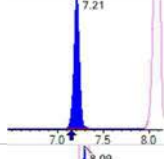
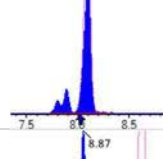
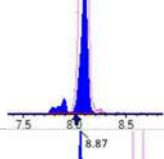
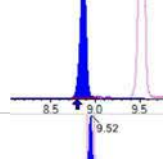
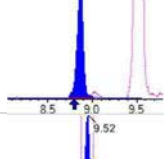
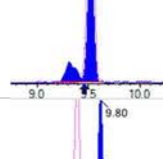
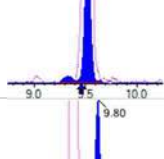
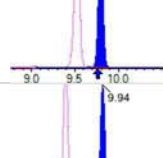
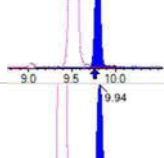
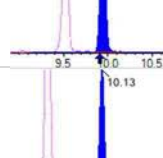
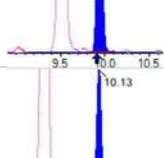
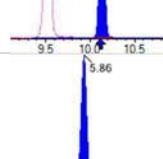
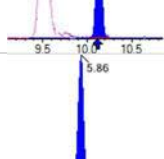
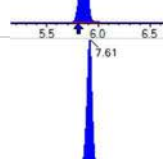
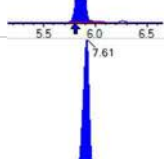
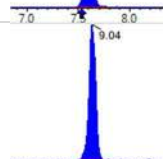
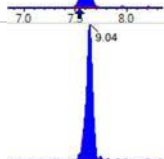
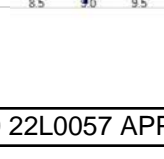
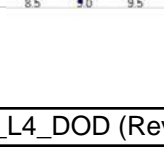
ANALYSIS DATA SHEET

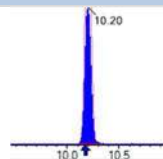
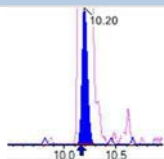
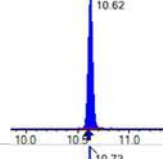
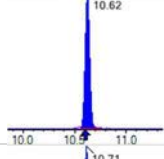
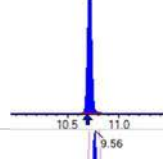
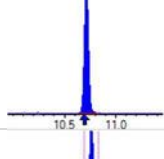
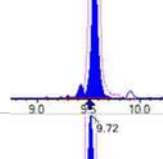
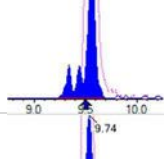
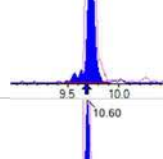
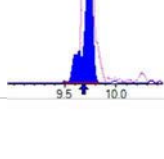
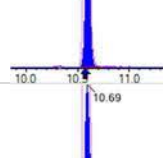
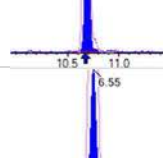
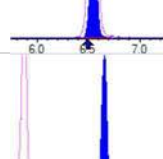
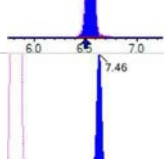
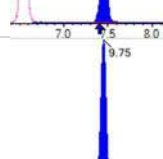
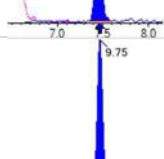
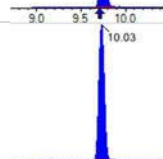
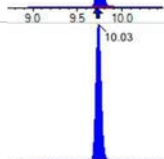
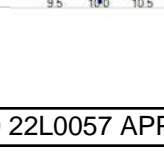
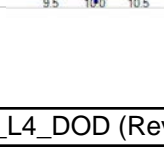
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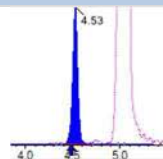
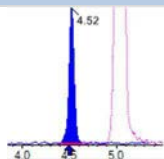
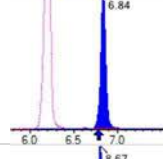
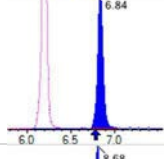
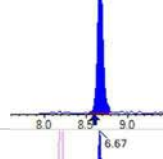
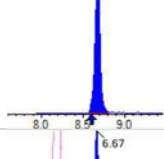
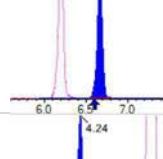
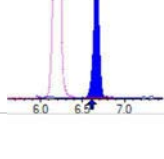
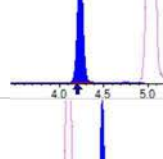
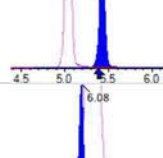
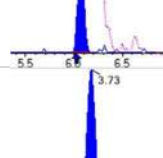
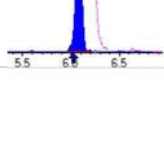
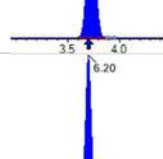
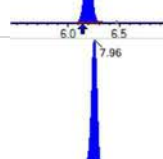
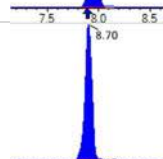
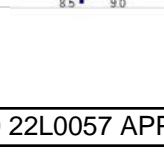
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-BSD1
Sampled:		File ID:	S2022-12-14B (7)
Solids:		Prepared:	12/09/22 15:06
Batch:	BBL0206	Analyzed:	12/15/22 01:07
Column:	1	Preparation:	1633
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		Instrument:	Saphira
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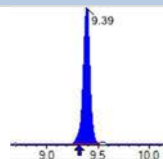
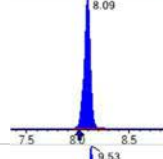
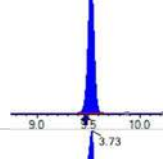
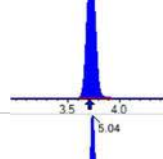
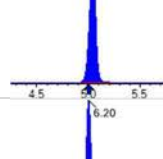
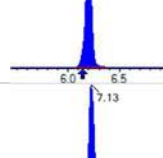
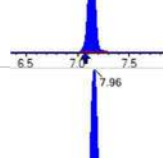
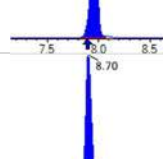
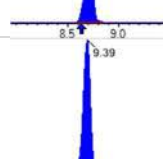
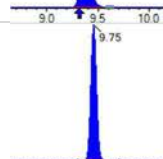
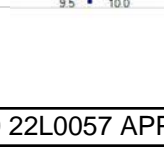
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
ADONA	0.799	0.080	0.026	
PFEESA	0.635	0.080	0.017	
PFMPA	0.915	0.080	0.028	
PFMBA	0.900	0.080	0.032	
NFDHA	0.846	0.080	0.049	
9CL-PF3ONS	0.851	0.080	0.024	
11CL-PF3OUDS	0.786	0.080	0.027	
3:3FTCA	1.71	0.16	0.064	
5:3FTCA	1.56	0.16	0.065	
7:3FTCA	1.37	0.16	0.050	

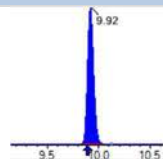
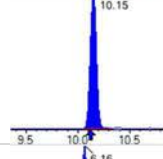
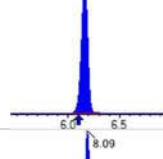
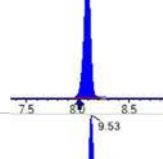
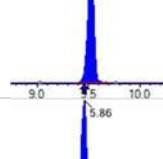
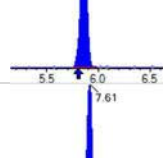
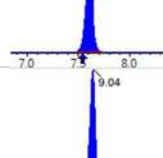
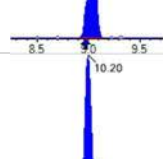
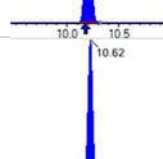
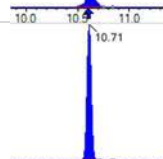
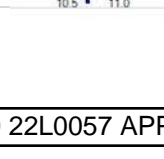
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 247850	(3.72, 1.00) (0.00, N/A, 0.0)	58.8	N/A 0.0 0.0	4.5492 [4.0000]	113.7%			
PFPeA	(262.9 / 219.0) 174503 (262.9 / 69.0) 1824	(5.04, 1.00) (0.00, N/A, -0.3)	670.2 55.7	0.0105 83.2 99.7	2.1288 [2.0000]	106.4%			
PFHxA	(313.0 / 269.0) 156743 (313.0 / 119.0) 15313	(6.20, 1.00) (0.00, N/A, -0.1)	458.4 199.9	0.0977 105.5 93.7	1.0660 [1.0000]	106.6%			
PFHpA	(363.0 / 319.0) 138197 (363.0 / 169.0) 37093	(7.14, 1.00) (0.00, N/A, 0.3)	463.6 286.5	0.2684 86.3 83.4	1.0593 [1.0000]	105.9%			
PFOA	(413.0 / 369.0) 145746 (413.0 / 169.0) 43261	(7.96, 1.00) (0.00, N/A, -0.2)	314.2 269.8	0.2968 88.4 95.0	1.1214 [1.0000]	112.1%			
PFNA	(463.0 / 419.0) 105700 (463.0 / 169.0) 22914	(8.70, 1.00) (0.00, N/A, 0.2)	224.4 92.4	0.2168 123.5 109.1	1.1146 [1.0000]	111.5%			
PFDA	(513.0 / 469.0) 148712 (513.0 / 169.0) 7968	(9.39, 1.00) (0.00, N/A, -0.3)	264.9 2609.5	0.0536 53.2 57.1	1.1469 [1.0000]	114.7%			
PFUnA	(563.0 / 519.0) 184771 (563.0 / 169.0) 17993	(9.75, 1.00) (0.00, N/A, 0.5)	339.4 393.1	0.0974 106.4 105.4	1.1044 [1.0000]	110.4%			
PFDoA	(613.0 / 569.0) 176164 (613.0 / 169.0) 30147	(9.92, 1.00) (0.00, N/A, -0.2)	265.8 1349.0	0.1711 133.5 116.3	0.9476 [1.0000]	94.8%			
PFTrDA	(663.0 / 619.0) 164427 (663.0 / 169.0) 31266	(10.04, 1.01) (N/A, 0.02, 0.0)	359.9 158.5	0.1902 86.6 78.5	1.0728 [1.0000]	107.3%			
PFTeDA	(713.0 / 669.0) 134090 (713.0 / 169.0) 28253	(10.15, 1.00) (0.00, N/A, -0.3)	406.2 126.1	0.2107 113.2 100.2	1.1083 [1.0000]	110.8%			

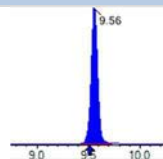
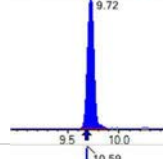
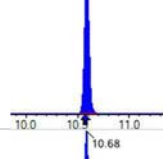
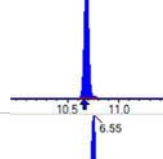
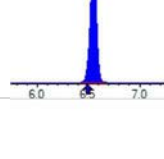
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 189018 (298.9 / 99.0) 119659	(6.16, 1.00) (0.00, N/A, 0.2)	920.0 421.4	0.6331 87.9 103.8	0.8794 [0.8847]	99.4%			
PFPeS	(349.0 / 80.0) 382647 (349.0 / 99.0) 136534	(7.21, 0.89) (N/A, 0.06, -0.1)	853.8 809.5	0.3568 95.3 94.9	1.0837 [0.9384]	115.5%			
PFHxS	(399.0 / 80.0) 315081 (399.0 / 99.0) 110144	(8.09, 1.00) (0.00, N/A, -0.1)	9985.4 4969599.9	0.3496 108.4 103.7	0.9776 [0.9110]	107.3%			
PFHpS	(449.0 / 80.0) 290542 (449.0 / 99.0) 82908	(8.87, 0.93) (N/A, 0.08, -0.1)	367.1 423.4	0.2854 92.9 126.9	0.9807 [0.9514]	103.1%			
PFOS	(499.0 / 80.0) 373953 (499.0 / 99.0) 79545	(9.52, 1.00) (-0.01, N/A, 0.1)	156.2 162.4	0.2127 92.7 93.9	1.0387 [0.9275]	112.0%			
PFNS	(549.0 / 80.0) 477321 (549.0 / 99.0) 110887	(9.80, 1.03) (N/A, 0.03, -0.1)	1104.1 394.0	0.2323 89.6 91.2	1.0760 [0.9599]	112.1%			
PFDS	(599.0 / 80.0) 575165 (599.0 / 99.0) 121904	(9.94, 1.04) (N/A, 0.03, 0.1)	737.4 346.3	0.2119 94.2 84.5	0.9863 [0.9631]	102.4%			
PFDoS	(698.9 / 80.0) 312463 (698.9 / 99.0) 72077	(10.13, 1.06) (N/A, 0.02, 0.0)	787.1 633.5	0.2307 113.9 112.3	1.0592 [0.9696]	109.2%			
4:2FTS	(327.0 / 307.0) 313297 (327.0 / 81.0) 170280	(5.86, 1.00) (0.00, N/A, 0.0)	691.0 483.5	0.5435 89.6 101.8	4.4969 [3.7381]	120.3%			
6:2FTS	(427.0 / 407.0) 172089 (427.0 / 81.0) 120616	(7.61, 1.00) (0.00, N/A, 0.1)	540.1 565.6	0.7009 107.9 104.1	3.9295 [3.7962]	103.5%			
8:2FTS	(527.0 / 507.0) 166111 (527.0 / 81.0) 102526	(9.04, 1.00) (0.00, N/A, -0.1)	553.6 233.9	0.6172 98.5 103.3	5.5438 [3.8332]	144.6%			QC,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 442178 (498.0 / 478.0) 9320	(10.20, 1.00) (0.00, N/A, 0.1)	664.1 178.9	0.0211 92.6 113.6	1.0679 [1.0000]	106.8%			
NMeFOSA	(511.9 / 219.0) 153283 (511.9 / 169.0) 106456	(10.62, 1.00) (0.00, N/A, 0.0)	537.3 922.1	0.6945 108.9 97.7	4.6969 [4.0000]	117.4%			
NEIFOSA	(526.0 / 219.0) 134199 (526.0 / 169.0) 147370	(10.72, 1.00) (0.01, N/A, 0.1)	1469.2 852.2	1.0981 102.9 98.0	4.4571 [4.0000]	111.4%			
NMeFOSAA	(570.0 / 419.0) 63206 (570.0 / 483.0) 41239	(9.56, 1.00) (0.00, N/A, 0.0)	465.1 269.3	0.6525 113.7 120.8	1.0626 [1.0000]	106.3%			
NEIFOSAA	(584.0 / 419.0) 63126 (584.0 / 526.0) 42791	(9.72, 1.00) (0.00, N/A, -0.9)	257.3 217.5	0.6779 119.6 149.3	1.0083 [1.0000]	100.8%			
NMeFOSE	(616.1 / 59.0) 67348	(10.60, 1.00) (0.01, N/A, 0.0)	538.5	N/A 0.0 0.0	4.2107 [4.0000]	105.3%			
NEtFOSE	(630.0 / 59.0) 17745	(10.69, 1.00) (0.01, N/A, 0.0)	402.6	N/A 0.0 0.0	4.2123 [4.0000]	105.3%			
HFPO-DA	(285.0 / 169.0) 129701 (285.0 / 185.0) 358168	(6.55, 1.00) (0.00, N/A, -0.1)	667.3 828.8	2.7615 105.0 87.7	2.2352 [2.0000]	111.8%			
ADONA	(377.0 / 85.0) 494284 (377.0 / 251.0) 62759	(7.46, 1.14) (N/A, 0.07, 0.0)	823.2 222.9	0.1270 107.7 97.4	1.9974 [1.8854]	105.9%			
9CI-Pf3ONS	(531.0 / 351.0) 1492042 (533.0 / 353.0) 479574	(9.75, 1.49) (N/A, 0.04, 0.2)	695.1 516.4	0.3214 110.9 92.3	2.1265 [1.8665]	113.9%			
11CI-PF3OUDS	(631.0 / 451.0) 883542 (633.0 / 453.0) 271866	(10.03, 1.53) (N/A, 0.02, 0.0)	920.2 609.6	0.3077 97.5 99.0	1.9649 [1.8864]	104.2%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 14690 (241.0 / 117.0) 24778	(4.53, 0.90) (N/A, 0.04, 0.1)	472.0 304.5	1.6867 102.9 93.4	4.2642 [4.0000]	106.6%			
5:3FTCA	(341.0 / 236.7) 114821 (341.0 / 217.0) 181977	(6.84, 1.10) (N/A, 0.06, -0.1)	424.5 459.4	1.5849 100.6 88.7	3.9027 [4.0000]	97.6%			
7:3FTCA	(441.0 / 317.0) 125825 (441.0 / 337.0) 112675	(8.67, 1.40) (N/A, 0.07, -0.3)	211.7 377.0	0.8955 106.9 112.5	3.4181 [4.0000]	85.5%			
PFEESA	(315.0 / 135.0) 254072 (315.0 / 83.0) 75329	(6.67, 1.08) (N/A, 0.06, -0.1)	829.7 280.0	0.2965 96.7 96.5	1.5868 [1.7849]	88.9%			
PFMPA	(229.0 / 85.0) 50899	(4.24, 0.84) (N/A, 0.04, 0.0)	932.8	N/A 0.0 0.0	2.2874 [2.0000]	114.4%			
PFMBA	(279.0 / 85.0) 167485	(5.43, 1.08) (N/A, 0.05, 0.0)	841.1	N/A 0.0 0.0	2.2490 [2.0000]	112.5%			
NFDHA	(201.0 / 85.0) 6672 (295.0 / 201.0) 43932	(6.08, 0.98) (N/A, 0.05, -0.3)	178.8 381.4	6.5845 100.0 103.8	2.1140 [2.0000]	105.7%			
13C3_PFBA_IIS	(216.0 / 172.0) 81838	(3.73, N/A) (N/A, 0.03, N/A)	736.5	N/A	0.6745 [1.0000]	67.4% { 83.1% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 155544	(6.20, N/A) (N/A, 0.05, N/A)	605.8	N/A	0.8524 [1.0000]	85.2% { 88.2% }			
13C4_PFOA_IIS	(417.0 / 372.0) 130136	(7.96, N/A) (N/A, 0.07, N/A)	391.2	N/A	0.7455 [1.0000]	74.5% { 74.4% }			
13C5_PFNA_IIS	(468.0 / 423.0) 104059	(8.70, N/A) (N/A, 0.07, N/A)	415.6	N/A	0.7658 [1.0000]	76.6% { 76.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 109947	(9.39, N/A) (N/A, 0.07, N/A)	418.6	N/A	0.7924 [1.0000]	79.2% { 96.3% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 251884	(8.09, N/A) (N/A, 0.07, N/A)	771.8	N/A	0.7805 [1.0000]	78.0% { 85.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 200285	(9.53, N/A) (N/A, 0.06, N/A)	421.5	N/A	0.7953 [1.0000]	79.5% { 86.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 620473	(3.73, N/A) (N/A, 0.03, N/A)	786.9	N/A	9.9463 [8.0000]	124.3% { 96.1% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 369397	(5.04, N/A) (N/A, 0.04, N/A)	699.3	N/A	4.2885 [4.0000]	107.2% { 96.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 331834	(6.20, N/A) (N/A, 0.06, N/A)	596.7	N/A	2.5314 [2.0000]	126.6% { 113.7% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 281936	(7.13, N/A) (N/A, 0.06, N/A)	685.1	N/A	2.4776 [2.0000]	123.9% { 115.3% }			
13C8_PFOA_EIS	(421.0 / 376.0) 260112	(7.96, N/A) (N/A, 0.07, N/A)	550.7	N/A	2.6067 [2.0000]	130.3% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 104018	(8.70, N/A) (N/A, 0.07, N/A)	584.1	N/A	1.2975 [1.0000]	129.7% { 105.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 128233	(9.39, N/A) (N/A, 0.08, N/A)	254.5	N/A	1.2161 [1.0000]	121.6% { 92.8% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 192858	(9.75, N/A) (N/A, 0.04, N/A)	483.1	N/A	1.3317 [1.0000]	133.2% { 105.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 214675	(9.92, N/A) (N/A, 0.03, N/A)	448.5	N/A	1.2054 [1.0000]	120.5% { 83.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 132388	(10.15, N/A) (N/A, 0.03, N/A)	346.8	N/A	1.1839 [1.0000]	118.4% { 82.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 760846	(6.16, N/A) (N/A, 0.06, N/A)	921.7	N/A	2.6252 [2.0000]	131.3% { 97.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 401362	(8.09, N/A) (N/A, 0.07, N/A)	503.0	N/A	2.4608 [2.0000]	123.0% { 96.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 654836	(9.53, N/A) (N/A, 0.07, N/A)	570.4	N/A	2.6260 [2.0000]	131.3% { 109.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 85466	(5.86, N/A) (N/A, 0.05, N/A)	435.7	N/A	5.0456 [4.0000]	126.1% { 96.8% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 107475	(7.61, N/A) (N/A, 0.07, N/A)	729.0	N/A	5.1892 [4.0000]	129.7% { 93.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 84157	(9.04, N/A) (N/A, 0.08, N/A)	347.6	N/A	4.0728 [4.0000]	101.8% { 78.7% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 844225	(10.20, N/A) (N/A, 0.03, N/A)	866.0	N/A	2.2382 [2.0000]	111.9% { 93.8% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 78454	(10.62, N/A) (N/A, 0.02, N/A)	630.6	N/A	0.8103 [2.0000]	40.5% { 31.2% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 65145	(10.71, N/A) (N/A, 0.02, N/A)	442.9	N/A	0.7755 [2.0000]	38.8% { 29.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 307792	(9.56, N/A) (N/A, 0.06, N/A)	263.5	N/A	5.2148 [4.0000]	130.4% { 115.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 287679	(9.72, N/A) (N/A, 0.04, N/A)	293.4	N/A	5.3866 [4.0000]	134.7% { 115.4% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 237103	(10.59, N/A) (N/A, 0.02, N/A)	674.8	N/A	12.7738 [20.0000]	63.9% { 46.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 124534	(10.68, N/A) (N/A, 0.02, N/A)	1152.0	N/A	13.3896 [20.0000]	66.9% { 49.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 750670	(6.55, N/A) (N/A, 0.06, N/A)	1175.1	N/A	9.3489 [8.0000]	116.9% { 109.0% }			

ANALYSIS DATA SHEET

MRL Check

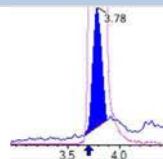
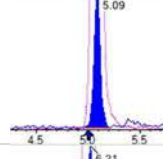
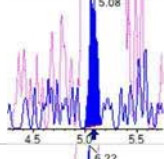
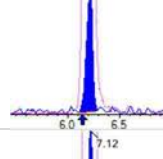
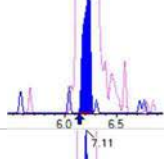
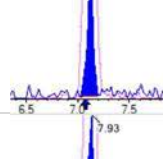
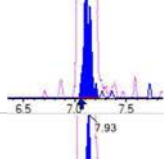
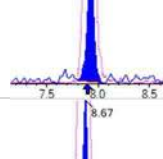
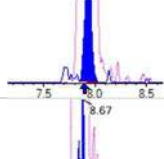
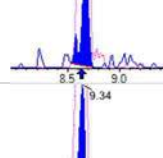
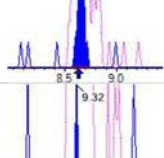
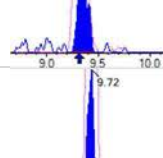
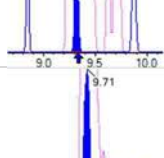
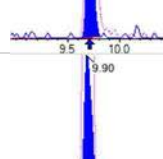
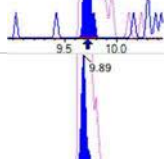
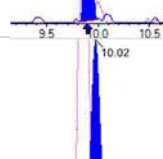
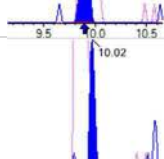
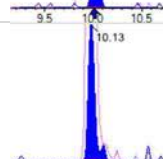
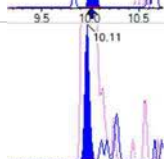
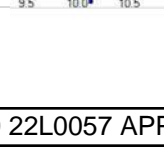
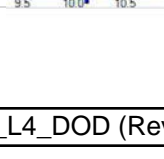
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Batch:	BBL0206	Sequence:	SB03845
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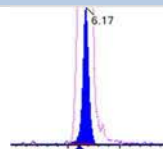
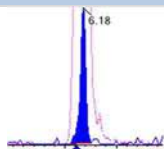
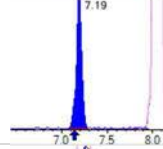
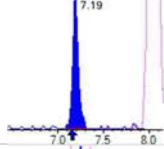
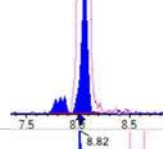
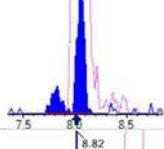
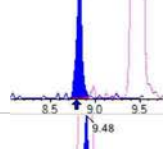
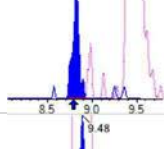
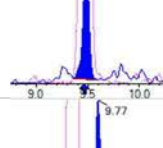
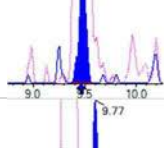
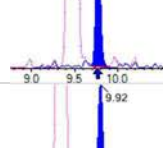
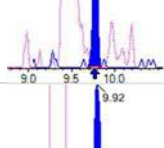
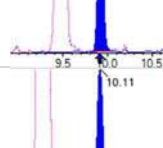
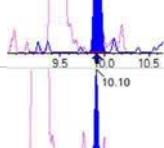
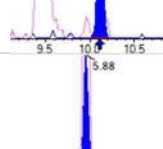
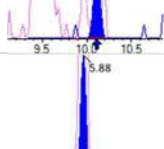
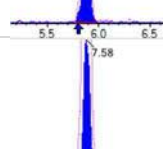
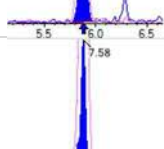
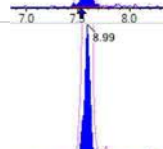
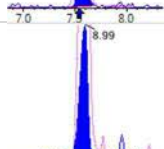
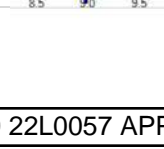
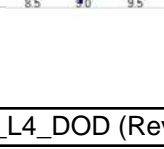
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
PFBA	0.166	0.30	0.15	J
PFPEA	0.0880	0.080	0.022	
PFHXA	0.0472	0.040	0.015	IR2
PFHPA	0.0505	0.040	0.015	
PFOA	0.0802	0.040	0.021	BS2
PFNA	0.0471	0.040	0.022	
PFDA	0.0643	0.040	0.022	BS2, IR1
PFUnA	0.0401	0.040	0.020	IR2
PFDOA	0.0487	0.040	0.023	IR2
PFTRDA	0.0576	0.040	0.016	
PFTEDA	0.0493	0.040	0.025	
PFBS	0.0391	0.040	0.016	J
PFPEs	0.0389	0.040	0.012	J
PFHXS	0.0430	0.040	0.015	
PFHPS	0.0347	0.040	0.011	J
PFOS	0.0452	0.040	0.0097	
PFNS	0.0336	0.040	0.015	J
PFDS	0.0399	0.040	0.014	J
PFDOS	0.0319	0.040	0.013	J
4:2FTS	0.200	0.16	0.045	
6:2FTS	0.180	0.16	0.061	
8:2FTS	0.164	0.16	0.051	
PFOSA	0.0490	0.040	0.012	
NMeFOSA	0.184	0.16	0.066	
NEtFOSA	0.169	0.16	0.027	
NMeFOSAA	0.0503	0.040	0.010	IR1
NEtFOSAA	0.0539	0.040	0.018	
NMeFOSE	0.144	0.16	0.054	J
NEtFOSE	0.224	0.16	0.047	
HFPO-DA	0.0930	0.088	0.022	

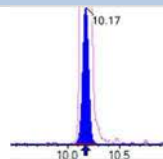
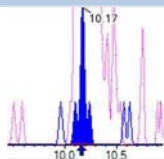
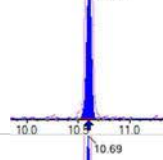
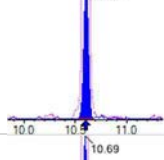
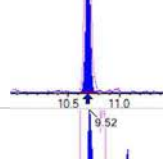
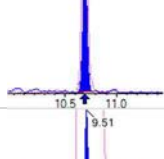
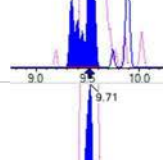
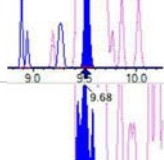
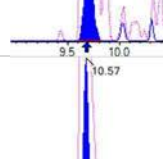
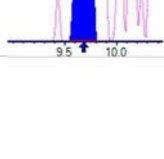
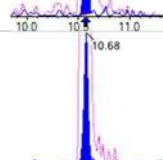
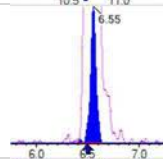
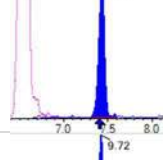
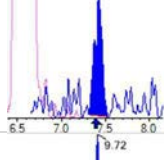
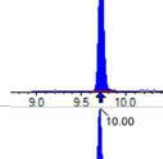
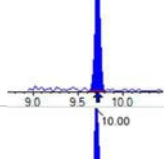
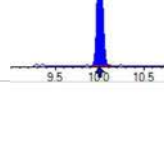
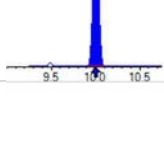
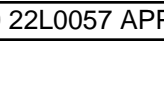
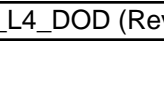
ANALYSIS DATA SHEET**MRL Check**

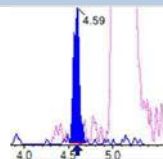
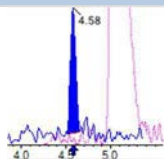
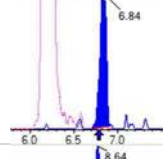
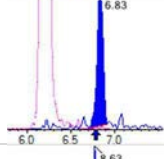
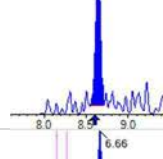
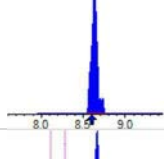
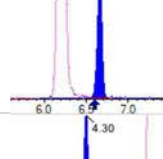
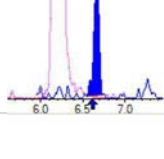
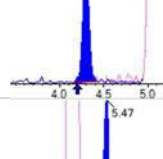
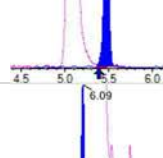
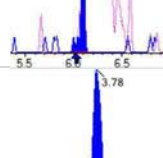
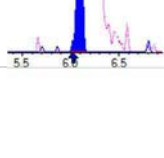
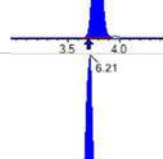
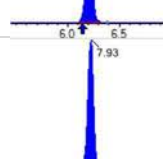
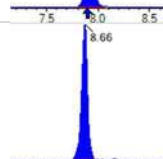
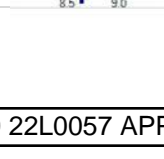
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Matrix:	Solid	Laboratory ID:	BBL0206-MRL1
Sampled:		File ID:	S2022-12-14B (8)
		Prepared:	12/09/22 15:06
Solids:		Analyzed:	12/15/22 01:20
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		Calibration:	2251013
		Instrument:	Saphira

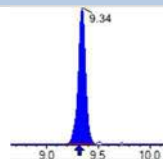
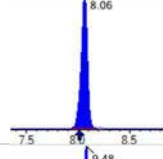
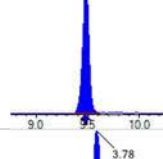
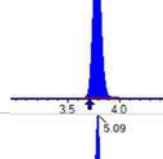
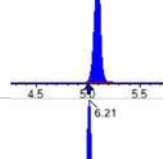
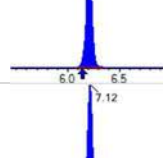
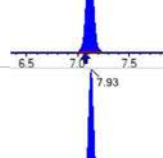
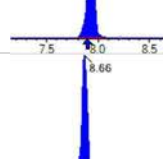
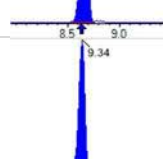
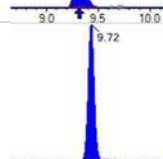
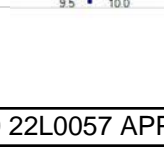
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
ADONA	0.0711	0.080	0.026	J
PFEESA	0.0775	0.080	0.017	J
PFMPA	0.0771	0.080	0.028	J
PFMBA	0.0798	0.080	0.032	J
NFDHA	0.102	0.080	0.049	
9CL-PF3ONS	0.0752	0.080	0.024	J
11CL-PF3OUDS	0.0705	0.080	0.027	J
3:3FTCA	0.147	0.16	0.064	J
5:3FTCA	0.144	0.16	0.065	J
7:3FTCA	0.130	0.16	0.050	J

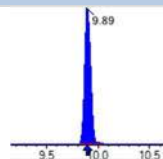
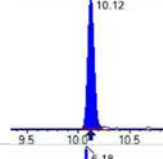
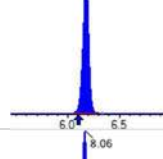
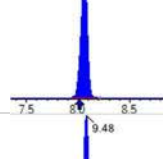
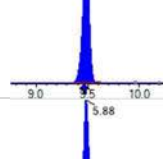
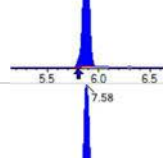
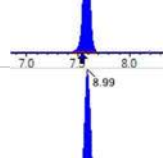
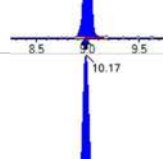
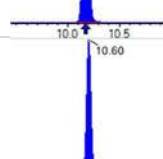
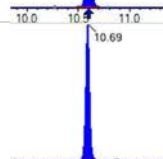
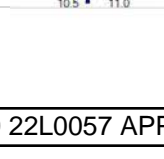
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 21837	(3.78, 1.00) (0.00, N/A, 0.0)	43.9	N/A 0.0 0.0	0.4151 [0.4000]	103.8%			
PFPeA	(262.9 / 219.0) 17492 (262.9 / 69.0) 330	(5.09, 1.00) (0.00, N/A, 0.7)	134.6 10.1	0.0188 150.0 179.8	0.2200 [0.2000]	110.0%			
PFHxA	(313.0 / 269.0) 15424 (313.0 / 119.0) 2478	(6.21, 1.00) (0.01, N/A, -0.2)	85.2 72.4	0.1607 173.5 154.2	0.1179 [0.1000]	117.9%			IR2,
PFHpA	(363.0 / 319.0) 14154 (363.0 / 169.0) 4718	(7.12, 1.00) (0.01, N/A, 0.4)	51.5 118.7	0.3334 107.1 103.6	0.1263 [0.1000]	126.3%			
PFOA	(413.0 / 369.0) 25058 (413.0 / 169.0) 7168	(7.93, 1.00) (0.00, N/A, -0.2)	71.1 93.8	0.2860 85.2 91.5	0.2006 [0.1000]	200.6%			QC,
PFNA	(463.0 / 419.0) 11571 (463.0 / 169.0) 1935	(8.67, 1.00) (0.01, N/A, 0.1)	48.0 28.3	0.1672 95.3 84.1	0.1177 [0.1000]	117.7%			
PFDA	(513.0 / 469.0) 18399 (513.0 / 169.0) 268	(9.34, 1.00) (0.00, N/A, 1.4)	51.7 367.4	0.0146 14.5 15.5	0.1607 [0.1000]	160.7%			QC,IR1,
PFUnA	(563.0 / 519.0) 15742 (563.0 / 169.0) 2906	(9.72, 1.00) (0.00, N/A, 0.5)	60.6 28.9	0.1846 201.7 199.8	0.1002 [0.1000]	100.2%			IR2,
PFDoA	(613.0 / 569.0) 20224 (613.0 / 169.0) 3952	(9.90, 1.00) (0.00, N/A, 0.7)	103.6 93.2	0.1954 152.4 132.7	0.1218 [0.1000]	121.8%			IR2,
PFTrDA	(663.0 / 619.0) 19700 (663.0 / 169.0) 2860	(10.02, 1.01) (N/A, 0.01, 0.2)	122.1 56.9	0.1452 66.1 60.0	0.1439 [0.1000]	143.9%			QC,
PFTeDA	(713.0 / 669.0) 15593 (713.0 / 169.0) 2524	(10.13, 1.00) (0.00, N/A, 0.7)	99.0 34.3	0.1619 87.0 77.0	0.1234 [0.1000]	123.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 19904 (298.9 / 99.0) 12502	(6.17, 1.00) (0.00, N/A, -0.3)	238.3 98.9	0.6281 87.2 103.0	0.0977 [0.0885]	110.5%			
PFPeS	(349.0 / 80.0) 31504 (349.0 / 99.0) 12629	(7.19, 0.89) (N/A, 0.05, 0.2)	257.9 150.3	0.4009 107.0 106.6	0.0972 [0.0938]	103.6%			
PFHxS	(399.0 / 80.0) 31790 (399.0 / 99.0) 8855	(8.06, 1.00) (0.00, N/A, 0.4)	13622.0 828.5	0.2785 86.4 82.6	0.1075 [0.0911]	118.0%			
PFHpS	(449.0 / 80.0) 23836 (449.0 / 99.0) 5724	(8.82, 0.93) (N/A, 0.03, 0.2)	129.6 94.5	0.2401 78.2 106.8	0.0869 [0.0951]	91.3%			
PFOS	(499.0 / 80.0) 37692 (499.0 / 99.0) 8688	(9.48, 1.00) (0.00, N/A, 0.4)	54.0 57.8	0.2305 100.4 101.7	0.1130 [0.0927]	121.8%			
PFNS	(549.0 / 80.0) 34564 (549.0 / 99.0) 7825	(9.77, 1.03) (N/A, 0.01, -0.1)	83.8 65.4	0.2264 87.3 88.9	0.0841 [0.0960]	87.6%			
PFDS	(599.0 / 80.0) 53934 (599.0 / 99.0) 16498	(9.92, 1.05) (N/A, 0.01, 0.2)	219.2 61.4	0.3059 135.9 122.0	0.0998 [0.0963]	103.7%			
PFDoS	(698.9 / 80.0) 21783 (698.9 / 99.0) 5057	(10.11, 1.07) (N/A, 0.00, 0.4)	142.1 114.3	0.2322 114.7 113.0	0.0797 [0.0970]	82.2%			
4:2FTS	(327.0 / 307.0) 29384 (327.0 / 81.0) 16128	(5.88, 1.00) (0.00, N/A, -0.3)	470.7 95.3	0.5489 90.4 102.8	0.4997 [0.3738]	133.7%			QC.
6:2FTS	(427.0 / 407.0) 19322 (427.0 / 81.0) 13640	(7.58, 1.00) (0.00, N/A, 0.2)	199.1 147.7	0.7059 108.7 104.9	0.4507 [0.3796]	118.7%			
8:2FTS	(527.0 / 507.0) 13980 (527.0 / 81.0) 12147	(8.99, 1.00) (0.00, N/A, 0.2)	213.1 85.1	0.8689 138.6 145.4	0.4093 [0.3833]	106.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 47054 (498.0 / 478.0) 1822	(10.17, 1.00) (0.00, N/A, 0.0)	265.3 44.4	0.0387 170.1 208.8	0.1224 [0.1000]	122.4%			
NMeFOSA	(511.9 / 219.0) 14641 (511.9 / 169.0) 11326	(10.60, 1.00) (0.00, N/A, 0.0)	224.1 246.3	0.7736 121.2 108.8	0.4605 [0.4000]	115.1%			
NEtFOSA	(526.0 / 219.0) 12225 (526.0 / 169.0) 14259	(10.69, 1.00) (0.00, N/A, 0.0)	369.4 226.7	1.1664 109.3 104.1	0.4228 [0.4000]	105.7%			
NMeFOSAA	(570.0 / 419.0) 6930 (570.0 / 483.0) 1371	(9.52, 1.00) (0.01, N/A, 0.5)	8063.6 119804.3	0.1978 34.5 36.6	0.1257 [0.1000]	125.7%			IR1,
NEtFOSAA	(584.0 / 419.0) 7414 (584.0 / 526.0) 2901	(9.71, 1.00) (0.01, N/A, 1.4)	22808.4 18.3	0.3913 69.0 86.2	0.1347 [0.1000]	134.7%			QC,
NMeFOSE	(616.1 / 59.0) 6048	(10.57, 1.00) (0.01, N/A, 0.0)	91.4	N/A 0.0 0.0	0.3607 [0.4000]	90.2%			
NEtFOSE	(630.0 / 59.0) 2605	(10.68, 1.00) (0.01, N/A, 0.0)	101.9	N/A 0.0 0.0	0.5603 [0.4000]	140.1%			QC,
HFPO-DA	(285.0 / 169.0) 13348 (285.0 / 185.0) 35710	(6.55, 1.00) (0.01, N/A, 0.4)	553.9 310.8	2.6754 101.7 85.0	0.2325 [0.2000]	116.2%			
ADONA	(377.0 / 85.0) 43517 (377.0 / 251.0) 6346	(7.43, 1.14) (N/A, 0.04, 0.2)	262.6 19.9	0.1458 123.7 111.9	0.1777 [0.1885]	94.3%			
9CI-Pf3ONS	(531.0 / 351.0) 130602 (533.0 / 353.0) 36123	(9.72, 1.48) (N/A, 0.01, 0.1)	326.3 118.8	0.2766 95.4 79.4	0.1881 [0.1867]	100.8%			
11CI-PF3OUDS	(631.0 / 451.0) 78373 (633.0 / 453.0) 21898	(10.00, 1.53) (N/A, 0.00, 0.1)	344.7 5795.4	0.2794 88.6 89.9	0.1761 [0.1886]	93.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 1227 (241.0 / 117.0) 2080	(4.59, 0.90) (N/A, 0.11, 0.5)	73.6 38.2	1.6957 103.4 93.9	0.3671 [0.4000]	91.8%			
5:3FTCA	(341.0 / 236.7) 9410 (341.0 / 217.0) 15120	(6.84, 1.10) (N/A, 0.06, 0.2)	97.5 69.6	1.6067 101.9 89.9	0.3596 [0.4000]	89.9%			
7:3FTCA	(441.0 / 317.0) 10627 (441.0 / 337.0) 7844	(8.64, 1.39) (N/A, 0.04, 0.5)	23.9 333139.7	0.7382 88.1 92.7	0.3245 [0.4000]	81.1%			
PFEESA	(315.0 / 135.0) 27587 (315.0 / 83.0) 7543	(6.66, 1.07) (N/A, 0.06, -0.2)	398.4 54.0	0.2734 89.2 89.0	0.1937 [0.1785]	108.5%			
PFMPA	(229.0 / 85.0) 4163	(4.30, 0.84) (N/A, 0.10, 0.0)	140.3	N/A 0.0 0.0	0.1929 [0.2000]	96.4%			
PFMBA	(279.0 / 85.0) 14405	(5.47, 1.07) (N/A, 0.09, 0.0)	331.7	N/A 0.0 0.0	0.1994 [0.2000]	99.7%			
NFDHA	(201.0 / 85.0) 1008 (295.0 / 201.0) 4473	(6.09, 0.98) (N/A, 0.07, -0.1)	47.9 269.4	4.4393 67.4 70.0	0.2559 [0.2000]	128.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 81708	(3.78, N/A) (N/A, 0.09, N/A)	582.0	N/A	0.6734 [1.0000]	67.3% {83.0%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 138551	(6.21, N/A) (N/A, 0.07, N/A)	887.2	N/A	0.7592 [1.0000]	75.9% {78.5%}			
13C4_PFOA_IIS	(417.0 / 372.0) 131112	(7.93, N/A) (N/A, 0.04, N/A)	655.6	N/A	0.7511 [1.0000]	75.1% {74.9%}			
13C5_PFNA_IIS	(468.0 / 423.0) 116376	(8.66, N/A) (N/A, 0.03, N/A)	335.6	N/A	0.8564 [1.0000]	85.6% {85.5%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 107714	(9.34, N/A) (N/A, 0.02, N/A)	304.5	N/A	0.7763 [1.0000]	77.6% { 94.3% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 237889	(8.06, N/A) (N/A, 0.04, N/A)	781.9	N/A	0.7371 [1.0000]	73.7% { 81.1% }			
13C4_PFOS_IIS	(502.8 / 79.9) 192946	(9.48, N/A) (N/A, 0.02, N/A)	251.0	N/A	0.7662 [1.0000]	76.6% { 83.4% }			
13C4_PFBA_EIS	(217.0 / 172.0) 599160	(3.78, N/A) (N/A, 0.09, N/A)	833.7	N/A	9.6199 [8.0000]	120.2% { 92.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 358326	(5.09, N/A) (N/A, 0.10, N/A)	739.4	N/A	4.6701 [4.0000]	116.8% { 93.6% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 295195	(6.21, N/A) (N/A, 0.07, N/A)	724.5	N/A	2.5281 [2.0000]	126.4% { 101.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 242126	(7.12, N/A) (N/A, 0.05, N/A)	855.2	N/A	2.3888 [2.0000]	119.4% { 99.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 249977	(7.93, N/A) (N/A, 0.04, N/A)	664.1	N/A	2.4864 [2.0000]	124.3% { 96.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 107876	(8.66, N/A) (N/A, 0.03, N/A)	308.3	N/A	1.2031 [1.0000]	120.3% { 109.1% }			
13C6_PFDA_EIS	(519.0 / 474.0) 113239	(9.34, N/A) (N/A, 0.02, N/A)	318.8	N/A	1.0962 [1.0000]	109.6% { 82.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 181070	(9.72, N/A) (N/A, 0.01, N/A)	318.8	N/A	1.2762 [1.0000]	127.6% { 98.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 191757	(9.89, N/A) (N/A, 0.01, N/A)	495.6	N/A	1.0990 [1.0000]	109.9% { 74.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 138318	(10.12, N/A) (N/A, 0.00, N/A)	310.6	N/A	1.2626 [1.0000]	126.3% { 86.5% }			
13C3_PFBs_EIS	(302.0 / 80.0) 720777	(6.18, N/A) (N/A, 0.07, N/A)	810.8	N/A	2.6333 [2.0000]	131.7% { 92.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 368306	(8.06, N/A) (N/A, 0.04, N/A)	746.1	N/A	2.3909 [2.0000]	119.5% { 88.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 606617	(9.48, N/A) (N/A, 0.02, N/A)	458.0	N/A	2.5252 [2.0000]	126.3% { 101.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 72138	(5.88, N/A) (N/A, 0.07, N/A)	522.5	N/A	4.5093 [4.0000]	112.7% { 81.7% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 105196	(7.58, N/A) (N/A, 0.04, N/A)	817.0	N/A	5.3780 [4.0000]	134.5% { 91.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 95938	(8.99, N/A) (N/A, 0.03, N/A)	317.0	N/A	4.9161 [4.0000]	122.9% { 89.7% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 783763	(10.17, N/A) (N/A, 0.01, N/A)	743.4	N/A	2.1569 [2.0000]	107.8% { 87.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 76429	(10.60, N/A) (N/A, 0.00, N/A)	536.9	N/A	0.8194 [2.0000]	41.0% { 30.4% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 62569	(10.69, N/A) (N/A, 0.00, N/A)	551.6	N/A	0.7732 [2.0000]	38.7% { 28.1% }			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0206-MRL1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-13.dam

Quant Method: 1633 - S2022-12-13A
 Path: S2022-12-14B (8)
 Acquired: 2022/12/15 - 01:20

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 285295	(9.52, N/A) (N/A, 0.01, N/A)	363.7	N/A	5.0175 [4.0000]	125.4% { 107.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 252948	(9.69, N/A) (N/A, 0.01, N/A)	240.2	N/A	4.9165 [4.0000]	122.9% { 101.4% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 248541	(10.57, N/A) (N/A, 0.00, N/A)	853.7	N/A	13.8993 [20.0000]	69.5% { 48.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 137425	(10.66, N/A) (N/A, 0.00, N/A)	938.2	N/A	15.3376 [20.0000]	76.7% { 55.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 742807	(6.55, N/A) (N/A, 0.06, N/A)	1027.7	N/A	10.3855 [8.0000]	129.8% { 107.9% }			

ANALYSIS DATA SHEET**Matrix Spike**

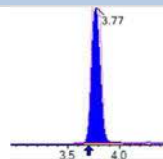
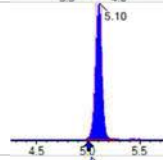
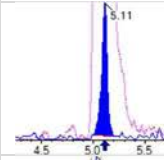
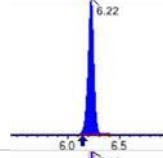
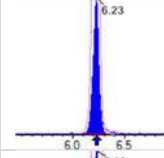
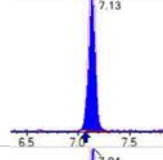
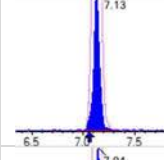
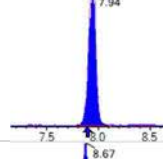
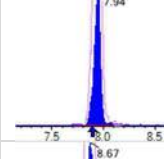
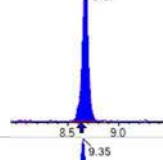
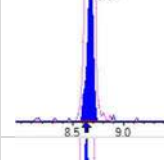
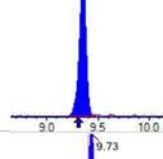
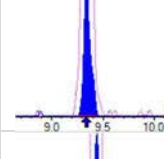
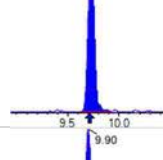
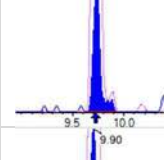
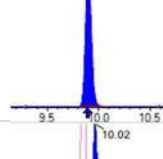
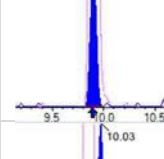
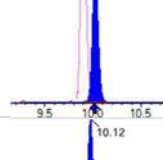
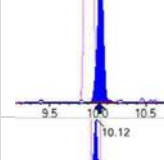
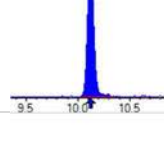
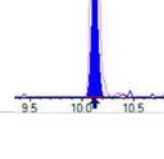
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-MS1
Sampled:		File ID:	S2022-12-14B (9)
		Prepared:	12/09/22 15:06
Solids:		Analyzed:	12/15/22 01:33
		Preparation:	1633
Batch:	BBL0206	Dilution:	1
		Sequence:	SB03845
		Calibration:	2251013
Column:	1	Instrument:	Saphira

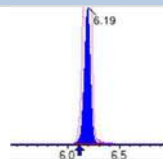
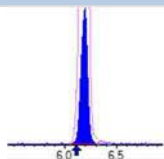
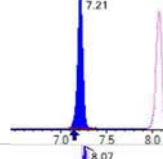
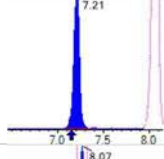
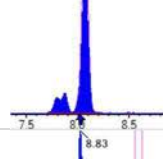
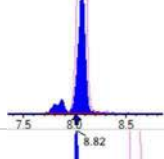
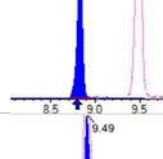
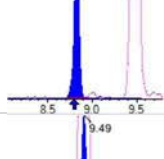
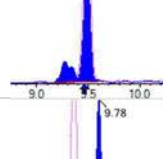
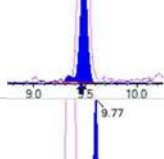
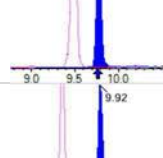
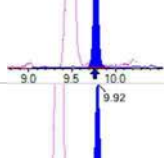
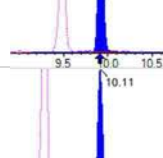
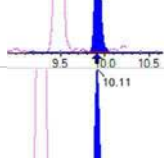
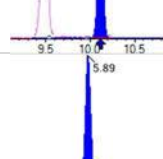
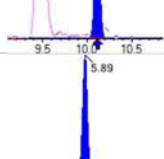
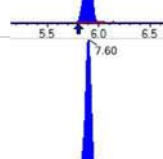
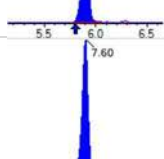
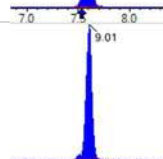
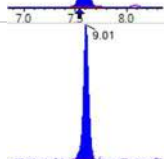
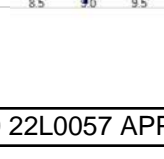
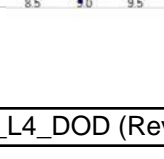
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
PFBA	2.86	0.29	0.15	
PFPEA	1.19	0.078	0.021	
PFHXA	2.35	0.039	0.015	MS1
PFHPA	0.481	0.039	0.015	
PFOA	0.594	0.039	0.021	
PFNA	0.415	0.039	0.021	
PFDA	0.504	0.039	0.021	
PFUnA	0.393	0.39	0.16	
PFDOA	0.413	0.039	0.022	
PFTRDA	0.370	0.039	0.016	
PFTEDA	0.461	0.039	0.024	
PFBS	0.375	0.039	0.016	
PFPEs	0.442	0.039	0.011	
PFHXS	0.409	0.039	0.015	
PFHPS	0.358	0.039	0.010	
PFOS	0.438	0.039	0.0095	
PFNS	0.332	0.039	0.014	
PFDS	0.367	0.039	0.013	
PFDOS	0.402	0.039	0.013	
4:2FTS	1.91	0.16	0.044	
6:2FTS	43.5	0.16	0.059	MS1
8:2FTS	1.93	0.16	0.050	
PFOSA	0.474	0.039	0.012	
NMeFOSA	1.58	0.16	0.064	
NEtFOSA	1.68	0.16	0.026	
NMeFOSAA	0.437	0.039	0.0098	
NEtFOSAA	0.444	0.039	0.017	
NMeFOSE	1.50	0.16	0.052	
NEtFOSE	1.60	0.16	0.046	
HFPO-DA	0.984	0.078	0.031	

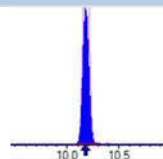
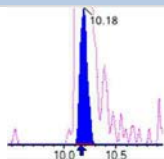
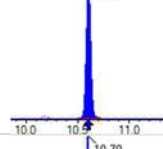
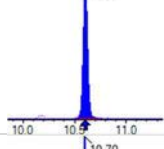
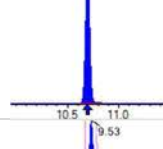
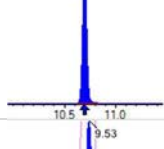
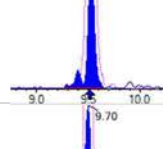
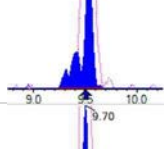
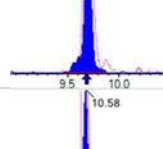
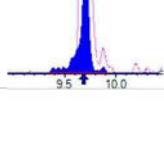
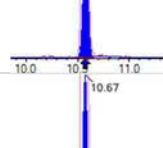
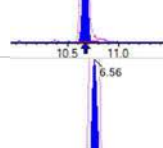
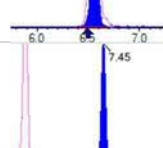
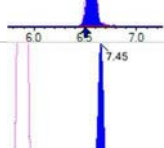
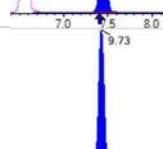
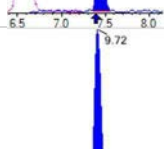
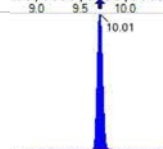
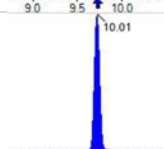
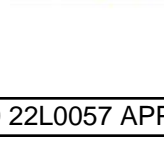
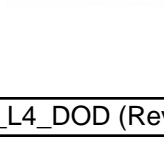
ANALYSIS DATA SHEET**Matrix Spike**

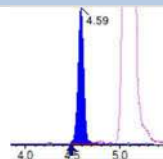
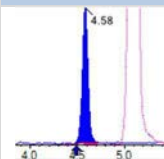
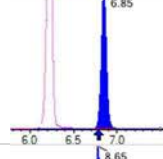
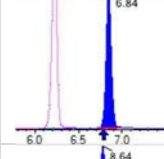
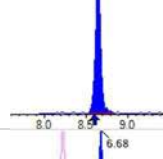
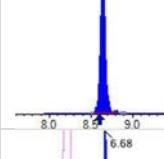
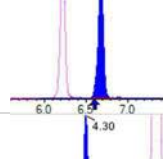
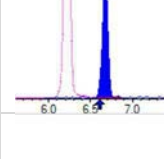
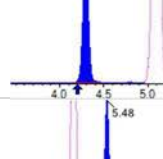
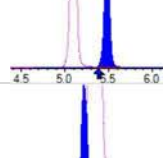
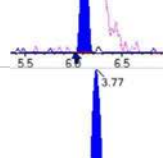
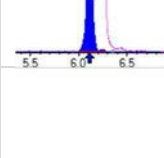
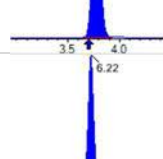
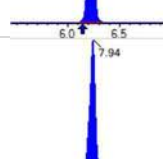
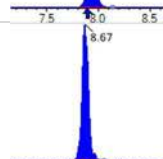
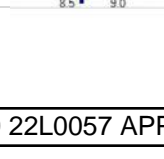
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-MS1
Sampled:		File ID:	S2022-12-14B (9)
		Prepared:	12/09/22 15:06
Solids:		Analyzed:	12/15/22 01:33
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Batch:	BBL0206	Dilution:	1
Column:	1	Sequence:	SB03845
		Calibration:	2251013
		Instrument:	Saphira

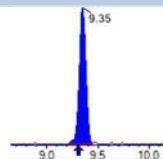
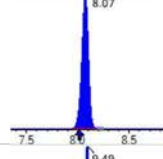
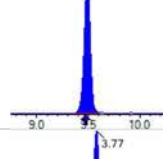
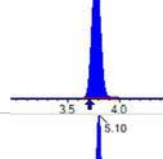
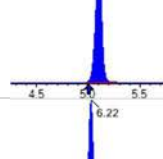
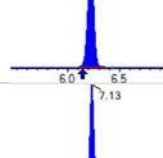
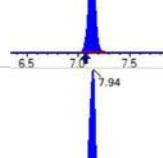
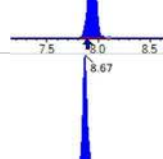
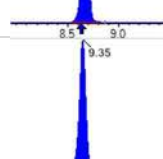
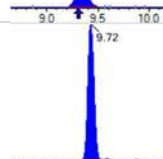
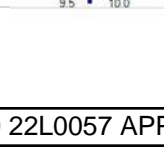
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
ADONA	0.854	0.078	0.026	
PFEESA	0.757	0.078	0.017	
PFMPA	0.819	0.078	0.027	
PFMBA	0.872	0.078	0.032	
NFDHA	0.995	0.078	0.048	
9CL-PF3ONS	0.503	0.078	0.023	
11CL-PF3OUDS	0.818	0.078	0.026	
3:3FTCA	1.53	0.16	0.062	
5:3FTCA	1.98	0.16	0.063	
7:3FTCA	1.65	0.16	0.048	

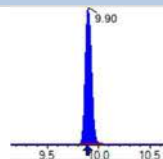
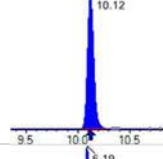
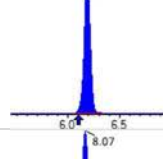
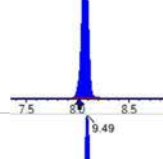
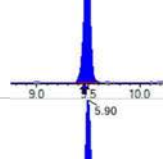
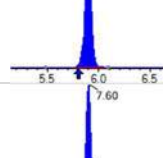
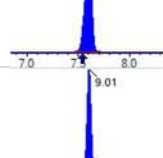
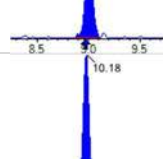
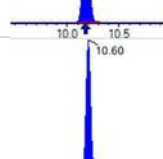
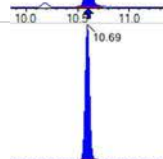
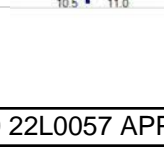
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 388246	(3.77, 1.00) (0.00, N/A, 0.0)	65.2	N/A 0.0 0.0	7.3248	N/A			
PFPeA	(262.9 / 219.0) 252471 (262.9 / 69.0) 2479	(5.10, 1.00) (0.00, N/A, -0.6)	642.9 90.8	0.0098 78.2 93.7	3.0605	N/A			
PFHxA	(313.0 / 269.0) 746265 (313.0 / 119.0) 73465	(6.22, 1.00) (0.00, N/A, -0.1)	571.9 501.9	0.0984 106.3 94.5	6.0356	N/A			
PFHpA	(363.0 / 319.0) 152782 (363.0 / 169.0) 47473	(7.13, 1.00) (0.00, N/A, 0.3)	359.0 349.4	0.3107 99.9 96.5	1.2332	N/A			
PFOA	(413.0 / 369.0) 182867 (413.0 / 169.0) 55890	(7.94, 1.00) (0.00, N/A, -0.2)	445.9 342.0	0.3056 91.1 97.8	1.5239	N/A			
PFNA	(463.0 / 419.0) 93159 (463.0 / 169.0) 18985	(8.67, 1.00) (0.01, N/A, -0.1)	322.2 82.0	0.2038 116.1 102.5	1.0657	N/A			
PFDA	(513.0 / 469.0) 143131 (513.0 / 169.0) 14632	(9.35, 1.00) (0.00, N/A, 0.7)	334.2 1094.7	0.1022 101.6 109.0	1.2939	N/A			
PFUnA	(563.0 / 519.0) 111678 (563.0 / 169.0) 13154	(9.73, 1.00) (0.00, N/A, -0.2)	229.0 67.4	0.1178 128.7 127.5	1.0075	N/A			
PFDoA	(613.0 / 569.0) 199028 (613.0 / 169.0) 22456	(9.90, 1.00) (0.00, N/A, 0.0)	595.9 144.5	0.1128 88.0 76.7	1.0604	N/A			
PFTrDA	(663.0 / 619.0) 147026 (663.0 / 169.0) 32053	(10.02, 1.01) (N/A, 0.00, -0.3)	427.4 189.1	0.2180 99.3 90.0	0.9501	N/A			
PFTeDA	(713.0 / 669.0) 95068 (713.0 / 169.0) 22741	(10.12, 1.00) (0.00, N/A, -0.2)	297.4 237.6	0.2392 128.6 113.7	1.1826	N/A			

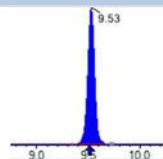
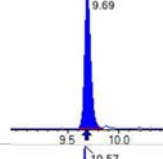
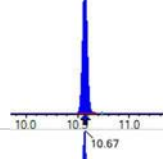
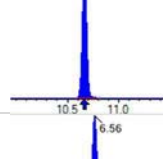
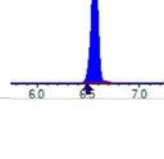
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 194494 (298.9 / 99.0) 106597	(6.19, 1.00) (0.00, N/A, 0.0)	699.5 405.3	0.5481 76.1 89.9	0.9611	N/A			
PFPeS	(349.0 / 80.0) 352210 (349.0 / 99.0) 115373	(7.21, 0.89) (N/A, 0.06, 0.1)	720.7 542.2	0.3276 87.5 87.1	1.1346	N/A			
PFHxS	(399.0 / 80.0) 297346 (399.0 / 99.0) 102325	(8.07, 1.00) (0.00, N/A, 0.0)	6755.4 329192.0	0.3441 106.7 102.1	1.0494	N/A			
PFHpS	(449.0 / 80.0) 224888 (449.0 / 99.0) 65444	(8.83, 0.93) (N/A, 0.04, 0.3)	519.2 411.4	0.2910 94.8 129.5	0.9195	N/A			
PFOS	(499.0 / 80.0) 333615 (499.0 / 99.0) 73424	(9.49, 1.00) (0.00, N/A, 0.1)	125.2 186.7	0.2201 95.9 97.1	1.1224	N/A			
PFNS	(549.0 / 80.0) 312173 (549.0 / 99.0) 70047	(9.78, 1.03) (N/A, 0.01, 0.0)	308.7 264.3	0.2244 86.5 88.1	0.8524	N/A			
PFDS	(599.0 / 80.0) 452722 (599.0 / 99.0) 105475	(9.92, 1.04) (N/A, 0.01, -0.1)	369.2 490.7	0.2330 103.5 92.9	0.9403	N/A			
PFDoS	(698.9 / 80.0) 251098 (698.9 / 99.0) 60575	(10.11, 1.07) (N/A, 0.00, 0.1)	533.6 1382.8	0.2412 119.1 117.4	1.0310	N/A			
4:2FTS	(327.0 / 307.0) 293778 (327.0 / 81.0) 181538	(5.89, 1.00) (0.00, N/A, 0.0)	626.8 538.3	0.6179 101.8 115.7	4.8973	N/A			
6:2FTS	(427.0 / 407.0) 5775041 (427.0 / 81.0) 3942289	(7.60, 1.00) (0.00, N/A, 0.1)	1082.8 525.2	0.6826 105.1 101.4	111.5324	N/A			
8:2FTS	(527.0 / 507.0) 108057 (527.0 / 81.0) 71150	(9.01, 1.00) (0.00, N/A, 0.0)	394.5 318.6	0.6584 105.0 110.2	4.9620	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 393800 (498.0 / 478.0) 5755	(10.18, 1.00) (0.00, N/A, -0.3)	730.4 372.9	0.0146 64.2 78.8	1.2153	N/A			
NMeFOSA	(511.9 / 219.0) 304352 (511.9 / 169.0) 215850	(10.61, 1.00) (0.00, N/A, 0.1)	1072.8 1079.5	0.7092 111.2 99.7	4.0519	N/A			
NEIFOSA	(526.0 / 219.0) 334040 (526.0 / 169.0) 367350	(10.70, 1.00) (0.00, N/A, 0.0)	1160.6 695.6	1.0997 103.0 98.2	4.3137	N/A			
NMeFOSAA	(570.0 / 419.0) 56411 (570.0 / 483.0) 31920	(9.53, 1.00) (0.00, N/A, -0.3)	233.6 63926.7	0.5658 98.6 104.8	1.1211	N/A			
NEIFOSAA	(584.0 / 419.0) 61253 (584.0 / 526.0) 32779	(9.70, 1.00) (0.01, N/A, -0.3)	2525.3 143.5	0.5351 94.4 117.9	1.1401	N/A			
NMeFOSE	(616.1 / 59.0) 108898	(10.58, 1.00) (0.01, N/A, 0.0)	306.5	N/A 0.0 0.0	3.8480	N/A			
NEtFOSE	(630.0 / 59.0) 28677	(10.67, 1.00) (0.01, N/A, 0.0)	733.6	N/A 0.0 0.0	4.0941	N/A			
HFPO-DA	(285.0 / 169.0) 130748 (285.0 / 185.0) 359431	(6.56, 1.00) (0.00, N/A, 0.0)	828.0 606.3	2.7490 104.5 87.3	2.5238	N/A			
ADONA	(377.0 / 85.0) 484090 (377.0 / 251.0) 52810	(7.45, 1.14) (N/A, 0.06, 0.0)	857.3 222.6	0.1091 92.5 83.7	2.1912	N/A			
9CI-Pf3ONS	(531.0 / 351.0) 807767 (533.0 / 353.0) 253721	(9.73, 1.48) (N/A, 0.01, 0.3)	673.7 359.0	0.3141 108.3 90.2	1.2895	N/A			
11CI-PF3OUDS	(631.0 / 451.0) 842776 (633.0 / 453.0) 245963	(10.01, 1.53) (N/A, 0.00, -0.1)	379.2 697.3	0.2918 92.5 93.9	2.0994	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 13608 (241.0 / 117.0) 23585	(4.59, 0.90) (N/A, 0.11, 0.2)	468.6 346.7	1.7331 105.7 96.0	3.9252	N/A			
5:3FTCA	(341.0 / 236.7) 125730 (341.0 / 217.0) 190138	(6.85, 1.10) (N/A, 0.07, 0.2)	662.4 433.5	1.5123 95.9 84.6	5.0820	N/A			
7:3FTCA	(441.0 / 317.0) 131173 (441.0 / 337.0) 118515	(8.65, 1.39) (N/A, 0.05, 0.2)	255.9 339.3	0.9035 107.8 113.5	4.2376	N/A			
PFEESA	(315.0 / 135.0) 261398 (315.0 / 83.0) 73778	(6.68, 1.07) (N/A, 0.08, 0.2)	585.3 305.6	0.2822 92.0 91.9	1.9414	N/A			
PFMPA	(229.0 / 85.0) 47053	(4.30, 0.84) (N/A, 0.10, 0.0)	978.1	N/A 0.0 0.0	2.1013	N/A			
PFMBA	(279.0 / 85.0) 167622	(5.48, 1.07) (N/A, 0.10, 0.0)	1232.1	N/A 0.0 0.0	2.2367	N/A			
NFDHA	(201.0 / 85.0) 6710 (295.0 / 201.0) 40056	(6.11, 0.98) (N/A, 0.08, -0.1)	171.4 440.0	5.9692 90.6 94.1	2.5526	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 85948	(3.77, N/A) (N/A, 0.08, N/A)	653.0	N/A	0.7084 [1.0000]	70.8% { 87.3% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 144676	(6.22, N/A) (N/A, 0.08, N/A)	549.0	N/A	0.7928 [1.0000]	79.3% { 82.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 123603	(7.94, N/A) (N/A, 0.06, N/A)	502.2	N/A	0.7081 [1.0000]	70.8% { 70.6% }			
13C5_PFNA_IIS	(468.0 / 423.0) 95582	(8.67, N/A) (N/A, 0.04, N/A)	256.9	N/A	0.7034 [1.0000]	70.3% { 70.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 108633	(9.35, N/A) (N/A, 0.03, N/A)	426.5	N/A	0.7829 [1.0000]	78.3% { 95.1% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 204838	(8.07, N/A) (N/A, 0.05, N/A)	653.0	N/A	0.6347 [1.0000]	63.5% { 69.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 176139	(9.49, N/A) (N/A, 0.03, N/A)	438.5	N/A	0.6995 [1.0000]	69.9% { 76.1% }			
13C4_PFBA_EIS	(217.0 / 172.0) 603649	(3.77, N/A) (N/A, 0.08, N/A)	1023.8	N/A	9.2139 [8.0000]	115.2% { 93.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 371739	(5.10, N/A) (N/A, 0.10, N/A)	746.7	N/A	4.6398 [4.0000]	116.0% { 97.1% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 279042	(6.22, N/A) (N/A, 0.08, N/A)	721.6	N/A	2.2886 [2.0000]	114.4% { 95.6% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 267721	(7.13, N/A) (N/A, 0.06, N/A)	871.0	N/A	2.5294 [2.0000]	126.5% { 109.5% }			
13C8_PFOA_EIS	(421.0 / 376.0) 240163	(7.94, N/A) (N/A, 0.05, N/A)	668.6	N/A	2.5339 [2.0000]	126.7% { 92.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 95885	(8.67, N/A) (N/A, 0.04, N/A)	305.4	N/A	1.3021 [1.0000]	130.2% { 96.9% }			
13C6_PFDA_EIS	(519.0 / 474.0) 109404	(9.35, N/A) (N/A, 0.03, N/A)	369.3	N/A	1.0501 [1.0000]	105.0% { 79.2% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 127777	(9.72, N/A) (N/A, 0.01, N/A)	274.4	N/A	0.8930 [1.0000]	89.3% { 69.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 216741	(9.90, N/A) (N/A, 0.01, N/A)	869.0	N/A	1.2317 [1.0000]	123.2% { 84.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 87966	(10.12, N/A) (N/A, 0.00, N/A)	314.1	N/A	0.7962 [1.0000]	79.6% { 55.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 716323	(6.19, N/A) (N/A, 0.08, N/A)	874.8	N/A	3.0393 [2.0000]	152.0% { 91.8% }			S2,
13C3_PFHxS_EIS	(402.0 / 80.0) 352847	(8.07, N/A) (N/A, 0.05, N/A)	719.9	N/A	2.6602 [2.0000]	133.0% { 84.8% }			
13C8_PFOS_EIS	(507.0 / 80.0) 540624	(9.49, N/A) (N/A, 0.03, N/A)	405.7	N/A	2.4652 [2.0000]	123.3% { 90.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 73588	(5.90, N/A) (N/A, 0.09, N/A)	475.7	N/A	5.3421 [4.0000]	133.6% { 83.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 127069	(7.60, N/A) (N/A, 0.06, N/A)	727.8	N/A	7.5445 [4.0000]	188.6% { 109.9% }			S2,
13C2_8:2FTS_EIS	(529.0 / 81.0) 61164	(9.01, N/A) (N/A, 0.04, N/A)	231.7	N/A	3.6399 [4.0000]	91.0% { 57.2% }			
13C8_PFOA_EIS	(506.0 / 78.0) 660709	(10.18, N/A) (N/A, 0.01, N/A)	708.6	N/A	1.9918 [2.0000]	99.6% { 73.4% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 180571	(10.60, N/A) (N/A, 0.01, N/A)	374.9	N/A	2.1207 [2.0000]	106.0% { 71.9% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 167544	(10.69, N/A) (N/A, 0.01, N/A)	1030.6	N/A	2.2679 [2.0000]	113.4% { 75.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 260375	(9.53, N/A) (N/A, 0.03, N/A)	443.4	N/A	5.0162 [4.0000]	125.4% { 97.9% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 246883	(9.69, N/A) (N/A, 0.01, N/A)	292.3	N/A	5.2564 [4.0000]	131.4% { 99.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 419524	(10.57, N/A) (N/A, 0.01, N/A)	1074.0	N/A	25.6999 [20.0000]	128.5% { 82.1% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 207062	(10.67, N/A) (N/A, 0.01, N/A)	956.6	N/A	25.3145 [20.0000]	126.6% { 82.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 670179	(6.56, N/A) (N/A, 0.07, N/A)	1075.2	N/A	8.9734 [8.0000]	112.2% { 97.3% }			

ANALYSIS DATA SHEET**Matrix Spike Dup**

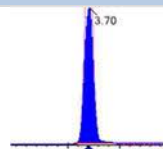
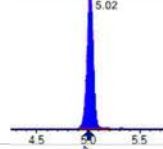
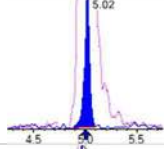
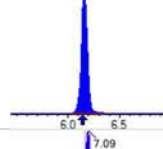
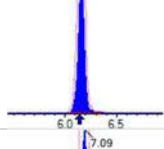
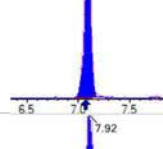
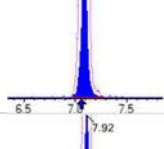
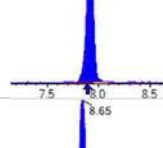
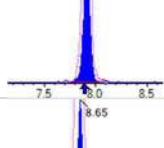
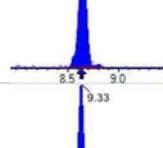
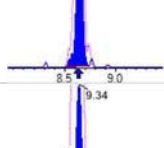
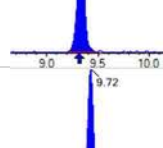
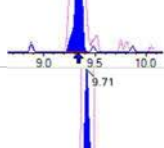
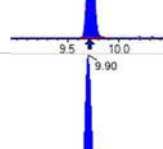
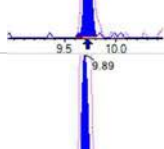
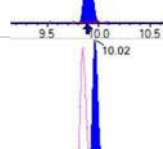
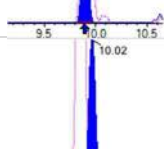
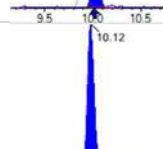
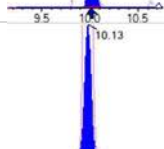
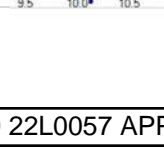
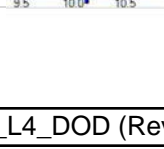
Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-MSD1
Sampled:		File ID:	S2022-12-14B (10)
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Solids:		Analyzed:	12/15/22 01:45
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Column:	1	Sequence:	SB03845
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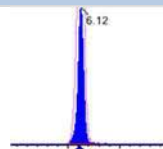
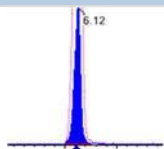
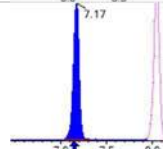
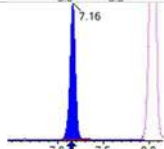
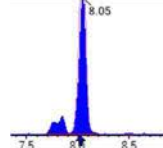
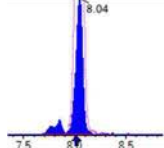
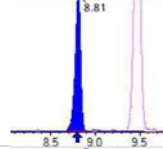
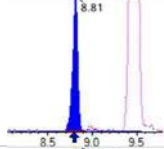
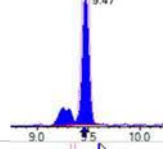
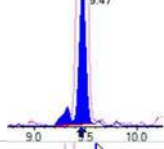
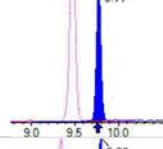
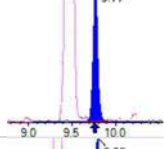
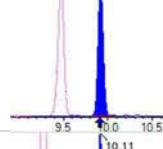
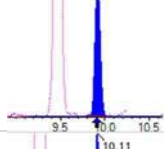
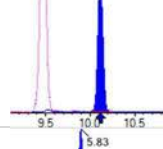
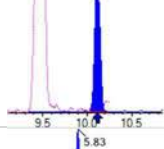
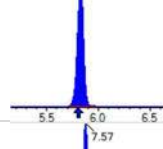
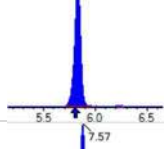
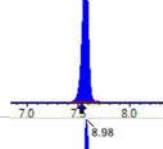
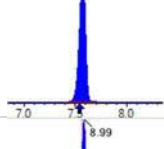
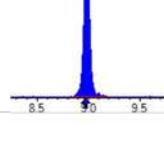
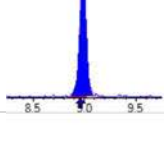
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
PFBA	3.10	0.28	0.14	
PFPEA	1.44	0.074	0.020	
PFHXA	3.35	0.037	0.014	MS1
PFHPA	0.562	0.037	0.014	
PFOA	0.542	0.037	0.020	
PFNA	0.396	0.037	0.020	
PFDA	0.389	0.037	0.020	
PFUnA	0.420	0.37	0.15	
PFDOA	0.492	0.037	0.021	
PFTRDA	0.518	0.037	0.015	MS3
PFTEDA	0.406	0.037	0.023	
PFBS	0.398	0.037	0.015	
PFPEs	0.373	0.037	0.011	
PFHXS	0.349	0.037	0.014	
PFHPS	0.324	0.037	0.0099	
PFOS	0.460	0.037	0.0090	
PFNS	0.302	0.037	0.013	
PFDS	0.360	0.037	0.013	
PFDOS	0.388	0.037	0.012	
4:2FTS	1.95	0.15	0.042	
6:2FTS	51.4	0.15	0.056	MS1
8:2FTS	1.63	0.15	0.047	
PFOSA	0.424	0.037	0.011	
NMeFOSA	1.68	0.15	0.061	
NEtFOSA	1.68	0.15	0.025	
NMeFOSAA	0.480	0.037	0.0093	
NEtFOSAA	0.524	0.037	0.016	
NMeFOSE	1.52	0.15	0.050	
NEtFOSE	1.56	0.15	0.043	
HFPO-DA	0.839	0.074	0.028	

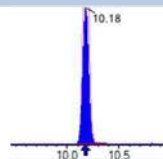
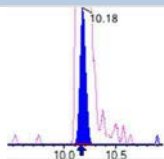
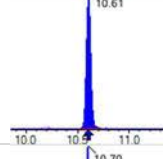
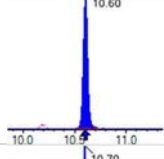
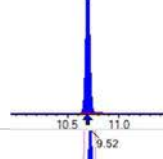
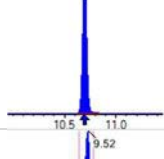
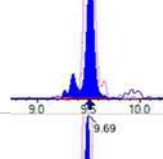
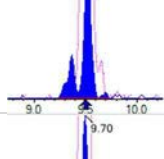
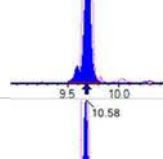
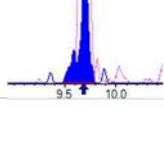
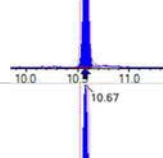
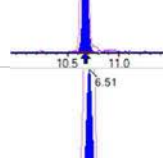
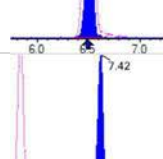
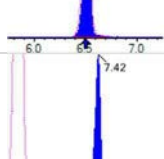
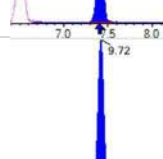
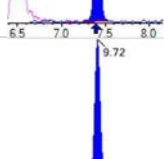
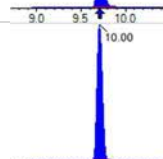
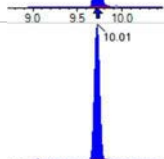
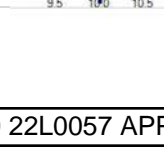
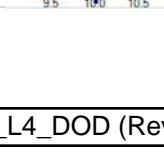
ANALYSIS DATA SHEET**Matrix Spike Dup**

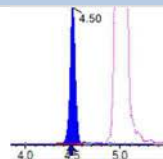
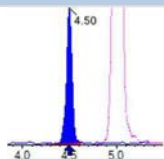
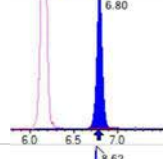
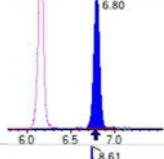
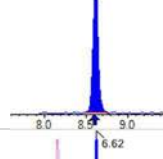
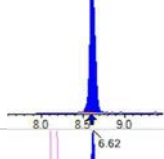
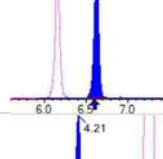
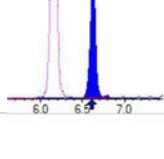
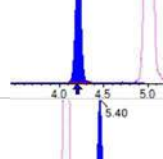
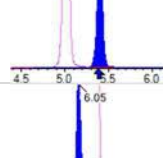
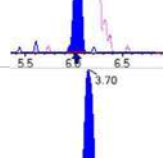
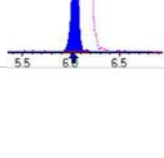
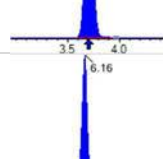
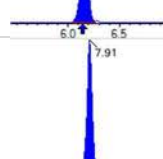
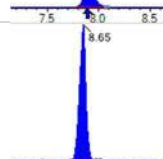
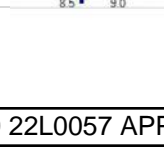
Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0206-MSD1
Sampled:		File ID:	S2022-12-14B (10)
		Prepared:	12/09/22 15:06
Solids:		Analyzed:	12/15/22 01:45
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Column:	1	Sequence:	SB03845
		Calibration:	2251013
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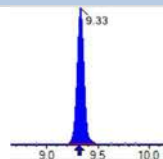
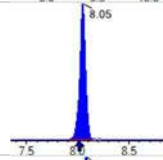
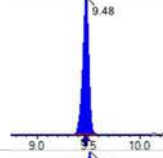
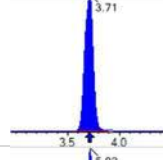
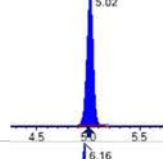
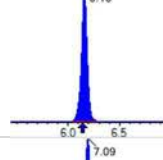
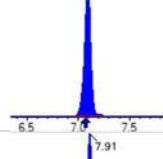
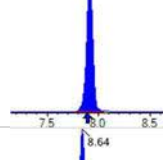
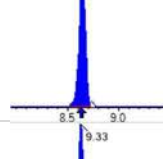
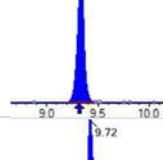
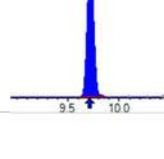
COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
ADONA	0.883	0.074	0.024	
PFEESA	0.790	0.074	0.016	
PFMPA	0.815	0.074	0.026	
PFMBA	0.799	0.074	0.030	
NFDHA	0.666	0.074	0.045	MS3
9CL-PF3ONS	0.558	0.074	0.022	
11CL-PF3OUDS	0.855	0.074	0.025	
3:3FTCA	1.65	0.15	0.059	
5:3FTCA	1.80	0.15	0.060	
7:3FTCA	1.50	0.15	0.046	

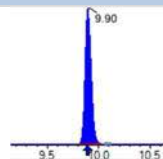
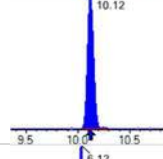
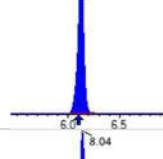
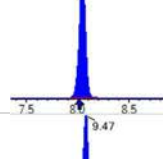
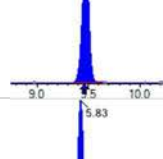
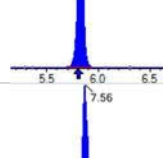
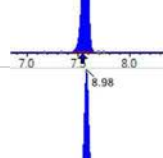
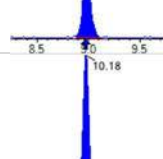
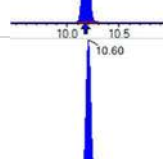
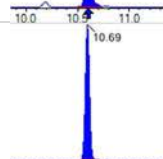
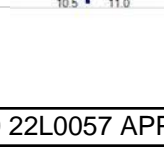
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 421270	(3.70, 1.00) (0.00, N/A, 0.0)	59.8	N/A 0.0 0.0	8.3918	N/A			
PFPeA	(262.9 / 219.0) 295927 (262.9 / 69.0) 3486	(5.02, 1.00) (0.00, N/A, 0.0)	744.5 125.7	0.0118 93.8 112.4	3.9155	N/A			
PFHxA	(313.0 / 269.0) 1107810 (313.0 / 119.0) 101051	(6.16, 1.00) (0.00, N/A, 0.0)	698.5 580.6	0.0912 98.5 87.5	9.0781	N/A			
PFHpA	(363.0 / 319.0) 173745 (363.0 / 169.0) 52501	(7.09, 1.00) (0.00, N/A, 0.2)	451.4 330.1	0.3022 97.1 93.9	1.5221	N/A			
PFOA	(413.0 / 369.0) 175622 (413.0 / 169.0) 61484	(7.92, 1.00) (0.00, N/A, 0.0)	341.1 480.8	0.3501 104.3 112.0	1.4680	N/A			
PFNA	(463.0 / 419.0) 95553 (463.0 / 169.0) 21071	(8.65, 1.00) (0.00, N/A, -0.3)	231.8 75.3	0.2205 125.6 111.0	1.0730	N/A			
PFDA	(513.0 / 469.0) 130642 (513.0 / 169.0) 12293	(9.33, 1.00) (0.00, N/A, -0.5)	354.9 251.3	0.0941 93.5 100.3	1.0535	N/A			
PFUnA	(563.0 / 519.0) 134538 (563.0 / 169.0) 12920	(9.72, 1.00) (0.00, N/A, 0.5)	386.3 117.5	0.0960 104.9 103.9	1.1384	N/A			
PFDoA	(613.0 / 569.0) 206444 (613.0 / 169.0) 23885	(9.90, 1.00) (0.00, N/A, 0.3)	586.5 468.5	0.1157 90.3 78.6	1.3330	N/A			
PFTrDA	(663.0 / 619.0) 179318 (663.0 / 169.0) 26041	(10.02, 1.01) (N/A, 0.00, -0.1)	323.7 2991.3	0.1452 66.1 60.0	1.4044	N/A			
PFTeDA	(713.0 / 669.0) 101126 (713.0 / 169.0) 20173	(10.12, 1.00) (0.00, N/A, -0.2)	405.2 104.2	0.1995 107.2 94.8	1.0996	N/A			

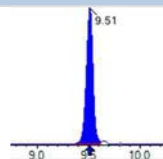
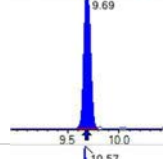
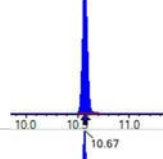
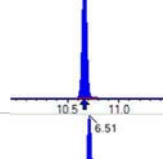
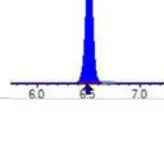
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 200807 (298.9 / 99.0) 123751	(6.12, 1.00) (0.00, N/A, 0.1)	796.7 487.7	0.6163 85.5 101.1	1.0792	N/A			
PFPeS	(349.0 / 80.0) 349899 (349.0 / 99.0) 129001	(7.17, 0.89) (N/A, 0.02, 0.2)	752.7 499.5	0.3687 98.4 98.0	1.0107	N/A			
PFHxS	(399.0 / 80.0) 298498 (399.0 / 99.0) 107325	(8.05, 1.00) (0.00, N/A, 0.1)	1335.6 36073.4	0.3596 111.5 106.6	0.9446	N/A			
PFHpS	(449.0 / 80.0) 224891 (449.0 / 99.0) 62773	(8.81, 0.93) (N/A, 0.02, -0.3)	447.8 314.0	0.2791 90.9 124.2	0.8777	N/A			
PFOS	(499.0 / 80.0) 387893 (499.0 / 99.0) 88063	(9.47, 1.00) (0.00, N/A, 0.1)	114.6 109.0	0.2270 98.9 100.2	1.2457	N/A			
PFNS	(549.0 / 80.0) 313895 (549.0 / 99.0) 78160	(9.77, 1.03) (N/A, 0.01, 0.1)	293.0 411.0	0.2490 96.0 97.8	0.8182	N/A			
PFDS	(599.0 / 80.0) 492587 (599.0 / 99.0) 133429	(9.92, 1.05) (N/A, 0.01, 0.0)	489.6 597.8	0.2709 120.3 108.0	0.9767	N/A			
PFDoS	(698.9 / 80.0) 268150 (698.9 / 99.0) 61740	(10.11, 1.07) (N/A, 0.00, -0.1)	570.8 355.7	0.2302 113.7 112.0	1.0510	N/A			
4:2FTS	(327.0 / 307.0) 342392 (327.0 / 81.0) 208024	(5.83, 1.00) (0.00, N/A, -0.1)	827.0 467.1	0.6076 100.1 113.8	5.2891	N/A			
6:2FTS	(427.0 / 407.0) 6484033 (427.0 / 81.0) 4696801	(7.57, 1.00) (0.00, N/A, -0.1)	1186.5 962.5	0.7244 111.5 107.6	139.1748	N/A			
8:2FTS	(527.0 / 507.0) 118318 (527.0 / 81.0) 73815	(8.98, 1.00) (0.00, N/A, -0.2)	360.3 245.0	0.6239 99.5 104.4	4.4110	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 385624 (498.0 / 478.0) 7283	(10.18, 1.00) (0.00, N/A, 0.0)	397.4 26272.0	0.0189 83.0 101.8	1.1500	N/A			
NMeFOFA	(511.9 / 219.0) 318762 (511.9 / 169.0) 215531	(10.61, 1.00) (0.00, N/A, 0.0)	1614.3 1347.8	0.6762 106.0 95.1	4.5477	N/A			
NEIFOSA	(526.0 / 219.0) 330854 (526.0 / 169.0) 362844	(10.70, 1.00) (0.00, N/A, 0.0)	1034.4 1326.2	1.0967 102.7 97.9	4.5420	N/A			
NMeFOSAA	(570.0 / 419.0) 68986 (570.0 / 483.0) 35370	(9.52, 1.00) (0.00, N/A, -0.2)	146.7 296.8	0.5127 89.3 94.9	1.3001	N/A			
NEIFOSAA	(584.0 / 419.0) 71365 (584.0 / 526.0) 23630	(9.69, 1.00) (0.00, N/A, -0.3)	137094.2 151.0	0.3311 58.4 72.9	1.4188	N/A			
NMeFOSE	(616.1 / 59.0) 107159	(10.58, 1.00) (0.01, N/A, 0.0)	413.5	N/A 0.0 0.0	4.1312	N/A			
NEtFOSE	(630.0 / 59.0) 26634	(10.67, 1.00) (0.01, N/A, 0.0)	427.9	N/A 0.0 0.0	4.2255	N/A			
HFPO-DA	(285.0 / 169.0) 104033 (285.0 / 185.0) 319278	(6.51, 1.00) (0.00, N/A, -0.1)	650.2 830.4	3.0690 116.7 97.5	2.2748	N/A			
ADONA	(377.0 / 85.0) 466640 (377.0 / 251.0) 63351	(7.42, 1.14) (N/A, 0.02, -0.1)	925.1 234.8	0.1358 115.1 104.1	2.3927	N/A			
9CI-Pf3ONS	(531.0 / 351.0) 836140 (533.0 / 353.0) 290266	(9.72, 1.49) (N/A, 0.01, 0.1)	664.8 537.2	0.3472 119.7 99.7	1.5121	N/A			
11CI-PF3OUDS	(631.0 / 451.0) 820850 (633.0 / 453.0) 245232	(10.00, 1.54) (N/A, 0.00, -0.3)	759.6 634.4	0.2988 94.7 96.1	2.3163	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 14224 (241.0 / 117.0) 23160	(4.50, 0.90) (N/A, 0.02, 0.0)	378.0 319.7	1.6282 99.3 90.2	4.4782	N/A			
5:3FTCA	(341.0 / 236.7) 119140 (341.0 / 217.0) 200420	(6.80, 1.10) (N/A, 0.02, -0.1)	448.2 413.0	1.6822 106.7 94.2	4.8793	N/A			
7:3FTCA	(441.0 / 317.0) 123919 (441.0 / 337.0) 105824	(8.62, 1.40) (N/A, 0.02, 0.3)	257.2 387.9	0.8540 101.9 107.3	4.0561	N/A			
PFEESA	(315.0 / 135.0) 284621 (315.0 / 83.0) 87245	(6.62, 1.08) (N/A, 0.02, 0.0)	824.4 265.4	0.3065 100.0 99.8	2.1418	N/A			
PFMPA	(229.0 / 85.0) 45287	(4.21, 0.84) (N/A, 0.02, 0.0)	1093.2	N/A 0.0 0.0	2.2074	N/A			
PFMBA	(279.0 / 85.0) 148599	(5.40, 1.08) (N/A, 0.02, 0.0)	1026.8	N/A 0.0 0.0	2.1642	N/A			
NFDHA	(201.0 / 85.0) 4774 (295.0 / 201.0) 36794	(6.05, 0.98) (N/A, 0.02, 0.4)	173.3 438.3	7.7078 117.0 121.5	1.8053	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 85276	(3.70, N/A) (N/A, 0.01, N/A)	570.7	N/A	0.7028 [1.0000]	70.3% { 86.6% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 146055	(6.16, N/A) (N/A, 0.02, N/A)	605.6	N/A	0.8004 [1.0000]	80.0% { 82.8% }			
13C4_PFOA_IIS	(417.0 / 372.0) 139520	(7.91, N/A) (N/A, 0.03, N/A)	521.2	N/A	0.7992 [1.0000]	79.9% { 79.7% }			
13C5_PFNA_IIS	(468.0 / 423.0) 109867	(8.65, N/A) (N/A, 0.02, N/A)	349.5	N/A	0.8085 [1.0000]	80.9% { 80.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 115871	(9.33, N/A) (N/A, 0.01, N/A)	509.8	N/A	0.8351 [1.0000]	83.5% { 101.5% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 263878	(8.05, N/A) (N/A, 0.03, N/A)	673.1	N/A	0.8176 [1.0000]	81.8% { 89.9% }			
13C4_PFOS_IIS	(502.8 / 79.9) 208943	(9.48, N/A) (N/A, 0.01, N/A)	478.3	N/A	0.8297 [1.0000]	83.0% { 90.3% }			
13C4_PFBA_EIS	(217.0 / 172.0) 571716	(3.71, N/A) (N/A, 0.01, N/A)	768.6	N/A	8.7952 [8.0000]	109.9% { 88.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 340583	(5.02, N/A) (N/A, 0.02, N/A)	867.4	N/A	4.2108 [4.0000]	105.3% { 89.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 275403	(6.16, N/A) (N/A, 0.02, N/A)	655.4	N/A	2.2374 [2.0000]	111.9% { 94.4% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 246671	(7.09, N/A) (N/A, 0.02, N/A)	621.4	N/A	2.3085 [2.0000]	115.4% { 100.9% }			
13C8_PFOA_EIS	(421.0 / 376.0) 239437	(7.91, N/A) (N/A, 0.03, N/A)	895.0	N/A	2.2381 [2.0000]	111.9% { 92.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 97681	(8.64, N/A) (N/A, 0.01, N/A)	464.2	N/A	1.1540 [1.0000]	115.4% { 98.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 122647	(9.33, N/A) (N/A, 0.02, N/A)	298.4	N/A	1.1037 [1.0000]	110.4% { 88.8% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 136228	(9.72, N/A) (N/A, 0.01, N/A)	306.8	N/A	0.8926 [1.0000]	89.3% { 74.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 178838	(9.90, N/A) (N/A, 0.01, N/A)	399.8	N/A	0.9528 [1.0000]	95.3% { 69.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 100633	(10.12, N/A) (N/A, 0.00, N/A)	331.1	N/A	0.8539 [1.0000]	85.4% { 62.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 658597	(6.12, N/A) (N/A, 0.02, N/A)	900.1	N/A	2.1691 [2.0000]	108.5% { 84.4% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 393493	(8.04, N/A) (N/A, 0.03, N/A)	832.9	N/A	2.3029 [2.0000]	115.1% { 94.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 566335	(9.47, N/A) (N/A, 0.01, N/A)	432.1	N/A	2.1770 [2.0000]	108.8% { 95.1% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 79413	(5.83, N/A) (N/A, 0.02, N/A)	463.2	N/A	4.4751 [4.0000]	111.9% { 89.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 114333	(7.56, N/A) (N/A, 0.03, N/A)	513.0	N/A	5.2695 [4.0000]	131.7% { 98.9% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 75337	(8.98, N/A) (N/A, 0.02, N/A)	360.8	N/A	3.4802 [4.0000]	87.0% { 70.4% }			
13C8_PFOA_EIS	(506.0 / 78.0) 683726	(10.18, N/A) (N/A, 0.01, N/A)	802.0	N/A	1.7376 [2.0000]	86.9% { 76.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 168503	(10.60, N/A) (N/A, 0.01, N/A)	395.8	N/A	1.6682 [2.0000]	83.4% { 67.1% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 157605	(10.69, N/A) (N/A, 0.01, N/A)	1051.5	N/A	1.7984 [2.0000]	89.9% { 70.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 274559	(9.51, N/A) (N/A, 0.01, N/A)	414.7	N/A	4.4590 [4.0000]	111.5% { 103.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 231134	(9.69, N/A) (N/A, 0.01, N/A)	342.2	N/A	4.1485 [4.0000]	103.7% { 92.7% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 384528	(10.57, N/A) (N/A, 0.01, N/A)	725.6	N/A	19.8578 [20.0000]	99.3% { 75.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 186333	(10.67, N/A) (N/A, 0.00, N/A)	1003.2	N/A	19.2038 [20.0000]	96.0% { 74.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 591609	(6.51, N/A) (N/A, 0.02, N/A)	638.4	N/A	7.8466 [8.0000]	98.1% { 85.9% }			

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0400-BLK1
Sampled:		Prepared:	12/20/22 14:19
Solids:		Preparation:	1633
Batch:	BBL0400	Sequence:	SB03951
Column:	1	Calibration:	2252011
		Instrument:	Saphira
		File ID:	S2022-12-22A (5)
		Analyzed:	12/22/22 12:17
		Dilution:	1

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
PFBA	0.20 U	0.30	0.20	0.15	U
PFPEA	0.040 U	0.080	0.040	0.022	U
PFHXA	0.020 U	0.040	0.020	0.015	U
PFHPA	0.020 U	0.040	0.020	0.015	U
PFOA	0.0235 J	0.040	0.030	0.021	B, J
PFNA	0.030 U	0.040	0.030	0.022	U
PFDA	0.030 U	0.040	0.030	0.022	U
PFUnA	0.020 U	0.040	0.020	0.020	U
PFDOA	0.030 U	0.040	0.030	0.023	U
PFTRDA	0.020 U	0.040	0.020	0.016	U
PFTEDA	0.030 U	0.040	0.030	0.025	U
PFBS	0.020 U	0.040	0.020	0.016	U
PFPEs	0.020 U	0.040	0.020	0.012	U
PFHXS	0.020 U	0.040	0.020	0.015	U
PFHPS	0.020 U	0.040	0.020	0.011	U
PFOS	0.0107 J	0.040	0.020	0.0097	J
PFNS	0.020 U	0.040	0.020	0.015	U
PFDS	0.020 U	0.040	0.020	0.014	U
PFDOS	0.020 U	0.040	0.020	0.013	U
4:2FTS	0.080 U	0.16	0.080	0.045	U
6:2FTS	0.080 U	0.16	0.080	0.061	U
8:2FTS	0.080 U	0.16	0.080	0.051	U
PFOSA	0.020 U	0.040	0.020	0.012	U
NMeFOSA	0.080 U	0.16	0.080	0.066	U
NEtFOSA	0.080 U	0.16	0.080	0.027	U
NMeFOSAA	0.020 U	0.040	0.020	0.010	U
NEtFOSAA	0.020 U	0.040	0.020	0.018	U
NMeFOSE	0.080 U	0.16	0.080	0.054	U
NEtFOSE	0.080 U	0.16	0.080	0.047	U
HFPO-DA	0.040 U	0.080	0.040	0.020	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0400-BLK1
Sampled:		File ID:	S2022-12-22A (5)
Solids:		Prepared:	12/20/22 14:19
Batch:	BBL0400	Analyzed:	12/22/22 12:17
Column:	1	Preparation:	1633
		Dilution:	1
		Sequence:	SB03951
		Calibration:	2252011
		Instrument:	Saphira

COMPOUND	CONC. (ug/kg Dry)	LOQ	LOD	DL	Q
ADONA	0.040 U	0.080	0.040	0.026	U
PFEESA	0.040 U	0.080	0.040	0.017	U
PFMPA	0.040 U	0.080	0.040	0.028	U
PFMBA	0.040 U	0.080	0.040	0.032	U
NFDHA	0.060 U	0.080	0.060	0.049	U
9CL-PF3ONS	0.040 U	0.080	0.040	0.024	U
11CL-PF3OUDS	0.040 U	0.080	0.040	0.027	U
3:3FTCA	0.080 U	0.16	0.080	0.064	U
5:3FTCA	0.080 U	0.16	0.080	0.065	U
7:3FTCA	0.080 U	0.16	0.080	0.050	U



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0400-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (5)
 Acquired: 2022/12/22 - 12:17

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) 4481 (363.0 / 169.0) 1073	(7.05, 1.00) (0.00, N/A, 0.3)	16.3 11.7	0.2396 76.9 77.7	0.0185	N/A			
PFOA	(413.0 / 369.0) 17634 (413.0 / 169.0) 4880	(7.87, 1.00) (0.00, N/A, -0.1)	92.5 38.7	0.2767 84.7 93.5	0.0587	N/A			MI5-DG 2022-12-22
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0400-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (5)
 Acquired: 2022/12/22 - 12:17

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 17878 (499.0 / 99.0) 4255	(9.43 , 1.00) (0.00 , N/A , -0.2)	19.6 30.0	0.2380 97.9 104.1	0.0267	N/A			MI5 DG 2022-12-22
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0400-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (5)
 Acquired: 2022/12/22 - 12:17

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEIFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9CI-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11CI-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

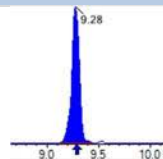
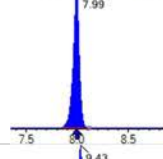
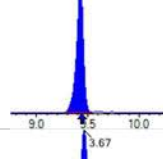
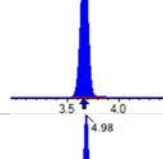
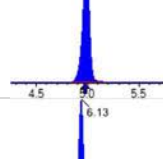
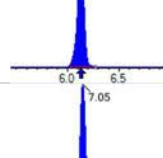
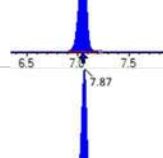
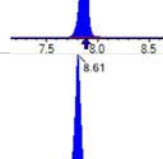
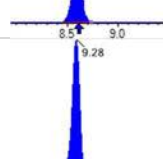
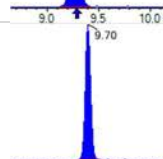
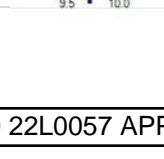


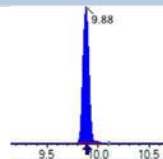
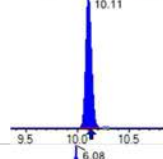
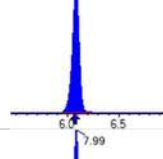
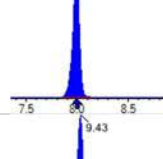
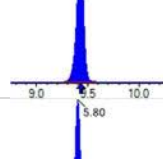
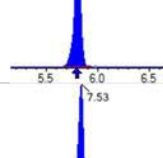
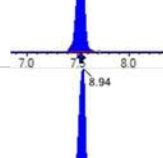
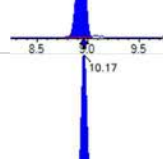
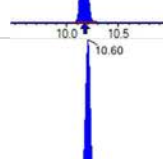
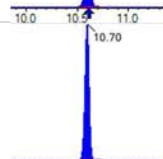
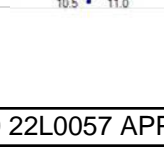
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

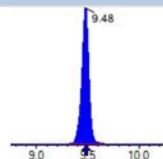
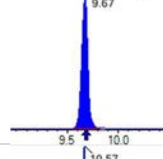
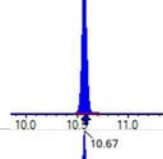
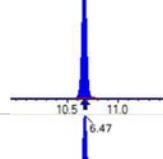
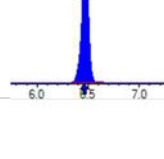
Sample I.D.: BBL0400-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (5)
 Acquired: 2022/12/22 - 12:17

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 173091	(3.67, N/A) (N/A, 0.01, N/A)	753.9	N/A	1.2435 [1.0000]	124.4% { 110.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 266349	(6.13, N/A) (N/A, 0.01, N/A)	693.2	N/A	1.1534 [1.0000]	115.3% { 112.9% }			
13C4_PFOA_IIS	(417.0 / 372.0) 287293	(7.87, N/A) (N/A, -0.01, N/A)	813.3	N/A	1.3068 [1.0000]	130.7% { 111.8% }			
13C5_PFNA_IIS	(468.0 / 423.0) 222337	(8.60, N/A) (N/A, -0.01, N/A)	350.0	N/A	1.2006 [1.0000]	120.1% { 94.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 186730	(9.28, N/A) (N/A, -0.01, N/A)	329.1	N/A	1.0104 [1.0000]	101.0% { 99.8% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 476239	(7.99, N/A) (N/A, 0.00, N/A)	772.4	N/A	1.1797 [1.0000]	118.0% { 106.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 410846	(9.43, N/A) (N/A, -0.01, N/A)	423.2	N/A	1.2872 [1.0000]	128.7% { 118.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1443548	(3.67, N/A) (N/A, 0.01, N/A)	848.6	N/A	8.1031 [8.0000]	101.3% { 115.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 758736	(4.98, N/A) (N/A, 0.02, N/A)	618.4	N/A	4.0941 [4.0000]	102.4% { 111.6% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 599176	(6.13, N/A) (N/A, 0.01, N/A)	720.7	N/A	1.9549 [2.0000]	97.7% { 111.8% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 532771	(7.05, N/A) (N/A, 0.00, N/A)	548.1	N/A	1.9925 [2.0000]	99.6% { 118.5% }			
13C8_PFOA_EIS	(421.0 / 376.0) 611266	(7.87, N/A) (N/A, -0.01, N/A)	801.4	N/A	1.9401 [2.0000]	97.0% { 102.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 231302	(8.61, N/A) (N/A, -0.01, N/A)	446.6	N/A	0.9461 [1.0000]	94.6% { 99.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 303497	(9.28, N/A) (N/A, -0.01, N/A)	429.8	N/A	1.1428 [1.0000]	114.3% { 110.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 403268	(9.70, N/A) (N/A, -0.01, N/A)	484.1	N/A	1.0675 [1.0000]	106.8% { 108.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDaA_EIS	(615.0 / 570.0) 368760	(9.88, N/A) (N/A, -0.01, N/A)	660.5	N/A	0.9780 [1.0000]	97.8% { 100.7% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 252531	(10.11, N/A) (N/A, -0.01, N/A)	606.7	N/A	1.0085 [1.0000]	100.9% { 98.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1454547	(6.08, N/A) (N/A, 0.01, N/A)	588.1	N/A	1.8064 [2.0000]	90.3% { 109.1% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 783254	(7.99, N/A) (N/A, -0.01, N/A)	953.0	N/A	1.8282 [2.0000]	91.4% { 102.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1232126	(9.43, N/A) (N/A, -0.01, N/A)	527.5	N/A	1.7474 [2.0000]	87.4% { 110.3% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 283477	(5.80, N/A) (N/A, 0.01, N/A)	851.9	N/A	4.1566 [4.0000]	103.9% { 125.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 373597	(7.53, N/A) (N/A, 0.00, N/A)	830.4	N/A	4.5500 [4.0000]	113.8% { 111.1% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 293306	(8.94, N/A) (N/A, -0.01, N/A)	355.0	N/A	3.5684 [4.0000]	89.2% { 92.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1403754	(10.17, N/A) (N/A, -0.01, N/A)	790.7	N/A	1.5749 [2.0000]	78.7% { 102.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 196715	(10.60, N/A) (N/A, 0.00, N/A)	1132.0	N/A	1.0108 [2.0000]	50.5% { 68.5% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 184878	(10.70, N/A) (N/A, 0.00, N/A)	1026.0	N/A	1.0291 [2.0000]	51.5% { 60.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 536460	(9.48, N/A) (N/A, -0.01, N/A)	388.8	N/A	3.1995 [4.0000]	80.0% { 101.5% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 451520	(9.67, N/A) (N/A, -0.01, N/A)	392.1	N/A	3.0552 [4.0000]	76.4% { 108.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 366643	(10.57, N/A) (N/A, -0.01, N/A)	1055.7	N/A	13.4179 [20.0000]	67.1% { 84.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 167457	(10.67, N/A) (N/A, -0.01, N/A)	1219.6	N/A	13.4615 [20.0000]	67.3% { 84.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1398269	(6.47, N/A) (N/A, 0.00, N/A)	696.4	N/A	8.5804 [8.0000]	107.3% { 114.9% }			

ANALYSIS DATA SHEET

LCS

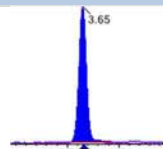
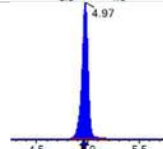
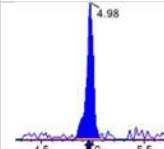
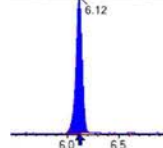
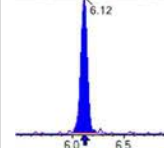
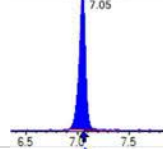
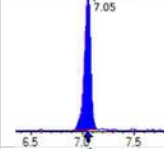
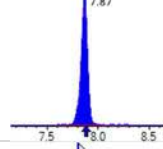
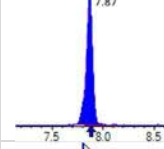
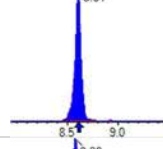
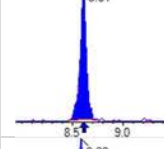
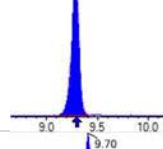
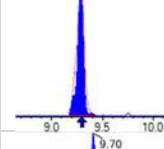
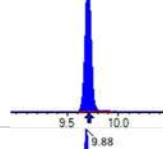
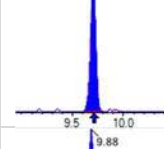
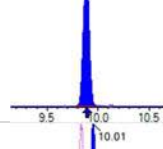
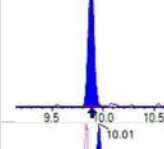
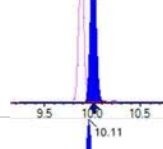
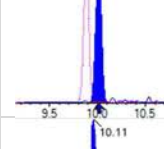
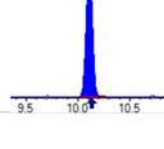
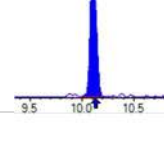
Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0400-BS1
Sampled:		File ID:	S2022-12-22A (6)
		Prepared:	12/20/22 14:19
		Analyzed:	12/22/22 12:30
Solids:		Preparation:	1633
		Dilution:	1
Batch:	BBL0400	Sequence:	SB03951
		Calibration:	2252011
		Instrument:	Saphira
Column:	1		

COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
PFBA	1.65	0.30	0.15	
PFPEA	0.801	0.080	0.022	
PFHXA	0.402	0.040	0.015	
PFHPA	0.387	0.040	0.015	
PFOA	0.378	0.040	0.021	
PFNA	0.388	0.040	0.022	
PFDA	0.406	0.040	0.022	
PFUnA	0.378	0.040	0.020	
PFDOA	0.345	0.040	0.023	
PFTRDA	0.361	0.040	0.016	
PFTEDA	0.374	0.040	0.025	
PFBS	0.356	0.040	0.016	
PFPEs	0.347	0.040	0.012	
PFHXS	0.333	0.040	0.015	
PFHPS	0.370	0.040	0.011	
PFOS	0.348	0.040	0.0097	
PFNS	0.344	0.040	0.015	
PFDS	0.336	0.040	0.014	
PFDOS	0.271	0.040	0.013	
4:2FTS	1.36	0.16	0.045	
6:2FTS	1.43	0.16	0.061	
8:2FTS	1.25	0.16	0.051	
PFOSA	0.341	0.040	0.012	
NMeFOSA	1.62	0.16	0.066	
NEtFOSA	1.69	0.16	0.027	
NMeFOSAA	0.417	0.040	0.010	
NEtFOSAA	0.337	0.040	0.018	
NMeFOSE	1.58	0.16	0.054	
NEtFOSE	1.52	0.16	0.047	
HFPO-DA	0.714	0.088	0.033	

ANALYSIS DATA SHEET**LCS**

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0400-BS1
Sampled:		File ID:	S2022-12-22A (6)
		Prepared:	12/20/22 14:19
Solids:		Analyzed:	12/22/22 12:30
		Preparation:	1633
Batch:	BBL0400	Dilution:	1
		Sequence:	SB03951
Column:	1	Calibration:	2252011
		Instrument:	Saphira

COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
ADONA	0.692	0.080	0.026	
PFEESA	0.647	0.080	0.017	
PFMPA	0.805	0.080	0.028	
PFMBA	0.758	0.080	0.032	
NFDHA	0.802	0.080	0.049	
9CL-PF3ONS	0.597	0.080	0.024	
11CL-PF3OUDS	0.602	0.080	0.027	
3:3FTCA	1.63	0.16	0.064	
5:3FTCA	1.53	0.16	0.065	
7:3FTCA	1.60	0.16	0.050	

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 495655	(3.65, 1.00) (0.00, N/A, 0.0)	480.1	N/A 0.0 0.0	4.1308 [4.0000]	103.3%			
PFPeA	(262.9 / 219.0) 344853 (262.9 / 69.0) 3515	(4.97, 1.00) (0.00, N/A, -0.2)	510.2 64.5	0.0102 91.1 98.0	2.0022 [2.0000]	100.1%			
PFHxA	(313.0 / 269.0) 273075 (313.0 / 119.0) 24081	(6.12, 1.00) (0.00, N/A, 0.1)	413.2 186.7	0.0882 90.2 98.7	1.0060 [1.0000]	100.6%			
PFHpA	(363.0 / 319.0) 252523 (363.0 / 169.0) 70840	(7.05, 1.00) (0.00, N/A, -0.2)	402.1 316.2	0.2805 90.1 91.0	0.9687 [1.0000]	96.9%			
PFOA	(413.0 / 369.0) 279494 (413.0 / 169.0) 96207	(7.87, 1.00) (0.00, N/A, -0.1)	567.7 497.6	0.3442 105.3 116.3	0.9449 [1.0000]	94.5%			
PFNA	(463.0 / 419.0) 195865 (463.0 / 169.0) 39466	(8.61, 1.00) (0.00, N/A, -0.2)	355.1 85.6	0.2015 104.5 96.7	0.9688 [1.0000]	96.9%			
PFDA	(513.0 / 469.0) 274430 (513.0 / 169.0) 25202	(9.28, 1.00) (0.00, N/A, -0.2)	350.0 407.7	0.0918 96.1 93.5	1.0158 [1.0000]	101.6%			
PFUnA	(563.0 / 519.0) 312777 (563.0 / 169.0) 22291	(9.70, 1.00) (0.00, N/A, -0.1)	543.6 143.8	0.0713 82.1 79.5	0.9455 [1.0000]	94.6%			
PFDoA	(613.0 / 569.0) 326577 (613.0 / 169.0) 39509	(9.88, 1.00) (0.00, N/A, 0.1)	434.3 207.3	0.1210 86.9 92.0	0.8613 [1.0000]	86.1%			
PFTrDA	(663.0 / 619.0) 296392 (663.0 / 169.0) 51653	(10.01, 1.01) (N/A, -0.01, -0.3)	501.3 153.4	0.1743 85.1 76.2	0.9022 [1.0000]	90.2%			
PFTeDA	(713.0 / 669.0) 235726 (713.0 / 169.0) 49709	(10.11, 1.00) (0.00, N/A, 0.2)	615.5 158.0	0.2109 103.7 102.7	0.9347 [1.0000]	93.5%			

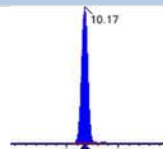
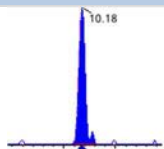
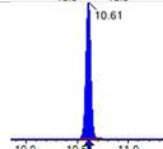
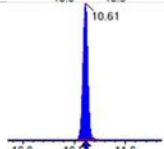
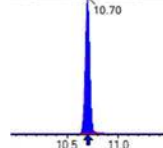
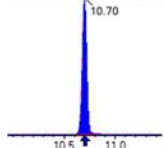
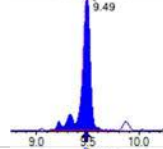
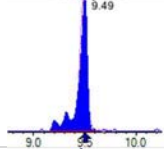
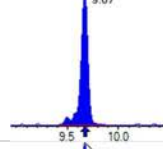
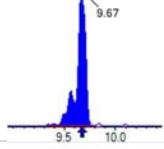
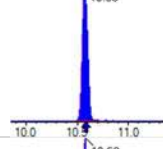
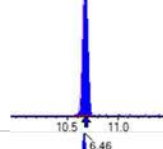
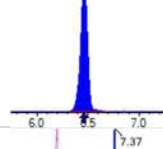
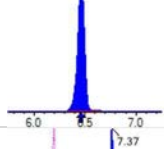
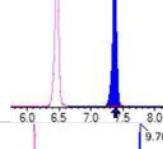
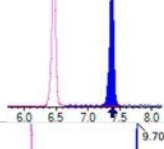
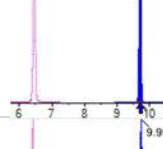
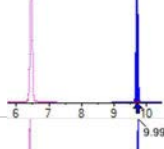
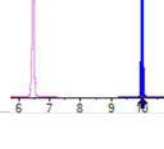
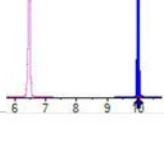


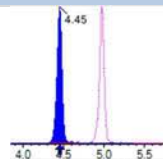
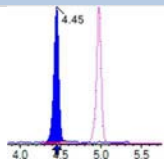
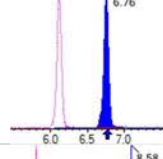
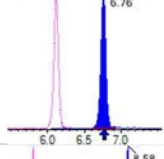
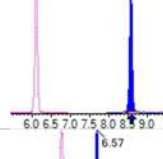
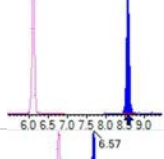
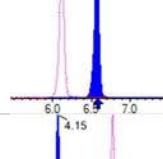
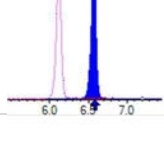
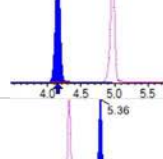
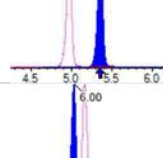
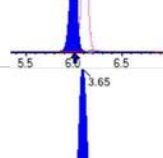
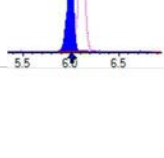
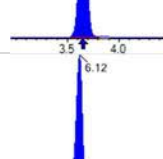
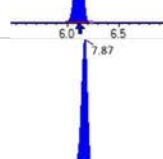
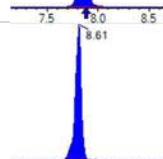
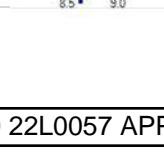
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

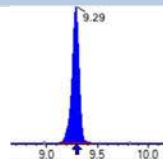
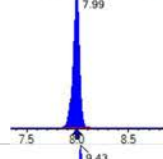
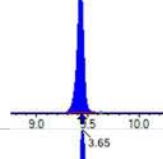
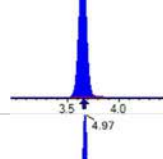
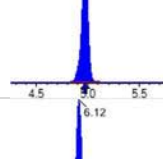
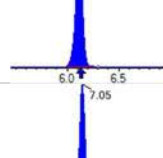
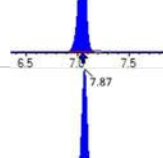
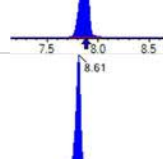
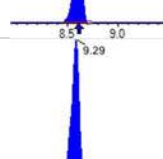
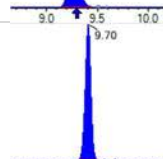
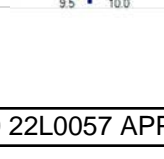
Sample I.D.: BBL0400-BS1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (6)
 Acquired: 2022/12/22 - 12:30

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 386279 (298.9 / 99.0) 244087	(6.07 , 1.00) (0.00 , N/A , 0.0)	617.1 597.4	0.6319 102.7 96.5	0.8897 [0.8847]	100.6%			
PFPeS	(349.0 / 80.0) 690531 (349.0 / 99.0) 253201	(7.11 , 0.89) (N/A , 0.00 , 0.1)	715.8 625.3	0.3667 103.0 95.5	0.8669 [0.9384]	92.4%			
PFHxS	(399.0 / 80.0) 577221 (399.0 / 99.0) 195696	(7.99 , 1.00) (0.00 , N/A , 0.0)	2486.6 4982.7	0.3390 100.9 102.4	0.8333 [0.9110]	91.5%			
PFHpS	(449.0 / 80.0) 527078 (449.0 / 99.0) 138352	(8.76 , 0.93) (N/A , -0.01 , 0.2)	536.9 240.4	0.2625 95.9 103.2	0.9255 [0.9514]	97.3%			
PFOS	(499.0 / 80.0) 616035 (499.0 / 99.0) 149496	(9.43 , 1.00) (0.00 , N/A , 0.0)	97.5 110.6	0.2427 99.8 106.1	0.8695 [0.9275]	93.8%			
PFNS	(549.0 / 80.0) 674912 (549.0 / 99.0) 167352	(9.75 , 1.03) (N/A , -0.01 , -0.1)	565.2 491.5	0.2480 101.6 97.2	0.8588 [0.9599]	89.5%			
PFDS	(599.0 / 80.0) 732991 (599.0 / 99.0) 148914	(9.90 , 1.05) (N/A , -0.01 , 0.1)	556.1 400.6	0.2032 90.3 86.8	0.8401 [0.9631]	87.2%			
PFDoS	(698.9 / 80.0) 246881 (698.9 / 99.0) 65067	(10.10 , 1.07) (N/A , -0.01 , 0.2)	855.9 280.9	0.2636 107.7 135.8	0.6770 [0.9696]	69.8%			QC,
4:2FTS	(327.0 / 307.0) 839550 (327.0 / 81.0) 452862	(5.79 , 1.00) (0.00 , N/A , 0.2)	572.1 422.6	0.5394 109.2 94.2	3.4046 [3.7381]	91.1%			
6:2FTS	(427.0 / 407.0) 549301 (427.0 / 81.0) 356539	(7.52 , 1.00) (-0.01 , N/A , -0.2)	644.2 458.6	0.6491 83.4 93.1	3.5810 [3.7962]	94.3%			
8:2FTS	(527.0 / 507.0) 402545 (527.0 / 81.0) 277912	(8.95 , 1.00) (0.01 , N/A , 0.1)	633.9 366.3	0.6904 122.0 125.4	3.1360 [3.8332]	81.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 609684 (498.0 / 478.0) 17286	(10.17, 1.00) (0.00, N/A, -0.3)	884.9 287.9	0.0284 136.0 116.9	0.8532 [1.0000]	85.3%			
NMeFOSA	(511.9 / 219.0) 401796 (511.9 / 169.0) 256289	(10.61, 1.00) (0.00, N/A, -0.1)	933.6 1018.3	0.6379 88.6 94.3	4.0434 [4.0000]	101.1%			
NEIFOSA	(526.0 / 219.0) 386589 (526.0 / 169.0) 410200	(10.70, 1.00) (0.00, N/A, 0.0)	1105.4 1139.1	1.0611 100.3 100.1	4.2300 [4.0000]	105.8%			
NMeFOSAA	(570.0 / 419.0) 114693 (570.0 / 483.0) 53370	(9.49, 1.00) (0.01, N/A, -0.2)	227.8 443.9	0.4653 75.7 93.1	1.0428 [1.0000]	104.3%			
NEIFOSAA	(584.0 / 419.0) 96026 (584.0 / 526.0) 66946	(9.67, 1.00) (0.00, N/A, -0.2)	385.8 194.2	0.6972 95.1 96.0	0.8428 [1.0000]	84.3%			
NMeFOSE	(616.1 / 59.0) 84186	(10.58, 1.00) (0.01, N/A, 0.0)	683.0	N/A 0.0 0.0	3.9486 [4.0000]	98.7%			
NEtFOSE	(630.0 / 59.0) 15699	(10.68, 1.00) (0.01, N/A, 0.0)	409.6	N/A 0.0 0.0	3.7902 [4.0000]	94.8%			
HFPO-DA	(285.0 / 169.0) 181425 (285.0 / 185.0) 514577	(6.46, 1.00) (0.00, N/A, 0.0)	519.8 625.4	2.8363 103.3 109.0	1.7855 [2.0000]	89.3%			
ADONA	(377.0 / 85.0) 780811 (377.0 / 251.0) 100083	(7.37, 1.14) (N/A, -0.01, -0.2)	770.7 342.4	0.1282 102.9 100.4	1.7301 [1.8854]	91.8%			
9CI-Pf3ONS	(531.0 / 351.0) 1899028 (533.0 / 353.0) 662033	(9.70, 1.50) (N/A, -0.01, 0.2)	714.9 536.2	0.3486 117.8 120.1	1.4929 [1.8665]	80.0%			
11CI-PF3OUDS	(631.0 / 451.0) 949196 (633.0 / 453.0) 335854	(9.99, 1.55) (N/A, -0.01, 0.1)	944.4 828.8	0.3538 107.0 110.1	1.5048 [1.8864]	79.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 24266 (241.0 / 117.0) 41770	(4.45, 0.89) (N/A, 0.00, 0.1)	496.6 331.2	1.7213 102.9 102.5	4.0823 [4.0000]	102.1%			
5:3FTCA	(341.0 / 236.7) 183395 (341.0 / 217.0) 302993	(6.76, 1.11) (N/A, -0.01, -0.1)	455.4 454.0	1.6521 112.9 102.8	3.8237 [4.0000]	95.6%			
7:3FTCA	(441.0 / 317.0) 220409 (441.0 / 337.0) 178798	(8.58, 1.40) (N/A, -0.01, 0.1)	389.8 372.7	0.8112 96.9 97.2	3.9938 [4.0000]	99.8%			
PFEESA	(315.0 / 135.0) 481001 (315.0 / 83.0) 146378	(6.57, 1.07) (N/A, -0.01, 0.1)	771.7 374.2	0.3043 99.1 103.0	1.6185 [1.7849]	90.7%			
PFMPA	(229.0 / 85.0) 95155	(4.15, 0.84) (N/A, 0.00, 0.0)	838.7	N/A 0.0 0.0	2.0130 [2.0000]	100.6%			
PFMBA	(279.0 / 85.0) 309808	(5.36, 1.08) (N/A, 0.00, 0.0)	900.1	N/A 0.0 0.0	1.8961 [2.0000]	94.8%			
NFDHA	(295.0 / 201.0) 274348 (295.0 / 85.0) 259618	(6.00, 0.98) (N/A, 0.00, -0.1)	612.0 602.3	0.9463 107.2 108.0	2.0044 [2.0000]	100.2%			
13C3_PFBA_IIS	(216.0 / 172.0) 189445	(3.65, N/A) (N/A, 0.00, N/A)	631.7	N/A	1.3610 [1.0000]	136.1% {120.6%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 294847	(6.12, N/A) (N/A, 0.00, N/A)	634.6	N/A	1.2768 [1.0000]	127.7% {125.0%}			
13C4_PFOA_IIS	(417.0 / 372.0) 316304	(7.87, N/A) (N/A, -0.01, N/A)	614.3	N/A	1.4387 [1.0000]	143.9% {123.1%}			
13C5_PFNxA_IIS	(468.0 / 423.0) 248882	(8.61, N/A) (N/A, -0.01, N/A)	521.9	N/A	1.3440 [1.0000]	134.4% {106.1%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 280448	(9.29, N/A) (N/A, 0.00, N/A)	405.7	N/A	1.5175 [1.0000]	151.8% { 149.8% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 538995	(7.99, N/A) (N/A, 0.00, N/A)	986.8	N/A	1.3351 [1.0000]	133.5% { 120.8% }			
13C4_PFOS_IIS	(502.8 / 79.9) 492636	(9.43, N/A) (N/A, -0.01, N/A)	536.0	N/A	1.5434 [1.0000]	154.3% { 142.1% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1471389	(3.65, N/A) (N/A, 0.00, N/A)	895.4	N/A	7.5464 [8.0000]	94.3% { 117.2% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 784449	(4.97, N/A) (N/A, 0.00, N/A)	758.4	N/A	3.8238 [4.0000]	95.6% { 115.4% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 632127	(6.12, N/A) (N/A, -0.01, N/A)	686.7	N/A	1.8630 [2.0000]	93.2% { 117.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 571973	(7.05, N/A) (N/A, 0.00, N/A)	667.6	N/A	1.9324 [2.0000]	96.6% { 127.2% }			
13C8_PFOA_EIS	(421.0 / 376.0) 601586	(7.87, N/A) (N/A, -0.01, N/A)	569.6	N/A	1.7343 [2.0000]	86.7% { 101.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 235610	(8.61, N/A) (N/A, 0.00, N/A)	646.8	N/A	0.8609 [1.0000]	86.1% { 101.7% }			
13C6_PFDA_EIS	(519.0 / 474.0) 283825	(9.29, N/A) (N/A, 0.00, N/A)	416.2	N/A	0.7116 [1.0000]	71.2% { 103.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 418594	(9.70, N/A) (N/A, -0.01, N/A)	447.2	N/A	0.7378 [1.0000]	73.8% { 112.5% }			

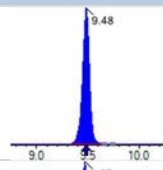






Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0400-BS1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (6)
 Acquired: 2022/12/22 - 12:30

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 439842	(9.88, N/A) (N/A, -0.01, N/A)	478.5	N/A	0.7767 [1.0000]	77.7% { 120.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 284564	(10.11, N/A) (N/A, -0.01, N/A)	426.5	N/A	0.7567 [1.0000]	75.7% { 111.5% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1583898	(6.07, N/A) (N/A, 0.00, N/A)	666.3	N/A	1.7381 [2.0000]	86.9% { 118.9% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 891757	(7.99, N/A) (N/A, 0.00, N/A)	740.7	N/A	1.8392 [2.0000]	92.0% { 116.1% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1305382	(9.43, N/A) (N/A, 0.00, N/A)	373.6	N/A	1.5439 [2.0000]	77.2% { 116.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 298310	(5.79, N/A) (N/A, 0.00, N/A)	640.5	N/A	3.8648 [4.0000]	96.6% { 132.5% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 399058	(7.53, N/A) (N/A, 0.00, N/A)	630.4	N/A	4.2943 [4.0000]	107.4% { 118.6% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 324086	(8.94, N/A) (N/A, -0.01, N/A)	654.9	N/A	3.4838 [4.0000]	87.1% { 102.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1512286	(10.17, N/A) (N/A, -0.01, N/A)	1031.9	N/A	1.4150 [2.0000]	70.8% { 110.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 243808	(10.61, N/A) (N/A, 0.00, N/A)	878.2	N/A	1.0448 [2.0000]	52.2% { 84.9% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 202638	(10.70, N/A) (N/A, 0.00, N/A)	967.4	N/A	0.9407 [2.0000]	47.0% { 66.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 564575	(9.48, N/A) (N/A, 0.00, N/A)	351.5	N/A	2.8081 [4.0000]	70.2% { 106.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 507666	(9.67, N/A) (N/A, -0.01, N/A)	435.9	N/A	2.8648 [4.0000]	71.6% { 122.3% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 337826	(10.57, N/A) (N/A, -0.01, N/A)	934.4	N/A	10.3107 [20.0000]	51.6% { 77.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 161790	(10.67, N/A) (N/A, 0.00, N/A)	854.9	N/A	10.8466 [20.0000]	54.2% { 81.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1337376	(6.46, N/A) (N/A, -0.01, N/A)	611.0	N/A	7.4135 [8.0000]	92.7% { 109.9% }			

ANALYSIS DATA SHEET

MRL Check

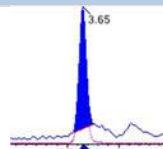
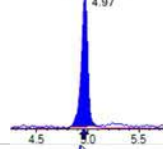
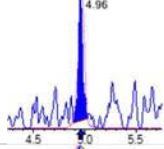
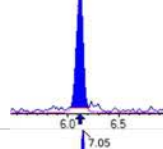
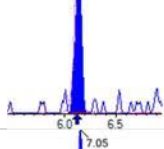
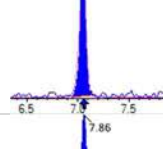
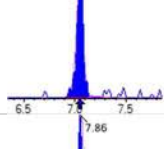
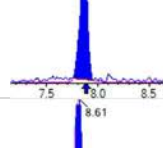
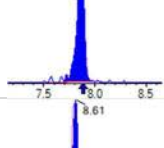
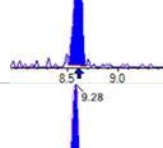
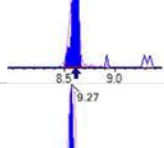
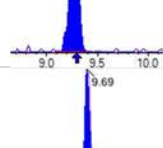
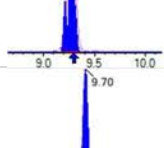
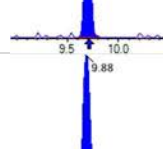
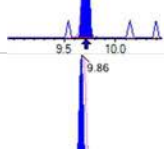
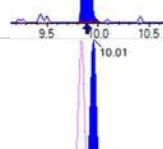
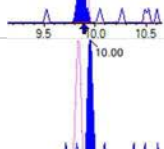
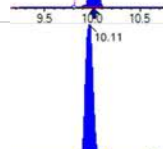
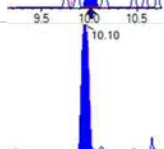
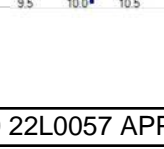
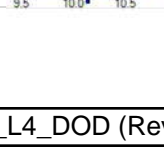
Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0400-MRL1
Sampled:		File ID:	S2022-12-22A (7)
		Prepared:	12/20/22 14:19
		Analyzed:	12/22/22 12:43
Solids:		Preparation:	1633
		Dilution:	1
Batch:	BBL0400	Sequence:	SB03951
		Calibration:	2252011
		Instrument:	Saphira
Column:	1		

COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
PFBA	0.148	0.30	0.010	J
PFPEA	0.0723	0.080	0.022	J
PFHXA	0.0422	0.040	0.015	
PFHPA	0.0389	0.040	0.015	J
PFOA	0.0428	0.040	0.021	
PFNA	0.0376	0.040	0.022	J
PFDA	0.0395	0.040	0.022	J
PFUnA	0.0319	0.040	0.020	IR2, J
PFDOA	0.0314	0.040	0.023	J
PFTRDA	0.0498	0.040	0.016	IR1
PFTEDA	0.0436	0.040	0.025	
PFBS	0.0301	0.040	0.016	J
PFPEs	0.0332	0.040	0.012	J
PFHXS	0.0353	0.040	0.015	J
PFHPS	0.0349	0.040	0.011	J
PFOS	0.0419	0.040	0.0097	
PFNS	0.0324	0.040	0.015	J
PFDS	0.0271	0.040	0.014	J
PFDOS	0.0197	0.040	0.013	J
4:2FTS	0.136	0.16	0.045	J
6:2FTS	0.159	0.16	0.061	J
8:2FTS	0.141	0.16	0.051	J
PFOSA	0.0369	0.040	0.012	J
NMeFOSA	0.155	0.16	0.066	J
NEtFOSA	0.155	0.16	0.027	J
NMeFOSAA	0.0403	0.040	0.010	
NEtFOSAA	0.0240	0.040	0.018	J
NMeFOSE	0.148	0.16	0.054	J
NEtFOSE	0.109	0.16	0.047	J
HFPO-DA	0.0644	0.080	0.020	J

ANALYSIS DATA SHEET**MRL Check**

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0400-MRL1
Sampled:		File ID:	S2022-12-22A (7)
		Prepared:	12/20/22 14:19
Solids:		Analyzed:	12/22/22 12:43
		Preparation:	1633
Batch:	BBL0400	Dilution:	1
Column:	1	Sequence:	SB03951
		Calibration:	2252011
		Instrument:	Saphira

COMPOUND	CONC. (ug/kg Dry)	LOQ	DL	Q
ADONA	0.0677	0.080	0.026	J
PFEESA	0.0667	0.080	0.017	J
PFMPA	0.0673	0.080	0.028	J
PFMBA	0.0659	0.080	0.032	J
NFDHA	0.0793	0.080	0.049	J
9CL-PF3ONS	0.0566	0.080	0.024	J
11CL-PF3OUDS	0.0602	0.080	0.027	J
3:3FTCA	0.155	0.16	0.064	J
5:3FTCA	0.155	0.16	0.065	J
7:3FTCA	0.166	0.16	0.050	

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 43173	(3.65, 1.00) (0.00, N/A, 0.0)	48.8	N/A 0.0 0.0	0.3697 [0.4000]	92.4%			
PFPeA	(262.9 / 219.0) 32124 (262.9 / 69.0) 382	(4.97, 1.00) (0.00, N/A, 0.8)	203.8 16.9	0.0119 106.3 114.5	0.1808 [0.2000]	90.4%			
PFHxA	(313.0 / 269.0) 29057 (313.0 / 119.0) 2840	(6.12, 1.00) (0.00, N/A, -1.1)	104.1 37.1	0.0977 99.9 109.4	0.1055 [0.1000]	105.5%			
PFHpA	(363.0 / 319.0) 22868 (363.0 / 169.0) 9306	(7.05, 1.00) (0.00, N/A, -0.3)	92.5 79.9	0.4069 130.6 132.0	0.0971 [0.1000]	97.1%			
PFOA	(413.0 / 369.0) 34899 (413.0 / 169.0) 13838	(7.86, 1.00) (0.00, N/A, 0.2)	108.8 126.5	0.3965 121.3 134.0	0.1070 [0.1000]	107.0%			
PFNA	(463.0 / 419.0) 20406 (463.0 / 169.0) 4614	(8.61, 1.00) (0.01, N/A, 0.0)	83.4 55.1	0.2261 117.3 108.5	0.0940 [0.1000]	94.0%			
PFDA	(513.0 / 469.0) 30523 (513.0 / 169.0) 2635	(9.28, 1.00) (0.00, N/A, 0.6)	108.3 69.7	0.0863 90.3 87.9	0.0989 [0.1000]	98.9%			
PFUnA	(563.0 / 519.0) 28904 (563.0 / 169.0) 3976	(9.69, 1.00) (-0.01, N/A, -0.8)	119.7 90.4	0.1376 158.4 153.4	0.0797 [0.1000]	79.7%			IR2,
PFDoA	(613.0 / 569.0) 26783 (613.0 / 169.0) 4357	(9.88, 1.00) (0.00, N/A, 1.2)	114.2 49.3	0.1627 116.9 123.7	0.0786 [0.1000]	78.6%			
PFTrDA	(663.0 / 619.0) 36747 (663.0 / 169.0) 2212	(10.01, 1.01) (N/A, -0.01, 0.2)	1017.7 19.1	0.0602 29.4 26.3	0.1245 [0.1000]	124.5%			IR1,
PFTeDA	(713.0 / 669.0) 26175 (713.0 / 169.0) 7371	(10.11, 1.00) (0.00, N/A, 0.7)	112.8 67.5	0.2816 138.5 137.2	0.1091 [0.1000]	109.1%			

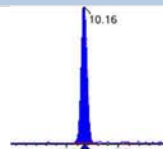
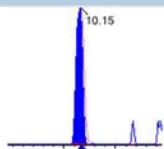
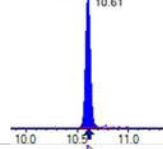
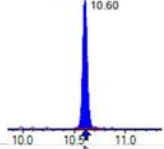
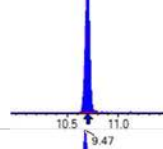
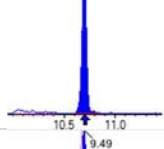
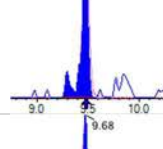
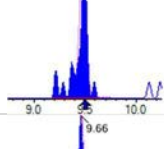
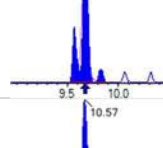
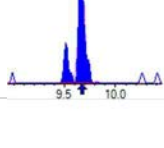
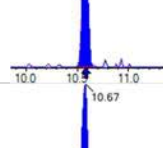
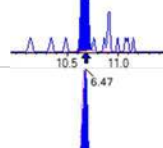
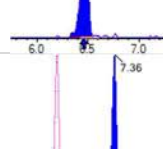
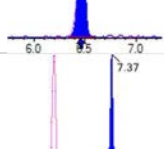
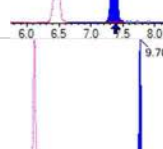
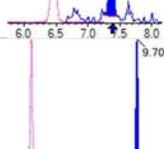
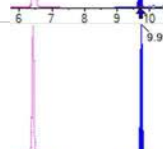
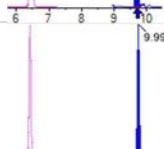




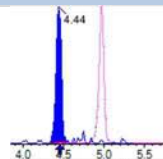
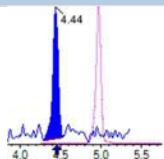
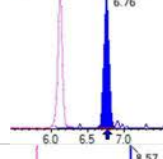
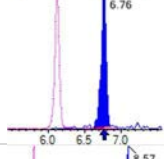
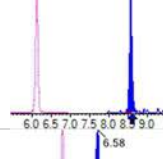
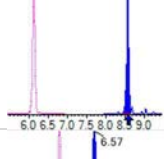
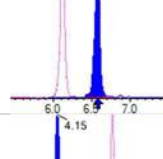
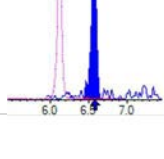
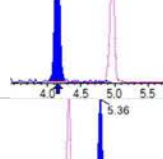
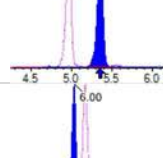
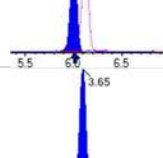
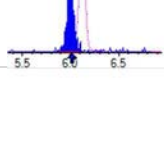
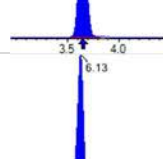
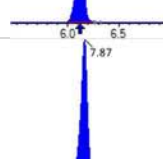
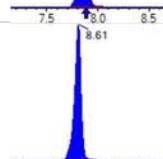
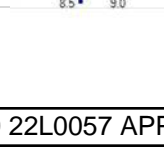
Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

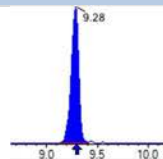
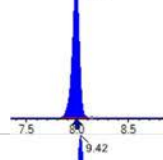
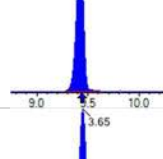
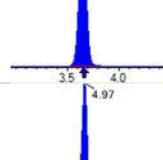
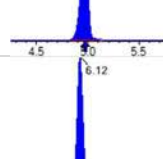
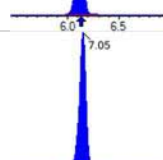
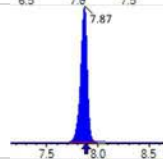
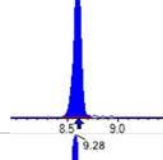
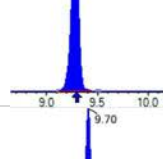
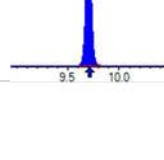
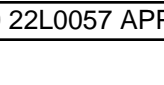
Sample I.D.: BBL0400-MRL1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

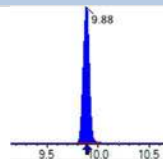
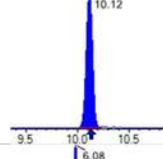
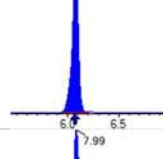
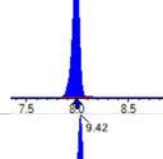
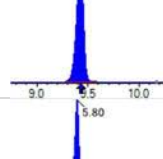
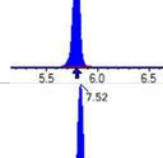
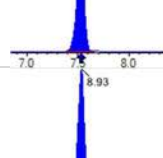
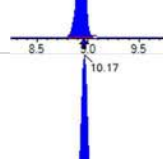
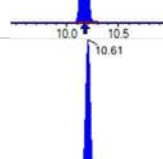
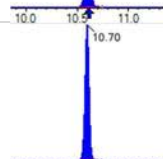
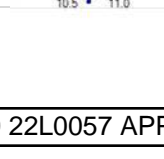
Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (7)
 Acquired: 2022/12/22 - 12:43

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 33619 (298.9 / 99.0) 21155	(6.08 , 1.00) (0.00 , N/A , 0.1)	210.0 131.9	0.6293 102.2 96.1	0.0751 [0.0885]	84.9%			
PFPeS	(349.0 / 80.0) 66306 (349.0 / 99.0) 22611	(7.12 , 0.89) (N/A , 0.00 , 0.4)	228.4 158.9	0.3410 95.8 88.8	0.0830 [0.0938]	88.4%			
PFHxS	(399.0 / 80.0) 61333 (399.0 / 99.0) 19035	(7.99 , 1.00) (0.00 , N/A , 0.4)	1598.4 8184.2	0.3104 92.3 93.8	0.0883 [0.0911]	96.9%			
PFHpS	(449.0 / 80.0) 55154 (449.0 / 99.0) 11849	(8.75 , 0.93) (N/A , -0.02 , 0.0)	198.8 93.5	0.2148 78.5 84.5	0.0873 [0.0951]	91.8%			
PFOS	(499.0 / 80.0) 82351 (499.0 / 99.0) 13073	(9.43 , 1.00) (0.00 , N/A , 0.2)	148.0 419.8	0.1587 65.3 69.4	0.1048 [0.0927]	113.0%			MIS DG 2022-12-22
PFNS	(549.0 / 80.0) 70505 (549.0 / 99.0) 15717	(9.75 , 1.03) (N/A , -0.01 , -0.4)	218.4 69.8	0.2229 91.3 87.4	0.0809 [0.0960]	84.3%			
PFDS	(599.0 / 80.0) 65662 (599.0 / 99.0) 16908	(9.91 , 1.05) (N/A , 0.00 , -0.1)	233.9 90.2	0.2575 114.4 110.0	0.0679 [0.0963]	70.5%			
PFDoS	(698.9 / 80.0) 19950 (698.9 / 99.0) 2855	(10.09 , 1.07) (N/A , -0.01 , -0.8)	366.8 918.5	0.1431 58.5 73.7	0.0493 [0.0970]	50.9%			QC,
4:2FTS	(327.0 / 307.0) 86505 (327.0 / 81.0) 45698	(5.79 , 1.00) (0.00 , N/A , 0.2)	476.0 151.7	0.5283 106.9 92.3	0.3397 [0.3738]	90.9%			
6:2FTS	(427.0 / 407.0) 55999 (427.0 / 81.0) 36762	(7.53 , 1.00) (0.00 , N/A , 0.2)	185.5 154.8	0.6565 84.4 94.2	0.3972 [0.3796]	104.6%			
8:2FTS	(527.0 / 507.0) 44391 (527.0 / 81.0) 28911	(8.94 , 1.00) (0.01 , N/A , 1.1)	234.3 92.2	0.6513 115.1 118.3	0.3513 [0.3833]	91.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 75119 (498.0 / 478.0) 3421	(10.16, 1.00) (0.00, N/A, 0.9)	234.5 314.9	0.0455 218.5 187.8	0.0922 [0.1000]	92.2%			
NMeFOSA	(511.9 / 219.0) 36982 (511.9 / 169.0) 25694	(10.61, 1.00) (0.00, N/A, 0.1)	438.5 312.4	0.6948 96.5 102.7	0.3881 [0.4000]	97.0%			
NEIFOSA	(526.0 / 219.0) 35325 (526.0 / 169.0) 36318	(10.70, 1.00) (0.00, N/A, 0.2)	733.0 302.1	1.0281 97.2 97.0	0.3870 [0.4000]	96.7%			
NMeFOSAA	(570.0 / 419.0) 11107 (570.0 / 483.0) 6324	(9.47, 1.00) (0.00, N/A, -1.1)	61.6 1534.3	0.5694 92.6 113.9	0.1008 [0.1000]	100.8%			
NEIFOSAA	(584.0 / 419.0) 7954 (584.0 / 526.0) 8008	(9.68, 1.00) (0.01, N/A, 0.9)	1923.9 154.0	1.0068 137.3 138.6	0.0601 [0.1000]	60.1%			QC,
NMeFOSE	(616.1 / 59.0) 9843	(10.57, 1.00) (0.00, N/A, 0.0)	153.7	N/A 0.0 0.0	0.3707 [0.4000]	92.7%			
NEIFOSE	(630.0 / 59.0) 1251	(10.67, 1.00) (0.01, N/A, 0.0)	38.8	N/A 0.0 0.0	0.2727 [0.4000]	68.2%			QC,
HFPO-DA	(285.0 / 169.0) 16879 (285.0 / 185.0) 46904	(6.47, 1.00) (0.01, N/A, 0.1)	176.3 236.7	2.7788 101.2 106.8	0.1610 [0.2000]	80.5%			
ADONA	(377.0 / 85.0) 78763 (377.0 / 251.0) 8648	(7.36, 1.14) (N/A, -0.01, -0.2)	347.2 61.3	0.1098 88.2 86.0	0.1692 [0.1885]	89.7%			
9CI-Pf3ONS	(531.0 / 351.0) 201285 (533.0 / 353.0) 59747	(9.70, 1.50) (N/A, -0.01, 0.3)	331.1 176.6	0.2968 100.3 102.3	0.1415 [0.1867]	75.8%			
11CI-PF3OUDS	(631.0 / 451.0) 97916 (633.0 / 453.0) 29849	(9.99, 1.55) (N/A, -0.01, 0.0)	7322.9 818.4	0.3048 92.2 94.9	0.1505 [0.1886]	79.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 2369 (241.0 / 117.0) 4588	(4.44, 0.89) (N/A, -0.01, 0.1)	119.2 51.1	1.9367 115.7 115.3	0.3863 [0.4000]	96.6%			
5:3FTCA	(341.0 / 236.7) 18805 (341.0 / 217.0) 29525	(6.76, 1.10) (N/A, -0.01, -0.4)	171.5 135.0	1.5701 107.3 97.7	0.3864 [0.4000]	96.6%			
7:3FTCA	(441.0 / 317.0) 23253 (441.0 / 337.0) 18580	(8.57, 1.40) (N/A, -0.02, -0.1)	145.9 169.7	0.7990 95.4 95.8	0.4153 [0.4000]	103.8%			
PFEESA	(315.0 / 135.0) 50276 (315.0 / 83.0) 13365	(6.58, 1.07) (N/A, 0.00, 0.3)	234.7 56.2	0.2658 86.6 90.0	0.1667 [0.1785]	93.4%			
PFMPA	(229.0 / 85.0) 8206	(4.15, 0.83) (N/A, -0.01, 0.0)	178.7	N/A 0.0 0.0	0.1683 [0.2000]	84.1%			
PFMBA	(279.0 / 85.0) 27785	(5.36, 1.08) (N/A, 0.00, 0.0)	399.7	N/A 0.0 0.0	0.1648 [0.2000]	82.4%			
NFDHA	(295.0 / 201.0) 27526 (295.0 / 85.0) 23488	(6.00, 0.98) (N/A, 0.00, 0.2)	352.3 132.7	0.8533 96.7 97.4	0.1982 [0.2000]	99.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 197812	(3.65, N/A) (N/A, 0.00, N/A)	839.1	N/A	1.4211 [1.0000]	142.1% {125.9%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 313166	(6.13, N/A) (N/A, 0.00, N/A)	545.9	N/A	1.3562 [1.0000]	135.6% {132.7%}			
13C4_PFOA_IIS	(417.0 / 372.0) 320615	(7.87, N/A) (N/A, -0.01, N/A)	564.4	N/A	1.4583 [1.0000]	145.8% {124.8%}			
13C5_PFNA_IIS	(468.0 / 423.0) 258485	(8.61, N/A) (N/A, -0.01, N/A)	358.8	N/A	1.3958 [1.0000]	139.6% {110.2%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 242615	(9.28, N/A) (N/A, -0.01, N/A)	308.0	N/A	1.3128 [1.0000]	131.3% { 129.6% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 554565	(7.99, N/A) (N/A, -0.01, N/A)	706.6	N/A	1.3737 [1.0000]	137.4% { 124.3% }			
13C4_PFOS_IIS	(502.8 / 79.9) 500975	(9.42, N/A) (N/A, -0.01, N/A)	365.8	N/A	1.5696 [1.0000]	157.0% { 144.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1432047	(3.65, N/A) (N/A, 0.00, N/A)	947.7	N/A	7.0339 [8.0000]	87.9% { 114.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 809311	(4.97, N/A) (N/A, 0.00, N/A)	640.1	N/A	3.7142 [4.0000]	92.9% { 119.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 641361	(6.12, N/A) (N/A, 0.00, N/A)	649.0	N/A	1.7797 [2.0000]	89.0% { 119.6% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 516523	(7.05, N/A) (N/A, 0.00, N/A)	467.4	N/A	1.6430 [2.0000]	82.1% { 114.8% }			
13C8_PFOA_EIS	(421.0 / 376.0) 663468	(7.87, N/A) (N/A, -0.01, N/A)	751.1	N/A	1.8870 [2.0000]	94.3% { 111.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 253062	(8.60, N/A) (N/A, -0.01, N/A)	260.8	N/A	0.8903 [1.0000]	89.0% { 109.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 324366	(9.28, N/A) (N/A, -0.01, N/A)	290.5	N/A	0.9400 [1.0000]	94.0% { 117.9% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 458847	(9.70, N/A) (N/A, -0.01, N/A)	503.3	N/A	0.9349 [1.0000]	93.5% { 123.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 395140	(9.88, N/A) (N/A, -0.01, N/A)	558.0	N/A	0.8066 [1.0000]	80.7% { 107.9% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 270768	(10.12, N/A) (N/A, 0.00, N/A)	467.7	N/A	0.8323 [1.0000]	83.2% { 106.1% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1632008	(6.08, N/A) (N/A, 0.01, N/A)	598.3	N/A	1.7406 [2.0000]	87.0% { 122.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 894611	(7.99, N/A) (N/A, -0.01, N/A)	655.7	N/A	1.7932 [2.0000]	89.7% { 116.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1447565	(9.42, N/A) (N/A, -0.01, N/A)	548.8	N/A	1.6836 [2.0000]	84.2% { 129.6% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 308101	(5.80, N/A) (N/A, 0.01, N/A)	787.7	N/A	3.8796 [4.0000]	97.0% { 136.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 366765	(7.52, N/A) (N/A, -0.01, N/A)	785.0	N/A	3.8359 [4.0000]	95.9% { 109.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 319052	(8.93, N/A) (N/A, -0.02, N/A)	303.7	N/A	3.3334 [4.0000]	83.3% { 101.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1724429	(10.17, N/A) (N/A, -0.01, N/A)	935.0	N/A	1.5867 [2.0000]	79.3% { 126.4% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 233804	(10.61, N/A) (N/A, 0.00, N/A)	776.3	N/A	0.9853 [2.0000]	49.3% { 81.4% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 202386	(10.70, N/A) (N/A, 0.00, N/A)	1126.8	N/A	0.9239 [2.0000]	46.2% { 66.6% }			



Chemist: DAG
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0400-MRL1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - 2022-12-21
 Path: S2022-12-22A (7)
 Acquired: 2022/12/22 - 12:43

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 565628	(9.48 , N/A) (N/A , -0.01 , N/A)	309.4	N/A	2.7665 [4.0000]	69.2% { 107.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 589593	(9.67 , N/A) (N/A , -0.01 , N/A)	526.8	N/A	3.2717 [4.0000]	81.8% { 142.1% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 420720	(10.57 , N/A) (N/A , 0.00 , N/A)	1052.5	N/A	12.6270 [20.0000]	63.1% { 96.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 179109	(10.67 , N/A) (N/A , -0.01 , N/A)	1169.2	N/A	11.8079 [20.0000]	59.0% { 90.4% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1379759	(6.47 , N/A) (N/A , 0.00 , N/A)	825.5	N/A	7.2010 [8.0000]	90.0% { 113.3% }			

PREPARATION BENCH SHEET

Organics

Print Date/Time: 12/15/2022 11:32 am

BBL0206

Matrix: Solid

Prepared using: PFAS - 1633

Analyses 1633	Spiking Solution(s) PFAS - MIX 1633 10ng/mL	Surrogate Solution(s) MPFAC-HIF-ES 20.0ng/mL
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Lab Number	Sample and Source ID	Date Due	Extract by	Prepared	Initial (g)	Final (ml)	ul Spike	ul Surrogate	Extraction Comments
22L0057-01	ADIT6-DU03-SON01MI-22DEC	12/15/2022	01/04/2023	12/9/2022 3:06:00PM	5.09	2		200	
22L0057-01RE1	ADIT6-DU03-SON01MI-22DEC	12/15/2022	01/04/2023	12/9/2022 3:06:00PM	5.09	2		200	Added 12/14/2022 by ABK
22L0059-01	120601	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.33	2		200	
22L0059-01RE1	120601	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.33	2		200	Added 12/14/2022 by ABK
22L0059-02	120602	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.36	2		200	
22L0059-02RE1	120602	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.36	2		200	Added 12/14/2022 by ABK
22L0059-03	120603	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.29	2		200	
22L0059-03RE1	120603	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.29	2		200	Added 12/14/2022 by ABK
22L0059-04	120604	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.44	2		200	
22L0059-04RE1	120604	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.44	2		200	Added 12/14/2022 by ABK
22L0059-05	120605	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.02	2		200	
22L0059-05RE1	120605	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.02	2		200	Added 12/14/2022 by ABK
22L0059-06	120606	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.03	2		200	
22L0059-06RE1	120606	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.03	2		200	Added 12/14/2022 by ABK
22L0059-07	120607	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.24	2		200	
22L0059-07RE1	120607	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.24	2		200	Added 12/14/2022 by ABK
22L0059-08	120608	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.11	2		200	
22L0059-08RE1	120608	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.11	2		200	Added 12/14/2022 by ABK
22L0059-09	120609	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5	2		200	
22L0059-09RE1	120609	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5	2		200	Added 12/14/2022 by ABK
22L0059-10	120610	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.11	2		200	
22L0059-10RE1	120610	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.11	2		200	Added 12/14/2022 by ABK

Spiking Witnessed By _____ Date _____ Preparation Reviewed By _____ Date _____ Extracts Received By _____ Date _____

PREPARATION BENCH SHEET

Organics

BBL0206

(Continued)

Print Date/Time: 12/15/2022 11:32 am

Matrix: Solid

Prepared using: PFAS - 1633

Analyses		Spiking Solution(s)				Surrogate Solution(s)	
1633	22L0269	PFAS - MIX 1633 10ng/mL	22L0117	MPFAC-HIF-ES 20.0ng/mL			
22L0059-11	120611	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.25	2	200
22L0059-11RE1	120611	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.25	2	200
22L0059-12	120612	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.38	2	200
22L0059-12RE1	120612	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.38	2	200
22L0059-13	120613	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.2	2	200
22L0059-13RE1	120613	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.2	2	200
22L0059-14	120614	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.17	2	200
22L0059-14RE1	120614	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.17	2	200
22L0059-15	120615	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.31	2	200
22L0059-15RE1	120615	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.31	2	200
22L0059-16	120616	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.28	2	200
22L0059-16RE1	120616	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.28	2	200
22L0059-17	120617	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5	2	200
22L0059-17RE1	120617	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5	2	200
22L0059-18	120618	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.33	2	200
22L0059-18RE1	120618	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.33	2	200
22L0059-19	120619	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.21	2	200
22L0059-19RE1	120619	12/21/2022	01/03/2023	12/9/2022 3:06:00PM	5.21	2	200
BBL0206-BLK1	Blank			12/9/2022 3:06:00PM	5	2	0
BBL0206-BS1	LCS			12/9/2022 3:06:00PM	5	2	200
BBL0206-BSD1	LCS Dup			12/9/2022 3:06:00PM	5	2	200
BBL0206-MRL1	MRL Check			12/9/2022 3:06:00PM	5	2	20
BBL0206-MS1	Matrix Spike [22L0057-01]			12/9/2022 3:06:00PM	5.13	2	200
BBL0206-MSD1	Matrix Spike Dup [22L0057-01]			12/9/2022 3:06:00PM	5.42	2	200

Spiking Witnessed By	Preparation Reviewed By	Extracts Received By	Date

PREPARATION BENCH SHEET

Organics

Print Date/Time: 12/15/2022 11:32 am

BBL0206

(Continued)

Matrix: Solid

Prepared using: PFAS - 1633

Analyses

1633

Spiking Solution(s)

22L0269 PFAS - MIX 1633 10ng/mL

Surrogate Solution(s)

22L0117 MPFAC-HIF-ES 20.0ng/mL

Start Date/Time _____

StopDate/Time _____

Batch Comments:

Spiked by:

Balance #: WB2

Concentration:

Cartridge:

Reagents

Standard

Description

LotNum

Spiking Witnessed By _____

Date _____

Preparation Reviewed By _____

Date _____

Extracts Received By _____

Date _____

PREPARATION BENCH SHEET

Organics

Print Date/Time: 12/22/2022 3:42 pm

BBL0400

Matrix: Solid **Prepared using: PFAS - 1633**

Lab Number	Sample and Source ID	Date Due	Extract by	Prepared	Initial (g)	Final (ml)	ul Spike	ul Surrogate	Extraction Comments
22L0057-01RE2	ADIT6-DU03-SON01MI-22DEC	12/15/2022	01/04/2023	12/9/2022 3:06:00PM	5.96	2		200	From BBL0206 by LYA on 12/21/22
22L0057-01RE3	ADIT6-DU03-SON01MI-22DEC	12/15/2022	01/04/2023	12/9/2022 3:06:00PM	5.96	2		200	Added 12/22/2022 by DAG
22L0112-01RE3	RH-WS-01-OB	12/20/2022	01/11/2023	12/15/2022 1:18:00PM	5.04	2		200	From BBL0333 by LYA on 12/21/22
22L0112-01RE4	RH-WS-01-OB	12/20/2022	01/11/2023	12/15/2022 1:18:00PM	5.04	2		200	Added 12/22/2022 by DAG
22L0131-01	RH-WS-02-SS	12/22/2022	01/13/2023	12/20/2022 3:04:00PM	5.14	2		200	
22L0131-01RE1	RH-WS-02-SS	12/22/2022	01/13/2023	12/20/2022 3:04:00PM	5.14	2		200	Added 12/22/2022 by DAG
BBL0400-BLK1	Blank			12/20/2022 2:19:00PM	5	2	0	200	
BBL0400-BS1	LCS			12/20/2022 2:19:00PM	5	2	200	200	
BBL0400-MRL1	MRL Check			12/20/2022 2:19:00PM	5	2	20	200	
BBL0400-MS1	Matrix Spike [22L0131-01]			12/20/2022 2:19:00PM	5	2	200	200	
BBL0400-MSD1	Matrix Spike Dup [22L0131-01]			12/20/2022 2:19:00PM	5	2	200	200	

Spiking Solution(s)
 PFAS - MIX 1633 10ng/mL
 22L0269

Surrogate Solution(s)
 MPFAC-HIF-ES 20.0ng/mL
 22L0273

Reagents	Standard	Description	LotNum
	22K0511	Reagent -0.3M Formic Acid	M13H051
	22L0094	Reagent - 0.05MFA wash	x
	22L0366	Reagent - 1.0% Ammonia Hydroxide	219481

Start Date/Time _____
 Stop Date/Time _____

Batch Comments:
 Spiked by: DAG 12/20/22 4:20
 Balance #: WB2
 Cartridge: Phenomenex 8B-S038-FB1
 Concentration: 12/22/22 6:34-10:00

Spiking Witnessed By _____ Date _____
 Preparation Reviewed By _____ Date _____
 Extracts Received By _____ Date _____

PREPARATION BENCH SHEET

Organics

Print Date/Time: 12/20/2022 3:13 pm

BBL0400

Matrix: Solid

Prepared using: PFAS - 1633

Analyses 1633		Spiking Solution(s)			Surrogate Solution(s)				
Lab Number	Sample and Source ID	Date Due	Extract by	Prepared	Initial (g)	Final (ml)	ul Spike	ul Surrogate	Extraction Comments
22L0131-01	RH-W5-02-SS	12/22/2022	01/13/2023	12/20/2022 3:04:00PM	5	2			
BBL0400-BLK1	Blank			12/20/2022 2:19:00PM	5	2			
BBL0400-BS1	LCS			12/20/2022 2:19:00PM	5	2			
BBL0400-MRL1	MRL Check			12/20/2022 2:19:00PM	5	2			
BBL0400-MS1	Matrix Spike [22L0131-01]			12/20/2022 2:19:00PM	5	2			
BBL0400-MSD1	Matrix Spike Dup [22L0131-01]			12/20/2022 2:19:00PM	5	2			

Reagents	Standard	Description	LotNum

Start Date/Time _____
 Stop Date/Time _____

Spiking Witnessed By _____ Date _____ Preparation Reviewed By _____ Date _____ Extracts Received By _____ Date _____

INJECTION LOG - ANALYSIS SEQUENCE SUMMARY

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03823
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sampling
 Instrument: Saphira

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	SB03823-CAL1	S2022-12-13A (1)	12/13/22 20:03
Cal Standard	SB03823-CAL2	S2022-12-13A (2)	12/13/22 20:16
Cal Standard	SB03823-CAL3	S2022-12-13A (3)	12/13/22 20:29
Cal Standard	SB03823-CAL4	S2022-12-13A (4)	12/13/22 20:41
Cal Standard	SB03823-CAL5	S2022-12-13A (5)	12/13/22 20:54
Cal Standard	SB03823-CAL6	S2022-12-13A (6)	12/13/22 21:07
Cal Standard	SB03823-CAL7	S2022-12-13A (7)	12/13/22 21:19
Cal Standard	SB03823-CAL8	S2022-12-13A (8)	12/13/22 21:32
Initial Cal Blank	SB03823-ICB1	S2022-12-13A (9)	12/13/22 21:45
Secondary Cal Check	SB03823-SCV1	S2022-12-13A (10)	12/13/22 21:58

INJECTION LOG - ANALYSIS SEQUENCE SUMMARY

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03835
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sampling
 Instrument: Saphira

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Blank	SB03835-CCB1	S2022-12-14A (1)	12/14/22 10:56
Low Cal Check	SB03835-LCV1	S2022-12-14A (2)	12/14/22 11:08
Calibration Check	SB03835-CCV1	S2022-12-14A (3)	12/14/22 11:21
Calibration Blank	SB03835-CCB2	S2022-12-14A (4)	12/14/22 11:59
Blank	BBL0205-BLK1	S2022-12-14A (5)	12/14/22 12:12
LCS	BBL0205-BS1	S2022-12-14A (6)	12/14/22 12:25
MRL Check	BBL0205-MRL1	S2022-12-14A (7)	12/14/22 12:37
ADIT6-DU03-WQFB01-22DEC	22L0057-02	S2022-12-14A (8)	12/14/22 12:50
AF-RHMW17-WGN01LF-2212W1	22L0057-03	S2022-12-14A (10)	12/14/22 13:15
AF-RHMW17-WGN01LF-2212W1	22L0057-03RE1	S2022-12-14A (11)	12/14/22 13:28
Calibration Check	SB03835-CCV2	S2022-12-14A (24)	12/14/22 16:13
Calibration Blank	SB03835-CCB3	S2022-12-14A (25)	12/14/22 16:26
Calibration Check	SB03835-CCV3	S2022-12-14A (38)	12/14/22 19:11
Calibration Blank	SB03835-CCB4	S2022-12-14A (39)	12/14/22 19:24
Calibration Check	SB03835-CCV4	S2022-12-14A (53)	12/14/22 22:22
Calibration Blank	SB03835-CCB5	S2022-12-14A (54)	12/14/22 22:34

INJECTION LOG - ANALYSIS SEQUENCE SUMMARY

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03845
 Calibration: 2251013

SDG:
 Project: Red Hill AFFF Assessment Sampling
 Instrument: Saphira

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Blank	SB03845-CCB1	S2022-12-14B (1)	12/14/22 23:25
Low Cal Check	SB03845-LCV1	S2022-12-14B (2)	12/14/22 23:38
Calibration Check	SB03845-CCV1	S2022-12-14B (3)	12/14/22 23:51
Calibration Blank	SB03845-CCB2	S2022-12-14B (4)	12/15/22 00:29
Blank	BBL0206-BLK1	S2022-12-14B (5)	12/15/22 00:42
LCS	BBL0206-BS1	S2022-12-14B (6)	12/15/22 00:55
LCS Dup	BBL0206-BSD1	S2022-12-14B (7)	12/15/22 01:07
MRL Check	BBL0206-MRL1	S2022-12-14B (8)	12/15/22 01:20
ADIT6-DU03-SON01MI-22DEC	BBL0206-MS1	S2022-12-14B (9)	12/15/22 01:33
ADIT6-DU03-SON01MI-22DEC	BBL0206-MSD1	S2022-12-14B (10)	12/15/22 01:45
ADIT6-DU03-SON01MI-22DEC	22L0057-01	S2022-12-14B (11)	12/15/22 01:58
Calibration Check	SB03845-CCV2	S2022-12-14B (31)	12/15/22 06:12
Calibration Blank	SB03845-CCB3	S2022-12-14B (32)	12/15/22 06:25
Calibration Check	SB03845-CCV3	S2022-12-14B (53)	12/15/22 10:52
Calibration Blank	SB03845-CCB4	S2022-12-14B (54)	12/15/22 11:05

INJECTION LOG - ANALYSIS SEQUENCE SUMMARY

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sampling
 Instrument: Saphira

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	SB03941-CAL1	S2022-12-21A (1)	12/21/22 14:26
Cal Standard	SB03941-CAL1	S2022-12-21A (1)	12/21/22 14:26
Cal Standard	SB03941-CAL2	S2022-12-21A (2)	12/21/22 14:39
Cal Standard	SB03941-CAL2	S2022-12-21A (2)	12/21/22 14:39
Cal Standard	SB03941-CAL3	S2022-12-21A (3)	12/21/22 14:51
Cal Standard	SB03941-CAL3	S2022-12-21A (3)	12/21/22 14:51
Cal Standard	SB03941-CAL4	S2022-12-21A (4)	12/21/22 15:04
Cal Standard	SB03941-CAL4	S2022-12-21A (4)	12/21/22 15:04
Cal Standard	SB03941-CAL5	S2022-12-21A (5)	12/21/22 15:17
Cal Standard	SB03941-CAL5	S2022-12-21A (5)	12/21/22 15:17
Cal Standard	SB03941-CAL6	S2022-12-21A (6)	12/21/22 15:30
Cal Standard	SB03941-CAL6	S2022-12-21A (6)	12/21/22 15:30
Cal Standard	SB03941-CAL7	S2022-12-21A (7)	12/21/22 15:42
Cal Standard	SB03941-CAL7	S2022-12-21A (7)	12/21/22 15:42
Cal Standard	SB03941-CAL8	S2022-12-21A (8)	12/21/22 15:55
Cal Standard	SB03941-CAL8	S2022-12-21A (8)	12/21/22 15:55
Initial Cal Blank	SB03941-ICB1	S2022-12-21A (9)	12/21/22 16:08
Initial Cal Blank	SB03941-ICB1	S2022-12-21A (9)	12/21/22 16:08
Secondary Cal Check	SB03941-SCV1	S2022-12-21A (10)	12/21/22 16:20
Secondary Cal Check	SB03941-SCV1	S2022-12-21A (10)	12/21/22 16:20

INJECTION LOG - ANALYSIS SEQUENCE SUMMARY

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03951
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sampling
 Instrument: Saphira

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Blank	SB03951-CCB1	S2022-12-22A (1)	12/22/22 11:01
Low Cal Check	SB03951-LCV1	S2022-12-22A (2)	12/22/22 11:14
Calibration Check	SB03951-CCV1	S2022-12-22A (3)	12/22/22 11:26
Calibration Blank	SB03951-CCB2	S2022-12-22A (4)	12/22/22 12:04
Blank	BBL0400-BLK1	S2022-12-22A (5)	12/22/22 12:17
LCS	BBL0400-BS1	S2022-12-22A (6)	12/22/22 12:30
MRL Check	BBL0400-MRL1	S2022-12-22A (7)	12/22/22 12:43
ADIT6-DU03-SON01MI-22DEC	22L0057-01RE2	S2022-12-22A (12)	12/22/22 13:46
Calibration Check	SB03951-CCV2	S2022-12-22A (16)	12/22/22 14:37
Calibration Blank	SB03951-CCB3	S2022-12-22A (17)	12/22/22 14:50
Calibration Check	SB03951-CCV3	S2022-12-22A (33)	12/22/22 18:13
Calibration Blank	SB03951-CCB4	S2022-12-22A (34)	12/22/22 18:25

SAMPLE DATA

FORM I
ANALYSIS DATA SHEET
ADIT6-DU03-SON01MI-22DEC

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	22L0057-01
		File ID:	S2022-12-21B (28)
Sampled:	12/07/22 13:50	Prepared:	12/19/22 12:22
		Analyzed:	12/22/22 00:23
Solids:	91.07	Preparation:	PFAS Leachates
		Dilution:	1
Initial/Final:	107.38 mL / 2 mL	Instrument:	Saphira
Batch:	BBL0372	Sequence:	SB03942
		Calibration:	2252011

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
PFBA	190	7.5	3.7	0.98	
PFPEA	65	3.7	3.7	0.30	
PFHXA	410	1.9	1.9	0.26	
PFHPA	13	1.9	0.93	0.19	
PFOA	25	1.9	0.93	0.70	
PFNA	0.93 U	1.9	0.93	0.38	IR2,
PFDA	3.8	1.9	0.93	0.47	
PFUnA	0.93 U	1.9	0.93	0.75	
PFDOA	0.93 U	1.9	0.93	0.51	
PFTRDA	1.4 U	1.9	1.4	0.93	
PFTEDA	0.93 U	1.9	0.93	0.93	
PFBS	0.93 U	1.9	0.93	0.17	
PFPEs	0.93 U	1.9	0.93	0.29	
PFHXS	0.36 J	1.9	0.93	0.15	
PFHPS	0.93 U	1.9	0.93	0.24	
PFOS	2.9	1.9	0.93	0.30	
PFNS	0.93 U	1.9	0.93	0.56	
PFDS	0.93 U	1.9	0.93	0.70	
PFDOS	0.93 U	1.9	0.93	0.56	
4:2FTS	35	7.5	3.7	1.4	
8:2FTS	3.7 U	7.5	3.7	0.38	
PFOSA	0.93 U	1.9	0.93	0.47	
NMeFOSA	3.7 U	7.5	3.7	2.2	
NEtFOSA	3.7 U	7.5	3.7	1.9	
NMeFOSAA	0.93 U	1.9	0.93	0.51	
NEtFOSAA	0.93 U	1.9	0.93	0.51	
NMeFOSE	5.6 U	7.5	5.6	4.7	
NEtFOSE	5.6 U	7.5	5.6	4.7	
HFPO-DA	1.9 U	3.7	1.9	0.79	
ADONA	1.9 U	3.7	1.9	0.56	

FORM I
ANALYSIS DATA SHEET
ADIT6-DU03-SON01MI-22DEC

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	22L0057-01
		File ID:	S2022-12-21B (28)
Sampled:	12/07/22 13:50	Prepared:	12/19/22 12:22
		Analyzed:	12/22/22 00:23
Solids:	91.07	Preparation:	PFAS Leachates
		Dilution:	1
Initial/Final:	107.38 mL / 2 mL	Instrument:	Saphira
Batch:	BBL0372	Sequence:	SB03942
		Calibration:	2252011

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
PFEEESA	1.9 U	3.7	1.9	0.51	
PFMPA	1.9 U	3.7	1.9	0.25	
PFMBA	1.9 U	3.7	1.9	0.42	
NFDHA	1.9 U	3.7	1.9	1.4	
9CL-PF3ONS	1.9 U	3.7	1.9	0.98	
11CL-PF3OUDS	1.9 U	3.7	1.9	0.98	
3:3FTCA	3.7 U	7.5	3.7	2.7	
5:3FTCA	35	7.5	3.7	2.0	
7:3FTCA	3.7 U	7.5	3.7	2.6	

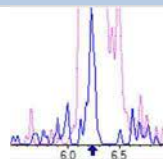
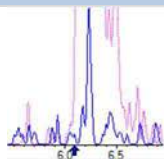
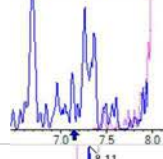
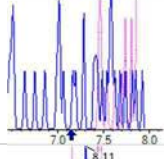
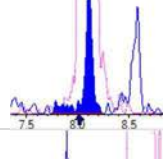
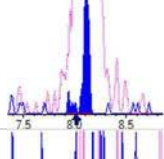
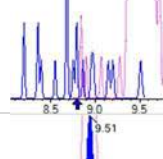
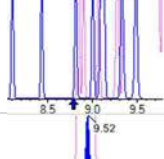
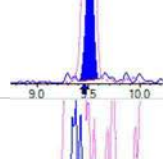
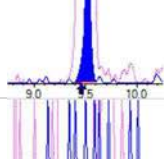
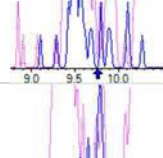
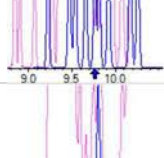
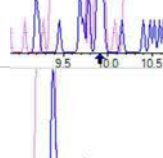
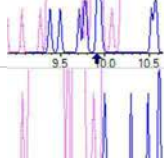
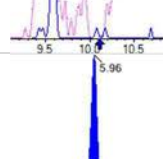
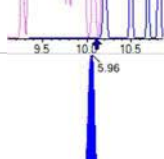
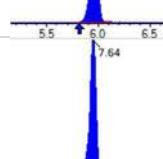
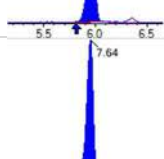
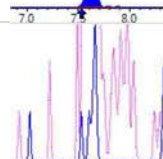
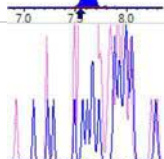
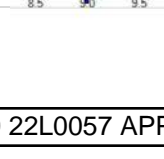
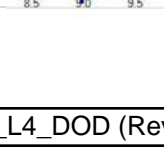


Chemist: ABK
Instrument: Saphira
Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
DF, IV: 1, 10.0µL
Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
Path: S2022-12-21B (28)
Acquired: 2022/12/22 - 00:23

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 1196808	(3.82, 1.00) (0.00, N/A, 0.0)	75.6	N/A 0.0 0.0	10.0445	N/A			
PFPeA	(262.9 / 219.0) 607719 (262.9 / 69.0) 5879	(5.15, 1.00) (0.00, N/A, -0.1)	688.6 102.2	0.0097 86.4 83.4	3.4714	N/A			
PFHxA	(313.0 / 269.0) 5576979 (313.0 / 119.0) 555181	(6.28, 1.00) (0.00, N/A, 0.1)	711.8 690.5	0.0995 101.8 107.4	21.7626	N/A			
PFHpA	(363.0 / 319.0) 157249 (363.0 / 169.0) 42039	(7.19, 1.00) (0.00, N/A, -0.1)	234.1 295.9	0.2673 85.8 85.7	0.7038	N/A			
PFOA	(413.0 / 369.0) 285070 (413.0 / 169.0) 92489	(7.99, 1.00) (0.00, N/A, 0.0)	555.8 630.3	0.3244 99.3 98.6	1.3449	N/A			
PFNA	(463.0 / 419.0) 2195 (463.0 / 169.0) 690	(8.71, 1.00) (-0.01, N/A, -1.0)	21.1 19.1	0.3144 163.1 137.0	0.0138	N/A			IR2,
PFDA	(513.0 / 469.0) 39780 (513.0 / 169.0) 4602	(9.40, 1.00) (0.01, N/A, -0.7)	157.1 72.7	0.1157 121.0 107.2	0.2026	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) 9401 (399.0 / 99.0) 2642	(8.11, 1.00) (0.00, N/A, -0.2)	133.8 120.7	0.2811 83.6 82.7	0.0192	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 74379 (499.0 / 99.0) 18351	(9.51, 1.00) (0.00, N/A, -0.4)	71.6 87.8	0.2467 101.4 114.9	0.1540	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) 425651 (327.0 / 81.0) 261987	(5.96, 1.00) (0.00, N/A, -0.2)	580.2 355.9	0.6155 124.6 119.3	1.8840	N/A			
6:2FTS	(427.0 / 407.0) 32931415 (427.0 / 81.0) 23540368	(7.64, 1.00) (0.00, N/A, 0.0)	752.4 849.1	0.7148 91.9 110.4	275.9756	N/A			E,
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (28)
 Acquired: 2022/12/22 - 00:23

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOFA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOFA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

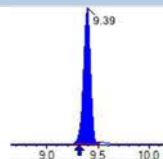
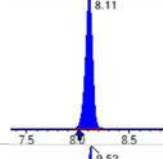
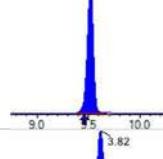
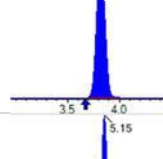
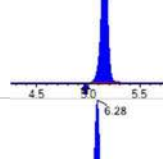
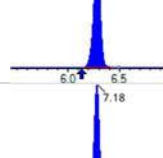
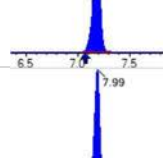
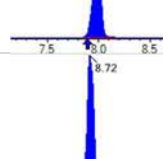
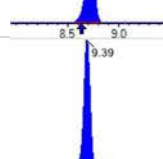
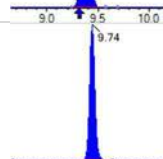
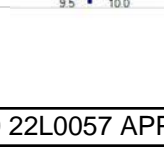


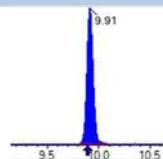
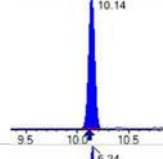
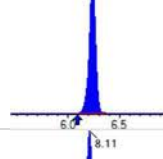
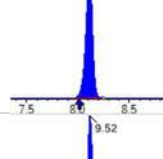
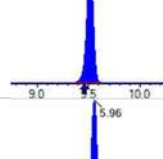
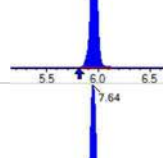
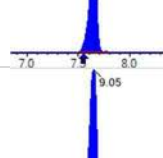
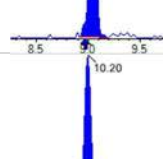
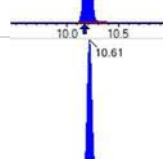
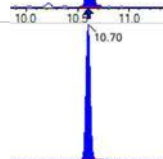
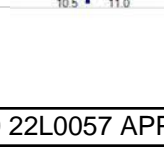
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (28)
 Acquired: 2022/12/22 - 00:23

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) 84557 (341.0 / 217.0) 138576	(6.90, 1.10) (N/A, 0.13, 0.0)	373.2 386.7	1.6388 112.0 105.8	1.8674	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 185236	(3.82, N/A) (N/A, 0.15, N/A)	753.8	N/A	1.3308 [1.0000]	133.1% { 113.6% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 284929	(6.28, N/A) (N/A, 0.15, N/A)	470.8	N/A	1.2339 [1.0000]	123.4% { 127.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 202097	(7.99, N/A) (N/A, 0.10, N/A)	724.8	N/A	0.9193 [1.0000]	91.9% { 82.9% }			
13C5_PFNA_IIS	(468.0 / 423.0) 194801	(8.72, N/A) (N/A, 0.09, N/A)	549.8	N/A	1.0519 [1.0000]	105.2% { 108.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 187327	(9.39, N/A) (N/A, 0.08, N/A)	311.1	N/A	1.0136 [1.0000]	101.4% { 93.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 394584	(8.11, N/A) (N/A, 0.10, N/A)	828.9	N/A	0.9774 [1.0000]	97.7% { 95.4% }			
13C4_PFOS_IIS	(502.8 / 79.9) 252607	(9.52, N/A) (N/A, 0.07, N/A)	482.1	N/A	0.7914 [1.0000]	79.1% { 74.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1461101	(3.82, N/A) (N/A, 0.15, N/A)	854.0	N/A	7.6639 [8.0000]	95.8% { 116.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 797323	(5.15, N/A) (N/A, 0.18, N/A)	978.7	N/A	4.0218 [4.0000]	100.5% { 120.2% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 596779	(6.28, N/A) (N/A, 0.15, N/A)	630.5	N/A	1.8201 [2.0000]	91.0% { 113.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 490258	(7.18, N/A) (N/A, 0.11, N/A)	658.6	N/A	1.7140 [2.0000]	85.7% { 105.4% }			
13C8_PFOA_EIS	(421.0 / 376.0) 431087	(7.99, N/A) (N/A, 0.10, N/A)	764.5	N/A	1.9451 [2.0000]	97.3% { 84.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 185687	(8.72, N/A) (N/A, 0.09, N/A)	640.7	N/A	0.8668 [1.0000]	86.7% { 101.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 206270	(9.39, N/A) (N/A, 0.08, N/A)	463.1	N/A	0.7742 [1.0000]	77.4% { 82.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 173024	(9.74, N/A) (N/A, 0.02, N/A)	633.6	N/A	0.4566 [1.0000]	45.7% { 53.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 222180	(9.91, N/A) (N/A, 0.02, N/A)	413.5	N/A	0.5874 [1.0000]	58.7% { 60.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 115693	(10.14, N/A) (N/A, 0.02, N/A)	294.7	N/A	0.4606 [1.0000]	46.1% { 41.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1503482	(6.24, N/A) (N/A, 0.15, N/A)	826.4	N/A	2.2536 [2.0000]	112.7% { 106.9% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 630561	(8.11, N/A) (N/A, 0.10, N/A)	777.5	N/A	1.7764 [2.0000]	88.8% { 91.1% }			
13C8_PFOS_EIS	(507.0 / 80.0) 890132	(9.52, N/A) (N/A, 0.06, N/A)	654.2	N/A	2.0532 [2.0000]	102.7% { 83.7% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 273315	(5.96, N/A) (N/A, 0.16, N/A)	668.0	N/A	4.8370 [4.0000]	120.9% { 121.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 310438	(7.64, N/A) (N/A, 0.10, N/A)	788.2	N/A	4.5632 [4.0000]	114.1% { 107.8% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 51305	(9.05, N/A) (N/A, 0.09, N/A)	159.0	N/A	0.7534 [4.0000]	18.8% { 22.8% }			S1,
13C8_PFOsa_EIS	(506.0 / 78.0) 774076	(10.20, N/A) (N/A, 0.02, N/A)	591.5	N/A	1.4125 [2.0000]	70.6% { 54.7% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 110796	(10.61, N/A) (N/A, 0.01, N/A)	472.1	N/A	0.9260 [2.0000]	46.3% { 32.7% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 97483	(10.70, N/A) (N/A, 0.00, N/A)	521.2	N/A	0.8826 [2.0000]	44.1% { 32.3% }			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (28)
 Acquired: 2022/12/22 - 00:23

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 611763	(9.56, N/A) (N/A, 0.06, N/A)	627.4	N/A	5.9342 [4.0000]	148.4% { 105.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 401703	(9.71, N/A) (N/A, 0.03, N/A)	421.6	N/A	4.4208 [4.0000]	110.5% { 88.9% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 273720	(10.58, N/A) (N/A, 0.01, N/A)	997.3	N/A	16.2923 [20.0000]	81.5% { 58.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 117224	(10.67, N/A) (N/A, 0.01, N/A)	1612.8	N/A	15.3265 [20.0000]	76.6% { 53.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1306228	(6.62, N/A) (N/A, 0.13, N/A)	981.8	N/A	7.4929 [8.0000]	93.7% { 107.5% }			

FORM I
ANALYSIS DATA SHEET
ADIT6-DU03-SON01MI-22DEC

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	22L0057-01RE1
		File ID:	S2022-12-21B (29)
Sampled:	12/07/22 13:50	Prepared:	12/19/22 12:22
		Analyzed:	12/22/22 00:36
Solids:	91.07	Preparation:	PFAS Leachates
		Dilution:	1
Initial/Final:	107.38 mL / 2 mL	Instrument:	Saphira
Batch:	BBL0372	Sequence:	SB03942
		Calibration:	2252011

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
6:2FTS	4700	75	37	14	



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (29)
 Acquired: 2022/12/22 - 00:36

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 103370	(3.64, 1.00) (0.00, N/A, 0.0)	60.7	N/A 0.0 0.0	1.0002	N/A			
PFPeA	(262.9 / 219.0) 56576 (262.9 / 69.0) 739	(4.93, 1.00) (0.00, N/A, -0.6)	335.8 28.8	0.0131 116.6 112.6	0.3464	N/A			
PFHxA	(313.0 / 269.0) 569906 (313.0 / 119.0) 57897	(6.08, 1.00) (0.00, N/A, 0.0)	643.1 326.5	0.1016 103.9 109.6	2.0728	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 34603 (413.0 / 169.0) 13511	(7.83, 1.00) (0.01, N/A, 0.2)	91.6 167.5	0.3905 119.5 118.7	0.1348	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (29)
 Acquired: 2022/12/22 - 00:36

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) 4112971 (427.0 / 81.0) 3351654	(7.49, 1.00) (0.00, N/A, 0.1)	856.3 815.0	0.8149 104.7 125.9	25.0329	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (29)
 Acquired: 2022/12/22 - 00:36

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

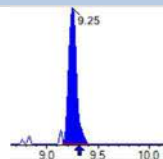
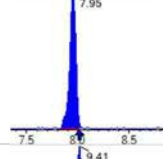
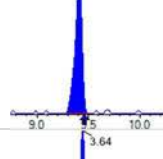
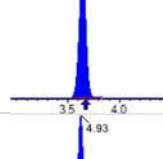
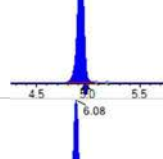
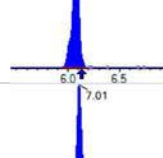
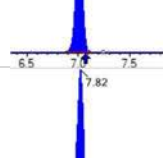
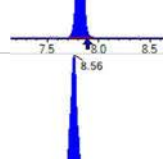
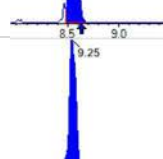
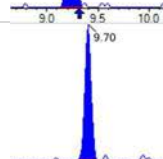
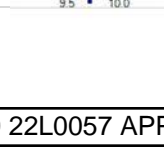


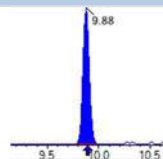
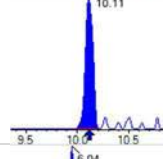
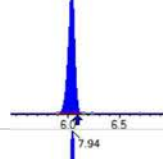
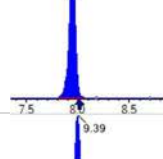
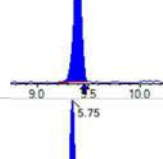
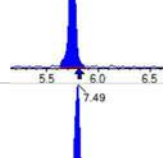
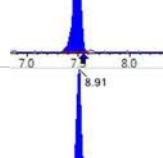
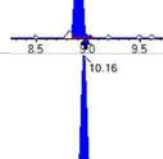
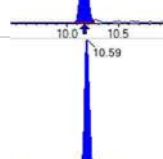
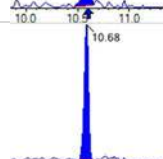
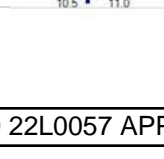
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (29)
 Acquired: 2022/12/22 - 00:36

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 17222	(3.64, N/A) (N/A, -0.02, N/A)	317.6	N/A	1.2372 [1.0000]	123.7% { 10.6% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 29108	(6.08, N/A) (N/A, -0.06, N/A)	273.4	N/A	1.2605 [1.0000]	126.1% { 13.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 25005	(7.83, N/A) (N/A, -0.06, N/A)	295.3	N/A	1.1374 [1.0000]	113.7% { 10.3% }			
13C5_PFNA_IIS	(468.0 / 423.0) 21429	(8.57, N/A) (N/A, -0.06, N/A)	222.4	N/A	1.1572 [1.0000]	115.7% { 11.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 20540	(9.25, N/A) (N/A, -0.06, N/A)	108.5	N/A	1.1114 [1.0000]	111.1% { 10.3% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 46913	(7.95, N/A) (N/A, -0.06, N/A)	369.3	N/A	1.1621 [1.0000]	116.2% { 11.3% }			
13C4_PFOS_IIS	(502.8 / 79.9) 28632	(9.41, N/A) (N/A, -0.04, N/A)	164.0	N/A	0.8971 [1.0000]	89.7% { 8.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 126729	(3.64, N/A) (N/A, -0.02, N/A)	782.5	N/A	0.7150 [0.8000]	89.4% { 10.1% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 74396	(4.93, N/A) (N/A, -0.05, N/A)	718.2	N/A	0.3673 [0.4000]	91.8% { 11.2% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 64028	(6.08, N/A) (N/A, -0.06, N/A)	356.0	N/A	0.1911 [0.2000]	95.6% { 12.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 55686	(7.01, N/A) (N/A, -0.06, N/A)	502.6	N/A	0.1906 [0.2000]	95.3% { 12.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 52209	(7.82, N/A) (N/A, -0.06, N/A)	609.3	N/A	0.1904 [0.2000]	95.2% { 10.2% }			
13C9_PFNA_EIS	(472.0 / 427.0) 23434	(8.56, N/A) (N/A, -0.07, N/A)	233.0	N/A	0.0995 [0.1000]	99.4% { 12.8% }			
13C6_PFDA_EIS	(519.0 / 474.0) 19688	(9.25, N/A) (N/A, -0.06, N/A)	150.7	N/A	0.0674 [0.1000]	67.4% { 7.9% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 23610	(9.70, N/A) (N/A, -0.02, N/A)	151.2	N/A	0.0568 [0.1000]	56.8% { 7.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 33137	(9.88, N/A) (N/A, -0.02, N/A)	167.4	N/A	0.0799 [0.1000]	79.9% {9.0%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 13578	(10.11, N/A) (N/A, -0.01, N/A)	54.6	N/A	0.0493 [0.1000]	49.3% {4.9%}			
13C3_PFBs_EIS	(302.0 / 80.0) 141319	(6.04, N/A) (N/A, -0.05, N/A)	463.7	N/A	0.1782 [0.2000]	89.1% {10.1%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 75561	(7.94, N/A) (N/A, -0.07, N/A)	626.1	N/A	0.1790 [0.2000]	89.5% {10.9%}			
13C8_PFOS_EIS	(507.0 / 80.0) 108992	(9.39, N/A) (N/A, -0.06, N/A)	209.6	N/A	0.2218 [0.2000]	110.9% {10.2%}			
13C2_4:2FTS_EIS	(329.0 / 81.0) 28897	(5.75, N/A) (N/A, -0.05, N/A)	239.7	N/A	0.4301 [0.4000]	107.5% {12.8%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 42744	(7.49, N/A) (N/A, -0.05, N/A)	488.4	N/A	0.5285 [0.4000]	132.1% {14.8%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 21543	(8.91, N/A) (N/A, -0.05, N/A)	214.1	N/A	0.2661 [0.4000]	66.5% {9.6%}			
13C8_PFOsa_EIS	(506.0 / 78.0) 121819	(10.16, N/A) (N/A, -0.02, N/A)	227.8	N/A	0.1961 [0.2000]	98.1% {8.6%}			
D3_NMeFOsa_EIS	(515.0 / 169.0) 11827	(10.59, N/A) (N/A, -0.02, N/A)	98.3	N/A	0.0872 [0.2000]	43.6% {3.5%}			
D5_NEiFOsa_EIS	(531.1 / 169.0) 8502	(10.68, N/A) (N/A, -0.01, N/A)	130.4	N/A	0.0679 [0.2000]	34.0% {2.8%}			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: 22L0057-01RE1@10
 DF, IV: 1, 1.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (29)
 Acquired: 2022/12/22 - 00:36

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 50989	(9.46 , N/A) (N/A , -0.05 , N/A)	187.6	N/A	0.4364 [0.4000]	109.1% { 8.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 33974	(9.66 , N/A) (N/A , -0.02 , N/A)	113.7	N/A	0.3299 [0.4000]	82.5% { 7.5% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 29962	(10.56 , N/A) (N/A , -0.01 , N/A)	433.0	N/A	1.5734 [2.0000]	78.7% { 6.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 14524	(10.65 , N/A) (N/A , -0.01 , N/A)	336.5	N/A	1.6753 [2.0000]	83.8% { 6.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 130002	(6.43 , N/A) (N/A , -0.06 , N/A)	689.9	N/A	0.7300 [0.8000]	91.2% { 10.7% }			

QUALITY CONTROL

SURROGATE SUMMARY SHEET

EPA 1633 SPLP

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
ADIT6-DU03-SON01MI-22DEC (22L0057-01) . ng/L		Lab File ID: S2022-12-21B (28)		Analyzed: 12/22/22 00:23
13C4-PFBA	149	95.8	20 - 150	
13C5-PFPEA	74.5	101	20 - 150	
13C5-PFHXA	37.3	91.0	20 - 150	
13C4-PFHFA	37.3	85.7	20 - 150	
13C8-PFOA	37.3	97.3	20 - 150	
13C9-PFNA	18.6	86.7	20 - 150	
13C6-PFDA	18.6	77.4	20 - 150	
13C7-PFUnA	18.6	45.7	20 - 150	
13C2-PFDOA	18.6	58.7	20 - 150	
13C2-PFTEDA	18.6	46.1	20 - 150	
13C3-PFBS	37.3	113	20 - 150	
13C3-PFHXS	37.3	88.8	20 - 150	
13C8-PFOS	37.3	103	20 - 150	
13C2-4:2FTS	74.5	121	20 - 150	
13C2-6:2FTS	74.5	114	20 - 150	
13C2-8:2FTS	74.5	18.8	20 - 150	*
13C8-PFOSA	37.3	70.6	20 - 150	
D5-NETFOSA	37.3	44.1	20 - 150	
D3-NMEFOSA	37.3	46.3	20 - 150	
D3-NMEFOSAA	74.5	148	20 - 150	
D5-NETFOSAA	74.5	111	20 - 150	
D7-NMEFOSE	373	81.5	20 - 150	
D9-NETFOSSE	373	76.6	20 - 150	
13C3-HFPO-DA	149	93.7	20 - 150	
ADIT6-DU03-SON01MI-22DEC (22L0057-01RE1) . ng/L		Lab File ID: S2022-12-21B (29)		Analyzed: 12/22/22 00:36
13C2-6:2FTS	74.5	132	20 - 150	
13C2-8:2FTS	74.5	66.5	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633 SPLP

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
Blank (BBL0372-BLK1) . ng/L	Lab File ID: S2022-12-21B (7)			Analyzed: 12/21/22 19:57
13C4-PFBA	160	94.4	20 - 150	
13C5-PFPEA	80.0	90.8	20 - 150	
13C5-PFHXA	40.0	87.4	20 - 150	
13C4-PFHFA	40.0	86.2	20 - 150	
13C8-PFOA	40.0	85.7	20 - 150	
13C9-PFNA	20.0	75.8	20 - 150	
13C6-PFDA	20.0	86.4	20 - 150	
13C7-PFUnA	20.0	66.8	20 - 150	
13C2-PFDOA	20.0	76.9	20 - 150	
13C2-PFTEDA	20.0	82.4	20 - 150	
13C3-PFBS	40.0	90.5	20 - 150	
13C3-PFHXS	40.0	82.1	20 - 150	
13C8-PFOS	40.0	75.7	20 - 150	
13C2-4:2FTS	80.0	82.2	20 - 150	
13C2-6:2FTS	80.0	73.6	20 - 150	
13C2-8:2FTS	80.0	79.8	20 - 150	
13C8-PFOSA	40.0	77.8	20 - 150	
D5-NETFOSA	40.0	21.6	20 - 150	
D3-NMEFOSA	40.0	24.9	20 - 150	
D3-NMEFOSAA	80.0	78.6	20 - 150	
D5-NETFOSAA	80.0	85.2	20 - 150	
D7-NMEFOSE	400	47.2	20 - 150	
D9-NETFOSE	400	41.2	20 - 150	
13C3-HFPO-DA	160	83.8	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633 SPLP

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
LCS (BBL0372-BS1) . ng/L	Lab File ID: S2022-12-21B (8)			Analyzed: 12/21/22 20:09
13C4-PFBA	160	90.9	20 - 150	
13C5-PFPEA	80.0	94.5	20 - 150	
13C5-PFHXA	40.0	86.1	20 - 150	
13C4-PFHPA	40.0	89.1	20 - 150	
13C8-PFOA	40.0	87.2	20 - 150	
13C9-PFNA	20.0	89.9	20 - 150	
13C6-PFDA	20.0	80.8	20 - 150	
13C7-PFUnA	20.0	78.6	20 - 150	
13C2-PFDOA	20.0	68.7	20 - 150	
13C2-PFTEDA	20.0	68.2	20 - 150	
13C3-PFBS	40.0	89.4	20 - 150	
13C3-PFHXS	40.0	81.4	20 - 150	
13C8-PFOS	40.0	69.7	20 - 150	
13C2-4:2FTS	80.0	86.3	20 - 150	
13C2-6:2FTS	80.0	80.1	20 - 150	
13C2-8:2FTS	80.0	73.9	20 - 150	
13C8-PFOSA	40.0	76.3	20 - 150	
D5-NETFOSA	40.0	18.3	20 - 150	*
D3-NMEFOSA	40.0	22.5	20 - 150	
D3-NMEFOSAA	80.0	68.1	20 - 150	
D5-NETFOSAA	80.0	66.1	20 - 150	
D7-NMEFOSE	400	41.3	20 - 150	
D9-NETFOSE	400	37.0	20 - 150	
13C3-HFPO-DA	160	91.9	20 - 150	

SURROGATE SUMMARY SHEET

EPA 1633 SPLP

Client: AECOM
 Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling

Surrogate Compound	Spike level	% Recovery	Recovery Limits	Q
MRL Check (BBL0372-MRL1) . ng/L	Lab File ID: S2022-12-21B (9)		Analyzed: 12/21/22 20:22	
13C4-PFBA	160	91.8	20 - 150	
13C5-PFPEA	80.0	91.0	20 - 150	
13C5-PFHXA	40.0	88.5	20 - 150	
13C4-PFHFA	40.0	91.5	20 - 150	
13C8-PFOA	40.0	86.0	20 - 150	
13C9-PFNA	20.0	76.0	20 - 150	
13C6-PFDA	20.0	73.3	20 - 150	
13C7-PFUnA	20.0	71.8	20 - 150	
13C2-PFDOA	20.0	81.5	20 - 150	
13C2-PFTEDA	20.0	85.1	20 - 150	
13C3-PFBS	40.0	78.5	20 - 150	
13C3-PFHXS	40.0	79.2	20 - 150	
13C8-PFOS	40.0	79.5	20 - 150	
13C2-4:2FTS	80.0	87.0	20 - 150	
13C2-6:2FTS	80.0	81.0	20 - 150	
13C2-8:2FTS	80.0	72.9	20 - 150	
13C8-PFOSA	40.0	73.5	20 - 150	
D5-NETFOSA	40.0	24.5	20 - 150	
D3-NMEFOSA	40.0	28.2	20 - 150	
D3-NMEFOSAA	80.0	76.3	20 - 150	
D5-NETFOSAA	80.0	73.8	20 - 150	
D7-NMEFOSE	400	49.7	20 - 150	
D9-NETFOSE	400	47.2	20 - 150	
13C3-HFPO-DA	160	89.9	20 - 150	

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0372-BLK1
Sampled:		File ID:	S2022-12-21B (7)
		Prepared:	12/19/22 12:22
		Analyzed:	12/21/22 19:57
Solids:		Preparation:	PFAS Leachates
		Dilution:	1
Batch:	BBL0372	Sequence:	SB03942
		Calibration:	2252011
		Instrument:	Saphira
Column:	1		

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
PFBA	4.0 U	8.0	4.0	1.0	U
PFPEA	4.0 U	4.0	4.0	0.32	U
PFHXA	2.0 U	2.0	2.0	0.28	U
PFHPA	1.0 U	2.0	1.0	0.20	U
PFOA	1.0 U	2.0	1.0	0.75	IR2, U
PFNA	1.0 U	2.0	1.0	0.41	U
PFDA	1.0 U	2.0	1.0	0.50	U
PFUnA	1.0 U	2.0	1.0	0.80	U
PFDOA	1.0 U	2.0	1.0	0.55	U
PFTRDA	1.5 U	2.0	1.5	1.0	U
PFTEDA	1.0 U	2.0	1.0	1.0	U
PFBS	1.0 U	2.0	1.0	0.18	U
PFPEs	1.0 U	2.0	1.0	0.32	U
PFHXS	1.0 U	2.0	1.0	0.16	U
PFHPS	1.0 U	2.0	1.0	0.26	U
PFOS	0.604 J	2.0	1.0	0.32	J
PFNS	1.0 U	2.0	1.0	0.60	U
PFDS	1.0 U	2.0	1.0	0.75	U
PFDOS	1.0 U	2.0	1.0	0.60	U
4:2FTS	4.0 U	8.0	4.0	1.4	U
6:2FTS	4.0 U	8.0	4.0	1.6	U
8:2FTS	4.0 U	8.0	4.0	0.41	U
PFOSA	1.0 U	2.0	1.0	0.50	U
NMeFOSA	4.0 U	8.0	4.0	2.4	U
NEtFOSA	4.0 U	8.0	4.0	2.0	U
NMeFOSAA	1.0 U	2.0	1.0	0.55	U
NEtFOSAA	1.0 U	2.0	1.0	0.55	U
NMeFOSE	6.0 U	8.0	6.0	5.0	U
NEtFOSE	6.0 U	8.0	6.0	5.0	U
HFPO-DA	2.0 U	4.0	2.0	0.85	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0372-BLK1
Sampled:		File ID:	S2022-12-21B (7)
		Prepared:	12/19/22 12:22
Solids:		Analyzed:	12/21/22 19:57
		Preparation:	PFAS Leachates
Batch:	BBL0372	Dilution:	1
Column:	1	Sequence:	SB03942
		Calibration:	2252011
		Instrument:	Saphira

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
ADONA	2.0 U	4.0	2.0	0.60	U
PFEESA	2.0 U	4.0	2.0	0.55	U
PFMPA	2.0 U	4.0	2.0	0.27	U
PFMBA	2.0 U	4.0	2.0	0.46	U
NFDHA	2.0 U	4.0	2.0	1.5	U
9CL-PF3ONS	2.0 U	4.0	2.0	1.0	U
11CL-PF3OUDS	2.0 U	4.0	2.0	1.0	U
3:3FTCA	4.0 U	8.0	4.0	2.8	U
5:3FTCA	4.0 U	8.0	4.0	2.2	U
7:3FTCA	4.0 U	8.0	4.0	2.8	U

LCS / LCS DUPLICATE RECOVERY**EPA 1633 SPLP**

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Preparation: PFAS Leachates

Batch: BBL0372

Laboratory ID: BBL0372-BS1

Column:

ANALYTE	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC.	QC LIMITS REC.
PFBA	80.0	79.8	99.7	40 - 150
PFPEA	40.0	39.7	99.3	40 - 150
PFHXA	20.0	20.9	105	40 - 150
PFHPA	20.0	19.3	96.7	40 - 150
PFOA	20.0	19.6	98.0	40 - 150
PFNA	20.0	21.7	109	40 - 150
PFDA	20.0	19.3	96.5	40 - 150
PFUnA	20.0	19.4	96.8	40 - 150
PFDOA	20.0	21.4	107	40 - 150
PFTRDA	20.0	20.5	102	40 - 150
PFTEDA	20.0	21.9	109	40 - 150
PFBS	17.7	18.7	106	40 - 150
PFPEs	18.8	20.5	109	40 - 150
PFHXS	18.3	19.1	104	40 - 150
PFHPS	19.1	21.1	111	40 - 150
PFOS	18.6	19.8	106	40 - 150
PFNS	19.2	19.3	100	40 - 150
PFDS	19.3	19.0	98.3	40 - 150
PFDOS	19.4	20.3	104	40 - 150
4:2FTS	75.0	76.8	102	40 - 150
6:2FTS	76.0	81.0	107	40 - 150
8:2FTS	76.8	77.3	101	40 - 150
PFOSA	20.0	20.5	103	40 - 150
NMeFOSA	80.0	87.1	109	40 - 150
NEtFOSA	80.0	91.7	115	40 - 150
NMeFOSAA	20.0	23.5	117	40 - 150
NEtFOSAA	20.0	23.3	116	40 - 150
NMeFOSE	80.0	71.2	89.0	40 - 150
NEtFOSE	80.0	58.1	72.6	40 - 150
HFPO-DA	40.0	37.4	93.6	40 - 150
ADONA	37.8	35.7	94.4	40 - 150
PFEESA	35.6	36.6	103	40 - 150
PFMPA	40.0	40.7	102	40 - 150
PFMBA	40.0	36.6	91.6	40 - 150

LCS / LCS DUPLICATE RECOVERY**EPA 1633 SPLP**

Laboratory: APPL, LLC

Work Order: 22L0057

Client: AECOM

Project: Red Hill AFFF Assessment Sampling

Matrix: Solid

Preparation: PFAS Leachates

Batch: BBL0372

Laboratory ID: BBL0372-BS1

Column:

ANALYTE	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC.	QC LIMITS REC.
NFDHA	40.0	44.2	110	40 - 150
9CL-PF3ONS	37.4	29.5	79.0	40 - 150
11CL-PF3OUDS	37.8	29.1	76.9	40 - 150
3:3FTCA	80.0	77.0	96.2	40 - 150
5:3FTCA	80.0	80.7	101	40 - 150
7:3FTCA	80.0	82.3	103	40 - 150

CALIBRATION SUMMARY

Analyte	(Q1 / Q3)	Internal Standard	Multiplier	AcidFactor	Function	Qualifier
PFBA	(212.9 / 169.0)	13C4_PFBA_EIS	4.0000	1.0000	y = 0.32619 x (std. dev. = 0.01628) (weighting: None)	%RSE=5.0
PFPeA	(262.9 / 219.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.43913 x (std. dev. = 0.01863) (weighting: None)	%RSE=4.2
PFHxA	(313.0 / 269.0)	13C5_PFHxA_EIS	1.0000	1.0000	y = 0.42941 x (std. dev. = 0.01769) (weighting: None)	%RSE=4.1
PFHpA	(363.0 / 319.0)	13C4_PFHpA_EIS	1.0000	1.0000	y = 0.45577 x (std. dev. = 0.01668) (weighting: None)	%RSE=3.7
PFOA	(413.0 / 369.0)	13C8_PFOA_EIS	1.0000	1.0000	y = 0.49169 x (std. dev. = 0.02929) (weighting: None)	%RSE=6.0
PFNA	(463.0 / 419.0)	13C9_PFNA_EIS	1.0000	1.0000	y = 0.85807 x (std. dev. = 0.06798) (weighting: None)	%RSE=7.9
PFDA	(513.0 / 469.0)	13C6_PFDA_EIS	1.0000	1.0000	y = 0.95185 x (std. dev. = 0.07020) (weighting: None)	%RSE=7.4
PFUnA	(563.0 / 519.0)	13C7_PFUnA_EIS	1.0000	1.0000	y = 0.79028 x (std. dev. = 0.12920) (weighting: None)	%RSE=16.3
PFDoA	(613.0 / 569.0)	13C2_PFDoA_EIS	1.0000	1.0000	y = 0.86208 x (std. dev. = 0.12117) (weighting: None)	%RSE=14.1
PFTTrDA	(663.0 / 619.0)	13C2_PFTDoA_EIS	1.0000	1.0000	y = 0.74691 x (std. dev. = 0.10467) (weighting: None)	%RSE=14.0
PFTeDA	(713.0 / 669.0)	13C2_PFTeDA_EIS	1.0000	1.0000	y = 0.88627 x (std. dev. = 0.09361) (weighting: None)	%RSE=10.6
PFBS	(298.9 / 80.0)	13C3_PFBs_EIS	1.0000	0.8847	y = 0.24253 x (std. dev. = 0.01275) (weighting: None)	%RSE=5.3
PFPeS	(349.0 / 80.0)	13C3_PFHxS_EIS	1.0000	0.9384	y = 0.83819 x (std. dev. = 0.04088) (weighting: None)	%RSE=4.9
PFHxS	(399.0 / 80.0)	13C3_PFHxS_EIS	1.0000	0.9110	y = 0.70765 x (std. dev. = 0.03393) (weighting: None)	%RSE=4.8
PFHpS	(449.0 / 80.0)	13C8_PFOs_EIS	1.0000	0.9514	y = 0.41508 x (std. dev. = 0.03452) (weighting: None)	%RSE=8.3
PFOS	(499.0 / 80.0)	13C8_PFOs_EIS	1.0000	0.9275	y = 0.50337 x (std. dev. = 0.03410) (weighting: None)	%RSE=6.8
PFNS	(549.0 / 80.0)	13C8_PFOs_EIS	1.0000	0.9599	y = 0.57789 x (std. dev. = 0.04314) (weighting: None)	%RSE=7.5
PFDS	(599.0 / 80.0)	13C8_PFOs_EIS	1.0000	0.9631	y = 0.64371 x (std. dev. = 0.05256) (weighting: None)	%RSE=8.2
PFDoS	(698.9 / 80.0)	13C8_PFOs_EIS	1.0000	0.9696	y = 0.27084 x (std. dev. = 0.02152) (weighting: None)	%RSE=7.9
4:2FTS	(327.0 / 307.0)	13C2_4:2FTS_EIS	4.0000	0.9345	y = 3.09002 x (std. dev. = 0.26815) (weighting: None)	%RSE=8.7
6:2FTS	(427.0 / 407.0)	13C2_6:2FTS_EIS	4.0000	0.9490	y = 1.45919 x (std. dev. = 0.11873) (weighting: None)	%RSE=8.1
8:2FTS	(527.0 / 507.0)	13C2_8:2FTS_EIS	4.0000	0.9583	y = 1.51823 x (std. dev. = 0.27229) (weighting: None)	%RSE=17.9
PFOSA	(498.0 / 78.0)	13C8_PFOsA_EIS	1.0000	1.0000	y = 0.47254 x (std. dev. = 0.03538) (weighting: None)	%RSE=7.5
NMeFOSA	(511.9 / 219.0)	D3_NMeFOSA_EIS	4.0000	1.0000	y = 1.63031 x (std. dev. = 0.18278) (weighting: None)	%RSE=11.2
NEiFOSA	(526.0 / 219.0)	D5_NEiFOSA_EIS	4.0000	1.0000	y = 1.80404 x (std. dev. = 0.10773) (weighting: None)	%RSE=6.0
NMeFOSAA	(570.0 / 419.0)	D3_MeFOSAA_EIS	1.0000	1.0000	y = 0.19482 x (std. dev. = 0.02187) (weighting: None)	%RSE=11.2
NEiFOSAA	(584.0 / 419.0)	D5_EiFOSAA_EIS	1.0000	1.0000	y = 0.22445 x (std. dev. = 0.03244) (weighting: None)	%RSE=14.5
NMeFOSE	(616.1 / 59.0)	D7_NMeFOSE_EIS	4.0000	1.0000	y = 0.25244 x (std. dev. = 0.02362) (weighting: None)	%RSE=9.4
NEiFOSE	(630.0 / 59.0)	D9_NEiFOSE_EIS	4.0000	1.0000	y = 0.10241 x (std. dev. = 0.01427) (weighting: None)	%RSE=13.9
HFPO-DA	(285.0 / 169.0)	13C3_HFPODA_EIS	2.0000	1.0000	y = 0.15195 x (std. dev. = 0.00913) (weighting: None)	%RSE=6.0
ADONA	(377.0 / 85.0)	13C3_HFPODA_EIS	2.0000	0.9427	y = 0.63625 x (std. dev. = 0.02798) (weighting: None)	%RSE=4.4
9Cl-Pf3ONS	(531.0 / 351.0)	13C3_HFPODA_EIS	2.0000	0.9333	y = -0.01255 x ² + 1.77065 x + 0.01174 (r = 0.99899) (weighting: 1 / x ²)	%RSE=4.6
11Cl-Pf3OUDS	(631.0 / 451.0)	13C3_HFPODA_EIS	2.0000	0.9432	y = 0.88975 x (std. dev. = 0.09345) (weighting: None)	%RSE=10.5
3:3FTCA	(241.0 / 177.0)	13C5_PFPeA_EIS	4.0000	1.0000	y = 0.03031 x (std. dev. = 0.00217) (weighting: None)	%RSE=7.2
5:3FTCA	(341.0 / 236.7)	13C5_PFHxA_EIS	4.0000	1.0000	y = 0.30350 x (std. dev. = 0.02546) (weighting: None)	%RSE=8.4
7:3FTCA	(441.0 / 317.0)	13C5_PFHxA_EIS	4.0000	1.0000	y = 0.34922 x (std. dev. = 0.01514) (weighting: None)	%RSE=4.3
PFEESA	(315.0 / 135.0)	13C5_PFHxA_EIS	2.0000	0.8925	y = 0.83914 x (std. dev. = 0.06120) (weighting: None)	%RSE=7.3
PFMPA	(229.0 / 85.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.12052 x (std. dev. = 0.00587) (weighting: None)	%RSE=4.9
PFMBA	(279.0 / 85.0)	13C5_PFPeA_EIS	2.0000	1.0000	y = 0.41658 x (std. dev. = 0.00844) (weighting: None)	%RSE=2.0
NFDHA	(295.0 / 201.0)	13C5_PFHxA_EIS	2.0000	1.0000	y = 0.43305 x (std. dev. = 0.01639) (weighting: None)	%RSE=3.8
13C3_PFBA_IIS	(216.0 / 172.0)	13C3_PFBA_IIS	1.0000	1.0000	y = 139193.5476 x	%RSD=8.2
13C2_PFHxA_IIS	(315.1 / 270.0)	13C2_PFHxA_IIS	1.0000	1.0000	y = 230918.4261 x	%RSD=8.2
13C4_PFOA_IIS	(417.0 / 372.0)	13C4_PFOA_IIS	1.0000	1.0000	y = 219848.0773 x	%RSD=7.7
13C5_PFNA_IIS	(468.0 / 423.0)	13C5_PFNA_IIS	1.0000	1.0000	y = 185181.4072 x	%RSD=9.2
13C2_PFDA_IIS	(515.1 / 470.1)	13C2_PFDA_IIS	1.0000	1.0000	y = 184809.0456 x	%RSD=11.0
18O2_PFHxS_IIS	(403.0 / 83.9)	18O2_PFHxS_IIS	1.0000	1.0000	y = 403709.6695 x	%RSD=4.9
13C4_PFOs_IIS	(502.8 / 79.9)	13C4_PFOs_IIS	1.0000	1.0000	y = 319178.8209 x	%RSD=6.9

Analyte	(Q1 / Q3)	Internal Standard	Multiplier	AcidFactor	Function	Qualifier
13C4_PFBa_EIS	(217.0 / 172.0)	13C3_PFBa_IIS	8.0000	1.0000	y = 8.2337 x	%RSD=3.2
13C5_PFPaA_EIS	(267.9 / 223.0)	13C2_PFHxA_IIS	4.0000	1.0000	y = 2.7832 x	%RSD=7.7
13C5_PFHxA_EIS	(318.0 / 273.0)	13C2_PFHxA_IIS	2.0000	1.0000	y = 2.3015 x	%RSD=6.9
13C4_PFHpA_EIS	(367.0 / 322.0)	13C2_PFHxA_IIS	2.0000	1.0000	y = 2.0078 x	%RSD=6.4
13C8_PFOA_EIS	(421.0 / 376.0)	13C4_PFOA_IIS	2.0000	1.0000	y = 2.1933 x	%RSD=5.9
13C9_PFNA_EIS	(472.0 / 427.0)	13C5_PFNA_IIS	1.0000	1.0000	y = 1.0996 x	%RSD=3.4
13C6_PFDA_EIS	(519.0 / 474.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 1.4222 x	%RSD=14.3
13C7_PFUaA_EIS	(570.0 / 525.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 2.0230 x	%RSD=15.9
13C2_PFDaA_EIS	(615.0 / 570.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 2.0192 x	%RSD=15.8
13C2_PFTeDA_EIS	(715.0 / 670.0)	13C2_PFDA_IIS	1.0000	1.0000	y = 1.3410 x	%RSD=16.6
13C3_PFBs_EIS	(302.0 / 80.0)	18O2_PFHxS_IIS	2.0000	1.0000	y = 3.3815 x	%RSD=8.1
13C3_PFHxS_EIS	(402.0 / 80.0)	18O2_PFHxS_IIS	2.0000	1.0000	y = 1.7992 x	%RSD=5.5
13C8_PFOs_EIS	(507.0 / 80.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 3.4325 x	%RSD=6.1
13C2_4:2FTS_EIS	(329.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.5728 x	%RSD=7.1
13C2_6:2FTS_EIS	(429.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.6896 x	%RSD=7.7
13C2_8:2FTS_EIS	(529.0 / 81.0)	18O2_PFHxS_IIS	4.0000	1.0000	y = 0.6904 x	%RSD=7.1
13C8_PFOsA_EIS	(506.0 / 78.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 4.3389 x	%RSD=5.1
D3_NMeFOsA_EIS	(515.0 / 169.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 0.9473 x	%RSD=12.5
D5_NEtFOsA_EIS	(531.1 / 169.0)	13C4_PFOs_IIS	2.0000	1.0000	y = 0.8745 x	%RSD=6.8
D3_MeFOsAA_EIS	(573.0 / 419.0)	13C4_PFOs_IIS	4.0000	1.0000	y = 1.6324 x	%RSD=5.4
D5_EtFOsAA_EIS	(589.0 / 419.0)	13C4_PFOs_IIS	4.0000	1.0000	y = 1.4389 x	%RSD=12.4
D7_NMeFOsE_EIS	(623.2 / 58.9)	13C4_PFOs_IIS	20.0000	1.0000	y = 1.3302 x	%RSD=9.0
D9_NEtFOsE_EIS	(639.2 / 58.9)	13C4_PFOs_IIS	20.0000	1.0000	y = 0.6056 x	%RSD=7.0
13C3_HFPODA_EIS	(287.0 / 169.0)	13C2_PFHxA_IIS	8.0000	1.0000	y = 4.8947 x	%RSD=6.9

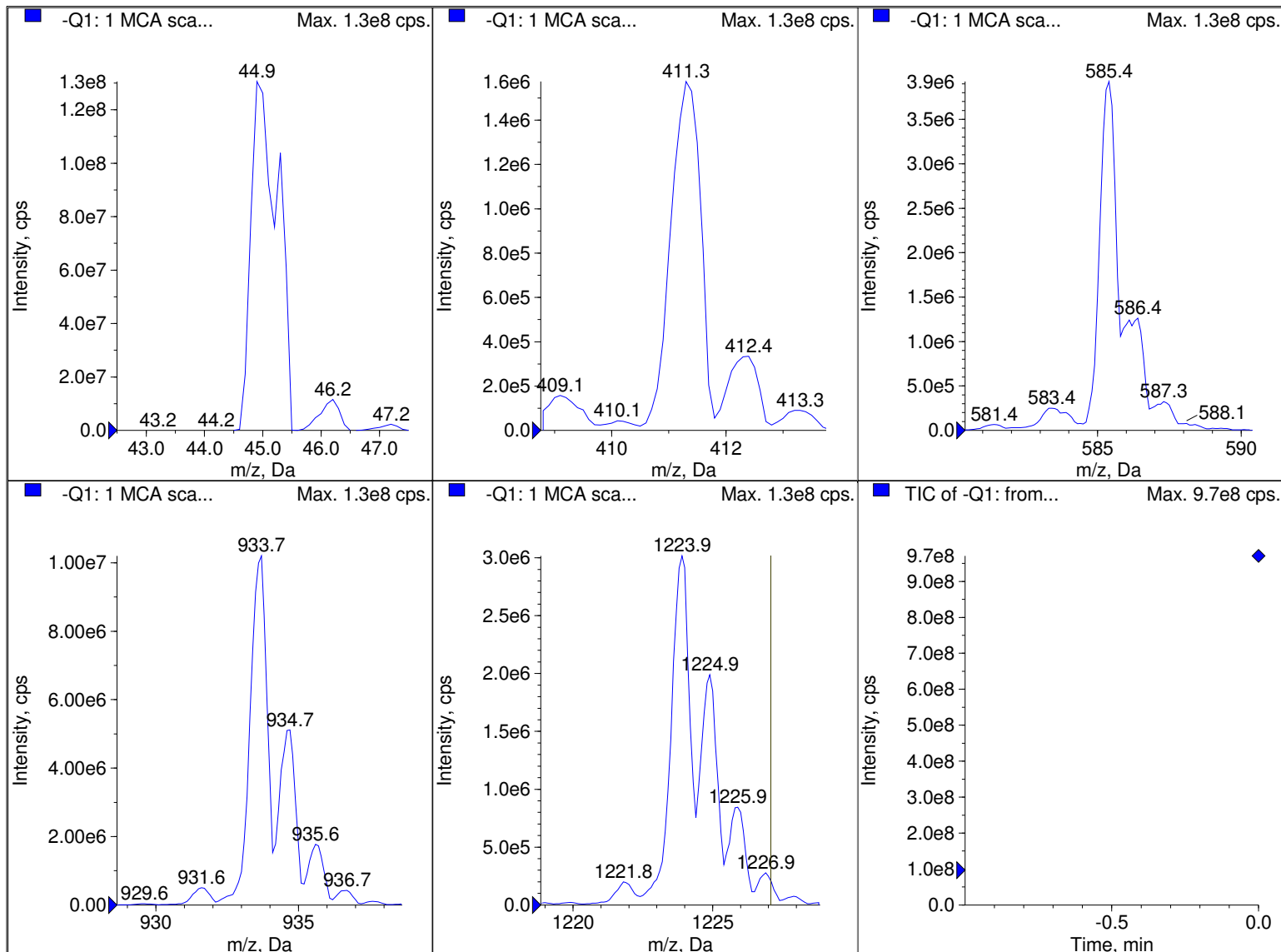
x= Concentration Analyte

$$y = \text{Area Ratio} = \frac{\text{Area Analyte}}{\text{Area Internal Standard}}$$

$$\text{Acid Factor} = \frac{\text{Molecular weight Acid}}{\text{Molecular weight Salt}}$$

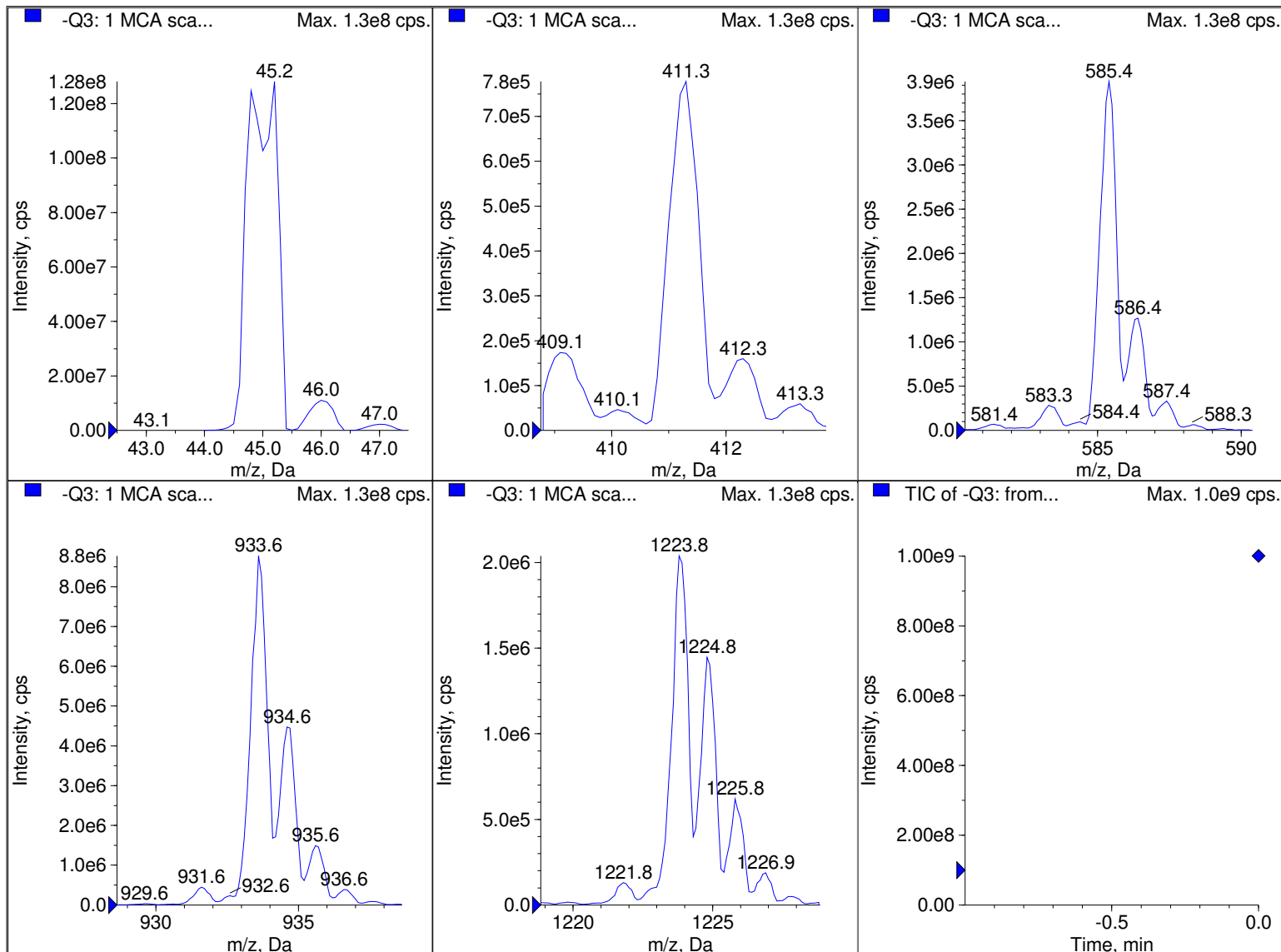
$$\text{Multiplier} = \frac{\text{Concentration of Analyte}}{\text{Concentration of PFOA}} \text{ in curve standard mix}$$

$$\text{Result} \left(\frac{\text{ng}}{\text{ml}} \right) = x * \text{Multiplier} * \text{Acid Factor}$$



Peak List for "-Q1: 1 MCA scans from Sample 1 (TuneSampleID) of MT20221111142838.wiff (Turbo Spray)"

	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	45.0305	1.3061e8	0.6158	-0.0325
2	411.2590	411.3148	1.5745e6	0.6085	-0.0558
3	585.3850	585.3651	3.9270e6	0.6307	0.0199
4	933.6360	933.6197	1.0205e7	0.6552	0.0163
5	1223.8450	1223.8627	3.0170e6	0.6967	-0.0177
6	1572.0970	n/a	n/a	n/a	n/a
7	1863.3060	n/a	n/a	n/a	n/a
8	1979.3890	n/a	n/a	n/a	n/a

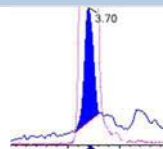
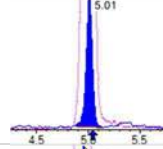
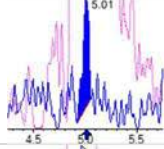
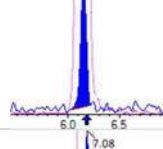
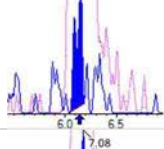
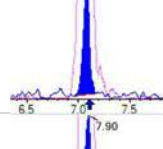
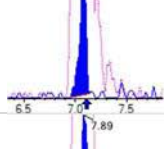
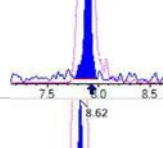
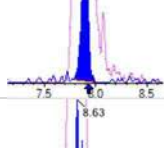
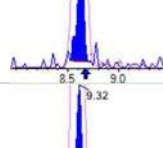
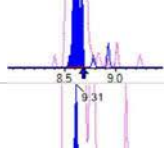
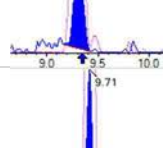
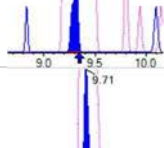
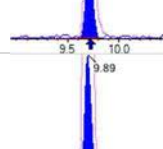
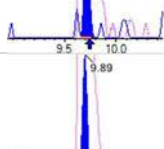
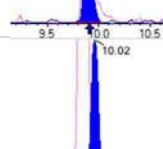
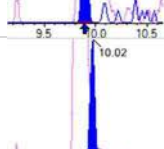
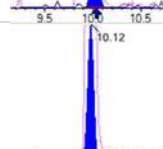
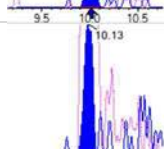
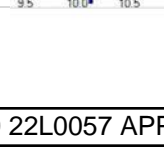
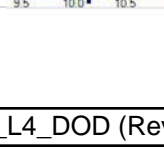


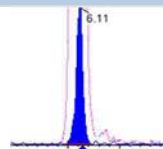
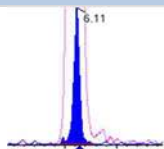
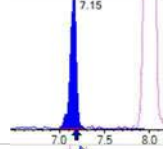
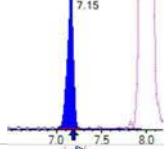
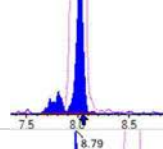
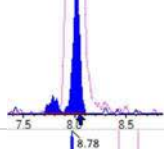
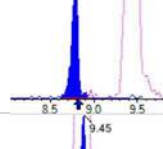
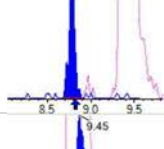
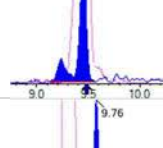
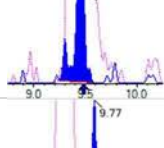
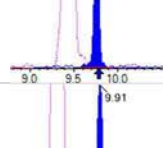
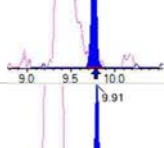
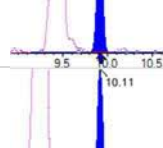
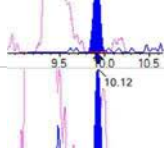
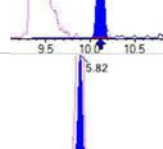
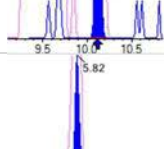
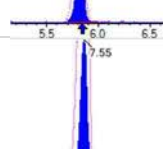
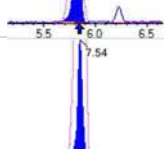
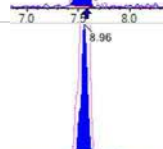
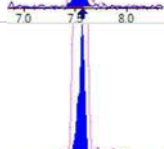
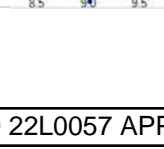
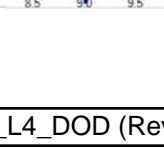
Peak List for "-Q3: 1 MCA scans from Sample 1 (TuneSampleID) of MT20221111142403.wiff (Turbo Spray)"

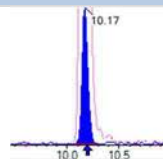
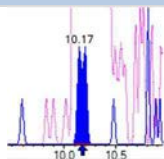
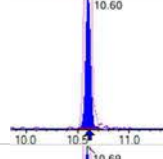
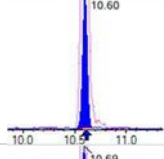
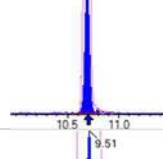
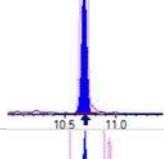
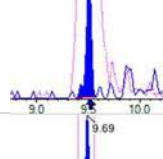
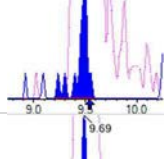
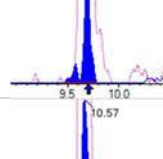
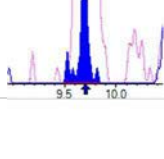
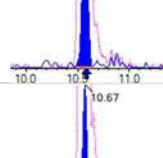
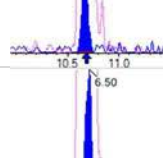
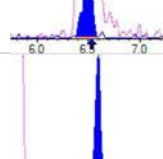
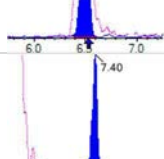
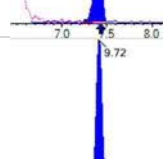
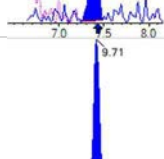
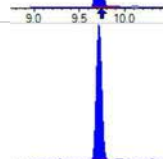
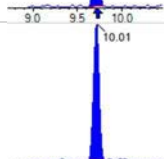
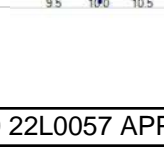
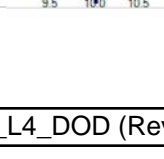
	Target Mass (Da)	Found At (Da)	Intensity (cps)	Width (Da)	Mass Shift (Da)
1	44.9980	44.9799	1.2814e8	0.6414	0.0181
2	411.2590	411.2677	7.7810e5	0.6076	-8.6898e-3
3	585.3850	585.3784	3.9438e6	0.6511	6.5868e-3
4	933.6360	933.6279	8.7759e6	0.6302	8.0526e-3
5	1223.8450	1223.8609	2.0397e6	0.6225	-0.0159
6	1572.0970	n/a	n/a	n/a	n/a
7	1863.3060	n/a	n/a	n/a	n/a
8	1979.3890	n/a	n/a	n/a	n/a

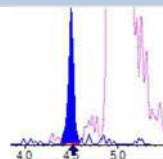
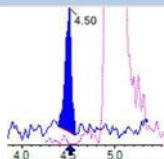
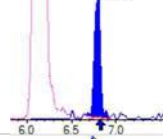
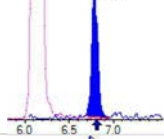
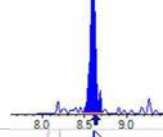
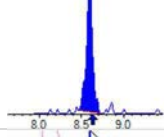
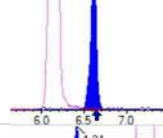
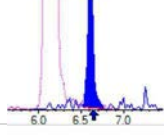
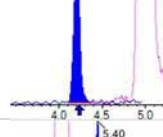
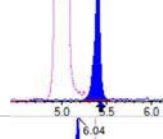
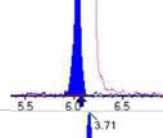
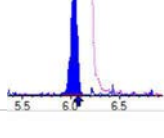
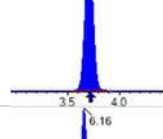
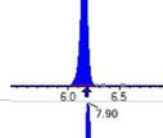
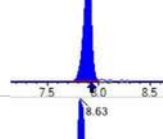
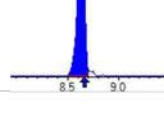
EPA 1633 SPLP

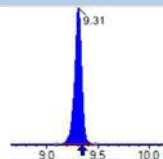
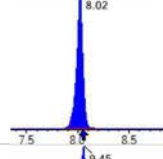
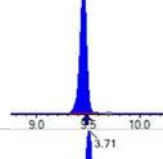
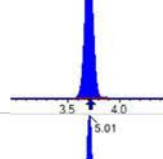
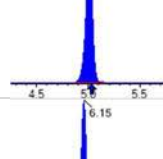
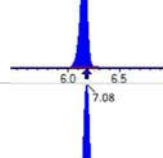
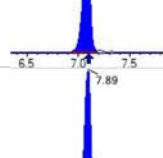
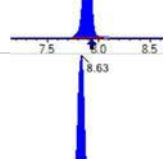
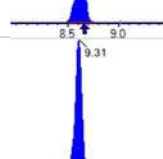
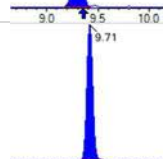
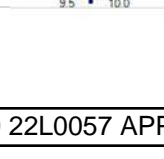
Initial Calibration: SB03941

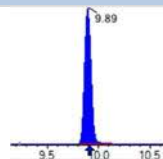
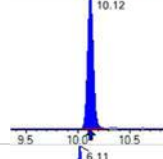
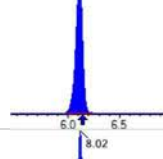
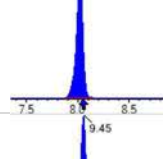
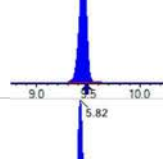
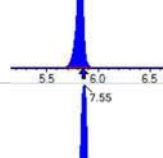
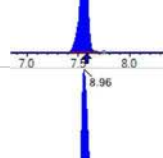
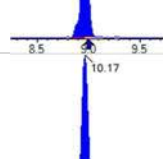
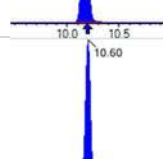
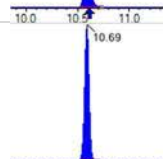

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 33232	(3.70, 1.00) (0.00, N/A, 0.0)	38.7	N/A 0.0 0.0	0.3669 [0.4000]	91.7%			
PFPeA	(262.9 / 219.0) 29292 (262.9 / 69.0) 400	(5.01, 1.00) (0.00, N/A, 0.0)	185.1 11.6	0.0136 121.9 121.9	0.2148 [0.2000]	107.4%			
PFHxA	(313.0 / 269.0) 21402 (313.0 / 119.0) 1522	(6.15, 1.00) (0.00, N/A, 0.9)	65.5 16.5	0.0711 72.7 72.7	0.0985 [0.1000]	98.5%			
PFHpA	(363.0 / 319.0) 20982 (363.0 / 169.0) 6156	(7.08, 1.00) (0.00, N/A, 0.1)	90.6 69.9	0.2934 94.2 94.2	0.1029 [0.1000]	102.9%			
PFOA	(413.0 / 369.0) 24265 (413.0 / 169.0) 8577	(7.90, 1.00) (0.00, N/A, 0.2)	63.6 78.4	0.3535 108.2 108.2	0.1081 [0.1000]	108.1%			
PFNA	(463.0 / 419.0) 12946 (463.0 / 169.0) 4470	(8.62, 1.00) (-0.01, N/A, -0.3)	48.4 29.7	0.3453 179.1 179.1	0.0879 [0.1000]	87.9%			IR2,
PFDA	(513.0 / 469.0) 23366 (513.0 / 169.0) 1070	(9.32, 1.00) (0.00, N/A, 0.1)	57.7 566.2	0.0458 47.9 47.9	0.1078 [0.1000]	107.8%			IR1,
PFUnA	(563.0 / 519.0) 38565 (563.0 / 169.0) 3911	(9.71, 1.00) (0.00, N/A, 0.1)	137.9 44.4	0.1014 116.8 116.8	0.1273 [0.1000]	127.3%			
PFDoA	(613.0 / 569.0) 35780 (613.0 / 169.0) 5060	(9.89, 1.00) (0.00, N/A, -0.1)	145.7 35.8	0.1414 101.6 101.6	0.1293 [0.1000]	129.3%			
PFTrDA	(663.0 / 619.0) 31090 (663.0 / 169.0) 6638	(10.02, 1.01) (N/A, -0.01, -0.4)	110.4 53.1	0.2135 104.3 104.3	0.1296 [0.1000]	129.6%			
PFTeDA	(713.0 / 669.0) 25589 (713.0 / 169.0) 4161	(10.12, 1.00) (0.00, N/A, -0.5)	94.3 12.4	0.1626 79.9 79.9	0.1029 [0.1000]	102.9%			

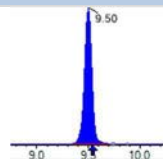
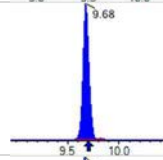
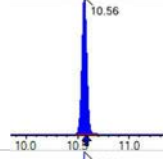
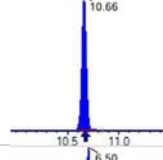
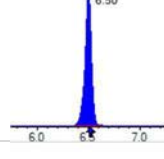
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 31824 (298.9 / 99.0) 25667	(6.11, 1.00) (0.00, N/A, -0.1)	228.6 158.1	0.8066 131.1 131.1	0.0899 [0.0885]	101.6%			
PFPeS	(349.0 / 80.0) 61392 (349.0 / 99.0) 26354	(7.15, 0.89) (N/A, -0.03, -0.1)	200.8 251.0	0.4293 120.6 120.6	0.0959 [0.0938]	102.2%			
PFHxS	(399.0 / 80.0) 54752 (399.0 / 99.0) 16706	(8.02, 1.00) (0.00, N/A, 0.2)	16908.1 6180.4	0.3051 90.8 90.8	0.0983 [0.0911]	107.9%			
PFHpS	(449.0 / 80.0) 40149 (449.0 / 99.0) 13981	(8.79, 0.93) (N/A, -0.03, 0.3)	153.7 102.5	0.3482 127.2 127.2	0.0837 [0.0951]	88.0%			
PFOS	(499.0 / 80.0) 63112 (499.0 / 99.0) 14475	(9.45, 1.00) (0.00, N/A, -0.1)	158.9 43.2	0.2294 94.3 94.3	0.1057 [0.0927]	114.0%			
PFNS	(549.0 / 80.0) 63295 (549.0 / 99.0) 15388	(9.76, 1.03) (N/A, -0.02, -0.6)	172.2 304.3	0.2431 99.6 99.6	0.0956 [0.0960]	99.6%			
PFDS	(599.0 / 80.0) 66751 (599.0 / 99.0) 15205	(9.91, 1.05) (N/A, -0.01, 0.0)	278.7 65.1	0.2278 101.2 101.2	0.0908 [0.0963]	94.3%			
PFDoS	(698.9 / 80.0) 32302 (698.9 / 99.0) 2212	(10.11, 1.07) (N/A, -0.01, -0.4)	151.2 18.9	0.0685 28.0 28.0	0.1051 [0.0970]	108.4%			IR1,
4:2FTS	(327.0 / 307.0) 73840 (327.0 / 81.0) 44310	(5.82, 1.00) (0.00, N/A, 0.1)	398.1 178.0	0.6001 121.5 121.5	0.3917 [0.3738]	104.8%			
6:2FTS	(427.0 / 407.0) 37991 (427.0 / 81.0) 30069	(7.55, 1.00) (0.00, N/A, 0.6)	171.3 166.4	0.7915 101.7 101.7	0.3927 [0.3796]	103.4%			
8:2FTS	(527.0 / 507.0) 54208 (527.0 / 81.0) 22387	(8.96, 1.00) (0.00, N/A, -0.5)	239.2 132.1	0.4130 73.0 73.0	0.5390 [0.3833]	140.6%			QC,

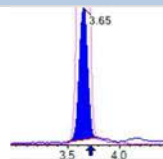
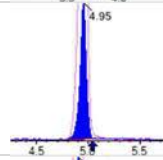
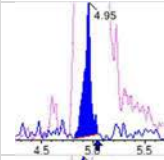
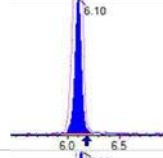
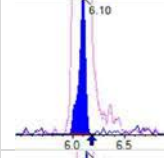
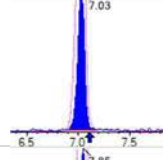
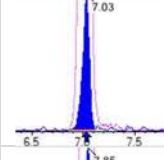
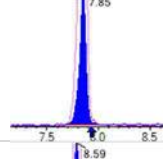
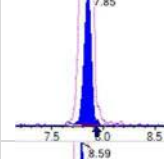
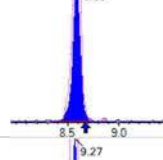
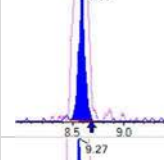
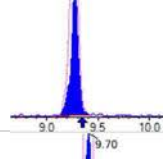
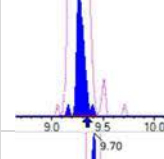
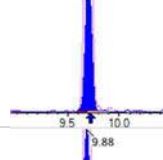
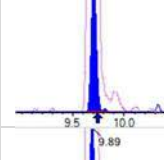
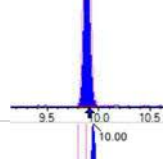
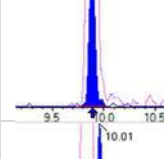
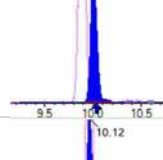
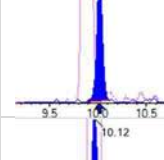
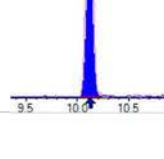
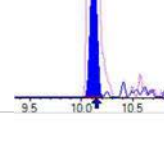
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 58943 (498.0 / 478.0) 1534	(10.17, 1.00) (0.00, N/A, -0.2)	160.7 16.7	0.0260 124.9 124.9	0.1005 [0.1000]	100.5%			
NMeFOSA	(511.9 / 219.0) 43872 (511.9 / 169.0) 26519	(10.60, 1.00) (0.00, N/A, 0.1)	298.9 244.3	0.6045 83.9 83.9	0.4219 [0.4000]	105.5%			
NEFOSA	(526.0 / 219.0) 44346 (526.0 / 169.0) 51516	(10.69, 1.00) (0.00, N/A, 0.0)	466.2 369.0	1.1617 109.8 109.8	0.3771 [0.4000]	94.3%			
NMeFOSAA	(570.0 / 419.0) 8400 (570.0 / 483.0) 3567	(9.51, 1.00) (0.01, N/A, 0.9)	51.6 212.6	0.4247 69.1 69.1	0.0791 [0.1000]	79.1%			
NEIFOSAA	(584.0 / 419.0) 14604 (584.0 / 526.0) 5838	(9.69, 1.00) (0.01, N/A, 0.0)	4382.3 108.5	0.3998 54.5 54.5	0.1309 [0.1000]	130.9%			QC,
NMeFOSE	(616.1 / 59.0) 9057	(10.57, 1.00) (0.00, N/A, 0.0)	71.0	N/A 0.0 0.0	0.3368 [0.4000]	84.2%			
NEtFOSE	(630.0 / 59.0) 2592	(10.67, 1.00) (0.01, N/A, 0.0)	55.9	N/A 0.0 0.0	0.5290 [0.4000]	132.3%			QC,
HFPO-DA	(285.0 / 169.0) 18333 (285.0 / 185.0) 52126	(6.50, 1.00) (0.00, N/A, 0.2)	196.1 229.6	2.8433 103.6 103.6	0.2191 [0.2000]	109.5%			
ADONA	(377.0 / 85.0) 66900 (377.0 / 251.0) 10886	(7.40, 1.14) (N/A, -0.03, 0.0)	225.5 39.2	0.1627 130.7 130.7	0.1800 [0.1885]	95.5%			
9CI-Pf3ONS	(531.0 / 351.0) 210135 (533.0 / 353.0) 57347	(9.72, 1.49) (N/A, -0.01, 0.2)	525.6 173.1	0.2729 92.2 92.2	0.1889 [0.1867]	101.2%			
11CI-PF3OUDS	(631.0 / 451.0) 110528 (633.0 / 453.0) 41123	(10.00, 1.54) (N/A, -0.01, -0.3)	422.1 246.1	0.3721 112.5 112.5	0.2127 [0.1886]	112.8%			

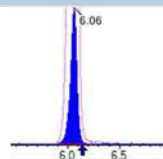
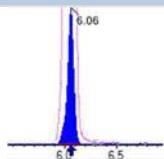
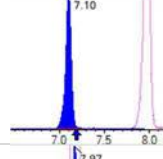
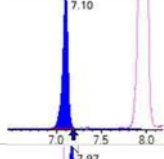
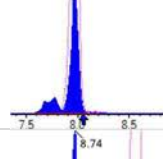
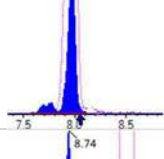
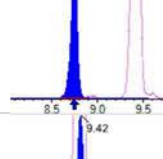
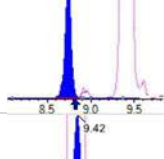
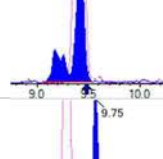
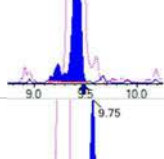
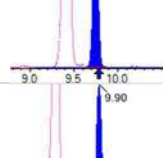
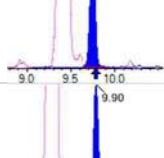
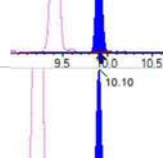
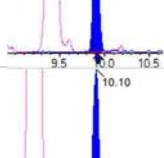
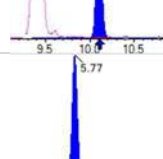
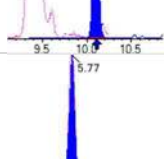
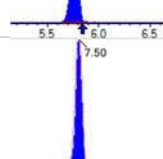
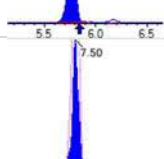
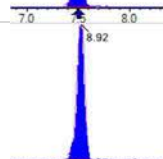
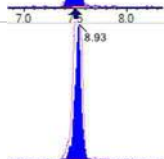
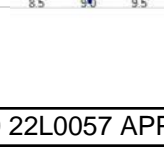
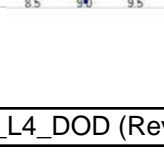
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 1752 (241.0 / 117.0) 3522	(4.50, 0.90) (N/A, -0.02, -0.1)	83.0 47.1	2.0106 120.1 120.1	0.3722 [0.4000]	93.0%			
5:3FTCA	(341.0 / 236.7) 13037 (341.0 / 217.0) 28648	(6.79, 1.10) (N/A, -0.03, 0.1)	86.9 98.3	2.1975 150.1 150.1	0.3394 [0.4000]	84.9%			IR2,
7:3FTCA	(441.0 / 317.0) 16935 (441.0 / 337.0) 16853	(8.60, 1.40) (N/A, -0.03, 0.2)	63.0 96.2	0.9952 118.8 118.8	0.3832 [0.4000]	95.8%			
PFEESA	(315.0 / 135.0) 48752 (315.0 / 83.0) 14590	(6.61, 1.07) (N/A, -0.03, 0.3)	297.4 57.3	0.2993 97.5 97.5	0.2049 [0.1785]	114.8%			
PFMPA	(229.0 / 85.0) 8084	(4.21, 0.84) (N/A, -0.02, 0.0)	159.7	N/A 0.0 0.0	0.2160 [0.2000]	108.0%			
PFMBA	(279.0 / 85.0) 26278	(5.40, 1.08) (N/A, -0.03, 0.0)	279.2	N/A 0.0 0.0	0.2031 [0.2000]	101.6%			
NFDHA	(295.0 / 201.0) 22691 (295.0 / 85.0) 23611	(6.04, 0.98) (N/A, -0.03, 0.3)	161.6 125.5	1.0405 117.9 117.9	0.2070 [0.2000]	103.5%			
13C3_PFBa_IIS	(216.0 / 172.0) 129665	(3.71, N/A) (N/A, -0.01, N/A)	734.9	N/A	0.9315 [1.0000]	93.2% {85.4%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 201573	(6.16, N/A) (N/A, -0.03, N/A)	556.3	N/A	0.8729 [1.0000]	87.3% {86.2%}			
13C4_PFOA_IIS	(417.0 / 372.0) 188558	(7.90, N/A) (N/A, -0.03, N/A)	449.6	N/A	0.8577 [1.0000]	85.8% {79.2%}			
13C5_PFNA_IIS	(468.0 / 423.0) 150014	(8.63, N/A) (N/A, -0.04, N/A)	351.9	N/A	0.8101 [1.0000]	81.0% {74.2%}			

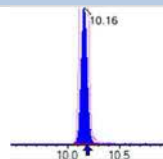
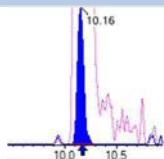
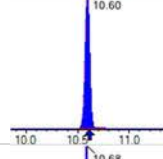
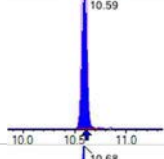
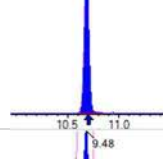
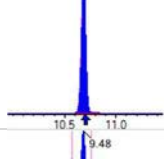
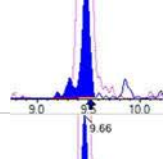
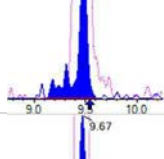
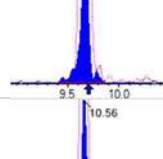
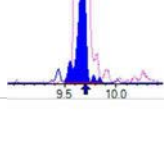
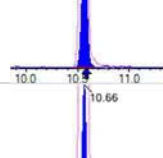
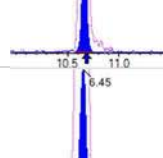
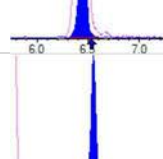
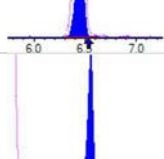
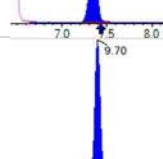
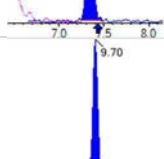
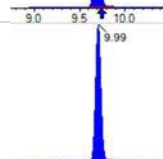
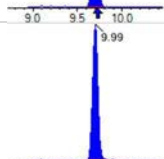
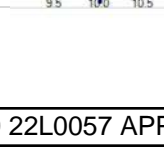
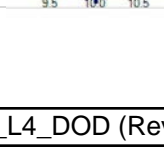
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 182339	(9.31, N/A) (N/A, -0.03, N/A)	393.6	N/A	0.9866 [1.0000]	98.7% {104.9%}			
18O2_PFHxS_IIS	(403.0 / 83.9) 376592	(8.02, N/A) (N/A, -0.03, N/A)	863.0	N/A	0.9328 [1.0000]	93.3% {89.1%}			
13C4_PFOS_IIS	(502.8 / 79.9) 319349	(9.45, N/A) (N/A, -0.03, N/A)	441.2	N/A	1.0005 [1.0000]	100.1% {97.4%}			
13C4_PFBA_EIS	(217.0 / 172.0) 1110686	(3.71, N/A) (N/A, -0.01, N/A)	922.4	N/A	8.3227 [8.0000]	104.0% {93.3%}			
13C5_PFPeA_EIS	(267.9 / 223.0) 621129	(5.01, N/A) (N/A, -0.03, N/A)	742.0	N/A	4.4287 [4.0000]	110.7% {89.2%}			
13C5_PFHxA_EIS	(318.0 / 273.0) 506172	(6.15, N/A) (N/A, -0.03, N/A)	648.4	N/A	2.1821 [2.0000]	109.1% {93.9%}			
13C4_PFHpA_EIS	(367.0 / 322.0) 447320	(7.08, N/A) (N/A, -0.03, N/A)	438.8	N/A	2.2105 [2.0000]	110.5% {91.1%}			
13C8_PFOA_EIS	(421.0 / 376.0) 456439	(7.89, N/A) (N/A, -0.03, N/A)	477.0	N/A	2.2073 [2.0000]	110.4% {91.7%}			
13C9_PFNA_EIS	(472.0 / 427.0) 171585	(8.63, N/A) (N/A, -0.04, N/A)	503.1	N/A	1.0402 [1.0000]	104.0% {78.4%}			
13C6_PFDA_EIS	(519.0 / 474.0) 227812	(9.31, N/A) (N/A, -0.03, N/A)	316.3	N/A	0.8785 [1.0000]	87.8% {81.0%}			
13C7_PFUnA_EIS	(570.0 / 525.0) 383307	(9.71, N/A) (N/A, -0.01, N/A)	510.8	N/A	1.0391 [1.0000]	103.9% {96.2%}			

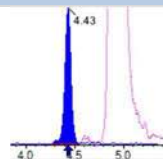
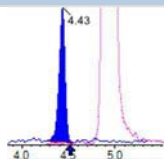
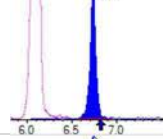
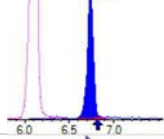
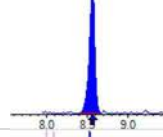
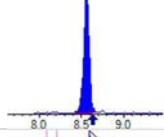
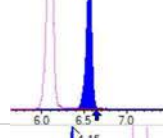
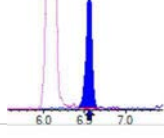
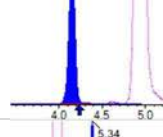
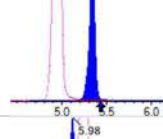
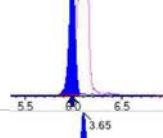
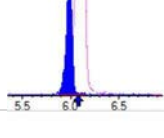
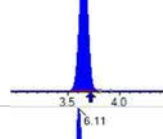
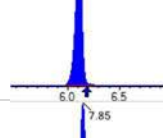
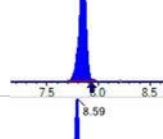
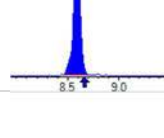
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 321089	(9.89, N/A) (N/A, -0.01, N/A)	437.4	N/A	0.8721 [1.0000]	87.2% {82.8%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 280643	(10.12, N/A) (N/A, -0.01, N/A)	381.3	N/A	1.1478 [1.0000]	114.8% {116.0%}			
13C3_PFBs_EIS	(302.0 / 80.0) 1291973	(6.11, N/A) (N/A, -0.03, N/A)	870.8	N/A	2.0291 [2.0000]	101.5% {94.1%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 716988	(8.02, N/A) (N/A, -0.03, N/A)	976.1	N/A	2.1164 [2.0000]	105.8% {95.1%}			
13C8_PFOS_EIS	(507.0 / 80.0) 1099756	(9.45, N/A) (N/A, -0.03, N/A)	492.9	N/A	2.0065 [2.0000]	100.3% {92.4%}			
13C2_4:2FTS_EIS	(329.0 / 81.0) 228032	(5.82, N/A) (N/A, -0.03, N/A)	818.1	N/A	4.2284 [4.0000]	105.7% {101.7%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 251709	(7.55, N/A) (N/A, -0.03, N/A)	625.3	N/A	3.8767 [4.0000]	96.9% {91.7%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 253898	(8.96, N/A) (N/A, -0.04, N/A)	403.4	N/A	3.9063 [4.0000]	97.7% {85.8%}			
13C8_PFOsa_EIS	(506.0 / 78.0) 1240858	(10.17, N/A) (N/A, -0.01, N/A)	815.5	N/A	1.7911 [2.0000]	89.6% {84.7%}			
D3_NMeFOSA_EIS	(515.0 / 169.0) 255122	(10.60, N/A) (N/A, -0.01, N/A)	937.9	N/A	1.6866 [2.0000]	84.3% {77.3%}			
D5_NEiFOSA_EIS	(531.1 / 169.0) 260767	(10.69, N/A) (N/A, -0.01, N/A)	1231.1	N/A	1.8675 [2.0000]	93.4% {91.6%}			

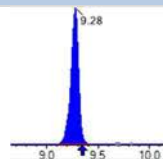
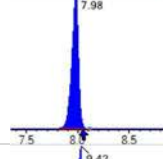
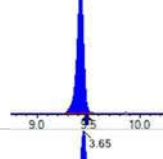
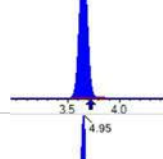
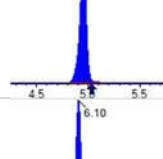
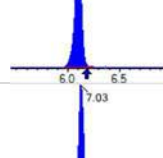
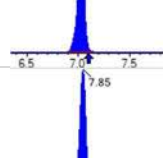
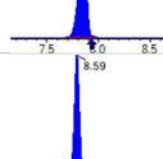
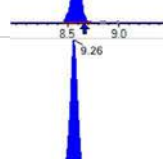
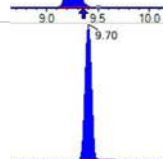
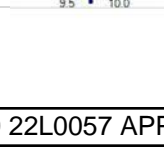
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 544985	(9.50, N/A) (N/A, -0.03, N/A)	407.2	N/A	4.1816 [4.0000]	104.5% {106.7%}			
D5_EtFOSAA_EIS	(589.0 / 419.0) 497176	(9.68, N/A) (N/A, -0.02, N/A)	540.1	N/A	4.3280 [4.0000]	108.2% {105.5%}			
D7_NMeFOSE_EIS	(623.2 / 58.9) 426059	(10.56, N/A) (N/A, -0.01, N/A)	1224.8	N/A	20.0598 [20.0000]	100.3% {98.7%}			
D9_NEtFOSE_EIS	(639.2 / 58.9) 191338	(10.66, N/A) (N/A, -0.01, N/A)	1253.8	N/A	19.7881 [20.0000]	98.9% {104.9%}			
13C3_HFPODA_EIS	(287.0 / 169.0) 1101544	(6.50, N/A) (N/A, -0.03, N/A)	840.6	N/A	8.9317 [8.0000]	111.6% {93.8%}			

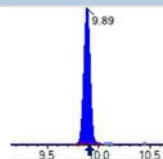
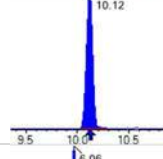
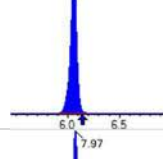
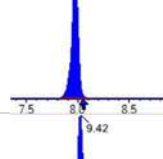
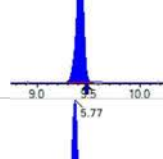
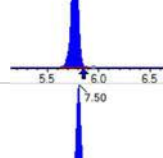
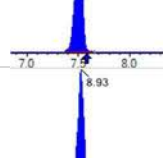
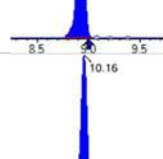
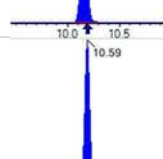
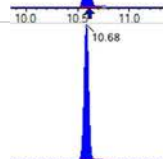
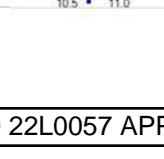
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 188421	(3.65, 1.00) (0.00, N/A, 0.0)	60.5	N/A 0.0 0.0	1.9028 [2.0000]	95.1%			
PFPeA	(262.9 / 219.0) 139219 (262.9 / 69.0) 1694	(4.95, 1.00) (0.00, N/A, 0.1)	388.4 40.0	0.0122 108.7 108.7	0.9614 [1.0000]	96.1%			
PFHxA	(313.0 / 269.0) 115909 (313.0 / 119.0) 10897	(6.10, 1.00) (0.00, N/A, 0.2)	310.0 98.6	0.0940 96.2 96.2	0.4941 [0.5000]	98.8%			
PFHpA	(363.0 / 319.0) 110782 (363.0 / 169.0) 29592	(7.03, 1.00) (0.00, N/A, 0.0)	210.6 163.1	0.2671 85.8 85.8	0.5195 [0.5000]	103.9%			
PFOA	(413.0 / 369.0) 131268 (413.0 / 169.0) 45112	(7.85, 1.00) (0.00, N/A, 0.2)	272.1 247.3	0.3437 105.2 105.2	0.5483 [0.5000]	109.7%			
PFNA	(463.0 / 419.0) 93190 (463.0 / 169.0) 19066	(8.59, 1.00) (0.00, N/A, -0.1)	270.2 71.5	0.2046 106.2 106.2	0.4982 [0.5000]	99.6%			
PFDA	(513.0 / 469.0) 116985 (513.0 / 169.0) 7443	(9.27, 1.00) (0.01, N/A, 0.2)	179.0 455.7	0.0636 66.6 66.6	0.4923 [0.5000]	98.5%			
PFUnA	(563.0 / 519.0) 112638 (563.0 / 169.0) 16433	(9.70, 1.00) (0.00, N/A, -0.2)	261.9 192.3	0.1459 168.0 168.0	0.3772 [0.5000]	75.4%			IR2,
PFDoA	(613.0 / 569.0) 170817 (613.0 / 169.0) 22966	(9.88, 1.00) (0.00, N/A, -0.1)	386.2 148.3	0.1344 96.6 96.6	0.5314 [0.5000]	106.3%			
PFTrDA	(663.0 / 619.0) 139394 (663.0 / 169.0) 23330	(10.00, 1.01) (N/A, -0.02, -0.6)	293.8 128.9	0.1674 81.8 81.8	0.5005 [0.5000]	100.1%			
PFTeDA	(713.0 / 669.0) 107548 (713.0 / 169.0) 13556	(10.12, 1.00) (0.00, N/A, 0.0)	266.4 52.5	0.1260 62.0 62.0	0.5082 [0.5000]	101.6%			

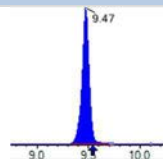
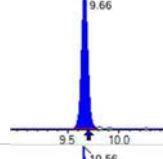
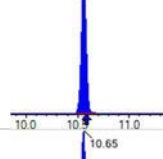
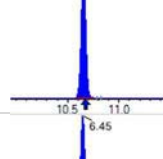
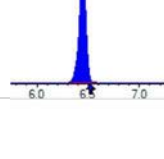
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 169308 (298.9 / 99.0) 116887	(6.06, 1.00) (0.00, N/A, 0.1)	532.3 438.0	0.6904 112.2 112.2	0.4218 [0.4424]	95.4%			
PFPeS	(349.0 / 80.0) 303756 (349.0 / 99.0) 113877	(7.10, 0.89) (N/A, -0.08, 0.0)	643.5 533.0	0.3749 105.3 105.3	0.4401 [0.4692]	93.8%			
PFHxS	(399.0 / 80.0) 254653 (399.0 / 99.0) 87687	(7.97, 1.00) (0.00, N/A, 0.0)	2864.9 16565.2	0.3443 102.4 102.4	0.4242 [0.4555]	93.1%			
PFHpS	(449.0 / 80.0) 232130 (449.0 / 99.0) 63281	(8.74, 0.93) (N/A, -0.07, 0.2)	720.8 355.5	0.2726 99.6 99.6	0.4831 [0.4757]	101.5%			
PFOS	(499.0 / 80.0) 271232 (499.0 / 99.0) 55582	(9.42, 1.00) (0.00, N/A, 0.2)	71.7 84.7	0.2049 84.3 84.3	0.4537 [0.4637]	97.8%			
PFNS	(549.0 / 80.0) 326430 (549.0 / 99.0) 76899	(9.75, 1.03) (N/A, -0.03, 0.0)	700.8 332.3	0.2356 96.5 96.5	0.4923 [0.4799]	102.6%			
PFDS	(599.0 / 80.0) 361311 (599.0 / 99.0) 88020	(9.90, 1.05) (N/A, -0.02, 0.0)	528.4 257.7	0.2436 108.2 108.2	0.4908 [0.4816]	101.9%			
PFDoS	(698.9 / 80.0) 143379 (698.9 / 99.0) 39342	(10.10, 1.07) (N/A, -0.01, 0.0)	394.0 390.0	0.2744 112.1 112.1	0.4660 [0.4848]	96.1%			
4:2FTS	(327.0 / 307.0) 369834 (327.0 / 81.0) 206873	(5.77, 1.00) (0.00, N/A, -0.2)	740.7 453.5	0.5594 113.2 113.2	1.8624 [1.8691]	99.6%			
6:2FTS	(427.0 / 407.0) 212400 (427.0 / 81.0) 133719	(7.50, 1.00) (0.00, N/A, 0.2)	557.0 426.3	0.6296 80.9 80.9	1.8471 [1.8981]	97.3%			
8:2FTS	(527.0 / 507.0) 187570 (527.0 / 81.0) 119060	(8.92, 1.00) (0.00, N/A, -0.3)	288.9 320.4	0.6348 112.1 112.1	1.8629 [1.9166]	97.2%			

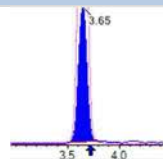
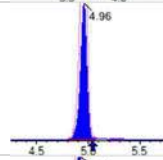
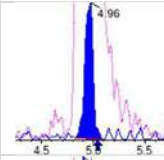
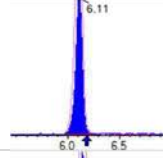
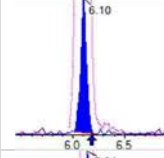
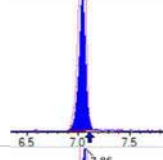
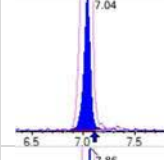
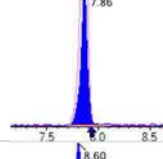
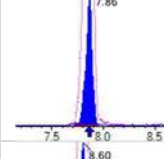
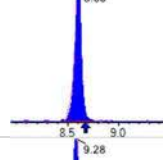
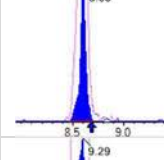
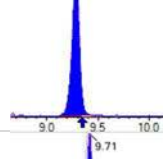
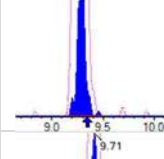
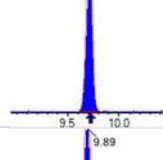
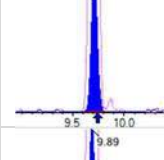
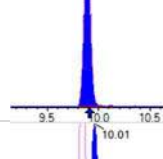
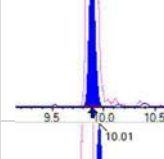
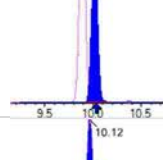
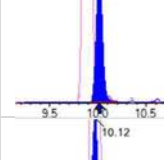
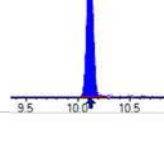
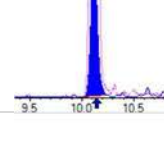
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 352198 (498.0 / 478.0) 8651	(10.16, 1.00) (0.00, N/A, 0.4)	513.9 157.2	0.0246 117.8 117.8	0.4906 [0.5000]	98.1%			
NMeFOSA	(511.9 / 219.0) 263260 (511.9 / 169.0) 153613	(10.60, 1.00) (0.00, N/A, 0.0)	638.7 672.6	0.5835 81.0 81.0	2.2704 [2.0000]	113.5%			
NEIFOSA	(526.0 / 219.0) 251838 (526.0 / 169.0) 278757	(10.68, 1.00) (0.00, N/A, 0.0)	1012.6 877.2	1.1069 104.7 104.7	1.9774 [2.0000]	98.9%			
NMeFOSAA	(570.0 / 419.0) 51544 (570.0 / 483.0) 33073	(9.48, 1.00) (0.00, N/A, -0.3)	116.9 95.9	0.6416 104.4 104.4	0.5096 [0.5000]	101.9%			
NEIFOSAA	(584.0 / 419.0) 57365 (584.0 / 526.0) 31030	(9.66, 1.00) (0.00, N/A, -0.4)	562.4 124.4	0.5409 73.8 73.8	0.5544 [0.5000]	110.9%			
NMeFOSE	(616.1 / 59.0) 54315	(10.56, 1.00) (0.00, N/A, 0.0)	454.0	N/A 0.0 0.0	1.8098 [2.0000]	90.5%			
NEtFOSE	(630.0 / 59.0) 10545	(10.66, 1.00) (0.01, N/A, 0.0)	298.7	N/A 0.0 0.0	1.8678 [2.0000]	93.4%			
HFPO-DA	(285.0 / 169.0) 90628 (285.0 / 185.0) 244184	(6.45, 1.00) (0.00, N/A, 0.3)	355.2 511.8	2.6944 98.2 98.2	1.0286 [1.0000]	102.9%			
ADONA	(377.0 / 85.0) 360241 (377.0 / 251.0) 45845	(7.35, 1.14) (N/A, -0.08, 0.0)	653.3 198.6	0.1273 102.2 102.2	0.9205 [0.9427]	97.6%			
9CI-Pf3ONS	(531.0 / 351.0) 951547 (533.0 / 353.0) 308143	(9.70, 1.50) (N/A, -0.03, 0.0)	461.5 485.9	0.3238 109.4 109.4	0.8553 [0.9333]	91.7%			
11CI-PF3OUDS	(631.0 / 451.0) 560809 (633.0 / 453.0) 162858	(9.99, 1.55) (N/A, -0.02, 0.0)	818.9 500.2	0.2904 87.8 87.8	1.0253 [0.9432]	108.7%			

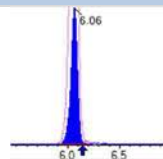
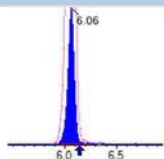
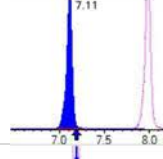
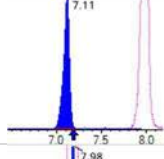
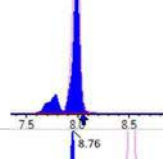
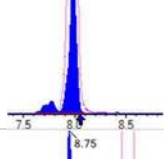
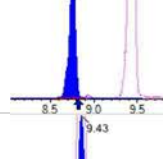
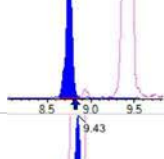
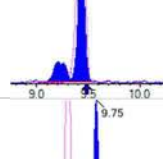
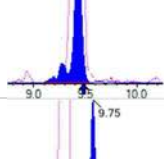
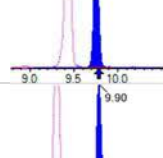
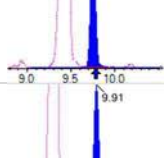
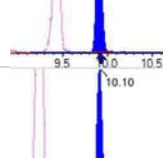
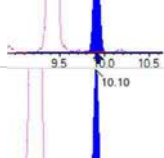
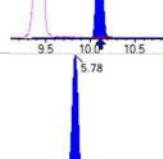
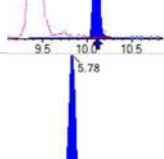
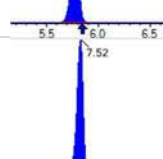
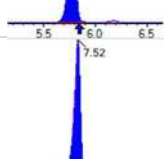
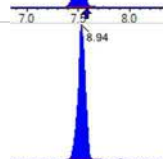
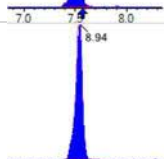
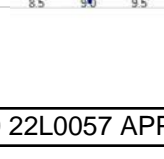
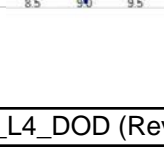
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 8941 (241.0 / 117.0) 17863	(4.43, 0.89) (N/A, -0.08, -0.1)	270.0 173.3	1.9979 119.4 119.4	1.7890 [2.0000]	89.5%			
5:3FTCA	(341.0 / 236.7) 83112 (341.0 / 217.0) 121575	(6.74, 1.10) (N/A, -0.08, 0.0)	282.1 320.5	1.4628 99.9 99.9	2.0050 [2.0000]	100.2%			
7:3FTCA	(441.0 / 317.0) 94595 (441.0 / 337.0) 73967	(8.56, 1.40) (N/A, -0.07, 0.0)	212.2 275.3	0.7819 93.4 93.4	1.9833 [2.0000]	99.2%			
PFEESA	(315.0 / 135.0) 227230 (315.0 / 83.0) 64514	(6.56, 1.07) (N/A, -0.08, 0.1)	666.6 216.3	0.2839 92.5 92.5	0.8847 [0.8925]	99.1%			
PFMPA	(229.0 / 85.0) 38716	(4.15, 0.84) (N/A, -0.08, 0.0)	651.7	N/A 0.0 0.0	0.9742 [1.0000]	97.4%			
PFMBA	(279.0 / 85.0) 138545	(5.34, 1.08) (N/A, -0.09, 0.0)	716.8	N/A 0.0 0.0	1.0085 [1.0000]	100.9%			
NFDHA	(295.0 / 201.0) 109976 (295.0 / 85.0) 101086	(5.98, 0.98) (N/A, -0.08, 0.0)	530.5 312.3	0.9192 104.1 104.1	0.9297 [1.0000]	93.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 145032	(3.65, N/A) (N/A, -0.07, N/A)	748.9	N/A	1.0419 [1.0000]	104.2% {95.6%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 249645	(6.11, N/A) (N/A, -0.08, N/A)	617.2	N/A	1.0811 [1.0000]	108.1% {106.7%}			
13C4_PFOA_IIS	(417.0 / 372.0) 223206	(7.85, N/A) (N/A, -0.08, N/A)	653.2	N/A	1.0153 [1.0000]	101.5% {93.8%}			
13C5_PFNA_IIS	(468.0 / 423.0) 192740	(8.59, N/A) (N/A, -0.08, N/A)	339.0	N/A	1.0408 [1.0000]	104.1% {95.3%}			

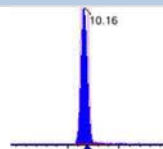
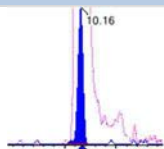
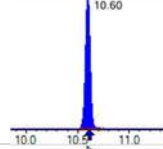
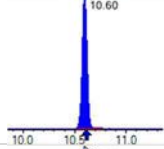
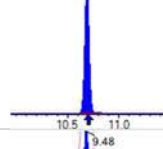
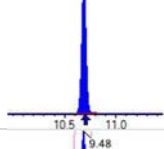
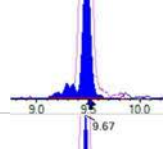
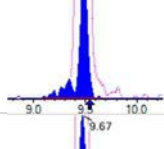
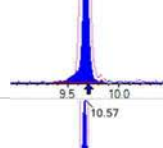
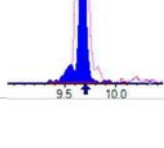
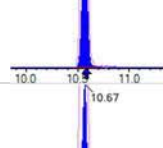
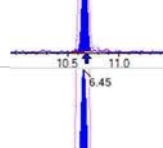
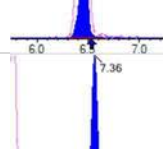
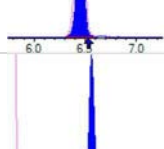
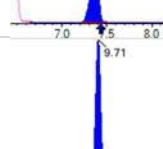
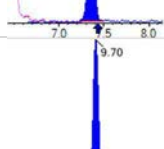
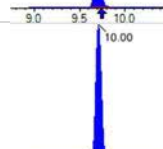
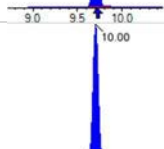
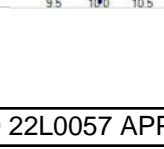
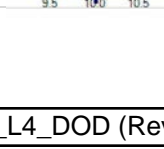
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 201200	(9.28, N/A) (N/A, -0.07, N/A)	450.6	N/A	1.0887 [1.0000]	108.9% { 115.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 391808	(7.98, N/A) (N/A, -0.07, N/A)	810.8	N/A	0.9705 [1.0000]	97.1% { 92.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 350992	(9.42, N/A) (N/A, -0.06, N/A)	464.9	N/A	1.0997 [1.0000]	110.0% { 107.1% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1214259	(3.65, N/A) (N/A, -0.07, N/A)	905.9	N/A	8.1347 [8.0000]	101.7% { 102.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 659529	(4.95, N/A) (N/A, -0.08, N/A)	789.0	N/A	3.7969 [4.0000]	94.9% { 94.8% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 546323	(6.10, N/A) (N/A, -0.08, N/A)	742.9	N/A	1.9017 [2.0000]	95.1% { 101.4% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 467878	(7.03, N/A) (N/A, -0.08, N/A)	943.4	N/A	1.8669 [2.0000]	93.3% { 95.3% }			
13C8_PFOA_EIS	(421.0 / 376.0) 486948	(7.85, N/A) (N/A, -0.08, N/A)	788.4	N/A	1.9893 [2.0000]	99.5% { 97.9% }			
13C9_PFNA_EIS	(472.0 / 427.0) 217999	(8.59, N/A) (N/A, -0.08, N/A)	418.4	N/A	1.0286 [1.0000]	102.9% { 99.7% }			
13C6_PFDA_EIS	(519.0 / 474.0) 249666	(9.26, N/A) (N/A, -0.08, N/A)	346.2	N/A	0.8725 [1.0000]	87.2% { 88.8% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 377869	(9.70, N/A) (N/A, -0.03, N/A)	445.6	N/A	0.9284 [1.0000]	92.8% { 94.9% }			

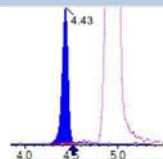
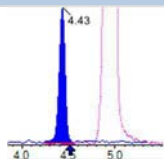
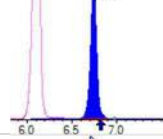
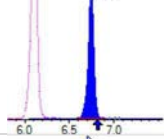
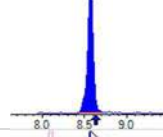
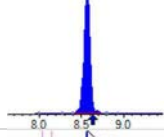
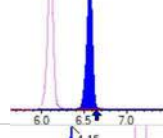
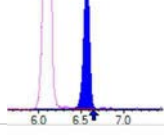
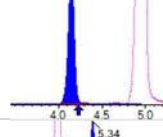
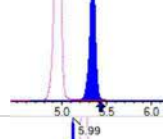
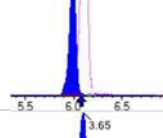
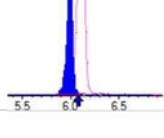
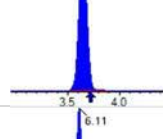
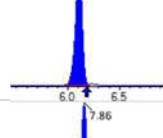
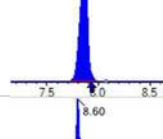
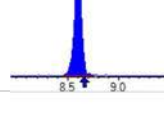
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 372869	(9.89, N/A) (N/A, -0.02, N/A)	424.9	N/A	0.9178 [1.0000]	91.8% { 96.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 238784	(10.12, N/A) (N/A, -0.01, N/A)	386.9	N/A	0.8850 [1.0000]	88.5% { 98.7% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1464188	(6.06, N/A) (N/A, -0.08, N/A)	862.0	N/A	2.2103 [2.0000]	110.5% { 106.6% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 772747	(7.97, N/A) (N/A, -0.08, N/A)	946.5	N/A	2.1924 [2.0000]	109.6% { 102.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1101471	(9.42, N/A) (N/A, -0.06, N/A)	400.8	N/A	1.8285 [2.0000]	91.4% { 92.5% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 240226	(5.77, N/A) (N/A, -0.08, N/A)	728.1	N/A	4.2815 [4.0000]	107.0% { 107.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 299151	(7.50, N/A) (N/A, -0.08, N/A)	829.8	N/A	4.4285 [4.0000]	110.7% { 109.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 254209	(8.93, N/A) (N/A, -0.07, N/A)	387.1	N/A	3.7592 [4.0000]	94.0% { 85.9% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1519271	(10.16, N/A) (N/A, -0.02, N/A)	650.9	N/A	1.9952 [2.0000]	99.8% { 103.7% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 284500	(10.59, N/A) (N/A, -0.02, N/A)	1128.4	N/A	1.7113 [2.0000]	85.6% { 86.2% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 282389	(10.68, N/A) (N/A, -0.01, N/A)	1021.0	N/A	1.8400 [2.0000]	92.0% { 99.2% }			

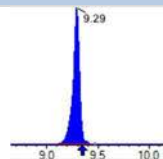
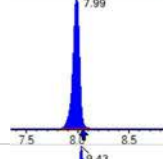
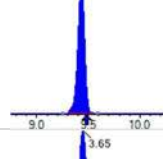
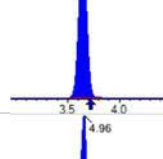
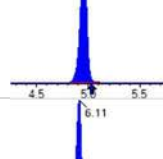
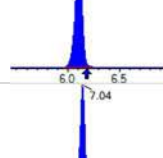
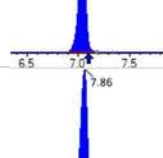
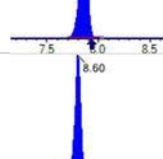
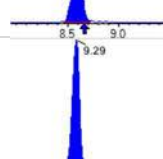
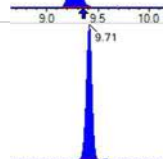
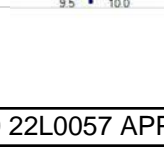
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 519161	(9.47, N/A) (N/A, -0.06, N/A)	335.3	N/A	3.6243 [4.0000]	90.6% { 101.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 461032	(9.66, N/A) (N/A, -0.03, N/A)	492.8	N/A	3.6515 [4.0000]	91.3% { 97.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 475546	(10.56, N/A) (N/A, -0.02, N/A)	945.0	N/A	20.3712 [20.0000]	101.9% { 110.2% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 220531	(10.65, N/A) (N/A, -0.02, N/A)	1126.5	N/A	20.7511 [20.0000]	103.8% { 120.9% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1159691	(6.45, N/A) (N/A, -0.08, N/A)	900.5	N/A	7.5925 [8.0000]	94.9% { 98.7% }			

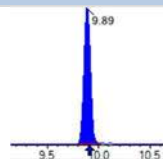
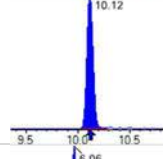
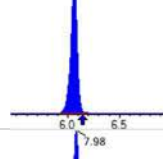
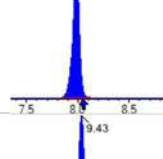
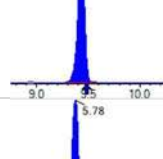
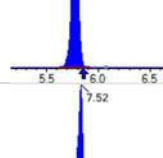
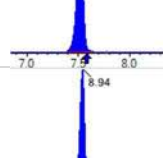
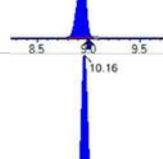
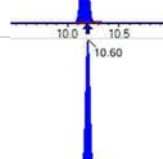
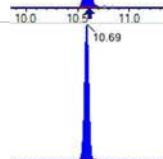
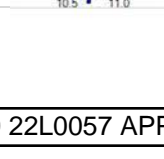
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 364131	(3.65, 1.00) (0.00, N/A, 0.0)	70.2	N/A 0.0 0.0	3.8803 [4.0000]	97.0%			
PFPeA	(262.9 / 219.0) 278554 (262.9 / 69.0) 3213	(4.96, 1.00) (0.00, N/A, -0.1)	617.6 57.0	0.0115 103.0 103.0	1.9980 [2.0000]	99.9%			
PFHxA	(313.0 / 269.0) 230736 (313.0 / 119.0) 17813	(6.11, 1.00) (0.00, N/A, 0.3)	411.0 127.8	0.0772 79.0 79.0	1.0595 [1.0000]	106.0%			
PFHpA	(363.0 / 319.0) 200810 (363.0 / 169.0) 53734	(7.04, 1.00) (0.00, N/A, 0.1)	368.9 203.8	0.2676 85.9 85.9	0.9983 [1.0000]	99.8%			
PFOA	(413.0 / 369.0) 205143 (413.0 / 169.0) 72948	(7.86, 1.00) (0.00, N/A, 0.0)	303.6 404.0	0.3556 108.8 108.8	0.9507 [1.0000]	95.1%			
PFNA	(463.0 / 419.0) 167406 (463.0 / 169.0) 35020	(8.60, 1.00) (0.00, N/A, 0.2)	279.7 86.6	0.2092 108.5 108.5	1.0679 [1.0000]	106.8%			
PFDA	(513.0 / 469.0) 260310 (513.0 / 169.0) 19191	(9.28, 1.00) (0.00, N/A, -0.3)	246.9 388.3	0.0737 77.1 77.1	0.9614 [1.0000]	96.1%			
PFUnA	(563.0 / 519.0) 242766 (563.0 / 169.0) 29112	(9.71, 1.00) (0.00, N/A, 0.0)	470.3 179.8	0.1199 138.1 138.1	0.8605 [1.0000]	86.1%			
PFDoA	(613.0 / 569.0) 276870 (613.0 / 169.0) 37204	(9.89, 1.00) (0.00, N/A, 0.1)	510.1 202.8	0.1344 96.5 96.5	0.8423 [1.0000]	84.2%			
PFTrDA	(663.0 / 619.0) 272310 (663.0 / 169.0) 51052	(10.01, 1.01) (N/A, -0.01, 0.2)	518.4 210.4	0.1875 91.6 91.6	0.9561 [1.0000]	95.6%			
PFTeDA	(713.0 / 669.0) 202539 (713.0 / 169.0) 35837	(10.12, 1.00) (0.00, N/A, -0.1)	464.6 111.3	0.1769 87.0 87.0	0.9914 [1.0000]	99.1%			

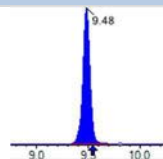
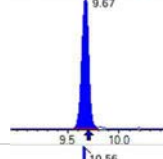
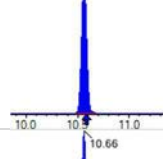
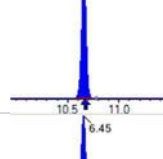
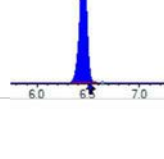
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 319512 (298.9 / 99.0) 214428	(6.06, 1.00) (0.00, N/A, 0.1)	552.7 573.6	0.6711 109.0 109.0	0.8374 [0.8847]	94.7%			
PFPeS	(349.0 / 80.0) 558156 (349.0 / 99.0) 204172	(7.11, 0.89) (N/A, -0.07, -0.2)	726.6 707.2	0.3658 102.8 102.8	0.9319 [0.9384]	99.3%			
PFHxS	(399.0 / 80.0) 460645 (399.0 / 99.0) 168480	(7.99, 1.00) (0.00, N/A, 0.2)	4071.9 6022.7	0.3657 108.8 108.8	0.8844 [0.9110]	97.1%			
PFHpS	(449.0 / 80.0) 399999 (449.0 / 99.0) 119983	(8.76, 0.93) (N/A, -0.06, -0.2)	473.2 390.9	0.3000 109.6 109.6	0.8477 [0.9514]	89.1%			
PFOS	(499.0 / 80.0) 510216 (499.0 / 99.0) 119134	(9.43, 1.00) (0.00, N/A, 0.3)	371.9 120.6	0.2335 96.0 96.0	0.8692 [0.9275]	93.7%			
PFNS	(549.0 / 80.0) 600745 (549.0 / 99.0) 129442	(9.75, 1.03) (N/A, -0.02, 0.2)	640.1 539.0	0.2155 88.3 88.3	0.9226 [0.9599]	96.1%			
PFDS	(599.0 / 80.0) 650063 (599.0 / 99.0) 165992	(9.90, 1.05) (N/A, -0.02, -0.4)	597.2 555.1	0.2553 113.4 113.4	0.8993 [0.9631]	93.4%			
PFDoS	(698.9 / 80.0) 310556 (698.9 / 99.0) 62440	(10.10, 1.07) (N/A, -0.01, 0.2)	612.5 270.2	0.2011 82.2 82.2	1.0279 [0.9696]	106.0%			
4:2FTS	(327.0 / 307.0) 734838 (327.0 / 81.0) 391330	(5.78, 1.00) (0.00, N/A, 0.0)	955.1 537.9	0.5325 107.8 107.8	3.8805 [3.7381]	103.8%			
6:2FTS	(427.0 / 407.0) 417365 (427.0 / 81.0) 267446	(7.52, 1.00) (0.00, N/A, -0.3)	653.9 548.6	0.6408 82.3 82.3	3.6814 [3.7962]	97.0%			
8:2FTS	(527.0 / 507.0) 398366 (527.0 / 81.0) 261360	(8.94, 1.00) (0.00, N/A, -0.3)	438.4 397.1	0.6561 115.9 115.9	3.3122 [3.8332]	86.4%			

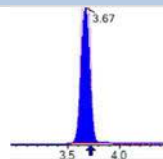
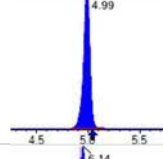
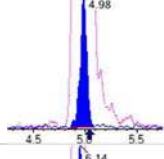
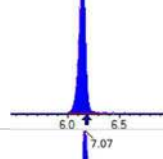
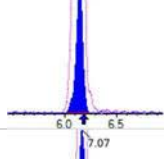
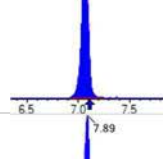
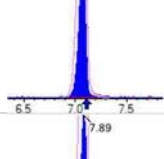
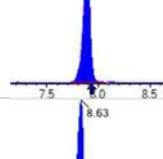
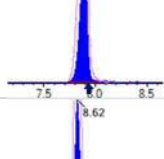
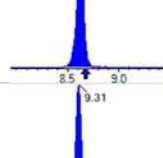
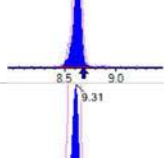
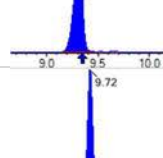
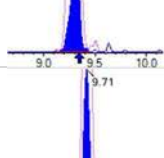
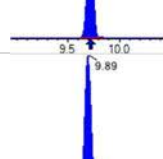
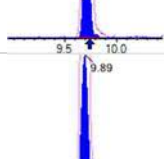
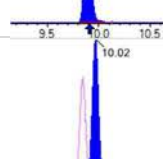
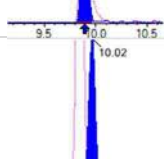
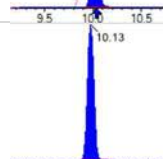
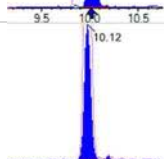
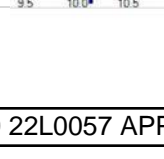
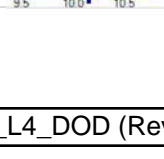
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 634394 (498.0 / 478.0) 14236	(10.16, 1.00) (0.00, N/A, 0.3)	672.1 142.6	0.0224 107.7 107.7	1.0186 [1.0000]	101.9%			
NMeFOSA	(511.9 / 219.0) 481844 (511.9 / 169.0) 311400	(10.60, 1.00) (0.00, N/A, 0.1)	1243.8 1242.2	0.6463 89.7 89.7	3.9784 [4.0000]	99.5%			
NEiFOSA	(526.0 / 219.0) 509457 (526.0 / 169.0) 556544	(10.69, 1.00) (0.00, N/A, 0.0)	1029.5 1040.4	1.0924 103.3 103.3	3.8752 [4.0000]	96.9%			
NMeFOSAA	(570.0 / 419.0) 98460 (570.0 / 483.0) 45291	(9.48, 1.00) (0.00, N/A, -0.2)	201.1 368.1	0.4600 74.8 74.8	0.9589 [1.0000]	95.9%			
NEiFOSAA	(584.0 / 419.0) 100078 (584.0 / 526.0) 64349	(9.67, 1.00) (0.00, N/A, 0.1)	308.0 11085.9	0.6430 87.7 87.7	0.9729 [1.0000]	97.3%			
NMeFOSE	(616.1 / 59.0) 109477	(10.57, 1.00) (0.00, N/A, 0.0)	635.3	N/A 0.0 0.0	4.0466 [4.0000]	101.2%			
NEiFOSE	(630.0 / 59.0) 18470	(10.67, 1.00) (0.01, N/A, 0.0)	332.3	N/A 0.0 0.0	3.6420 [4.0000]	91.1%			
HFPO-DA	(285.0 / 169.0) 157217 (285.0 / 185.0) 447290	(6.45, 1.00) (0.00, N/A, 0.0)	473.3 607.4	2.8450 103.7 103.7	1.8500 [2.0000]	92.5%			
ADONA	(377.0 / 85.0) 712997 (377.0 / 251.0) 91158	(7.36, 1.14) (N/A, -0.07, 0.0)	873.4 270.7	0.1279 102.7 102.7	1.8890 [1.8854]	100.2%			
9CI-Pf3ONS	(531.0 / 351.0) 2025171 (533.0 / 353.0) 608975	(9.71, 1.50) (N/A, -0.03, 0.1)	727.3 554.2	0.3007 101.6 101.6	1.9101 [1.8665]	102.3%			
11CI-PF3OUDS	(631.0 / 451.0) 945192 (633.0 / 453.0) 304735	(10.00, 1.55) (N/A, -0.01, -0.1)	1065.3 837.5	0.3224 97.5 97.5	1.7916 [1.8864]	95.0%			

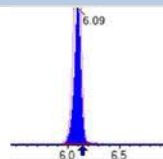
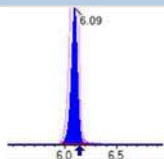
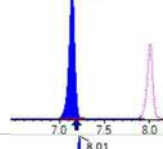
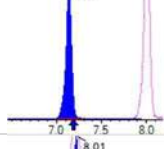
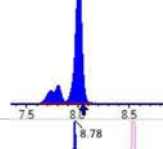
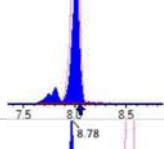
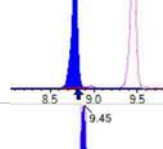
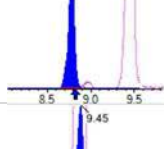
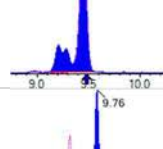
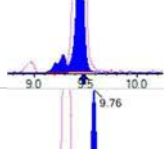
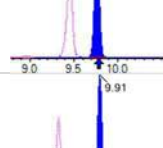
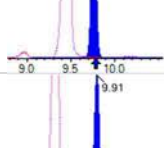
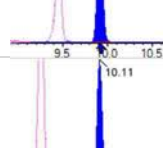
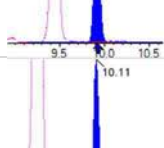
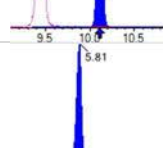
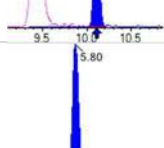
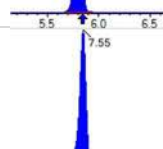
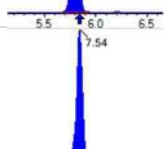
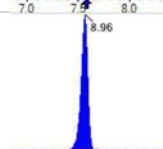
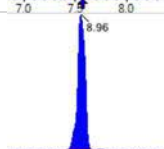
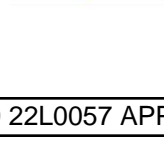

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 19424 (241.0 / 117.0) 28656	(4.43, 0.89) (N/A, -0.08, 0.0)	383.0 238.7	1.4753 88.2 88.2	4.0370 [4.0000]	100.9%			
5:3FTCA	(341.0 / 236.7) 163618 (341.0 / 217.0) 258573	(6.74, 1.10) (N/A, -0.08, -0.1)	567.6 530.2	1.5803 108.0 108.0	4.2520 [4.0000]	106.3%			
7:3FTCA	(441.0 / 317.0) 173439 (441.0 / 337.0) 148204	(8.57, 1.40) (N/A, -0.06, 0.2)	277.8 265.5	0.8545 102.0 102.0	3.9172 [4.0000]	97.9%			
PFEESA	(315.0 / 135.0) 425676 (315.0 / 83.0) 120482	(6.57, 1.08) (N/A, -0.07, 0.1)	558.7 464.3	0.2830 92.2 92.2	1.7854 [1.7849]	100.0%			
PFMPA	(229.0 / 85.0) 73196	(4.15, 0.84) (N/A, -0.08, 0.0)	797.4	N/A 0.0 0.0	1.9130 [2.0000]	95.6%			
PFMBA	(279.0 / 85.0) 259517	(5.34, 1.08) (N/A, -0.08, 0.0)	721.2	N/A 0.0 0.0	1.9622 [2.0000]	98.1%			
NFDHA	(295.0 / 201.0) 219791 (295.0 / 85.0) 199407	(5.99, 0.98) (N/A, -0.08, -0.1)	614.7 459.5	0.9073 102.8 102.8	2.0016 [2.0000]	100.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 133715	(3.65, N/A) (N/A, -0.07, N/A)	699.9	N/A	0.9606 [1.0000]	96.1% {88.1%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 210807	(6.11, N/A) (N/A, -0.08, N/A)	520.8	N/A	0.9129 [1.0000]	91.3% {90.1%}			
13C4_PFOA_IIS	(417.0 / 372.0) 203834	(7.86, N/A) (N/A, -0.07, N/A)	799.6	N/A	0.9272 [1.0000]	92.7% {85.6%}			
13C5_PFNA_IIS	(468.0 / 423.0) 176714	(8.60, N/A) (N/A, -0.07, N/A)	380.6	N/A	0.9543 [1.0000]	95.4% {87.4%}			

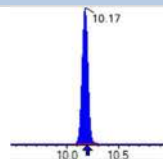
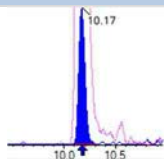
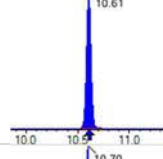
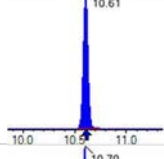
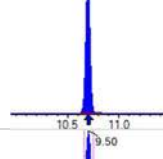
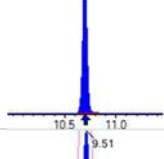
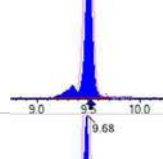
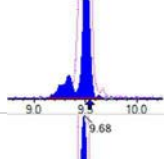
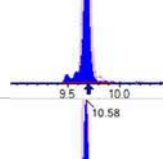
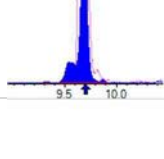
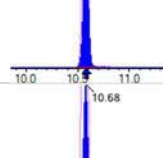
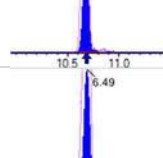
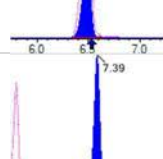
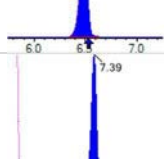
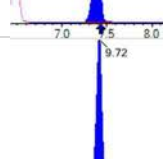
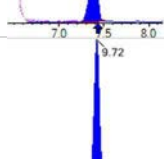
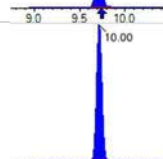
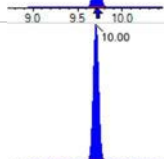
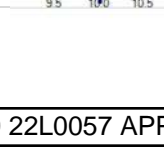
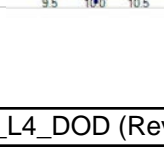
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 164172	(9.29, N/A) (N/A, -0.05, N/A)	395.8	N/A	0.8883 [1.0000]	88.8% { 94.4% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 382941	(7.99, N/A) (N/A, -0.06, N/A)	781.0	N/A	0.9486 [1.0000]	94.9% { 90.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 302129	(9.43, N/A) (N/A, -0.05, N/A)	425.5	N/A	0.9466 [1.0000]	94.7% { 92.2% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1150744	(3.65, N/A) (N/A, -0.07, N/A)	926.2	N/A	8.3617 [8.0000]	104.5% { 96.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 634958	(4.96, N/A) (N/A, -0.08, N/A)	725.6	N/A	4.3289 [4.0000]	108.2% { 91.2% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 507144	(6.11, N/A) (N/A, -0.08, N/A)	760.2	N/A	2.0905 [2.0000]	104.5% { 94.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 441364	(7.04, N/A) (N/A, -0.07, N/A)	592.1	N/A	2.0856 [2.0000]	104.3% { 89.9% }			
13C8_PFOA_EIS	(421.0 / 376.0) 438874	(7.86, N/A) (N/A, -0.06, N/A)	718.6	N/A	1.9633 [2.0000]	98.2% { 88.2% }			
13C9_PFNA_EIS	(472.0 / 427.0) 182699	(8.60, N/A) (N/A, -0.07, N/A)	305.7	N/A	0.9402 [1.0000]	94.0% { 83.5% }			
13C6_PFDA_EIS	(519.0 / 474.0) 284465	(9.29, N/A) (N/A, -0.06, N/A)	596.1	N/A	1.2183 [1.0000]	121.8% { 101.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 356973	(9.71, N/A) (N/A, -0.02, N/A)	765.7	N/A	1.0748 [1.0000]	107.5% { 89.6% }			

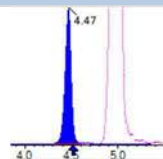
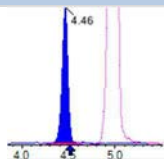
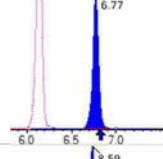
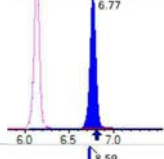
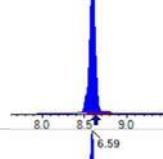
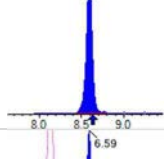
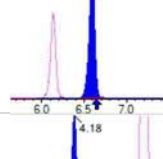
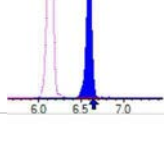
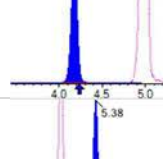
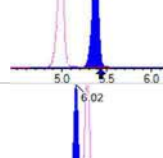
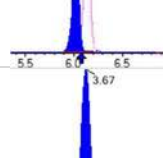
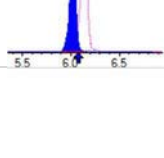
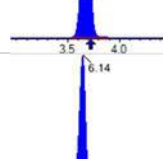
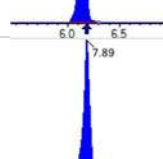
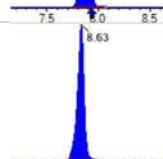
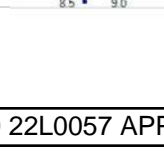
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 381316	(9.89, N/A) (N/A, -0.02, N/A)	333.2	N/A	1.1503 [1.0000]	115.0% { 98.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 230518	(10.12, N/A) (N/A, -0.02, N/A)	370.4	N/A	1.0471 [1.0000]	104.7% { 95.3% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1391867	(6.06, N/A) (N/A, -0.08, N/A)	799.8	N/A	2.1497 [2.0000]	107.5% { 101.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 670509	(7.98, N/A) (N/A, -0.07, N/A)	1003.2	N/A	1.9464 [2.0000]	97.3% { 88.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1081560	(9.43, N/A) (N/A, -0.05, N/A)	480.5	N/A	2.0858 [2.0000]	104.3% { 90.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 229082	(5.78, N/A) (N/A, -0.08, N/A)	619.0	N/A	4.1774 [4.0000]	104.4% { 102.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 294946	(7.52, N/A) (N/A, -0.06, N/A)	799.8	N/A	4.4673 [4.0000]	111.7% { 107.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 303660	(8.94, N/A) (N/A, -0.06, N/A)	479.0	N/A	4.5945 [4.0000]	114.9% { 102.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1318009	(10.16, N/A) (N/A, -0.02, N/A)	652.5	N/A	2.0109 [2.0000]	100.5% { 89.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 297155	(10.60, N/A) (N/A, -0.01, N/A)	855.7	N/A	2.0764 [2.0000]	103.8% { 90.0% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 291494	(10.69, N/A) (N/A, -0.01, N/A)	862.4	N/A	2.2065 [2.0000]	110.3% { 102.4% }			

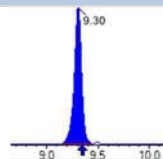
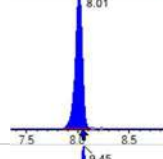
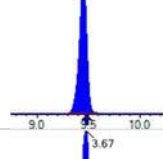
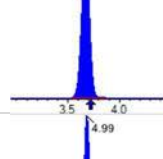
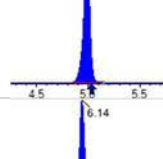
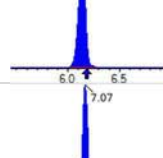
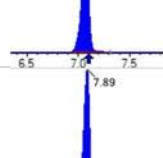
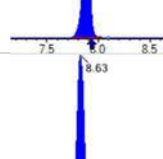
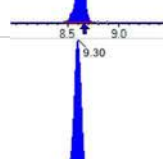
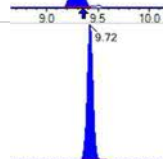
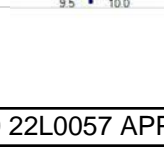
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 527024	(9.48, N/A) (N/A, -0.05, N/A)	346.8	N/A	4.2742 [4.0000]	106.9% { 103.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 458315	(9.67, N/A) (N/A, -0.02, N/A)	278.5	N/A	4.2171 [4.0000]	105.4% { 97.2% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 428676	(10.56, N/A) (N/A, -0.01, N/A)	1166.0	N/A	21.3333 [20.0000]	106.7% { 99.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 198093	(10.66, N/A) (N/A, -0.01, N/A)	1164.8	N/A	21.6544 [20.0000]	108.3% { 108.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1118507	(6.45, N/A) (N/A, -0.07, N/A)	638.3	N/A	8.6720 [8.0000]	108.4% { 95.2% }			

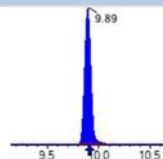
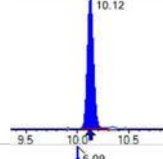
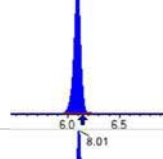
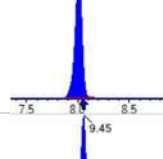
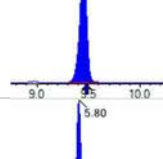
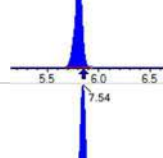
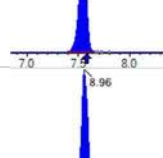
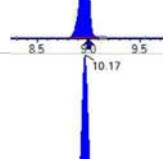
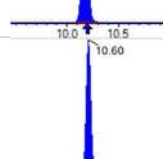
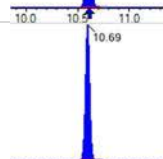
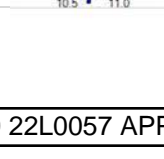
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 819896	(3.67, 1.00) (0.00, N/A, 0.0)	63.2	N/A 0.0 0.0	8.3322 [8.0000]	104.2%			
PFPeA	(262.9 / 219.0) 603288 (262.9 / 69.0) 6873	(4.99, 1.00) (0.00, N/A, 0.1)	714.5 139.6	0.0114 101.8 101.8	4.1560 [4.0000]	103.9%			
PFHxA	(313.0 / 269.0) 494481 (313.0 / 119.0) 48652	(6.14, 1.00) (0.00, N/A, -0.1)	480.7 302.7	0.0984 100.6 100.6	1.9728 [2.0000]	98.6%			
PFHpA	(363.0 / 319.0) 430799 (363.0 / 169.0) 129319	(7.07, 1.00) (0.00, N/A, -0.1)	617.2 361.9	0.3002 96.4 96.4	1.9616 [2.0000]	98.1%			
PFOA	(413.0 / 369.0) 498516 (413.0 / 169.0) 142531	(7.89, 1.00) (0.00, N/A, 0.1)	597.7 530.3	0.2859 87.5 87.5	1.9165 [2.0000]	95.8%			
PFNA	(463.0 / 419.0) 393754 (463.0 / 169.0) 83708	(8.63, 1.00) (0.00, N/A, 0.1)	416.4 106.0	0.2126 110.3 110.3	2.1745 [2.0000]	108.7%			
PFDA	(513.0 / 469.0) 564787 (513.0 / 169.0) 47750	(9.31, 1.00) (0.01, N/A, 0.1)	378.6 169.7	0.0845 88.5 88.5	2.2443 [2.0000]	112.2%			
PFUnA	(563.0 / 519.0) 658503 (563.0 / 169.0) 61653	(9.72, 1.00) (0.00, N/A, 0.4)	479.7 518.5	0.0936 107.8 107.8	2.0992 [2.0000]	105.0%			
PFDoA	(613.0 / 569.0) 675921 (613.0 / 169.0) 81123	(9.89, 1.00) (0.00, N/A, 0.2)	691.3 232.1	0.1200 86.2 86.2	1.9103 [2.0000]	95.5%			
PFTrDA	(663.0 / 619.0) 588988 (663.0 / 169.0) 110050	(10.02, 1.01) (N/A, 0.00, 0.1)	577.9 302.6	0.1868 91.3 91.3	1.9213 [2.0000]	96.1%			
PFTeDA	(713.0 / 669.0) 446345 (713.0 / 169.0) 83837	(10.13, 1.00) (0.00, N/A, 0.2)	486.0 629.5	0.1878 92.4 92.4	2.0034 [2.0000]	100.2%			

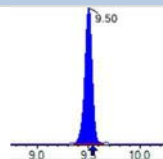
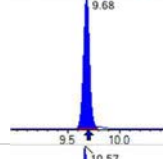
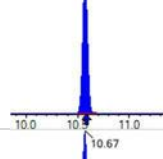
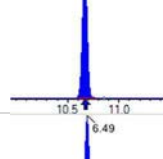
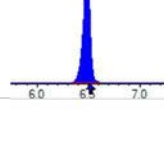
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 711903 (298.9 / 99.0) 484739	(6.09, 1.00) (0.00, N/A, 0.1)	731.9 757.9	0.6809 110.6 110.6	1.7756 [1.7695]	100.3%			
PFPeS	(349.0 / 80.0) 1288227 (349.0 / 99.0) 474774	(7.14, 0.89) (N/A, -0.04, 0.1)	707.6 705.0	0.3685 103.5 103.5	2.0076 [1.8768]	107.0%			
PFHxS	(399.0 / 80.0) 1027828 (399.0 / 99.0) 345011	(8.01, 1.00) (0.00, N/A, 0.0)	4264.5 49182.2	0.3357 99.9 99.9	1.8419 [1.8220]	101.1%			
PFHpS	(449.0 / 80.0) 977429 (449.0 / 99.0) 288763	(8.78, 0.93) (N/A, -0.04, 0.1)	730.0 481.1	0.2954 107.9 107.9	1.9191 [1.9028]	100.9%			
PFOS	(499.0 / 80.0) 1204037 (499.0 / 99.0) 223557	(9.45, 1.00) (0.00, N/A, 0.0)	87.9 105.3	0.1857 76.3 76.3	1.9004 [1.8550]	102.4%			
PFNS	(549.0 / 80.0) 1450440 (549.0 / 99.0) 305867	(9.76, 1.03) (N/A, -0.01, 0.0)	792.8 564.7	0.2109 86.4 86.4	2.0637 [1.9198]	107.5%			
PFDS	(599.0 / 80.0) 1519940 (599.0 / 99.0) 390353	(9.91, 1.05) (N/A, -0.01, -0.1)	861.1 462.0	0.2568 114.1 114.1	1.9480 [1.9262]	101.1%			
PFDoS	(698.9 / 80.0) 616036 (698.9 / 99.0) 122817	(10.11, 1.07) (N/A, -0.01, 0.2)	806.8 368.4	0.1994 81.5 81.5	1.8891 [1.9391]	97.4%			
4:2FTS	(327.0 / 307.0) 1460214 (327.0 / 81.0) 931969	(5.81, 1.00) (0.00, N/A, 0.3)	781.6 741.8	0.6382 129.2 129.2	7.3058 [7.4762]	97.7%			
6:2FTS	(427.0 / 407.0) 816068 (427.0 / 81.0) 629698	(7.55, 1.00) (0.00, N/A, 0.2)	696.5 806.5	0.7716 99.2 99.2	8.1240 [7.5923]	107.0%			
8:2FTS	(527.0 / 507.0) 874574 (527.0 / 81.0) 575440	(8.96, 1.00) (0.00, N/A, 0.1)	521.2 496.1	0.6580 116.2 116.2	7.8272 [7.6663]	102.1%			

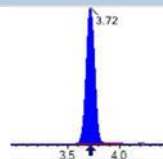
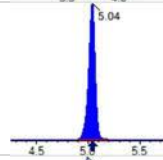
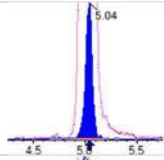
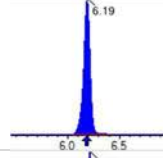
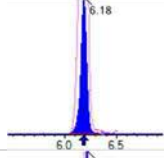
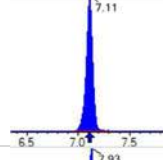
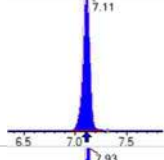
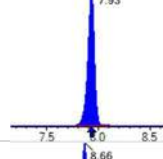
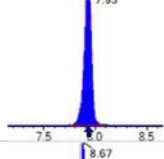
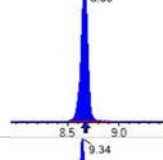
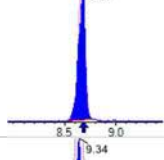
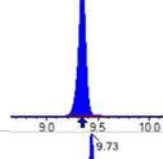
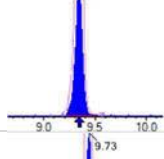
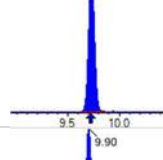
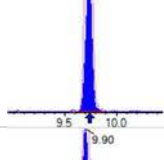
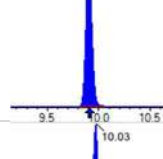
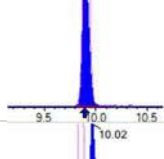
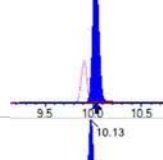
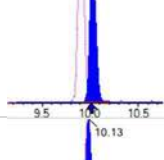
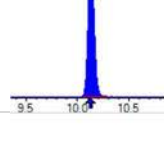
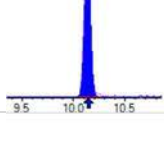
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 1485959 (498.0 / 478.0) 31674	(10.17, 1.00) (0.00, N/A, 0.2)	990.0 142.4	0.0213 102.3 102.3	2.1663 [2.0000]	108.3%			
NMeFOSA	(511.9 / 219.0) 1078575 (511.9 / 169.0) 708121	(10.61, 1.00) (0.00, N/A, 0.0)	1225.7 994.7	0.6565 91.2 91.2	8.7756 [8.0000]	109.7%			
NEIFOSA	(526.0 / 219.0) 1148331 (526.0 / 169.0) 1200365	(10.70, 1.00) (0.00, N/A, 0.0)	776.2 1306.9	1.0453 98.8 98.8	8.6933 [8.0000]	108.7%			
NMeFOSAA	(570.0 / 419.0) 241345 (570.0 / 483.0) 110259	(9.50, 1.00) (0.00, N/A, -0.4)	387.8 310.6	0.4569 74.3 74.3	2.3829 [2.0000]	119.1%			
NEIFOSAA	(584.0 / 419.0) 216496 (584.0 / 526.0) 131164	(9.68, 1.00) (0.00, N/A, -0.3)	488.0 17276.9	0.6059 82.6 82.6	1.8426 [2.0000]	92.1%			
NMeFOSE	(616.1 / 59.0) 263519	(10.58, 1.00) (0.01, N/A, 0.0)	1098.0	N/A 0.0 0.0	8.8080 [8.0000]	110.1%			
NEtFOSE	(630.0 / 59.0) 44341	(10.68, 1.00) (0.01, N/A, 0.0)	785.9	N/A 0.0 0.0	8.2657 [8.0000]	103.3%			
HFPO-DA	(285.0 / 169.0) 361196 (285.0 / 185.0) 1050555	(6.49, 1.00) (0.00, N/A, 0.1)	772.7 816.6	2.9085 106.0 106.0	4.2149 [4.0000]	105.4%			
ADONA	(377.0 / 85.0) 1531070 (377.0 / 251.0) 192620	(7.39, 1.14) (N/A, -0.04, 0.0)	808.7 452.2	0.1258 101.0 101.0	4.0224 [3.7708]	106.7%			
9CI-Pf3ONS	(531.0 / 351.0) 4127226 (533.0 / 353.0) 1353329	(9.72, 1.50) (N/A, -0.01, 0.1)	633.0 677.8	0.3279 110.8 110.8	3.9027 [3.7330]	104.5%			
11CI-PF3OUDS	(631.0 / 451.0) 2164994 (633.0 / 453.0) 639114	(10.00, 1.54) (N/A, -0.01, 0.2)	1045.2 822.2	0.2952 89.2 89.2	4.0695 [3.7728]	107.9%			

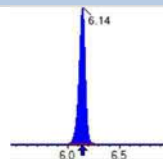
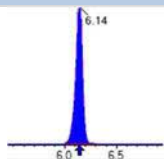
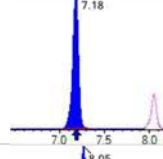
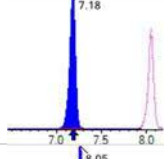
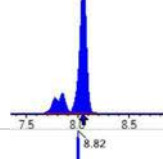
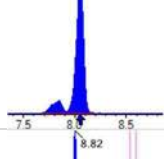
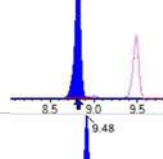
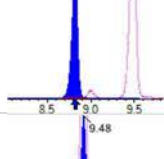
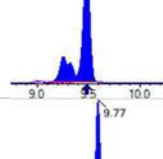
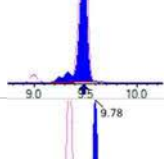
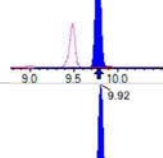
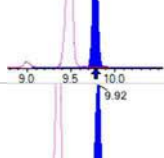
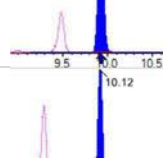
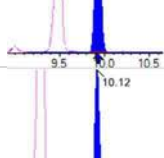
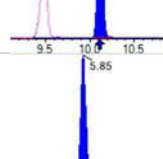
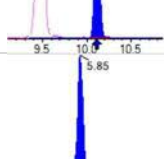
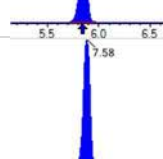
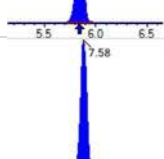
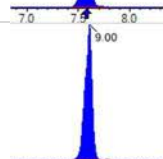
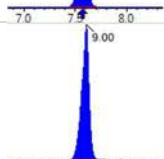
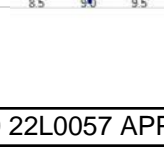
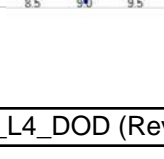
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 40453 (241.0 / 117.0) 66448	(4.47, 0.90) (N/A, -0.05, 0.1)	490.7 413.9	1.6426 98.2 98.2	8.0746 [8.0000]	100.9%			
5:3FTCA	(341.0 / 236.7) 329758 (341.0 / 217.0) 527254	(6.77, 1.10) (N/A, -0.05, 0.1)	661.0 537.3	1.5989 109.2 109.2	7.4457 [8.0000]	93.1%			
7:3FTCA	(441.0 / 317.0) 392499 (441.0 / 337.0) 316116	(8.59, 1.40) (N/A, -0.04, 0.1)	337.8 309.6	0.8054 96.2 96.2	7.7021 [8.0000]	96.3%			
PFEESA	(315.0 / 135.0) 963848 (315.0 / 83.0) 290484	(6.59, 1.07) (N/A, -0.05, 0.0)	701.2 684.7	0.3014 98.2 98.2	3.5124 [3.5698]	98.4%			
PFMPA	(229.0 / 85.0) 159859	(4.18, 0.84) (N/A, -0.05, 0.0)	785.7	N/A 0.0 0.0	4.0125 [4.0000]	100.3%			
PFMBA	(279.0 / 85.0) 557038	(5.38, 1.08) (N/A, -0.05, 0.0)	765.0	N/A 0.0 0.0	4.0451 [4.0000]	101.1%			
NFDHA	(295.0 / 201.0) 513792 (295.0 / 85.0) 442175	(6.02, 0.98) (N/A, -0.05, 0.0)	639.9 677.3	0.8606 97.5 97.5	4.0653 [4.0000]	101.6%			
13C3_PFBA_IIS	(216.0 / 172.0) 147062	(3.67, N/A) (N/A, -0.05, N/A)	798.2	N/A	1.0565 [1.0000]	105.7% { 96.9% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 235070	(6.14, N/A) (N/A, -0.04, N/A)	582.4	N/A	1.0180 [1.0000]	101.8% { 100.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 228180	(7.89, N/A) (N/A, -0.04, N/A)	542.9	N/A	1.0379 [1.0000]	103.8% { 95.9% }			
13C5_PFNA_IIS	(468.0 / 423.0) 190318	(8.63, N/A) (N/A, -0.04, N/A)	398.2	N/A	1.0277 [1.0000]	102.8% { 94.1% }			

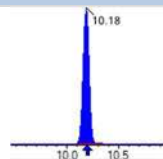
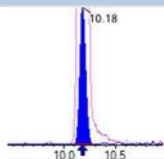
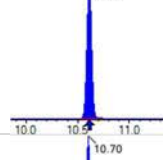
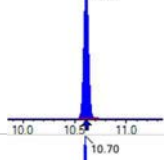
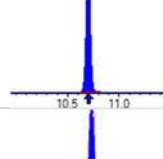
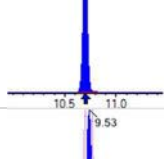
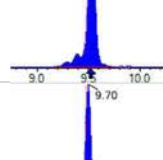
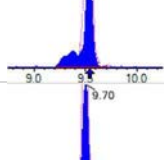
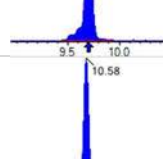
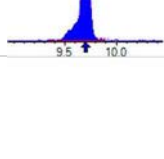
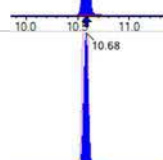
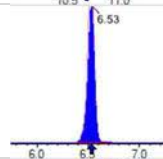
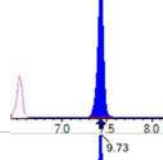
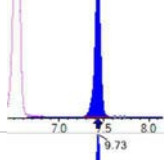
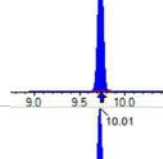
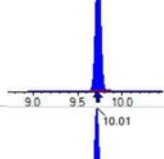
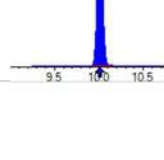
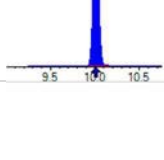
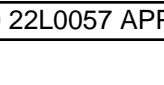
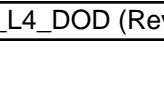
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 163196	(9.30, N/A) (N/A, -0.04, N/A)	351.2	N/A	0.8831 [1.0000]	88.3% { 93.9% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 399114	(8.01, N/A) (N/A, -0.04, N/A)	644.1	N/A	0.9886 [1.0000]	98.9% { 94.4% }			
13C4_PFOS_IIS	(502.8 / 79.9) 313371	(9.45, N/A) (N/A, -0.03, N/A)	470.2	N/A	0.9818 [1.0000]	98.2% { 95.6% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1206655	(3.67, N/A) (N/A, -0.05, N/A)	920.8	N/A	7.9721 [8.0000]	99.7% { 101.3% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 661139	(4.99, N/A) (N/A, -0.05, N/A)	803.5	N/A	4.0422 [4.0000]	101.1% { 95.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 583697	(6.14, N/A) (N/A, -0.05, N/A)	813.5	N/A	2.1578 [2.0000]	107.9% { 108.3% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 481858	(7.07, N/A) (N/A, -0.04, N/A)	625.4	N/A	2.0419 [2.0000]	102.1% { 98.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 529026	(7.89, N/A) (N/A, -0.04, N/A)	717.1	N/A	2.1141 [2.0000]	105.7% { 106.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 211031	(8.63, N/A) (N/A, -0.04, N/A)	522.0	N/A	1.0084 [1.0000]	100.8% { 96.5% }			
13C6_PFDA_EIS	(519.0 / 474.0) 264380	(9.30, N/A) (N/A, -0.04, N/A)	286.1	N/A	1.1391 [1.0000]	113.9% { 94.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 396942	(9.72, N/A) (N/A, -0.01, N/A)	636.0	N/A	1.2023 [1.0000]	120.2% { 99.7% }			

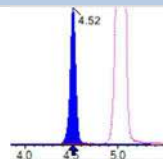
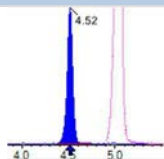
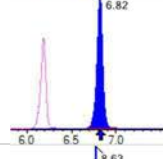
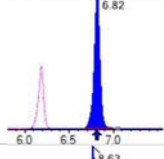
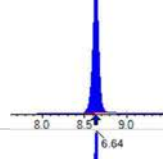
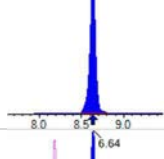
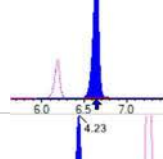
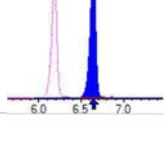
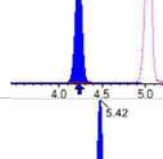
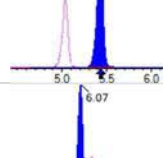
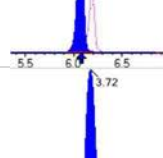
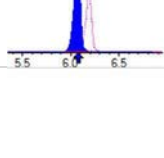
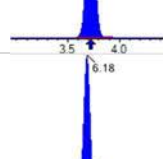
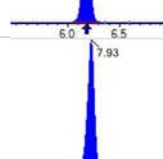
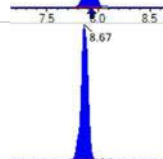
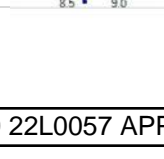
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 410435	(9.89, N/A) (N/A, -0.01, N/A)	625.4	N/A	1.2456 [1.0000]	124.6% { 105.9% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 251385	(10.12, N/A) (N/A, -0.01, N/A)	364.3	N/A	1.1487 [1.0000]	114.9% { 103.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1462627	(6.09, N/A) (N/A, -0.05, N/A)	798.2	N/A	2.1675 [2.0000]	108.4% { 106.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 718366	(8.01, N/A) (N/A, -0.04, N/A)	884.3	N/A	2.0008 [2.0000]	100.0% { 95.3% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1167403	(9.45, N/A) (N/A, -0.03, N/A)	347.8	N/A	2.1706 [2.0000]	108.5% { 98.1% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 241790	(5.80, N/A) (N/A, -0.05, N/A)	780.0	N/A	4.2305 [4.0000]	105.8% { 107.9% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 261330	(7.54, N/A) (N/A, -0.04, N/A)	519.2	N/A	3.7978 [4.0000]	94.9% { 95.2% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 282103	(8.96, N/A) (N/A, -0.04, N/A)	454.9	N/A	4.0954 [4.0000]	102.4% { 95.3% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1451627	(10.17, N/A) (N/A, -0.01, N/A)	856.3	N/A	2.1353 [2.0000]	106.8% { 99.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 301552	(10.60, N/A) (N/A, 0.00, N/A)	1022.7	N/A	2.0316 [2.0000]	101.6% { 91.4% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 292885	(10.69, N/A) (N/A, 0.00, N/A)	1224.3	N/A	2.1375 [2.0000]	106.9% { 102.9% }			

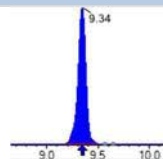
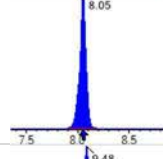
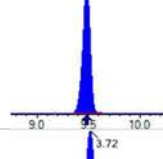
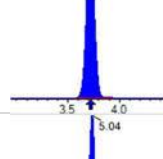
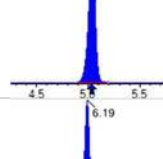
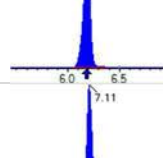
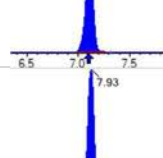
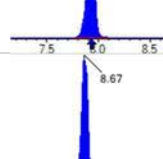
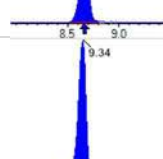
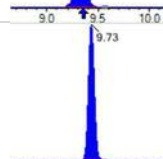
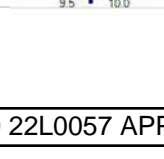
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 519867	(9.50, N/A) (N/A, -0.03, N/A)	351.6	N/A	4.0649 [4.0000]	101.6% { 101.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 523494	(9.68, N/A) (N/A, -0.01, N/A)	328.8	N/A	4.6440 [4.0000]	116.1% { 111.1% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 474063	(10.57, N/A) (N/A, 0.00, N/A)	906.7	N/A	22.7456 [20.0000]	113.7% { 109.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 209537	(10.67, N/A) (N/A, -0.01, N/A)	1132.4	N/A	22.0836 [20.0000]	110.4% { 114.8% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1127924	(6.49, N/A) (N/A, -0.04, N/A)	814.1	N/A	7.8424 [8.0000]	98.0% { 96.0% }			

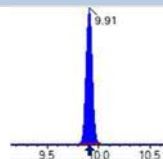
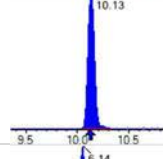
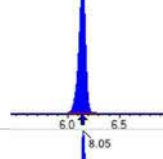
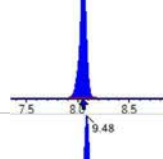
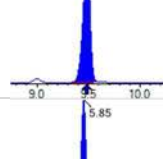
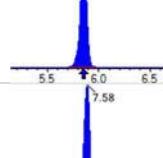
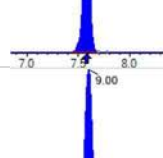
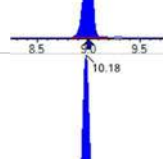
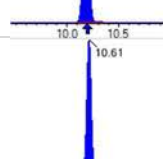
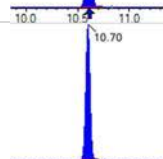
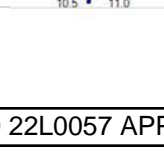
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 1990225	(3.72, 1.00) (0.00, N/A, 0.0)	64.8	N/A 0.0 0.0	20.4982 [20.0000]	102.5%			
PFPeA	(262.9 / 219.0) 1442100 (262.9 / 69.0) 16141	(5.04, 1.00) (0.00, N/A, 0.1)	681.9 331.7	0.0112 100.0 100.0	9.4373 [10.0000]	94.4%			
PFHxA	(313.0 / 269.0) 1106970 (313.0 / 119.0) 108235	(6.19, 1.00) (0.00, N/A, 0.1)	659.6 460.1	0.0978 100.0 100.0	4.7836 [5.0000]	95.7%			
PFHpA	(363.0 / 319.0) 1091562 (363.0 / 169.0) 339999	(7.11, 1.00) (0.00, N/A, 0.0)	794.0 590.8	0.3115 100.0 100.0	4.8774 [5.0000]	97.5%			
PFOA	(413.0 / 369.0) 1178218 (413.0 / 169.0) 385050	(7.93, 1.00) (0.00, N/A, 0.1)	590.9 623.3	0.3268 100.0 100.0	4.8153 [5.0000]	96.3%			
PFNA	(463.0 / 419.0) 1009822 (463.0 / 169.0) 194634	(8.66, 1.00) (0.00, N/A, -0.5)	531.9 118.3	0.1927 100.0 100.0	5.3804 [5.0000]	107.6%			
PFDA	(513.0 / 469.0) 1239600 (513.0 / 169.0) 118484	(9.34, 1.00) (0.00, N/A, 0.1)	438.5 380.8	0.0956 100.0 100.0	4.6297 [5.0000]	92.6%			
PFUnA	(563.0 / 519.0) 1546203 (563.0 / 169.0) 134285	(9.73, 1.00) (0.00, N/A, -0.2)	836.4 434.5	0.0868 100.0 100.0	4.9118 [5.0000]	98.2%			
PFDoA	(613.0 / 569.0) 1581806 (613.0 / 169.0) 220234	(9.90, 1.00) (0.00, N/A, 0.1)	474.2 387.0	0.1392 100.0 100.0	4.7333 [5.0000]	94.7%			
PFTrDA	(663.0 / 619.0) 1328428 (663.0 / 169.0) 271899	(10.03, 1.01) (N/A, 0.00, 0.0)	609.2 325.8	0.2047 100.0 100.0	4.5881 [5.0000]	91.8%			
PFTeDA	(713.0 / 669.0) 1063699 (713.0 / 169.0) 216340	(10.13, 1.00) (0.00, N/A, -0.2)	630.3 402.5	0.2034 100.0 100.0	4.9622 [5.0000]	99.2%			

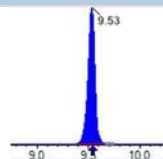
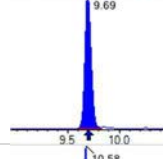
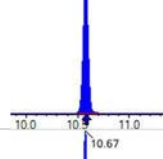
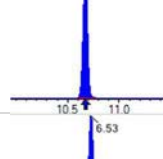
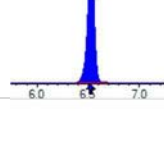
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1813615 (298.9 / 99.0) 1116198	(6.14, 1.00) (0.00, N/A, 0.0)	768.3 703.2	0.6155 100.0 100.0	4.8171 [4.4237]	108.9%			
PFPeS	(349.0 / 80.0) 3187262 (349.0 / 99.0) 1134601	(7.18, 0.89) (N/A, 0.00, 0.0)	946.8 863.6	0.3560 100.0 100.0	4.7330 [4.6919]	100.9%			
PFHxS	(399.0 / 80.0) 2633681 (399.0 / 99.0) 885281	(8.05, 1.00) (0.00, N/A, 0.1)	3311.5 3041.5	0.3361 100.0 100.0	4.4972 [4.5549]	98.7%			
PFHpS	(449.0 / 80.0) 2438304 (449.0 / 99.0) 667404	(8.82, 0.93) (N/A, 0.00, 0.1)	775.3 642.6	0.2737 100.0 100.0	4.6954 [4.7570]	98.7%			
PFOS	(499.0 / 80.0) 2788138 (499.0 / 99.0) 678060	(9.48, 1.00) (0.00, N/A, 0.1)	106.0 147.7	0.2432 100.0 100.0	4.3161 [4.6375]	93.1%			
PFNS	(549.0 / 80.0) 3204059 (549.0 / 99.0) 781912	(9.77, 1.03) (N/A, 0.00, -0.2)	897.4 623.4	0.2440 100.0 100.0	4.4712 [4.7994]	93.2%			
PFDS	(599.0 / 80.0) 3838984 (599.0 / 99.0) 864091	(9.92, 1.05) (N/A, 0.00, -0.1)	900.9 980.5	0.2251 100.0 100.0	4.8256 [4.8155]	100.2%			
PFDoS	(698.9 / 80.0) 1471553 (698.9 / 99.0) 360040	(10.12, 1.07) (N/A, 0.00, 0.1)	998.7 645.8	0.2447 100.0 100.0	4.4257 [4.8478]	91.3%			
4:2FTS	(327.0 / 307.0) 4028733 (327.0 / 81.0) 1990132	(5.85, 1.00) (0.00, N/A, -0.1)	873.0 781.7	0.4940 100.0 100.0	21.7465 [18.6906]	116.4%			
6:2FTS	(427.0 / 407.0) 1996255 (427.0 / 81.0) 1553538	(7.58, 1.00) (0.00, N/A, 0.1)	795.2 949.1	0.7782 100.0 100.0	18.9232 [18.9808]	99.7%			
8:2FTS	(527.0 / 507.0) 2012330 (527.0 / 81.0) 1139036	(9.00, 1.00) (0.00, N/A, 0.0)	497.7 645.4	0.5660 100.0 100.0	17.1622 [19.1658]	89.5%			

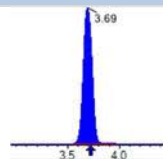
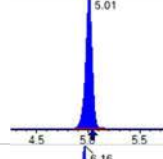
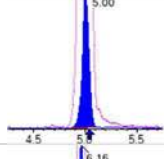
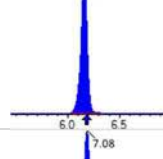
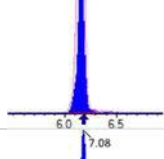
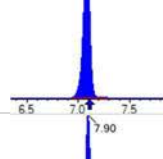
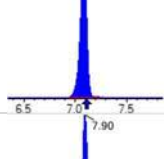
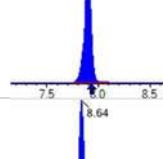
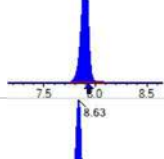
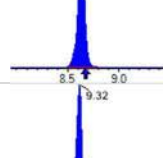
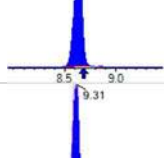
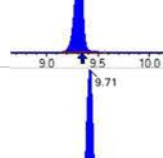
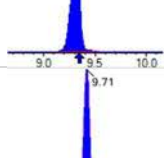
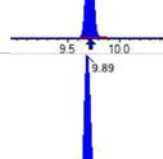
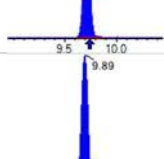
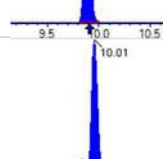
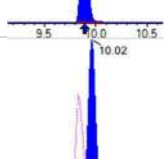
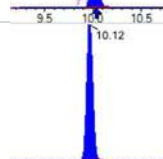
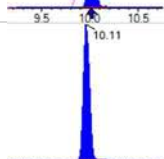
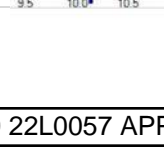
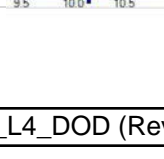
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 3270792 (498.0 / 478.0) 68177	(10.18, 1.00) (0.00, N/A, 0.2)	829.1 239.1	0.0208 100.0 100.0	4.7234 [5.0000]	94.5%			
NMeFOSA	(511.9 / 219.0) 2491137 (511.9 / 169.0) 1794272	(10.61, 1.00) (0.00, N/A, 0.0)	1462.0 1077.7	0.7203 100.0 100.0	18.5213 [20.0000]	92.6%			
NEIFOSA	(526.0 / 219.0) 2678351 (526.0 / 169.0) 2632868	(10.70, 1.00) (0.00, N/A, 0.1)	1554.8 1249.8	1.0577 100.0 100.0	20.8662 [20.0000]	104.3%			
NMeFOSAA	(570.0 / 419.0) 486745 (570.0 / 483.0) 299202	(9.53, 1.00) (0.00, N/A, -0.2)	573.1 562.9	0.6147 100.0 100.0	4.8937 [5.0000]	97.9%			
NEIFOSAA	(584.0 / 419.0) 490783 (584.0 / 526.0) 359842	(9.70, 1.00) (0.00, N/A, -0.1)	632.4 1809.1	0.7332 100.0 100.0	4.6394 [5.0000]	92.8%			
NMeFOSE	(616.1 / 59.0) 543390	(10.58, 1.00) (0.01, N/A, 0.0)	1051.7	N/A 0.0 0.0	19.9513 [20.0000]	99.8%			
NEtFOSE	(630.0 / 59.0) 87164	(10.68, 1.00) (0.01, N/A, 0.0)	921.6	N/A 0.0 0.0	18.6613 [20.0000]	93.3%			
HFPO-DA	(285.0 / 169.0) 898919 (285.0 / 185.0) 2467337	(6.53, 1.00) (0.00, N/A, 0.1)	856.6 806.8	2.7448 100.0 100.0	10.0733 [10.0000]	100.7%			
ADONA	(377.0 / 85.0) 3868840 (377.0 / 251.0) 481766	(7.43, 1.14) (N/A, 0.00, 0.0)	954.1 756.2	0.1245 100.0 100.0	9.7608 [9.4270]	103.5%			
9CI-Pf3ONS	(531.0 / 351.0) 10282118 (533.0 / 353.0) 3043082	(9.73, 1.49) (N/A, 0.00, 0.1)	1040.7 769.1	0.2960 100.0 100.0	9.5629 [9.3325]	102.5%			
11CI-PF3OUDS	(631.0 / 451.0) 5063261 (633.0 / 453.0) 1675005	(10.01, 1.53) (N/A, 0.00, 0.0)	1182.7 681.6	0.3308 100.0 100.0	9.1397 [9.4321]	96.9%			

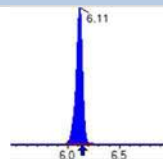
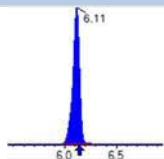
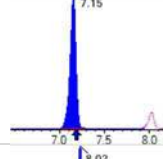
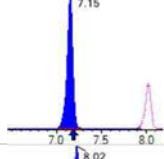
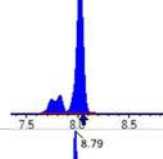
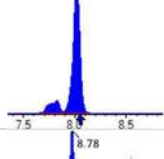
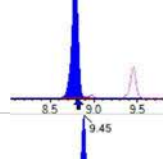
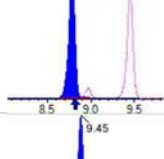
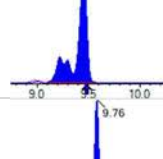
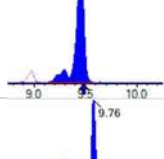
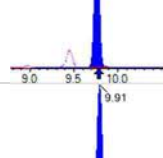
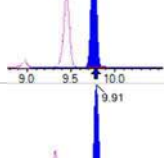
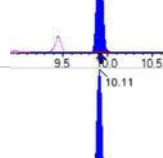
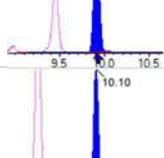
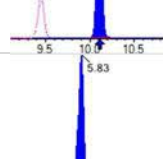
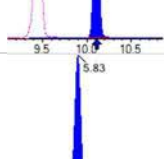
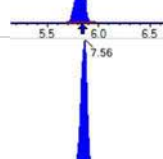
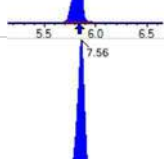
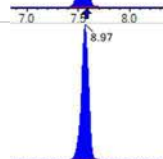
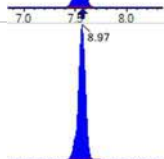
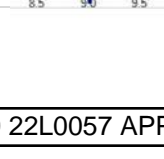
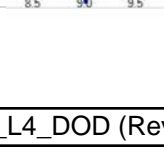
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 99522 (241.0 / 117.0) 166546	(4.52, 0.90) (N/A, 0.00, 0.0)	656.3 515.8	1.6734 100.0 100.0	18.8712 [20.0000]	94.4%			
5:3FTCA	(341.0 / 236.7) 874302 (341.0 / 217.0) 1279737	(6.82, 1.10) (N/A, 0.00, 0.1)	614.2 617.8	1.4637 100.0 100.0	21.3819 [20.0000]	106.9%			
7:3FTCA	(441.0 / 317.0) 962379 (441.0 / 337.0) 805964	(8.63, 1.40) (N/A, 0.00, 0.0)	516.9 404.8	0.8375 100.0 100.0	20.4549 [20.0000]	102.3%			
PFEESA	(315.0 / 135.0) 2085285 (315.0 / 83.0) 640190	(6.64, 1.07) (N/A, 0.00, 0.1)	832.1 689.8	0.3070 100.0 100.0	8.2307 [8.9246]	92.2%			
PFMPA	(229.0 / 85.0) 396790	(4.23, 0.84) (N/A, 0.00, 0.0)	1072.7	N/A 0.0 0.0	9.4611 [10.0000]	94.6%			
PFMBA	(279.0 / 85.0) 1416279	(5.42, 1.08) (N/A, 0.00, 0.0)	830.4	N/A 0.0 0.0	9.7700 [10.0000]	97.7%			
NFDHA	(295.0 / 201.0) 1199740 (295.0 / 85.0) 1059117	(6.07, 0.98) (N/A, 0.00, 0.0)	939.5 917.5	0.8828 100.0 100.0	10.2818 [10.0000]	102.8%			
13C3_PFBA_IIS	(216.0 / 172.0) 151758	(3.72, N/A) (N/A, 0.00, N/A)	805.9	N/A	1.0903 [1.0000]	109.0% { 100.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 233958	(6.18, N/A) (N/A, 0.00, N/A)	558.9	N/A	1.0132 [1.0000]	101.3% { 100.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 238020	(7.93, N/A) (N/A, 0.00, N/A)	686.2	N/A	1.0827 [1.0000]	108.3% { 100.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 202298	(8.67, N/A) (N/A, 0.00, N/A)	356.6	N/A	1.0924 [1.0000]	109.2% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 173856	(9.34, N/A) (N/A, 0.00, N/A)	302.9	N/A	0.9407 [1.0000]	94.1% { 100.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 422692	(8.05, N/A) (N/A, 0.00, N/A)	772.0	N/A	1.0470 [1.0000]	104.7% { 100.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 327849	(9.48, N/A) (N/A, 0.00, N/A)	486.2	N/A	1.0272 [1.0000]	102.7% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1190617	(3.72, N/A) (N/A, 0.00, N/A)	806.1	N/A	7.6228 [8.0000]	95.3% { 100.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 695964	(5.04, N/A) (N/A, 0.00, N/A)	743.0	N/A	4.2753 [4.0000]	106.9% { 100.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 538902	(6.19, N/A) (N/A, 0.00, N/A)	577.5	N/A	2.0016 [2.0000]	100.1% { 100.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 491038	(7.11, N/A) (N/A, 0.00, N/A)	663.4	N/A	2.0907 [2.0000]	104.5% { 100.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 497637	(7.93, N/A) (N/A, 0.00, N/A)	494.4	N/A	1.9065 [2.0000]	95.3% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 218730	(8.67, N/A) (N/A, 0.00, N/A)	468.8	N/A	0.9833 [1.0000]	98.3% { 100.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 281293	(9.34, N/A) (N/A, 0.00, N/A)	304.6	N/A	1.1376 [1.0000]	113.8% { 100.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 398330	(9.73, N/A) (N/A, 0.00, N/A)	590.9	N/A	1.1326 [1.0000]	113.3% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 387652	(9.91, N/A) (N/A, 0.00, N/A)	408.6	N/A	1.1043 [1.0000]	110.4% { 100.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 241867	(10.13, N/A) (N/A, 0.00, N/A)	473.7	N/A	1.0375 [1.0000]	103.7% { 100.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1373432	(6.14, N/A) (N/A, 0.00, N/A)	693.8	N/A	1.9218 [2.0000]	96.1% { 100.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 753903	(8.05, N/A) (N/A, 0.00, N/A)	856.1	N/A	1.9827 [2.0000]	99.1% { 100.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1190292	(9.48, N/A) (N/A, 0.00, N/A)	261.7	N/A	2.1154 [2.0000]	105.8% { 100.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 224114	(5.85, N/A) (N/A, 0.00, N/A)	886.7	N/A	3.7025 [4.0000]	92.6% { 100.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 274445	(7.58, N/A) (N/A, 0.00, N/A)	671.5	N/A	3.7659 [4.0000]	94.1% { 100.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 296038	(9.00, N/A) (N/A, 0.00, N/A)	428.2	N/A	4.0579 [4.0000]	101.4% { 100.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1465391	(10.18, N/A) (N/A, 0.00, N/A)	879.9	N/A	2.0603 [2.0000]	103.0% { 100.0% }			
D3_NMeFOsa_EIS	(515.0 / 169.0) 330001	(10.61, N/A) (N/A, 0.00, N/A)	806.2	N/A	2.1251 [2.0000]	106.3% { 100.0% }			
D5_NEtFOsa_EIS	(531.1 / 169.0) 284603	(10.70, N/A) (N/A, 0.00, N/A)	963.7	N/A	1.9853 [2.0000]	99.3% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 510539	(9.53, N/A) (N/A, 0.00, N/A)	423.7	N/A	3.8157 [4.0000]	95.4% { 100.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 471317	(9.69, N/A) (N/A, 0.00, N/A)	312.2	N/A	3.9965 [4.0000]	99.9% { 100.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 431560	(10.58, N/A) (N/A, 0.00, N/A)	1437.5	N/A	19.7920 [20.0000]	99.0% { 100.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 182445	(10.67, N/A) (N/A, 0.00, N/A)	924.0	N/A	18.3793 [20.0000]	91.9% { 100.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1174542	(6.53, N/A) (N/A, 0.00, N/A)	891.8	N/A	8.2053 [8.0000]	102.6% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 4050226	(3.69, 1.00) (0.00, N/A, 0.0)	65.3	N/A 0.0 0.0	42.6736 [40.0000]	106.7%			
PFPeA	(262.9 / 219.0) 2824768 (262.9 / 69.0) 30797	(5.01, 1.00) (0.00, N/A, 0.2)	725.3 354.5	0.0109 97.4 97.4	19.8721 [20.0000]	99.4%			
PFHxA	(313.0 / 269.0) 2355853 (313.0 / 119.0) 216426	(6.16, 1.00) (0.00, N/A, 0.1)	630.0 576.1	0.0919 94.0 94.0	9.7663 [10.0000]	97.7%			
PFHpA	(363.0 / 319.0) 2097907 (363.0 / 169.0) 669756	(7.08, 1.00) (0.00, N/A, 0.1)	650.6 555.8	0.3192 102.5 102.5	9.6572 [10.0000]	96.6%			
PFOA	(413.0 / 369.0) 2460865 (413.0 / 169.0) 754807	(7.90, 1.00) (0.00, N/A, 0.0)	797.2 515.8	0.3067 93.9 93.9	10.0578 [10.0000]	100.6%			
PFNA	(463.0 / 419.0) 1917681 (463.0 / 169.0) 398931	(8.64, 1.00) (0.00, N/A, 0.0)	698.0 110.9	0.2080 107.9 107.9	9.9870 [10.0000]	99.9%			
PFDA	(513.0 / 469.0) 2731475 (513.0 / 169.0) 237718	(9.32, 1.00) (0.01, N/A, 0.1)	431.9 384.2	0.0870 91.1 91.1	10.5011 [10.0000]	105.0%			
PFUnA	(563.0 / 519.0) 2762959 (563.0 / 169.0) 281752	(9.71, 1.00) (0.00, N/A, 0.0)	678.3 368.4	0.1020 117.4 117.4	10.3620 [10.0000]	103.6%			
PFDoA	(613.0 / 569.0) 3158081 (613.0 / 169.0) 408270	(9.89, 1.00) (0.00, N/A, -0.3)	740.9 505.8	0.1293 92.9 92.9	10.5649 [10.0000]	105.6%			
PFTrDA	(663.0 / 619.0) 2750923 (663.0 / 169.0) 615527	(10.01, 1.01) (N/A, -0.01, -0.3)	922.1 622.7	0.2238 109.3 109.3	10.6219 [10.0000]	106.2%			
PFTeDA	(713.0 / 669.0) 2392662 (713.0 / 169.0) 396949	(10.12, 1.00) (0.00, N/A, 0.2)	784.4 530.3	0.1659 81.6 81.6	12.1566 [10.0000]	121.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 3499294 (298.9 / 99.0) 2162960	(6.11, 1.00) (0.00, N/A, 0.0)	782.7 712.1	0.6181 100.4 100.4	9.3608 [8.8473]	105.8%			
PFPeS	(349.0 / 80.0) 6311120 (349.0 / 99.0) 2220135	(7.15, 0.89) (N/A, -0.03, 0.0)	774.9 858.6	0.3518 98.8 98.8	9.3269 [9.3838]	99.4%			
PFHxS	(399.0 / 80.0) 5497046 (399.0 / 99.0) 1809522	(8.02, 1.00) (0.00, N/A, 0.2)	3843.8 4067.6	0.3292 97.9 97.9	9.3415 [9.1098]	102.5%			
PFHpS	(449.0 / 80.0) 4655282 (449.0 / 99.0) 1364079	(8.79, 0.93) (N/A, -0.03, 0.1)	660.3 545.6	0.2930 107.1 107.1	10.1795 [9.5141]	107.0%			
PFOS	(499.0 / 80.0) 5408135 (499.0 / 99.0) 1245798	(9.45, 1.00) (0.00, N/A, -0.1)	107.2 128.5	0.2304 94.7 94.7	9.5064 [9.2749]	102.5%			
PFNS	(549.0 / 80.0) 6857872 (549.0 / 99.0) 1607367	(9.76, 1.03) (N/A, -0.01, 0.1)	779.5 870.0	0.2344 96.0 96.0	10.8669 [9.5989]	113.2%			
PFDS	(599.0 / 80.0) 7907397 (599.0 / 99.0) 1810025	(9.91, 1.05) (N/A, -0.01, 0.2)	1173.5 1014.3	0.2289 101.7 101.7	11.2866 [9.6311]	117.2%			
PFDoS	(698.9 / 80.0) 2945783 (698.9 / 99.0) 628808	(10.11, 1.07) (N/A, -0.01, 0.1)	1059.1 1043.2	0.2135 87.2 87.2	10.0602 [9.6956]	103.8%			
4:2FTS	(327.0 / 307.0) 7219424 (327.0 / 81.0) 3962590	(5.83, 1.00) (0.00, N/A, 0.3)	742.8 891.9	0.5489 111.1 111.1	35.0389 [37.3811]	93.7%			
6:2FTS	(427.0 / 407.0) 4387404 (427.0 / 81.0) 2952550	(7.56, 1.00) (0.00, N/A, -0.1)	852.0 1014.4	0.6730 86.5 86.5	42.2664 [37.9617]	111.3%			
8:2FTS	(527.0 / 507.0) 4299071 (527.0 / 81.0) 2483349	(8.97, 1.00) (0.00, N/A, 0.1)	581.6 491.2	0.5776 102.1 102.1	39.3656 [38.3315]	102.7%			

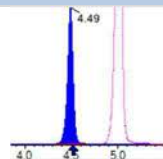
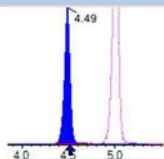
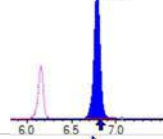
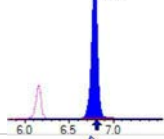
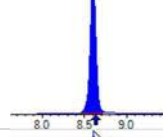
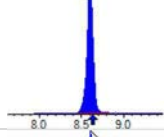
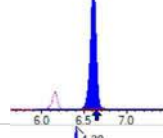
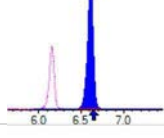
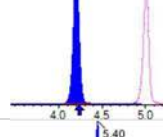
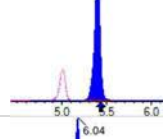
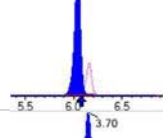
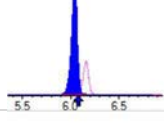
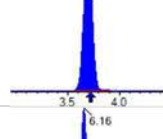
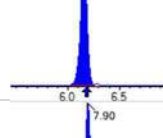
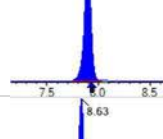
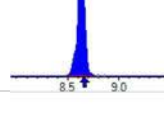


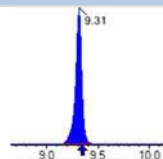
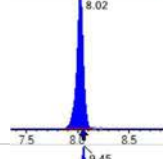
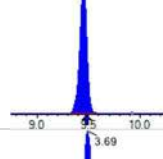
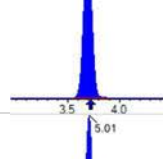
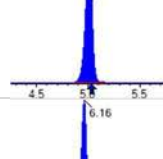
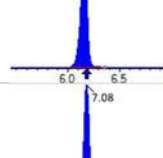
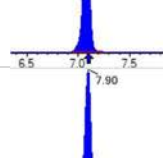
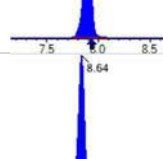
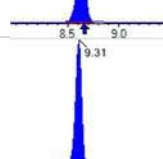
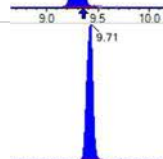
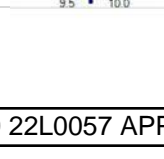
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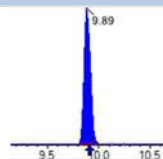
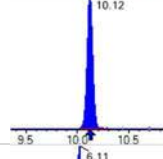
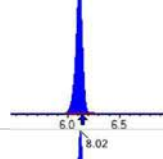
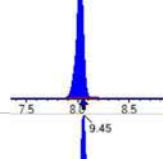
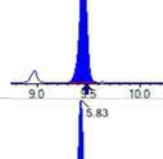
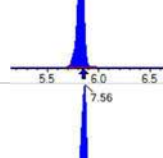
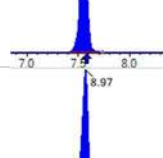
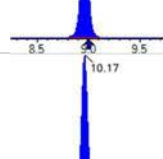
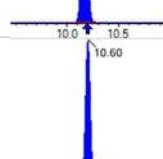
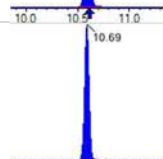
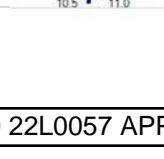
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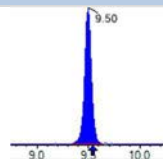
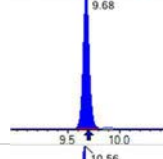
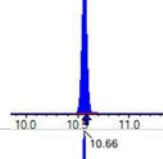
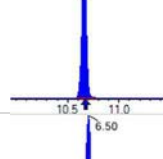
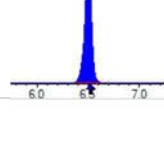
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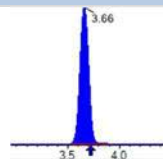
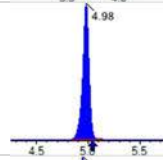
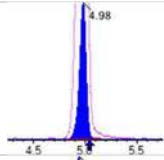
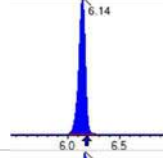
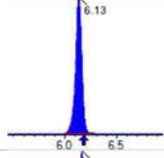
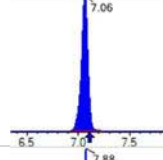
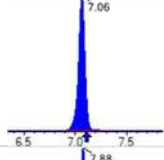
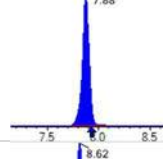
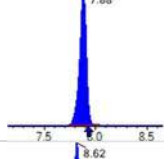
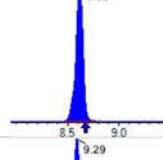
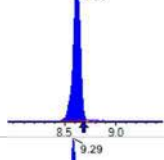
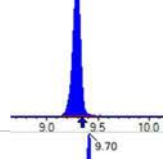
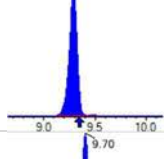
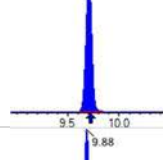
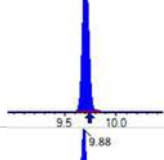
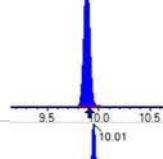
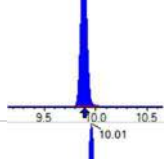
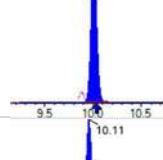
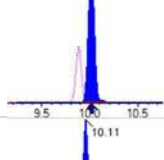
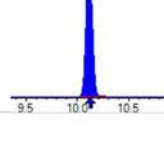
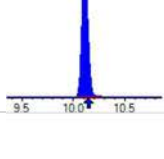
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 7323816 (498.0 / 478.0) 156082	(10.17 , 1.00) (0.00 , N/A , -0.1)	1220.2 517.0	0.0213 102.2 102.2	11.2339 [10.0000]	112.3%			
NMeFOSA	(511.9 / 219.0) 5018962 (511.9 / 169.0) 3409088	(10.60 , 1.00) (0.00 , N/A , -0.1)	1068.1 1194.8	0.6792 94.3 94.3	41.0228 [40.0000]	102.6%			
NEIFOSA	(526.0 / 219.0) 5202781 (526.0 / 169.0) 5559747	(10.69 , 1.00) (0.00 , N/A , 0.0)	1128.4 1454.6	1.0686 101.0 101.0	41.3031 [40.0000]	103.3%			
NMeFOSAA	(570.0 / 419.0) 1047253 (570.0 / 483.0) 528303	(9.50 , 1.00) (0.01 , N/A , 0.0)	505.4 486.7	0.5045 82.1 82.1	9.6770 [10.0000]	96.8%			
NEIFOSAA	(584.0 / 419.0) 1028405 (584.0 / 526.0) 603316	(9.68 , 1.00) (0.01 , N/A , 0.0)	933.5 1079.0	0.5867 80.0 80.0	8.7467 [10.0000]	87.5%			
NMeFOSE	(616.1 / 59.0) 1066666	(10.57 , 1.00) (0.01 , N/A , 0.0)	1245.3	N/A 0.0 0.0	43.1436 [40.0000]	107.9%			
NEtFOSE	(630.0 / 59.0) 190429	(10.67 , 1.00) (0.01 , N/A , 0.0)	952.6	N/A 0.0 0.0	39.7759 [40.0000]	99.4%			
HFPO-DA	(285.0 / 169.0) 1706844 (285.0 / 185.0) 4940740	(6.50 , 1.00) (0.00 , N/A , 0.0)	940.9 950.3	2.8947 105.5 105.5	19.4163 [20.0000]	97.1%			
ADONA	(377.0 / 85.0) 7625070 (377.0 / 251.0) 966765	(7.40 , 1.14) (N/A , -0.03 , 0.0)	848.9 734.0	0.1268 101.8 101.8	19.5285 [18.8540]	103.6%			
9CI-Pf3ONS	(531.0 / 351.0) 18752532 (533.0 / 353.0) 6070274	(9.71 , 1.49) (N/A , -0.02 , 0.0)	653.0 661.6	0.3237 109.4 109.4	18.3510 [18.6651]	98.3%			
11CI-PF3OUDS	(631.0 / 451.0) 10830263 (633.0 / 453.0) 3030278	(10.00 , 1.54) (N/A , -0.01 , 0.1)	1577.4 1022.7	0.2798 84.6 84.6	19.8453 [18.8642]	105.2%			

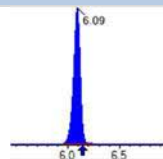
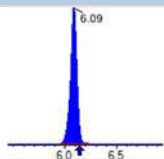
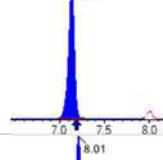
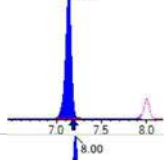
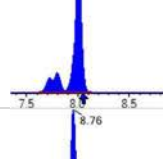
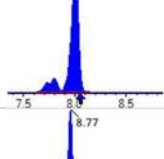
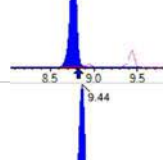
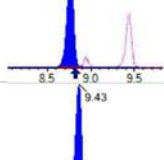
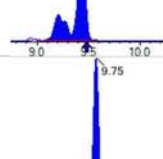
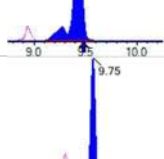
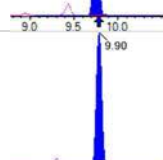
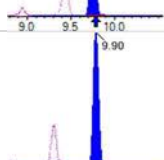
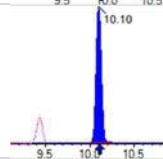
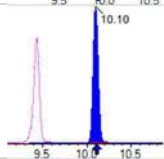
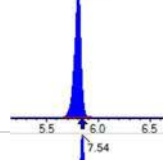
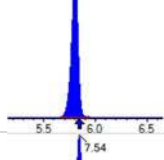
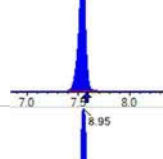
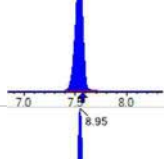
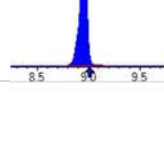
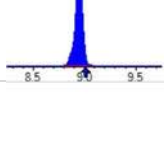
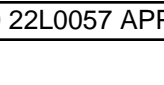
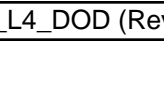
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 204327 (241.0 / 117.0) 336062	(4.49, 0.90) (N/A, -0.03, 0.1)	792.9 648.3	1.6447 98.3 98.3	41.6496 [40.0000]	104.1%			
5:3FTCA	(341.0 / 236.7) 1619148 (341.0 / 217.0) 2611063	(6.79, 1.10) (N/A, -0.03, -0.1)	703.3 612.1	1.6126 110.2 110.2	37.9872 [40.0000]	95.0%			
7:3FTCA	(441.0 / 317.0) 1906765 (441.0 / 337.0) 1608500	(8.60, 1.40) (N/A, -0.03, -0.1)	523.3 597.0	0.8436 100.7 100.7	38.8788 [40.0000]	97.2%			
PFEESA	(315.0 / 135.0) 4593030 (315.0 / 83.0) 1327802	(6.61, 1.07) (N/A, -0.03, -0.1)	844.1 795.4	0.2891 94.2 94.2	17.3915 [17.8492]	97.4%			
PFMPA	(229.0 / 85.0) 810629	(4.20, 0.84) (N/A, -0.03, 0.0)	1061.6	N/A 0.0 0.0	20.7783 [20.0000]	103.9%			
PFMBA	(279.0 / 85.0) 2665168	(5.40, 1.08) (N/A, -0.03, 0.0)	868.7	N/A 0.0 0.0	19.7641 [20.0000]	98.8%			
NFDHA	(295.0 / 201.0) 2388001 (295.0 / 85.0) 2094961	(6.04, 0.98) (N/A, -0.03, 0.0)	636.9 870.9	0.8773 99.4 99.4	19.6329 [20.0000]	98.2%			
13C3_PFBA_IIS	(216.0 / 172.0) 145548	(3.70, N/A) (N/A, -0.02, N/A)	760.7	N/A	1.0457 [1.0000]	104.6% { 95.9% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 251161	(6.16, N/A) (N/A, -0.03, N/A)	573.8	N/A	1.0877 [1.0000]	108.8% { 107.4% }			
13C4_PFOA_IIS	(417.0 / 372.0) 228422	(7.90, N/A) (N/A, -0.03, N/A)	604.8	N/A	1.0390 [1.0000]	103.9% { 96.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 199253	(8.63, N/A) (N/A, -0.03, N/A)	633.0	N/A	1.0760 [1.0000]	107.6% { 98.5% }			

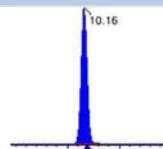
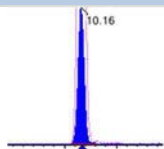
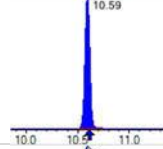
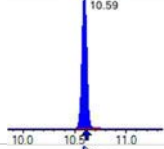
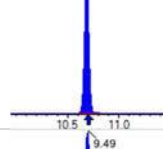
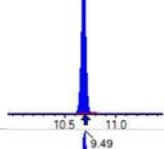
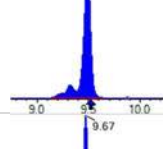
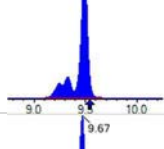
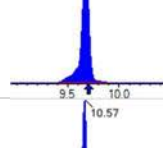
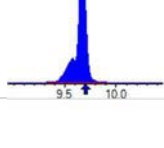
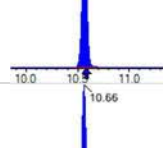
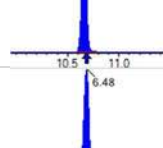
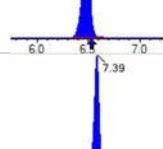
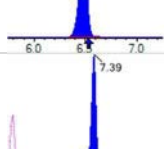
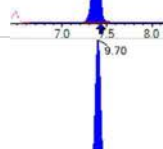
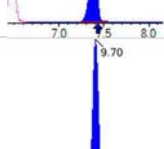
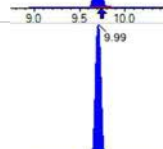
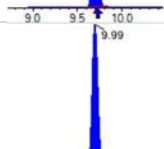
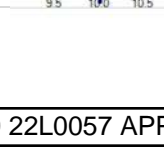
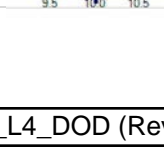
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 224539	(9.31, N/A) (N/A, -0.03, N/A)	595.4	N/A	1.2150 [1.0000]	121.5% { 129.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 425062	(8.02, N/A) (N/A, -0.03, N/A)	758.0	N/A	1.0529 [1.0000]	105.3% { 100.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 327789	(9.45, N/A) (N/A, -0.03, N/A)	437.5	N/A	1.0270 [1.0000]	102.7% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1163869	(3.69, N/A) (N/A, -0.02, N/A)	943.4	N/A	7.7695 [8.0000]	97.1% { 97.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 647411	(5.01, N/A) (N/A, -0.03, N/A)	744.3	N/A	3.7047 [4.0000]	92.6% { 93.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 561752	(6.16, N/A) (N/A, -0.03, N/A)	573.9	N/A	1.9436 [2.0000]	97.2% { 104.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 476643	(7.08, N/A) (N/A, -0.03, N/A)	661.3	N/A	1.8904 [2.0000]	94.5% { 97.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 497619	(7.90, N/A) (N/A, -0.03, N/A)	689.7	N/A	1.9865 [2.0000]	99.3% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 223778	(8.64, N/A) (N/A, -0.03, N/A)	409.0	N/A	1.0213 [1.0000]	102.1% { 102.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 273272	(9.31, N/A) (N/A, -0.03, N/A)	311.9	N/A	0.8557 [1.0000]	85.6% { 97.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 337405	(9.71, N/A) (N/A, -0.01, N/A)	389.2	N/A	0.7428 [1.0000]	74.3% { 84.7% }			

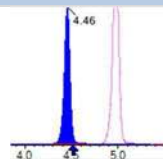
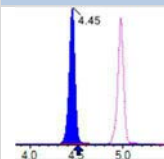
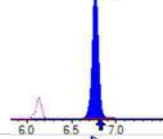
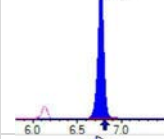
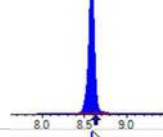
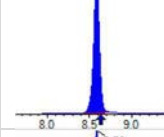
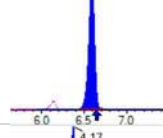
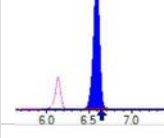
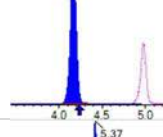
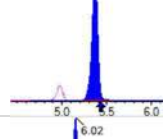
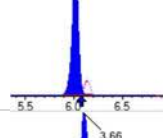
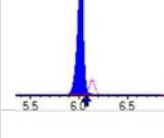
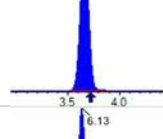
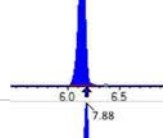
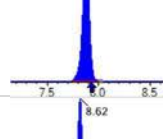
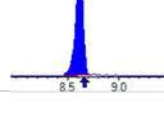
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 346746	(9.89, N/A) (N/A, -0.02, N/A)	642.1	N/A	0.7648 [1.0000]	76.5% { 89.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 222076	(10.12, N/A) (N/A, -0.01, N/A)	456.1	N/A	0.7376 [1.0000]	73.8% { 91.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1363704	(6.11, N/A) (N/A, -0.03, N/A)	654.6	N/A	1.8975 [2.0000]	94.9% { 99.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 757540	(8.02, N/A) (N/A, -0.03, N/A)	799.7	N/A	1.9811 [2.0000]	99.1% { 100.5% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1048231	(9.45, N/A) (N/A, -0.03, N/A)	180.4	N/A	1.8633 [2.0000]	93.2% { 88.1% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 249254	(5.83, N/A) (N/A, -0.03, N/A)	640.7	N/A	4.0948 [4.0000]	102.4% { 111.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 270052	(7.56, N/A) (N/A, -0.03, N/A)	709.3	N/A	3.6849 [4.0000]	92.1% { 98.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 275725	(8.97, N/A) (N/A, -0.03, N/A)	445.9	N/A	3.7584 [4.0000]	94.0% { 93.1% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1379635	(10.17, N/A) (N/A, -0.01, N/A)	959.9	N/A	1.9401 [2.0000]	97.0% { 94.1% }			
D3_NMeFOsa_EIS	(515.0 / 169.0) 300177	(10.60, N/A) (N/A, -0.01, N/A)	888.1	N/A	1.9334 [2.0000]	96.7% { 91.0% }			
D5_NEtFOsa_EIS	(531.1 / 169.0) 279297	(10.69, N/A) (N/A, -0.01, N/A)	926.2	N/A	1.9487 [2.0000]	97.4% { 98.1% }			

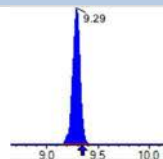
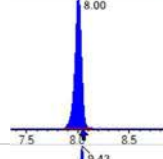
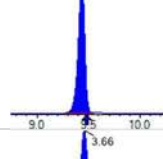
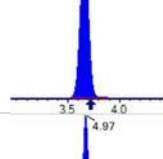
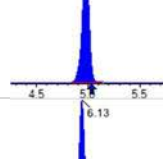
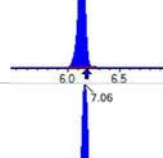
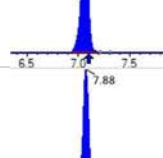
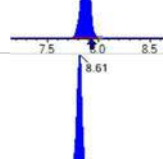
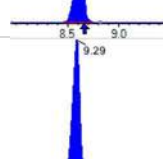
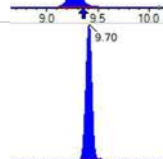
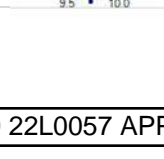
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 555492	(9.50, N/A) (N/A, -0.03, N/A)	414.0	N/A	4.1525 [4.0000]	103.8% { 108.8% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 523855	(9.68, N/A) (N/A, -0.02, N/A)	484.6	N/A	4.4428 [4.0000]	111.1% { 111.1% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 391753	(10.56, N/A) (N/A, -0.01, N/A)	1314.7	N/A	17.9697 [20.0000]	89.8% { 90.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 187004	(10.66, N/A) (N/A, -0.01, N/A)	901.5	N/A	18.8420 [20.0000]	94.2% { 102.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1157042	(6.50, N/A) (N/A, -0.03, N/A)	770.4	N/A	7.5294 [8.0000]	94.1% { 98.5% }			

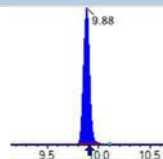
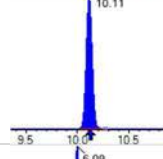
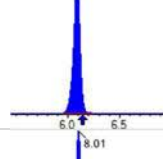
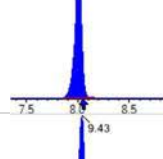
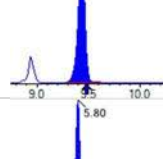
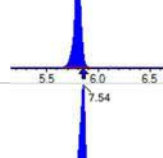
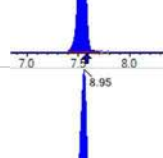
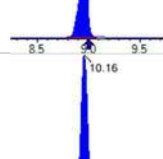
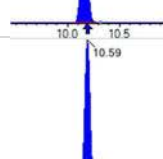
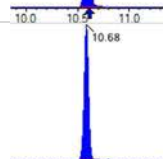
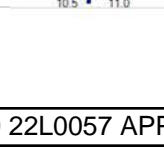
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 7729586	(3.66, 1.00) (0.00, N/A, 0.0)	67.9	N/A 0.0 0.0	81.7379 [80.0000]	102.2%			
PFPeA	(262.9 / 219.0) 5643399 (262.9 / 69.0) 60722	(4.98, 1.00) (0.00, N/A, 0.0)	694.2 520.3	0.0108 96.1 96.1	40.6136 [40.0000]	101.5%			
PFHxA	(313.0 / 269.0) 4661260 (313.0 / 119.0) 458438	(6.14, 1.00) (0.00, N/A, 0.3)	740.9 630.9	0.0984 100.6 100.6	21.3969 [20.0000]	107.0%			
PFHpA	(363.0 / 319.0) 4440128 (363.0 / 169.0) 1284143	(7.06, 1.00) (0.00, N/A, 0.0)	668.8 659.4	0.2892 92.9 92.9	21.0935 [20.0000]	105.5%			
PFOA	(413.0 / 369.0) 4641747 (413.0 / 169.0) 1487003	(7.88, 1.00) (0.00, N/A, -0.3)	945.5 720.9	0.3204 98.0 98.0	20.0481 [20.0000]	100.2%			
PFNA	(463.0 / 419.0) 3537219 (463.0 / 169.0) 723244	(8.62, 1.00) (0.00, N/A, -0.2)	600.2 105.2	0.2045 106.1 106.1	20.0197 [20.0000]	100.1%			
PFDA	(513.0 / 469.0) 4550414 (513.0 / 169.0) 407049	(9.29, 1.00) (0.00, N/A, 0.3)	458.4 340.9	0.0895 93.6 93.6	18.7496 [20.0000]	93.7%			
PFUnA	(563.0 / 519.0) 5474685 (563.0 / 169.0) 489769	(9.70, 1.00) (0.00, N/A, 0.3)	796.9 670.2	0.0895 103.0 103.0	20.8759 [20.0000]	104.4%			
PFDoA	(613.0 / 569.0) 6253442 (613.0 / 169.0) 780811	(9.88, 1.00) (0.00, N/A, 0.0)	838.3 526.7	0.1249 89.7 89.7	19.2908 [20.0000]	96.5%			
PFTrDA	(663.0 / 619.0) 5585067 (663.0 / 169.0) 1021977	(10.01, 1.01) (N/A, -0.02, -0.4)	939.9 794.3	0.1830 89.4 89.4	19.8858 [20.0000]	99.4%			
PFTeDA	(713.0 / 669.0) 4569846 (713.0 / 169.0) 904045	(10.11, 1.00) (0.00, N/A, 0.2)	734.0 687.4	0.1978 97.3 97.3	17.5178 [20.0000]	87.6%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 6221305 (298.9 / 99.0) 4130206	(6.09, 1.00) (0.00, N/A, 0.1)	735.2 716.1	0.6639 107.9 107.9	17.4196 [17.6947]	98.4%			
PFPeS	(349.0 / 80.0) 12435170 (349.0 / 99.0) 4513587	(7.13, 0.89) (N/A, -0.05, 0.0)	731.5 788.8	0.3630 102.0 102.0	19.6427 [18.7676]	104.7%			
PFHxS	(399.0 / 80.0) 10414987 (399.0 / 99.0) 3525485	(8.01, 1.00) (0.00, N/A, 0.2)	3224.1 4892.8	0.3385 100.7 100.7	18.9174 [18.2197]	103.8%			
PFHpS	(449.0 / 80.0) 9724229 (449.0 / 99.0) 2826299	(8.76, 0.93) (N/A, -0.05, -0.1)	693.4 620.9	0.2906 106.2 106.2	19.4303 [19.0281]	102.1%			
PFOS	(499.0 / 80.0) 11033465 (499.0 / 99.0) 2411819	(9.44, 1.00) (0.00, N/A, 0.2)	102.1 160.8	0.2186 89.9 89.9	17.7225 [18.5499]	95.5%			
PFNS	(549.0 / 80.0) 12066925 (549.0 / 99.0) 3200250	(9.75, 1.03) (N/A, -0.02, 0.0)	748.7 678.2	0.2652 108.7 108.7	17.4726 [19.1977]	91.0%			
PFDS	(599.0 / 80.0) 13381834 (599.0 / 99.0) 3299330	(9.90, 1.05) (N/A, -0.02, 0.1)	1052.2 1451.8	0.2466 109.5 109.5	17.4537 [19.2621]	90.6%			
PFDoS	(698.9 / 80.0) 5470070 (698.9 / 99.0) 1315874	(10.10, 1.07) (N/A, -0.02, 0.0)	1218.8 960.3	0.2406 98.3 98.3	17.0703 [19.3913]	88.0%			
4:2FTS	(327.0 / 307.0) 13496630 (327.0 / 81.0) 7417812	(5.80, 1.00) (0.00, N/A, 0.1)	849.9 833.0	0.5496 111.3 111.3	72.4566 [74.7622]	96.9%			
6:2FTS	(427.0 / 407.0) 8307126 (427.0 / 81.0) 5171329	(7.54, 1.00) (0.00, N/A, 0.0)	820.9 695.6	0.6225 80.0 80.0	76.1349 [75.9234]	100.3%			
8:2FTS	(527.0 / 507.0) 8258969 (527.0 / 81.0) 4745404	(8.95, 1.00) (0.00, N/A, 0.3)	609.9 658.7	0.5746 101.5 101.5	75.3496 [76.6631]	98.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 12934205 (498.0 / 478.0) 273418	(10.16, 1.00) (0.00, N/A, 0.0)	1019.0 675.2	0.0211 101.4 101.4	18.9126 [20.0000]	94.6%			
NMeFOSA	(511.9 / 219.0) 10047403 (511.9 / 169.0) 6239729	(10.59, 1.00) (0.00, N/A, 0.0)	963.4 963.6	0.6210 86.2 86.2	79.4328 [80.0000]	99.3%			
NEIFOSA	(526.0 / 219.0) 10330116 (526.0 / 169.0) 10487941	(10.69, 1.00) (0.00, N/A, 0.0)	1549.4 1526.7	1.0153 96.0 96.0	82.6028 [80.0000]	103.3%			
NMeFOSAA	(570.0 / 419.0) 2160138 (570.0 / 483.0) 1120189	(9.49, 1.00) (0.01, N/A, 0.0)	519.4 506.9	0.5186 84.4 84.4	21.0347 [20.0000]	105.2%			
NEIFOSAA	(584.0 / 419.0) 1755294 (584.0 / 526.0) 1179499	(9.67, 1.00) (0.01, N/A, 0.2)	1046.0 2541.1	0.6720 91.6 91.6	19.8369 [20.0000]	99.2%			
NMeFOSE	(616.1 / 59.0) 2100981	(10.57, 1.00) (0.01, N/A, 0.0)	1163.7	N/A 0.0 0.0	87.8464 [80.0000]	109.8%			
NEtFOSE	(630.0 / 59.0) 379057	(10.66, 1.00) (0.01, N/A, 0.0)	1328.5	N/A 0.0 0.0	79.1545 [80.0000]	98.9%			
HFPO-DA	(285.0 / 169.0) 3403206 (285.0 / 185.0) 9550202	(6.48, 1.00) (0.00, N/A, 0.0)	822.2 932.2	2.8062 102.2 102.2	39.8571 [40.0000]	99.6%			
ADONA	(377.0 / 85.0) 14175645 (377.0 / 251.0) 1888186	(7.39, 1.14) (N/A, -0.04, -0.1)	782.5 715.9	0.1332 107.0 107.0	37.3778 [37.7080]	99.1%			
9CI-Pf3ONS	(531.0 / 351.0) 33927453 (533.0 / 353.0) 11818760	(9.70, 1.50) (N/A, -0.03, 0.1)	767.5 701.4	0.3484 117.7 117.7	37.0127 [37.3302]	99.1%			
11CI-PF3OUDS	(631.0 / 451.0) 18459375 (633.0 / 453.0) 6096113	(9.99, 1.54) (N/A, -0.02, 0.1)	875.1 1257.4	0.3302 99.8 99.8	34.8243 [37.7283]	92.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 413530 (241.0 / 117.0) 684831	(4.46, 0.90) (N/A, -0.06, 0.0)	763.7 842.4	1.6561 99.0 99.0	86.2307 [80.0000]	107.8%			
5:3FTCA	(341.0 / 236.7) 3356741 (341.0 / 217.0) 5218130	(6.77, 1.10) (N/A, -0.05, -0.2)	736.7 741.6	1.5545 106.2 106.2	87.2034 [80.0000]	109.0%			
7:3FTCA	(441.0 / 317.0) 3849941 (441.0 / 337.0) 3225448	(8.58, 1.40) (N/A, -0.05, 0.0)	479.5 551.2	0.8378 100.0 100.0	86.9230 [80.0000]	108.7%			
PFEESA	(315.0 / 135.0) 8973610 (315.0 / 83.0) 2426863	(6.59, 1.07) (N/A, -0.05, 0.2)	892.6 762.9	0.2704 88.1 88.1	37.6244 [35.6984]	105.4%			
PFMPA	(229.0 / 85.0) 1587857	(4.17, 0.84) (N/A, -0.06, 0.0)	1007.1	N/A 0.0 0.0	41.6361 [40.0000]	104.1%			
PFMBA	(279.0 / 85.0) 5452093	(5.37, 1.08) (N/A, -0.06, 0.0)	936.0	N/A 0.0 0.0	41.3605 [40.0000]	103.4%			
NFDHA	(295.0 / 201.0) 4564595 (295.0 / 85.0) 4173432	(6.02, 0.98) (N/A, -0.05, -0.1)	742.5 3610.4	0.9143 103.6 103.6	41.5544 [40.0000]	103.9%			
13C3_PFBA_IIS	(216.0 / 172.0) 143451	(3.66, N/A) (N/A, -0.06, N/A)	719.9	N/A	1.0306 [1.0000]	103.1% { 94.5% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 248043	(6.13, N/A) (N/A, -0.05, N/A)	661.9	N/A	1.0742 [1.0000]	107.4% { 106.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 234938	(7.88, N/A) (N/A, -0.05, N/A)	713.0	N/A	1.0686 [1.0000]	106.9% { 98.7% }			
13C5_PFNA_IIS	(468.0 / 423.0) 193387	(8.62, N/A) (N/A, -0.05, N/A)	335.2	N/A	1.0443 [1.0000]	104.4% { 95.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 186408	(9.29, N/A) (N/A, -0.05, N/A)	664.1	N/A	1.0087 [1.0000]	100.9% { 107.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 428893	(8.00, N/A) (N/A, -0.05, N/A)	824.8	N/A	1.0624 [1.0000]	106.2% { 101.5% }			
13C4_PFOS_IIS	(502.8 / 79.9) 333901	(9.43, N/A) (N/A, -0.05, N/A)	344.0	N/A	1.0461 [1.0000]	104.6% { 101.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1159624	(3.66, N/A) (N/A, -0.06, N/A)	908.2	N/A	7.8543 [8.0000]	98.2% { 97.4% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 632863	(4.97, N/A) (N/A, -0.06, N/A)	720.4	N/A	3.6669 [4.0000]	91.7% { 90.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 507317	(6.13, N/A) (N/A, -0.05, N/A)	683.8	N/A	1.7773 [2.0000]	88.9% { 94.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 461855	(7.06, N/A) (N/A, -0.04, N/A)	556.4	N/A	1.8548 [2.0000]	92.7% { 94.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 470888	(7.88, N/A) (N/A, -0.05, N/A)	672.4	N/A	1.8276 [2.0000]	91.4% { 94.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 205912	(8.61, N/A) (N/A, -0.05, N/A)	479.7	N/A	0.9683 [1.0000]	96.8% { 94.1% }			
13C6_PFDA_EIS	(519.0 / 474.0) 254972	(9.29, N/A) (N/A, -0.06, N/A)	408.6	N/A	0.9617 [1.0000]	96.2% { 90.6% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 331844	(9.70, N/A) (N/A, -0.02, N/A)	703.9	N/A	0.8800 [1.0000]	88.0% { 83.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 376028	(9.88, N/A) (N/A, -0.02, N/A)	523.5	N/A	0.9990 [1.0000]	99.9% { 97.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 294342	(10.11, N/A) (N/A, -0.02, N/A)	600.7	N/A	1.1775 [1.0000]	117.8% { 121.7% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1302850	(6.09, N/A) (N/A, -0.05, N/A)	735.8	N/A	1.7967 [2.0000]	89.8% { 94.9% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 708742	(8.01, N/A) (N/A, -0.05, N/A)	751.5	N/A	1.8369 [2.0000]	91.8% { 94.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1147133	(9.43, N/A) (N/A, -0.05, N/A)	153.7	N/A	2.0018 [2.0000]	100.1% { 96.4% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 225340	(5.80, N/A) (N/A, -0.05, N/A)	720.4	N/A	3.6689 [4.0000]	91.7% { 100.5% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 283858	(7.54, N/A) (N/A, -0.04, N/A)	652.9	N/A	3.8387 [4.0000]	96.0% { 103.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 276735	(8.95, N/A) (N/A, -0.05, N/A)	514.2	N/A	3.7385 [4.0000]	93.5% { 93.5% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1447254	(10.16, N/A) (N/A, -0.02, N/A)	722.4	N/A	1.9979 [2.0000]	99.9% { 98.8% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 310344	(10.59, N/A) (N/A, -0.01, N/A)	1001.9	N/A	1.9623 [2.0000]	98.1% { 94.0% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 277284	(10.68, N/A) (N/A, -0.01, N/A)	799.4	N/A	1.8992 [2.0000]	95.0% { 97.4% }			

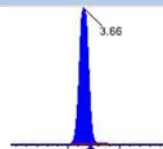
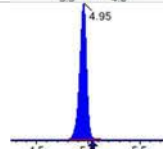
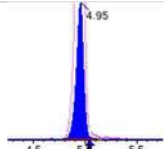
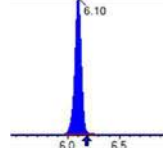
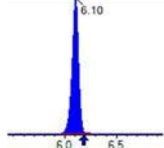
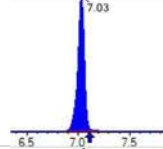
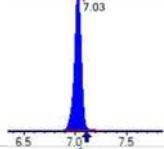
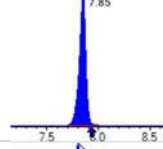
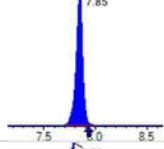
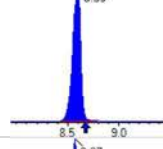
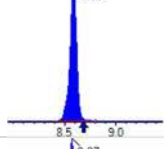
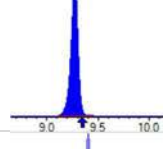
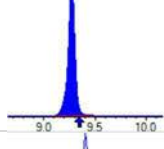
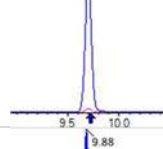
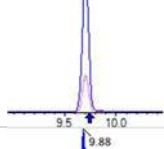
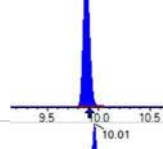
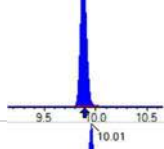
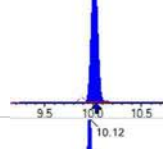
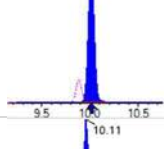
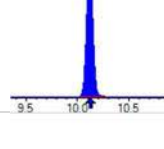
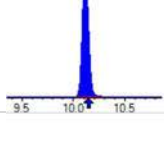


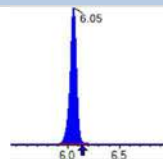
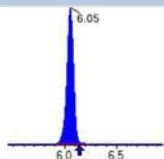
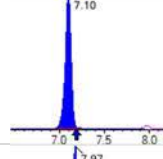
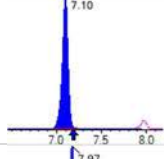
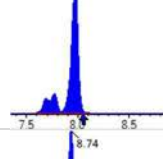
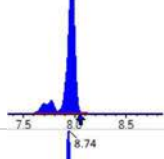
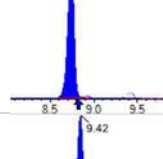
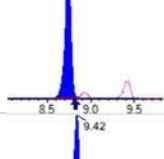
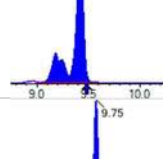
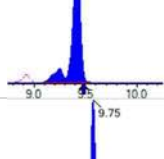
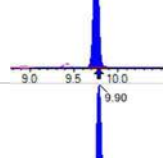
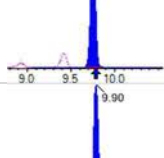
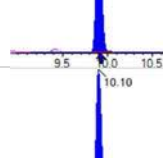
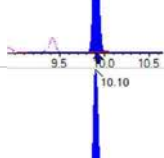
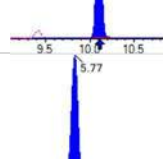
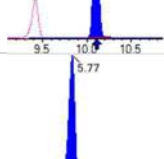
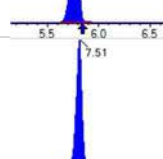
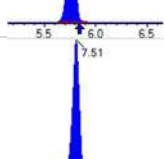
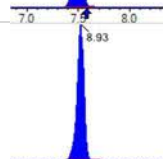
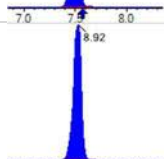
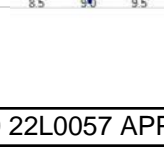
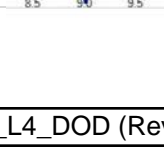
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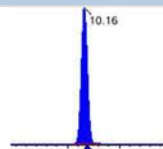
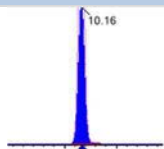
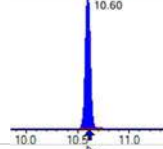
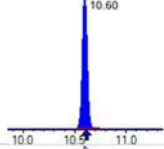
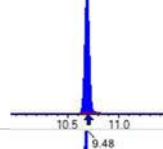
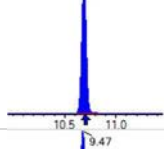
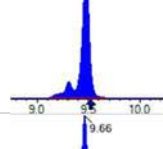
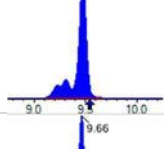
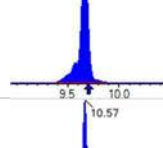
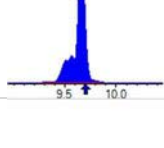
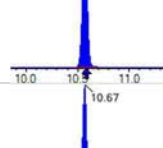
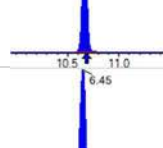
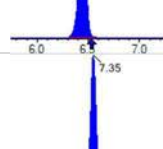
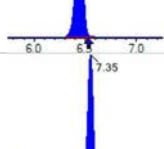
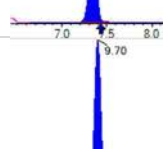
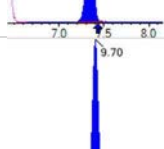
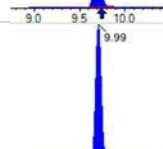
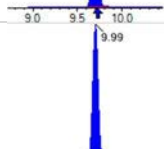
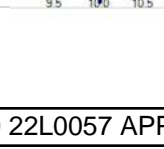
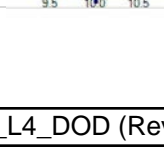
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 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

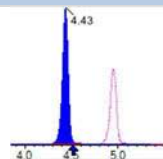
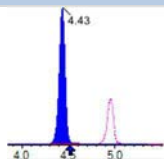
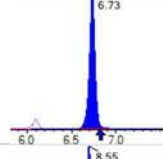
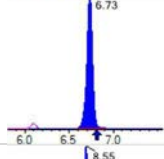
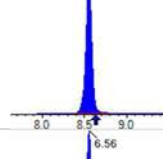
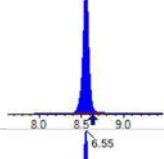
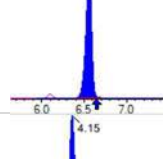
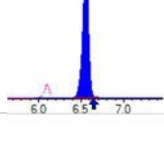
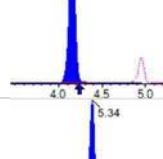
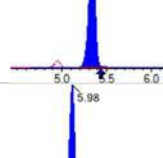
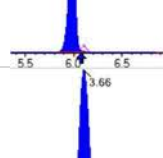
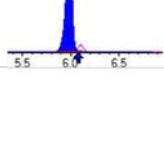
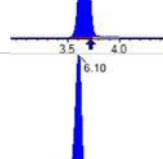
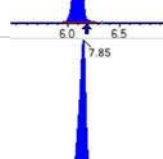
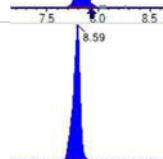
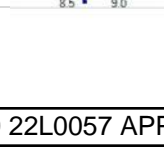
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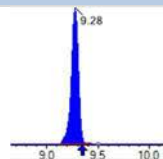
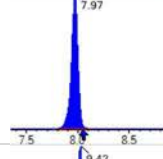
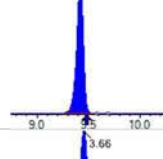
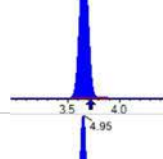
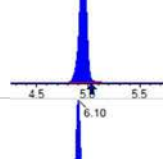
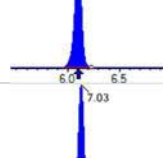
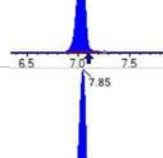
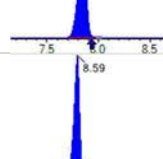
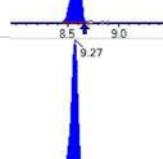
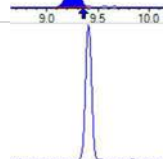
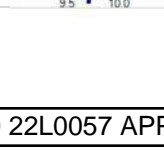
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 527124	(9.48, N/A) (N/A, -0.05, N/A)	391.6	N/A	3.8683 [4.0000]	96.7% { 103.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 394245	(9.67, N/A) (N/A, -0.03, N/A)	343.6	N/A	3.2824 [4.0000]	82.1% { 83.6% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 378964	(10.56, N/A) (N/A, -0.02, N/A)	878.6	N/A	17.0648 [20.0000]	85.3% { 87.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 187054	(10.66, N/A) (N/A, -0.02, N/A)	1005.6	N/A	18.5020 [20.0000]	92.5% { 102.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1123837	(6.48, N/A) (N/A, -0.05, N/A)	699.6	N/A	7.4053 [8.0000]	92.6% { 95.7% }			

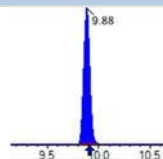
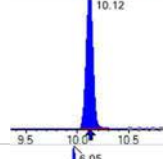
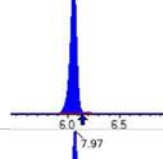
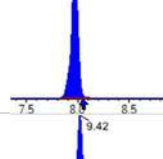
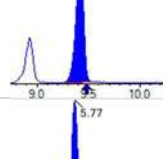
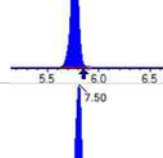
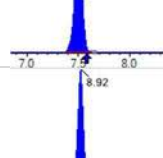
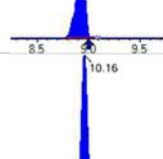
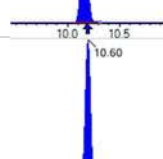
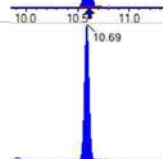
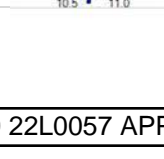
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 15778457	(3.66, 1.00) (0.00, N/A, 0.0)	61.8	N/A 0.0 0.0	201.2526 [200.0000]	100.6%			
PFPeA	(262.9 / 219.0) 12133479 (262.9 / 69.0) 132475	(4.95, 1.00) (0.00, N/A, 0.1)	828.8 567.2	0.0109 97.5 97.5	97.3969 [100.0000]	97.4%			
PFHxA	(313.0 / 269.0) 10205443 (313.0 / 119.0) 948352	(6.10, 1.00) (0.00, N/A, -0.2)	779.4 798.1	0.0929 95.0 95.0	48.9028 [50.0000]	97.8%			
PFHpA	(363.0 / 319.0) 9310576 (363.0 / 169.0) 2680356	(7.03, 1.00) (0.00, N/A, 0.2)	724.8 594.8	0.2879 92.4 92.4	47.8422 [50.0000]	95.7%			
PFOA	(413.0 / 369.0) 10880930 (413.0 / 169.0) 3245631	(7.85, 1.00) (0.00, N/A, 0.1)	767.4 928.5	0.2983 91.3 91.3	47.1047 [50.0000]	94.2%			
PFNA	(463.0 / 419.0) 7522680 (463.0 / 169.0) 1650478	(8.59, 1.00) (0.00, N/A, 0.3)	453.6 145.2	0.2194 113.8 113.8	44.6746 [50.0000]	89.3%			
PFDA	(513.0 / 469.0) 10901269 (513.0 / 169.0) 1054782	(9.27, 1.00) (0.00, N/A, 0.0)	475.9 419.2	0.0968 101.2 101.2	47.0411 [50.0000]	94.1%			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000 [50.0000]	N/A%			QC,
PFDoA	(613.0 / 569.0) 13234710 (613.0 / 169.0) 1677806	(9.88, 1.00) (0.00, N/A, 0.0)	801.8 797.3	0.1268 91.1 91.1	43.9737 [50.0000]	87.9%			
PFTrDA	(663.0 / 619.0) 10582859 (663.0 / 169.0) 2206188	(10.01, 1.01) (N/A, -0.01, 0.1)	667.9 1097.1	0.2085 101.9 101.9	40.5849 [50.0000]	81.2%			
PFTeDA	(713.0 / 669.0) 7805760 (713.0 / 169.0) 1615620	(10.12, 1.00) (0.00, N/A, 0.2)	709.6 922.1	0.2070 101.8 101.8	43.8879 [50.0000]	87.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 14320384 (298.9 / 99.0) 9157257	(6.05, 1.00) (0.00, N/A, 0.0)	609.6 755.2	0.6395 103.9 103.9	41.9991 [44.2367]	94.9%			
PFPeS	(349.0 / 80.0) 27380308 (349.0 / 99.0) 10684632	(7.10, 0.89) (N/A, -0.08, 0.0)	716.4 803.4	0.3902 109.6 109.6	43.5556 [46.9191]	92.8%			
PFHxS	(399.0 / 80.0) 23822711 (399.0 / 99.0) 8501412	(7.97, 1.00) (0.00, N/A, 0.2)	3206.8 4858.3	0.3569 106.2 106.2	43.5764 [45.5491]	95.7%			
PFHpS	(449.0 / 80.0) 21526516 (449.0 / 99.0) 6225213	(8.74, 0.93) (N/A, -0.08, -0.2)	807.9 582.9	0.2892 105.7 105.7	53.6267 [47.5703]	112.7%			
PFOS	(499.0 / 80.0) 23361916 (499.0 / 99.0) 5350161	(9.42, 1.00) (0.00, N/A, 0.2)	90.6 158.6	0.2290 94.2 94.2	46.7847 [46.3746]	100.9%			
PFNS	(549.0 / 80.0) 25746195 (549.0 / 99.0) 6429920	(9.75, 1.04) (N/A, -0.02, -0.1)	637.6 712.8	0.2497 102.3 102.3	46.4790 [47.9943]	96.8%			
PFDS	(599.0 / 80.0) 29991360 (599.0 / 99.0) 7324275	(9.90, 1.05) (N/A, -0.02, 0.0)	1114.1 872.9	0.2442 108.5 108.5	48.7700 [48.1553]	101.3%			
PFDoS	(698.9 / 80.0) 13570418 (698.9 / 99.0) 2668933	(10.10, 1.07) (N/A, -0.02, 0.0)	1153.0 1114.8	0.1967 80.4 80.4	52.7987 [48.4781]	108.9%			
4:2FTS	(327.0 / 307.0) 28030184 (327.0 / 81.0) 16838889	(5.77, 1.00) (0.00, N/A, -0.1)	791.1 776.4	0.6007 121.6 121.6	162.6637 [186.9055]	87.0%			
6:2FTS	(427.0 / 407.0) 17601598 (427.0 / 81.0) 12202144	(7.51, 1.00) (0.01, N/A, 0.1)	1049.9 926.0	0.6932 89.1 89.1	159.3520 [189.8085]	84.0%			
8:2FTS	(527.0 / 507.0) 17933024 (527.0 / 81.0) 10716573	(8.93, 1.00) (0.00, N/A, 0.1)	442.8 462.7	0.5976 105.6 105.6	159.3327 [191.6577]	83.1%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 26488352 (498.0 / 478.0) 712333	(10.16 , 1.00) (0.00 , N/A , 0.0)	898.9 465.3	0.0269 129.0 129.0	44.9093 [50.0000]	89.8%			
NMeFOSA	(511.9 / 219.0) 20550926 (511.9 / 169.0) 14258423	(10.60 , 1.00) (0.00 , N/A , 0.0)	1415.7 1392.1	0.6938 96.3 96.3	154.7837 [200.0000]	77.4%			
NEIFOSA	(526.0 / 219.0) 20990611 (526.0 / 169.0) 22220555	(10.69 , 1.00) (0.00 , N/A , 0.0)	1261.8 1236.0	1.0586 100.1 100.1	180.9576 [200.0000]	90.5%			
NMeFOSAA	(570.0 / 419.0) 4624057 (570.0 / 483.0) 2546681	(9.48 , 1.00) (0.00 , N/A , 0.1)	612.4 699.2	0.5507 89.6 89.6	52.0507 [50.0000]	104.1%			
NEIFOSAA	(584.0 / 419.0) 3449541 (584.0 / 526.0) 2257461	(9.66 , 1.00) (0.01 , N/A , 0.1)	2584.8 1657.6	0.6544 89.3 89.3	44.6984 [50.0000]	89.4%			
NMeFOSE	(616.1 / 59.0) 4659899	(10.57 , 1.00) (0.01 , N/A , 0.0)	1409.7	N/A 0.0 0.0	193.2279 [200.0000]	96.6%			
NEtFOSE	(630.0 / 59.0) 761135	(10.67 , 1.00) (0.01 , N/A , 0.0)	1449.6	N/A 0.0 0.0	176.5757 [200.0000]	88.3%			
HFPO-DA	(285.0 / 169.0) 7283624 (285.0 / 185.0) 21015218	(6.45 , 1.00) (0.00 , N/A , 0.0)	819.6 766.3	2.8853 105.1 105.1	92.2819 [100.0000]	92.3%			
ADONA	(377.0 / 85.0) 30997851 (377.0 / 251.0) 4228517	(7.35 , 1.14) (N/A , -0.08 , -0.1)	720.3 754.4	0.1364 109.5 109.5	88.4207 [94.2700]	93.8%			
9CI-Pf3ONS	(531.0 / 351.0) 59541631 (533.0 / 353.0) 22562888	(9.70 , 1.51) (N/A , -0.03 , 0.0)	623.2 593.5	0.3789 128.0 128.0	93.8486 [93.3254]	100.6%			
11CI-PF3OUDS	(631.0 / 451.0) 37565149 (633.0 / 453.0) 12408034	(9.99 , 1.55) (N/A , -0.02 , 0.0)	851.2 754.0	0.3303 99.8 99.8	76.6659 [94.3208]	81.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 940591 (241.0 / 117.0) 1590971	(4.43, 0.90) (N/A, -0.08, 0.1)	760.7 709.5	1.6915 101.1 101.1	218.7688 [200.0000]	109.4%			
5:3FTCA	(341.0 / 236.7) 7717092 (341.0 / 217.0) 13002088	(6.73, 1.10) (N/A, -0.09, 0.0)	773.6 732.5	1.6848 115.1 115.1	209.2781 [200.0000]	104.6%			
7:3FTCA	(441.0 / 317.0) 8714946 (441.0 / 337.0) 7497720	(8.55, 1.40) (N/A, -0.08, -0.1)	569.5 568.2	0.8603 102.7 102.7	205.3998 [200.0000]	102.7%			
PFEESA	(315.0 / 135.0) 18885479 (315.0 / 83.0) 5523428	(6.56, 1.07) (N/A, -0.08, 0.1)	779.0 865.9	0.2925 95.3 95.3	82.6581 [89.2459]	92.6%			
PFMPA	(229.0 / 85.0) 3283850	(4.15, 0.84) (N/A, -0.07, 0.0)	1205.9	N/A 0.0 0.0	96.0441 [100.0000]	96.0%			
PFMBA	(279.0 / 85.0) 11632442	(5.34, 1.08) (N/A, -0.09, 0.0)	841.8	N/A 0.0 0.0	98.4289 [100.0000]	98.4%			
NFDHA	(295.0 / 201.0) 10199642 (295.0 / 85.0) 9290082	(5.98, 0.98) (N/A, -0.09, 0.0)	742.8 3901.2	0.9108 103.2 103.2	96.9290 [100.0000]	96.9%			
13C3_PFBA_IIS	(216.0 / 172.0) 117318	(3.66, N/A) (N/A, -0.06, N/A)	626.3	N/A	0.8428 [1.0000]	84.3% {77.3%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 217089	(6.10, N/A) (N/A, -0.08, N/A)	517.0	N/A	0.9401 [1.0000]	94.0% {92.8%}			
13C4_PFOA_IIS	(417.0 / 372.0) 213627	(7.85, N/A) (N/A, -0.08, N/A)	585.4	N/A	0.9717 [1.0000]	97.2% {89.8%}			
13C5_PFNA_IIS	(468.0 / 423.0) 176727	(8.59, N/A) (N/A, -0.07, N/A)	679.2	N/A	0.9543 [1.0000]	95.4% {87.4%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 182763	(9.28, N/A) (N/A, -0.07, N/A)	341.1	N/A	0.9889 [1.0000]	98.9% { 105.1% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 402575	(7.97, N/A) (N/A, -0.08, N/A)	727.1	N/A	0.9972 [1.0000]	99.7% { 95.2% }			
13C4_PFOS_IIS	(502.8 / 79.9) 278049	(9.42, N/A) (N/A, -0.06, N/A)	306.0	N/A	0.8711 [1.0000]	87.1% { 84.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 961408	(3.66, N/A) (N/A, -0.06, N/A)	859.7	N/A	7.9622 [8.0000]	99.5% { 80.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 567388	(4.95, N/A) (N/A, -0.09, N/A)	677.6	N/A	3.7563 [4.0000]	93.9% { 81.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 485987	(6.10, N/A) (N/A, -0.09, N/A)	662.7	N/A	1.9454 [2.0000]	97.3% { 90.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 426996	(7.03, N/A) (N/A, -0.08, N/A)	645.9	N/A	1.9593 [2.0000]	98.0% { 87.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 469799	(7.85, N/A) (N/A, -0.08, N/A)	623.6	N/A	2.0053 [2.0000]	100.3% { 94.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 196241	(8.59, N/A) (N/A, -0.08, N/A)	331.3	N/A	1.0098 [1.0000]	101.0% { 89.7% }			
13C6_PFDA_EIS	(519.0 / 474.0) 243463	(9.27, N/A) (N/A, -0.07, N/A)	373.7	N/A	0.9366 [1.0000]	93.7% { 86.6% }			
13C7_PFUnA_EIS	(570.0 / 525.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A	0.0000 [1.0000]	0.0% { 0.0% }			S1,

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 349119	(9.88, N/A) (N/A, -0.02, N/A)	640.2	N/A	0.9461 [1.0000]	94.6% { 90.1% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 200679	(10.12, N/A) (N/A, -0.01, N/A)	414.7	N/A	0.8188 [1.0000]	81.9% { 83.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1243843	(6.05, N/A) (N/A, -0.09, N/A)	653.6	N/A	1.8274 [2.0000]	91.4% { 90.6% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 703772	(7.97, N/A) (N/A, -0.08, N/A)	1021.2	N/A	1.9433 [2.0000]	97.2% { 93.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 920090	(9.42, N/A) (N/A, -0.07, N/A)	82.3	N/A	1.9281 [2.0000]	96.4% { 77.3% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 208461	(5.77, N/A) (N/A, -0.09, N/A)	614.0	N/A	3.6160 [4.0000]	90.4% { 93.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 287362	(7.50, N/A) (N/A, -0.08, N/A)	693.3	N/A	4.1402 [4.0000]	103.5% { 104.7% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 284164	(8.92, N/A) (N/A, -0.08, N/A)	462.0	N/A	4.0898 [4.0000]	102.2% { 96.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1248175	(10.16, N/A) (N/A, -0.02, N/A)	697.4	N/A	2.0692 [2.0000]	103.5% { 85.2% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 325759	(10.60, N/A) (N/A, -0.01, N/A)	1257.7	N/A	2.4735 [2.0000]	123.7% { 98.7% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 257195	(10.69, N/A) (N/A, -0.01, N/A)	672.7	N/A	2.1155 [2.0000]	105.8% { 90.4% }			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03941-CAL8
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21A (8)
 Acquired: 2022/12/21 - 15:55

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 455998	(9.47, N/A) (N/A, -0.06, N/A)	320.1	N/A	4.0185 [4.0000]	100.5% { 89.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 343842	(9.66, N/A) (N/A, -0.04, N/A)	325.4	N/A	3.4378 [4.0000]	85.9% { 73.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 382126	(10.56, N/A) (N/A, -0.01, N/A)	1054.7	N/A	20.6637 [20.0000]	103.3% { 88.5% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 168371	(10.66, N/A) (N/A, -0.01, N/A)	1121.1	N/A	19.9994 [20.0000]	100.0% { 92.3% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1038848	(6.44, N/A) (N/A, -0.08, N/A)	965.8	N/A	7.8213 [8.0000]	97.8% { 88.4% }			

SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633 SPLP****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
PFBA	8.00	7.99	-0.1	30.00
PFBA	8.00	7.99	-0.1	30.00
PFPEA	4.00	4.05	1.3	30.00
PFPEA	4.00	4.05	1.3	30.00
PFHXA	2.00	2.06	2.9	30.00
PFHXA	2.00	2.06	2.9	30.00
PFHPA	2.00	1.83	-8.4	30.00
PFHPA	2.00	1.83	-8.4	30.00
PFOA	2.00	1.92	-4.0	30.00
PFOA	2.00	1.92	-4.0	30.00
PFNA	2.00	1.98	-1.0	30.00
PFNA	2.00	1.98	-1.0	30.00
PFDA	2.00	1.94	-3.0	30.00
PFDA	2.00	1.94	-3.0	30.00
PFUnA	2.00	2.01	0.6	30.00
PFUnA	2.00	2.01	0.6	30.00
PFDOA	2.00	1.94	-2.8	30.00
PFDOA	2.00	1.94	-2.8	30.00
PFTRDA	2.00	2.06	3.0	30.00
PFTRDA	2.00	2.06	3.0	30.00
PFTEDA	2.00	2.52	25.9	30.00
PFTEDA	2.00	2.52	25.9	30.00
PFBS	1.77	1.80	1.7	30.00
PFBS	1.77	1.80	1.7	30.00
PFPEs	1.88	1.90	1.2	30.00
PFPEs	1.88	1.90	1.2	30.00
PFHXS	1.83	1.70	-7.0	30.00

SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633 SPLP****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

PFHXS	1.83	1.70	-7.0	30.00
PFHPS	1.91	1.91	-0.1	30.00
PFHPS	1.91	1.91	-0.1	30.00
PFOS	1.86	1.92	3.4	30.00
PFOS	1.86	1.92	3.4	30.00
PFNS	1.92	2.20	14.7	30.00
PFNS	1.92	2.20	14.7	30.00
PFDS	1.93	2.24	16.0	30.00
PFDS	1.93	2.24	16.0	30.00
PFDOS	1.94	2.09	7.7	30.00
PFDOS	1.94	2.09	7.7	30.00
4:2FTS	7.50	7.40	-1.3	30.00
4:2FTS	7.50	7.40	-1.3	30.00
6:2FTS	7.60	7.32	-3.6	30.00
6:2FTS	7.60	7.32	-3.6	30.00
8:2FTS	7.68	8.45	10.0	30.00
8:2FTS	7.68	8.45	10.0	30.00
PFOSA	2.00	1.87	-6.3	30.00
PFOSA	2.00	1.87	-6.3	30.00
NMeFOSA	8.00	7.40	-7.5	30.00
NMeFOSA	8.00	7.40	-7.5	30.00
NEtFOSA	8.00	7.80	-2.5	30.00
NEtFOSA	8.00	7.80	-2.5	30.00
NMeFOSAA	2.00	2.24	11.9	30.00
NMeFOSAA	2.00	2.24	11.9	30.00
NEtFOSAA	2.00	1.95	-2.5	30.00
NEtFOSAA	2.00	1.95	-2.5	30.00
NMeFOSE	8.00	7.20	-10.0	30.00
NMeFOSE	8.00	7.20	-10.0	30.00

SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

NEtFOSE	8.00	7.47	-6.6	30.00
NEtFOSE	8.00	7.47	-6.6	30.00
HFPO-DA	4.00	3.77	-5.8	30.00
HFPO-DA	4.00	3.77	-5.8	30.00
ADONA	3.78	3.68	-2.6	30.00
ADONA	3.78	3.68	-2.6	30.00
PFEESA	3.56	3.55	-0.3	30.00
PFEESA	3.56	3.55	-0.3	30.00
PFMPA	4.00	3.70	-7.5	30.00
PFMPA	4.00	3.70	-7.5	30.00
PFMBA	4.00	3.61	-9.8	30.00
PFMBA	4.00	3.61	-9.8	30.00
NFDHA	4.00	3.97	-0.8	30.00
NFDHA	4.00	3.97	-0.8	30.00
9CL-PF3ONS	3.74	3.62	-3.2	30.00
9CL-PF3ONS	3.74	3.62	-3.2	30.00
11CL-PF3OUDS	3.78	3.53	-6.6	30.00
11CL-PF3OUDS	3.78	3.53	-6.6	30.00
3:3FTCA	8.00	7.48	-6.5	30.00
3:3FTCA	8.00	7.48	-6.5	30.00
5:3FTCA	8.00	8.11	1.4	30.00
5:3FTCA	8.00	8.11	1.4	30.00
7:3FTCA	8.00	8.03	0.3	30.00
7:3FTCA	8.00	8.03	0.3	30.00
13C4-PFBA	8.00	8.64	8.0	30.00
13C4-PFBA	8.00	8.64	8.0	30.00
13C5-PFPEA	4.00	4.71	17.7	30.00
13C5-PFPEA	4.00	4.71	17.7	30.00
13C5-PFHXA	2.00	2.18	8.9	30.00

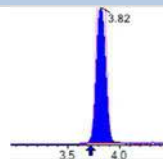
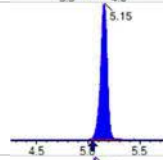
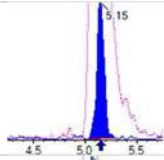
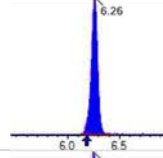
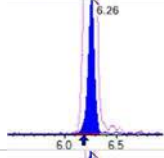
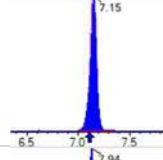
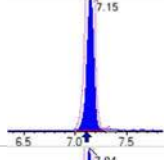
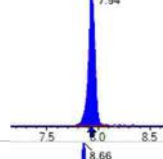
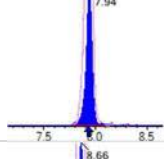
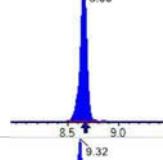
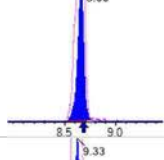
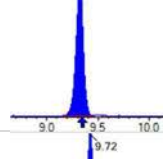
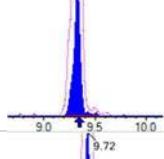
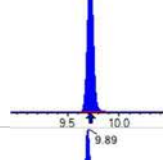
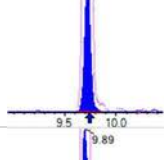
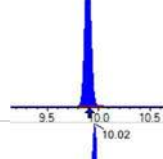
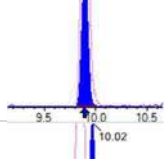
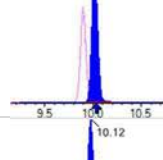
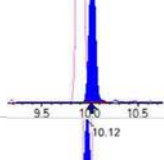
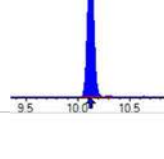
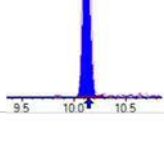
SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

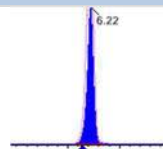
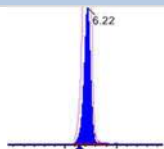
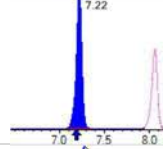
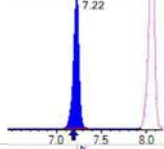
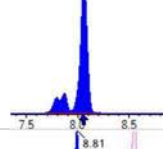
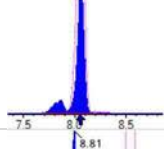
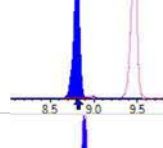
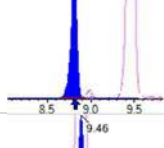
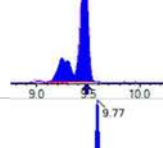
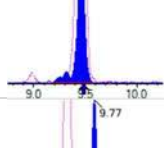
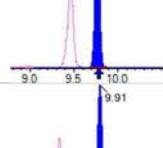
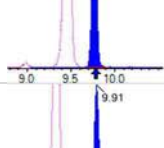
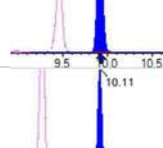
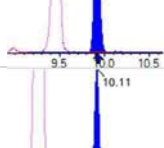
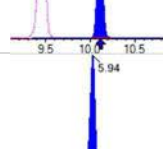
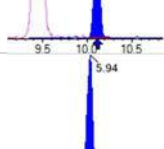
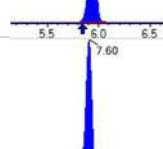
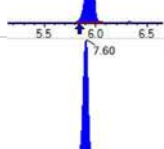
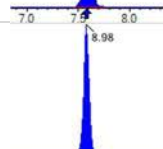
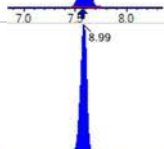
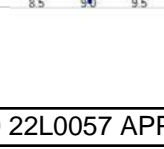
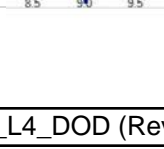
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13C4-PFHXA	2.00	2.44	22.0	30.00
13C8-PFOA	2.00	2.51	25.6	30.00
13C8-PFOA	2.00	2.51	25.6	30.00
13C9-PFNA	1.00	1.15	15.1	30.00
13C9-PFNA	1.00	1.15	15.1	30.00
13C6-PFDA	1.00	1.02	1.6	30.00
13C6-PFDA	1.00	1.02	1.6	30.00
13C7-PFUnA	1.00	1.01	0.9	30.00
13C7-PFUnA	1.00	1.01	0.9	30.00
13C2-PFDOA	1.00	1.12	12.1	30.00
13C2-PFDOA	1.00	1.12	12.1	30.00
13C2-PFTEDA	1.00	0.926	-7.4	30.00
13C2-PFTEDA	1.00	0.926	-7.4	30.00
13C3-PFBS	2.00	2.14	7.0	30.00
13C3-PFBS	2.00	2.14	7.0	30.00
13C3-PFHXS	2.00	2.11	5.5	30.00
13C3-PFHXS	2.00	2.11	5.5	30.00
13C8-PFOS	2.00	2.03	1.7	30.00
13C8-PFOS	2.00	2.03	1.7	30.00
13C2-4:2FTS	4.00	4.28	7.0	30.00
13C2-4:2FTS	4.00	4.28	7.0	30.00
13C2-6:2FTS	4.00	4.19	4.8	30.00
13C2-6:2FTS	4.00	4.19	4.8	30.00
13C2-8:2FTS	4.00	4.81	20.3	30.00
13C2-8:2FTS	4.00	4.81	20.3	30.00
13C8-PFOSA	2.00	2.54	26.8	30.00
13C8-PFOSA	2.00	2.54	26.8	30.00

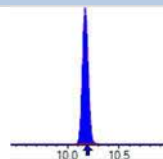
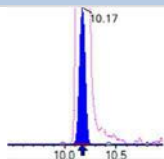
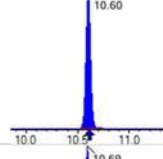
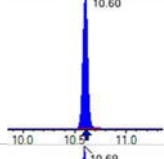
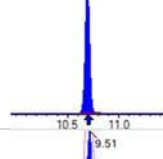
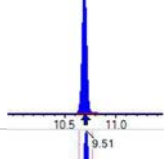
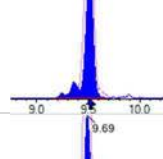
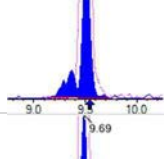
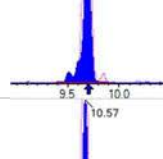
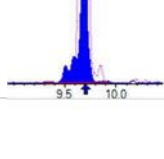
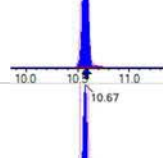
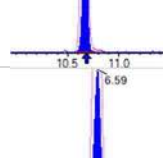
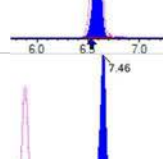
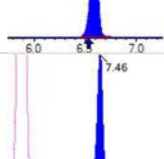
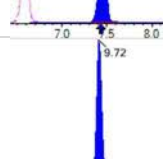
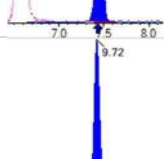
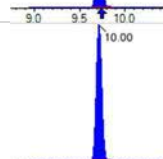
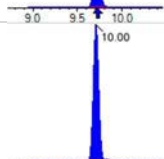
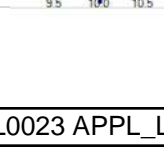
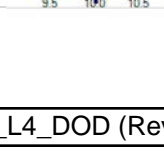
SECOND-SOURCE CALIBRATION VERIFICATION**EPA 1633****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03941-SCV1**Sequence:** SB03941**Standard ID:** 22L0308

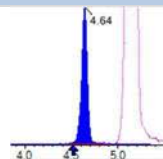
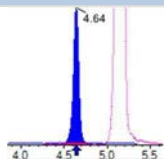
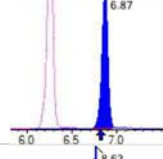
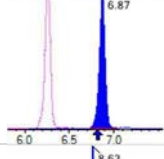
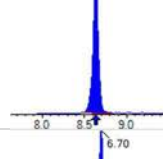
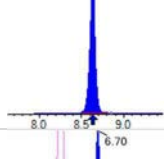
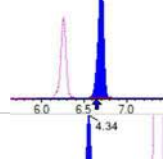
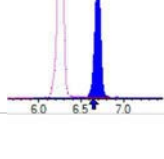
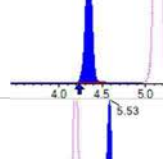
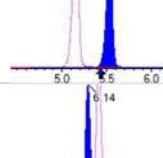
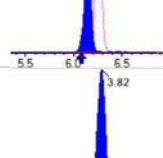
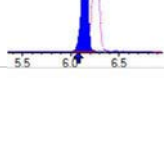
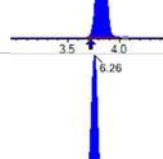
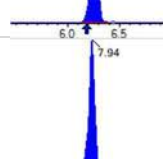
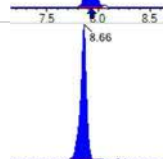
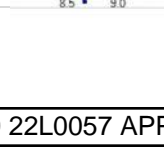
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D5-NETFOSA	2.00	2.46	23.2	30.00
D3-NMEFOSA	2.00	2.31	15.5	30.00
D3-NMEFOSA	2.00	2.31	15.5	30.00
D3-NMEFOSAA	4.00	3.87	-3.3	30.00
D3-NMEFOSAA	4.00	3.87	-3.3	30.00
D5-NETFOSAA	4.00	4.12	3.0	30.00
D5-NETFOSAA	4.00	4.12	3.0	30.00
D7-NMEFOSE	20.0	22.3	11.5	30.00
D7-NMEFOSE	20.0	22.3	11.5	30.00
D9-NETFOSE	20.0	21.7	8.5	30.00
D9-NETFOSE	20.0	21.7	8.5	30.00
13C3-HFPO-DA	8.00	9.26	15.7	30.00
13C3-HFPO-DA	8.00	9.26	15.7	30.00

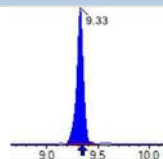
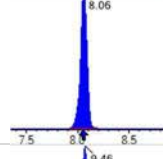
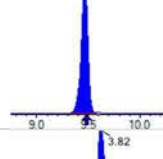
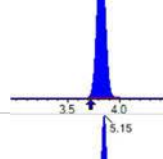
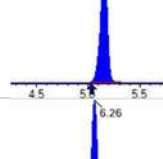
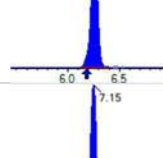
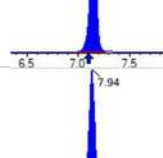
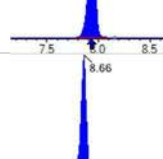
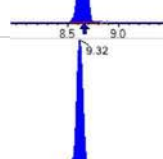
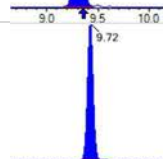
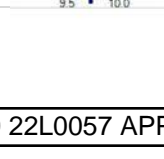
* Values outside of QC limits

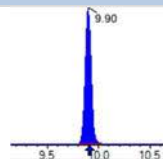
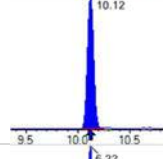
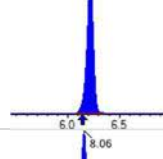
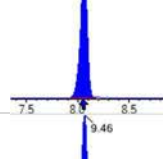
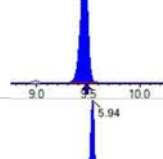
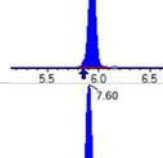
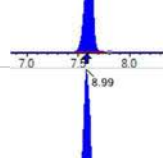
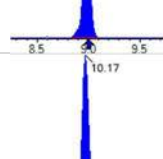
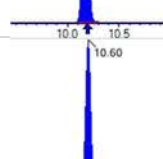
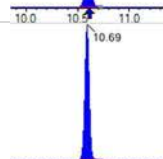
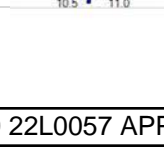
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 826160	(3.82, 1.00) (0.00, N/A, 0.0)	66.3	N/A 0.0 0.0	7.9908 [8.0000]	99.9%			
PFPeA	(262.9 / 219.0) 615408 (262.9 / 69.0) 7099	(5.15, 1.00) (0.00, N/A, 0.4)	793.3 166.5	0.0115 103.1 103.1	4.0518 [4.0000]	101.3%			
PFHxA	(313.0 / 269.0) 467843 (313.0 / 119.0) 45951	(6.26, 1.00) (0.00, N/A, 0.1)	507.4 322.7	0.0982 100.5 100.5	2.0587 [2.0000]	102.9%			
PFHpA	(363.0 / 319.0) 432075 (363.0 / 169.0) 138649	(7.15, 1.00) (0.00, N/A, 0.1)	541.7 385.0	0.3209 103.0 103.0	1.8321 [2.0000]	91.6%			
PFOA	(413.0 / 369.0) 540570 (413.0 / 169.0) 167693	(7.94, 1.00) (0.00, N/A, -0.3)	662.9 505.8	0.3102 94.9 94.9	1.9199 [2.0000]	96.0%			
PFNA	(463.0 / 419.0) 409308 (463.0 / 169.0) 78936	(8.66, 1.00) (0.00, N/A, -0.2)	495.2 94.8	0.1929 100.1 100.1	1.9793 [2.0000]	99.0%			
PFDA	(513.0 / 469.0) 482820 (513.0 / 169.0) 47535	(9.32, 1.00) (0.00, N/A, -0.3)	450.3 235.5	0.0985 103.0 103.0	1.9394 [2.0000]	97.0%			
PFUnA	(563.0 / 519.0) 587146 (563.0 / 169.0) 44298	(9.72, 1.00) (0.00, N/A, 0.0)	626.0 279.6	0.0754 86.9 86.9	2.0110 [2.0000]	100.6%			
PFDoA	(613.0 / 569.0) 686509 (613.0 / 169.0) 89917	(9.89, 1.00) (0.00, N/A, 0.0)	663.9 317.2	0.1310 94.1 94.1	1.9439 [2.0000]	97.2%			
PFTrDA	(663.0 / 619.0) 630517 (663.0 / 169.0) 105737	(10.02, 1.01) (N/A, -0.01, -0.3)	802.7 413.6	0.1677 81.9 81.9	2.0607 [2.0000]	103.0%			
PFTeDA	(713.0 / 669.0) 501366 (713.0 / 169.0) 87460	(10.12, 1.00) (0.00, N/A, 0.2)	703.1 221.5	0.1744 85.8 85.8	2.5178 [2.0000]	125.9%			

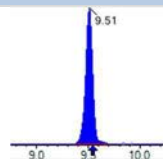
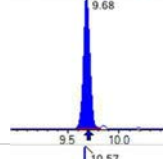
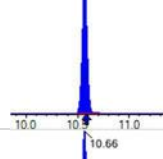
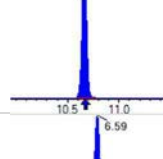
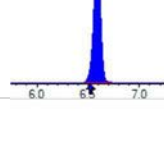
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 721250 (298.9 / 99.0) 444102	(6.22, 1.00) (0.00, N/A, 0.0)	841.6 645.4	0.6157 100.0 100.0	1.7993 [1.7695]	101.7%			
PFPeS	(349.0 / 80.0) 1304493 (349.0 / 99.0) 488870	(7.22, 0.90) (N/A, 0.04, -0.1)	955.5 884.4	0.3748 105.3 105.3	1.9033 [1.8768]	101.4%			
PFHxS	(399.0 / 80.0) 1014894 (399.0 / 99.0) 344027	(8.06, 1.00) (0.00, N/A, 0.0)	2419.1 74677.8	0.3390 100.8 100.8	1.7027 [1.8220]	93.5%			
PFHpS	(449.0 / 80.0) 879262 (449.0 / 99.0) 257815	(8.81, 0.93) (N/A, -0.01, -0.3)	667.5 488.6	0.2932 107.1 107.1	1.9077 [1.9028]	100.3%			
PFOS	(499.0 / 80.0) 1102928 (499.0 / 99.0) 236253	(9.46, 1.00) (0.00, N/A, 0.1)	115.1 129.8	0.2142 88.1 88.1	1.9236 [1.8550]	103.7%			
PFNS	(549.0 / 80.0) 1400580 (549.0 / 99.0) 348700	(9.77, 1.03) (N/A, -0.01, 0.0)	867.1 541.9	0.2490 102.0 102.0	2.2021 [1.9198]	114.7%			
PFDS	(599.0 / 80.0) 1581305 (599.0 / 99.0) 390095	(9.91, 1.05) (N/A, -0.01, 0.2)	992.5 464.1	0.2467 109.6 109.6	2.2395 [1.9262]	116.3%			
PFDoS	(698.9 / 80.0) 616747 (698.9 / 99.0) 133778	(10.11, 1.07) (N/A, -0.01, 0.0)	738.0 572.8	0.2169 88.7 88.7	2.0898 [1.9391]	107.8%			
4:2FTS	(327.0 / 307.0) 1514379 (327.0 / 81.0) 770935	(5.94, 1.00) (0.00, N/A, -0.1)	803.6 624.3	0.5091 103.1 103.1	7.3999 [7.4762]	99.0%			
6:2FTS	(427.0 / 407.0) 821840 (427.0 / 81.0) 567834	(7.60, 1.00) (0.00, N/A, 0.1)	946.6 705.6	0.6909 88.8 88.8	7.3229 [7.5923]	96.5%			
8:2FTS	(527.0 / 507.0) 1122259 (527.0 / 81.0) 538134	(8.98, 1.00) (0.00, N/A, -0.3)	414.3 515.2	0.4795 84.7 84.7	8.4461 [7.6663]	110.2%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 1474063 (498.0 / 478.0) 37178	(10.17, 1.00) (0.00, N/A, -0.1)	843.1 534.3	0.0252 121.0 121.0	1.8741 [2.0000]	93.7%			
NMeFOSA	(511.9 / 219.0) 999598 (511.9 / 169.0) 689735	(10.60, 1.00) (0.00, N/A, 0.0)	861.8 1151.0	0.6900 95.8 95.8	7.4034 [8.0000]	92.5%			
NEIFOSA	(526.0 / 219.0) 1146883 (526.0 / 169.0) 1178077	(10.69, 1.00) (0.00, N/A, 0.0)	1268.4 1089.4	1.0272 97.1 97.1	7.8009 [8.0000]	97.5%			
NMeFOSAA	(570.0 / 419.0) 208249 (570.0 / 483.0) 104771	(9.51, 1.00) (0.00, N/A, 0.2)	375.1 198.5	0.5031 81.8 81.8	2.2376 [2.0000]	111.9%			
NEIFOSAA	(584.0 / 419.0) 196413 (584.0 / 526.0) 111297	(9.69, 1.00) (0.01, N/A, 0.2)	455.1 117896.6	0.5666 77.3 77.3	1.9508 [2.0000]	97.5%			
NMeFOSE	(616.1 / 59.0) 203936	(10.57, 1.00) (0.01, N/A, 0.0)	1358.7	N/A 0.0 0.0	7.2019 [8.0000]	90.0%			
NEtFOSE	(630.0 / 59.0) 38033	(10.67, 1.00) (0.01, N/A, 0.0)	607.4	N/A 0.0 0.0	7.4728 [8.0000]	93.4%			
HFPO-DA	(285.0 / 169.0) 342689 (285.0 / 185.0) 1020987	(6.59, 1.00) (0.00, N/A, -0.1)	626.5 698.6	2.9793 108.5 108.5	3.7699 [4.0000]	94.2%			
ADONA	(377.0 / 85.0) 1486505 (377.0 / 251.0) 199325	(7.46, 1.13) (N/A, 0.03, 0.1)	678.2 385.1	0.1341 107.7 107.7	3.6817 [3.7708]	97.6%			
9CI-Pf3ONS	(531.0 / 351.0) 4066455 (533.0 / 353.0) 1234707	(9.72, 1.47) (N/A, -0.01, 0.0)	855.0 727.0	0.3036 102.6 102.6	3.6202 [3.7330]	97.0%			
11CI-PF3OUDS	(631.0 / 451.0) 1991501 (633.0 / 453.0) 617773	(10.00, 1.52) (N/A, -0.01, 0.0)	1070.3 1217.2	0.3102 93.8 93.8	3.5291 [3.7728]	93.5%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 39196 (241.0 / 117.0) 66770	(4.64, 0.90) (N/A, 0.12, 0.0)	403.7 453.1	1.7035 101.8 101.8	7.4773 [8.0000]	93.5%			
5:3FTCA	(341.0 / 236.7) 325755 (341.0 / 217.0) 500274	(6.87, 1.10) (N/A, 0.05, 0.0)	422.5 555.2	1.5357 104.9 104.9	8.1123 [8.0000]	101.4%			
7:3FTCA	(441.0 / 317.0) 370796 (441.0 / 337.0) 321550	(8.63, 1.38) (N/A, 0.00, 0.0)	380.2 406.9	0.8672 103.5 103.5	8.0251 [8.0000]	100.3%			
PFEESA	(315.0 / 135.0) 883452 (315.0 / 83.0) 263398	(6.70, 1.07) (N/A, 0.06, 0.2)	692.7 623.8	0.2981 97.1 97.1	3.5508 [3.5698]	99.5%			
PFMPA	(229.0 / 85.0) 154156	(4.34, 0.84) (N/A, 0.12, 0.0)	850.9	N/A 0.0 0.0	3.6980 [4.0000]	92.5%			
PFMBA	(279.0 / 85.0) 519912	(5.53, 1.07) (N/A, 0.11, 0.0)	881.8	N/A 0.0 0.0	3.6083 [4.0000]	90.2%			
NFDHA	(295.0 / 201.0) 454901 (295.0 / 85.0) 446222	(6.14, 0.98) (N/A, 0.08, -0.1)	909.2 665.8	0.9809 111.1 111.1	3.9698 [4.0000]	99.2%			
13C3_PFBa_IIS	(216.0 / 172.0) 142617	(3.82, N/A) (N/A, 0.11, N/A)	772.3	N/A	1.0246 [1.0000]	102.5% { 94.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 211230	(6.26, N/A) (N/A, 0.07, N/A)	637.8	N/A	0.9147 [1.0000]	91.5% { 90.3% }			
13C4_PFOA_IIS	(417.0 / 372.0) 207848	(7.94, N/A) (N/A, 0.01, N/A)	791.1	N/A	0.9454 [1.0000]	94.5% { 87.3% }			
13C5_PFNAl_IIS	(468.0 / 423.0) 190473	(8.66, N/A) (N/A, -0.01, N/A)	365.8	N/A	1.0286 [1.0000]	102.9% { 94.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 180965	(9.33, N/A) (N/A, -0.02, N/A)	300.8	N/A	0.9792 [1.0000]	97.9% { 104.1% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 404075	(8.06, N/A) (N/A, 0.01, N/A)	755.5	N/A	1.0009 [1.0000]	100.1% { 95.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 302637	(9.46, N/A) (N/A, -0.02, N/A)	490.6	N/A	0.9482 [1.0000]	94.8% { 92.3% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1267826	(3.82, N/A) (N/A, 0.10, N/A)	950.4	N/A	8.6374 [8.0000]	108.0% { 106.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 691765	(5.15, N/A) (N/A, 0.12, N/A)	655.0	N/A	4.7068 [4.0000]	117.7% { 99.4% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 529227	(6.26, N/A) (N/A, 0.07, N/A)	586.3	N/A	2.1772 [2.0000]	108.9% { 98.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 517454	(7.15, N/A) (N/A, 0.04, N/A)	625.4	N/A	2.4402 [2.0000]	122.0% { 105.4% }			
13C8_PFOA_EIS	(421.0 / 376.0) 572643	(7.94, N/A) (N/A, 0.01, N/A)	628.4	N/A	2.5123 [2.0000]	125.6% { 115.1% }			
13C9_PFNA_EIS	(472.0 / 427.0) 241000	(8.66, N/A) (N/A, -0.01, N/A)	482.3	N/A	1.1506 [1.0000]	115.1% { 110.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 261552	(9.32, N/A) (N/A, -0.02, N/A)	324.9	N/A	1.0162 [1.0000]	101.6% { 93.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 369444	(9.72, N/A) (N/A, -0.01, N/A)	383.8	N/A	1.0092 [1.0000]	100.9% { 92.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 409663	(9.90, N/A) (N/A, -0.01, N/A)	784.5	N/A	1.1211 [1.0000]	112.1% { 105.7% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 224684	(10.12, N/A) (N/A, -0.01, N/A)	303.5	N/A	0.9259 [1.0000]	92.6% { 92.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1462249	(6.22, N/A) (N/A, 0.08, N/A)	885.8	N/A	2.1403 [2.0000]	107.0% { 106.5% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 767313	(8.06, N/A) (N/A, 0.01, N/A)	732.1	N/A	2.1109 [2.0000]	105.5% { 101.8% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1056462	(9.46, N/A) (N/A, -0.02, N/A)	326.6	N/A	2.0340 [2.0000]	101.7% { 88.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 247570	(5.94, N/A) (N/A, 0.09, N/A)	728.4	N/A	4.2784 [4.0000]	107.0% { 110.5% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 291971	(7.60, N/A) (N/A, 0.02, N/A)	611.1	N/A	4.1910 [4.0000]	104.8% { 106.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 335471	(8.99, N/A) (N/A, -0.02, N/A)	757.5	N/A	4.8103 [4.0000]	120.3% { 113.3% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1664459	(10.17, N/A) (N/A, -0.01, N/A)	652.8	N/A	2.5352 [2.0000]	126.8% { 113.6% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 331270	(10.60, N/A) (N/A, -0.01, N/A)	916.6	N/A	2.3109 [2.0000]	115.5% { 100.4% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 325977	(10.69, N/A) (N/A, -0.01, N/A)	1349.4	N/A	2.4634 [2.0000]	123.2% { 114.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 477723	(9.51, N/A) (N/A, -0.02, N/A)	407.1	N/A	3.8679 [4.0000]	96.7% { 93.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 448595	(9.68, N/A) (N/A, -0.01, N/A)	368.4	N/A	4.1207 [4.0000]	103.0% { 95.2% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 448688	(10.57, N/A) (N/A, -0.01, N/A)	1653.3	N/A	22.2917 [20.0000]	111.5% { 104.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 198798	(10.66, N/A) (N/A, -0.01, N/A)	1695.3	N/A	21.6950 [20.0000]	108.5% { 109.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1196436	(6.59, N/A) (N/A, 0.06, N/A)	797.8	N/A	9.2576 [8.0000]	115.7% { 101.9% }			

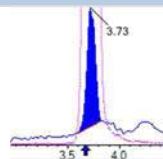
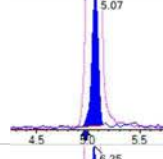
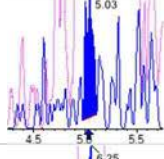
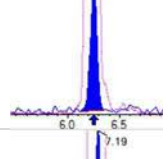
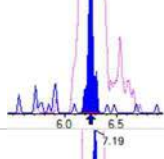
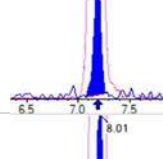
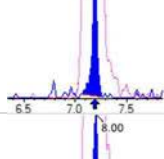
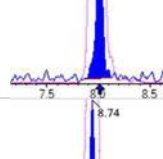
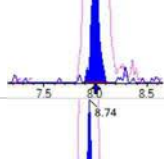
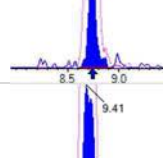
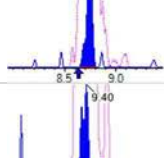
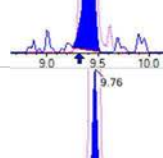
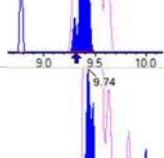
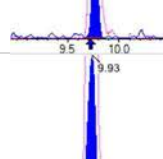
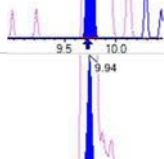
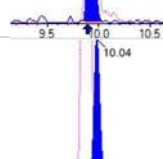
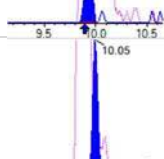
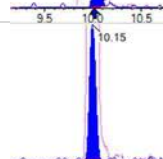
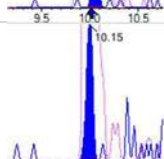
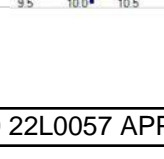
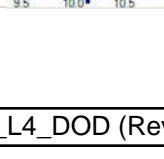
LOW-CONCENTRATION CALIBRATION VERIFICATION**EPA 1633 SPLP****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03942-LCV1**Sequence:** SB03942**Standard ID:** 22L0300

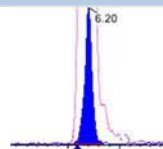
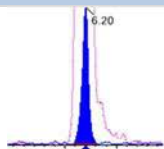
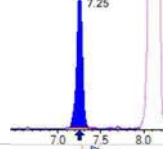
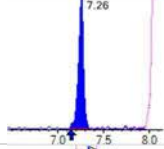
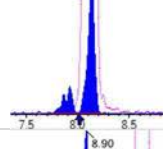
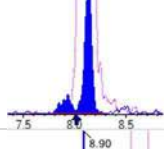
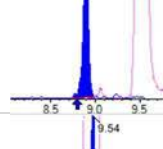
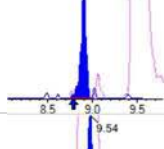
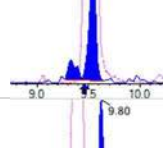
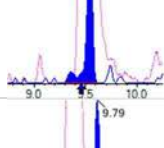
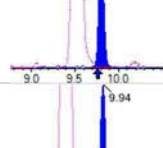
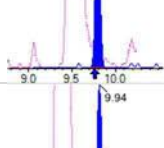
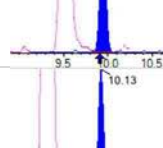
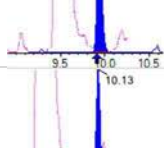
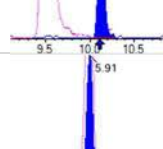
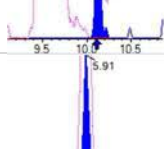
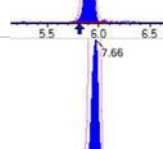
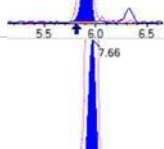
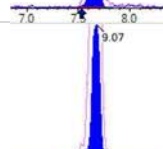
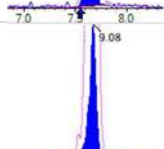
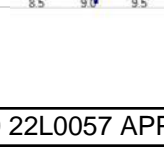
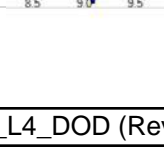
ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
PFBA	0.400	0.380	-4.9	30.00
PFPEA	0.200	0.204	2.1	30.00
PFHXA	0.100	0.0988	-1.2	30.00
PFHPA	0.100	0.0949	-5.1	30.00
PFOA	0.100	0.113	12.6	30.00
PFNA	0.100	0.127	26.7	30.00
PFDA	0.100	0.105	4.6	30.00
PFUnA	0.100	0.0996	-0.4	30.00
PFDOA	0.100	0.100	0.3	30.00
PFTRDA	0.100	0.107	7.1	30.00
PFTEDA	0.100	0.0908	-9.2	30.00
PFBS	0.0885	0.0780	-11.8	30.00
PFPEs	0.0940	0.0901	-4.1	30.00
PFHXS	0.0915	0.0875	-4.4	30.00
PFHPS	0.0955	0.0894	-6.4	30.00
PFOS	0.0930	0.110	18.8	30.00
PFNS	0.0960	0.112	16.2	30.00
PFDS	0.0965	0.0969	0.4	30.00
PFDOS	0.0970	0.120	23.6	30.00
4:2FTS	0.375	0.370	-1.4	30.00
6:2FTS	0.380	0.398	4.7	30.00
8:2FTS	0.384	0.473	23.2	30.00
PFOSA	0.100	0.112	12.3	30.00
NMeFOSA	0.400	0.444	11.1	30.00
NEtFOSA	0.400	0.429	7.2	30.00
NMeFOSAA	0.100	0.125	25.0	30.00
NEtFOSAA	0.100	0.0714	-28.6	30.00
NMeFOSE	0.400	0.341	-14.8	30.00

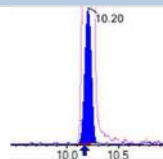
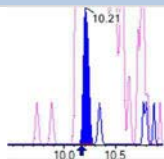
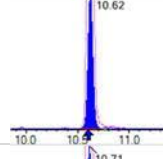
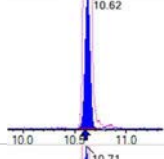
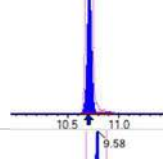
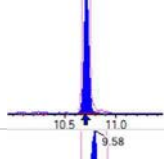
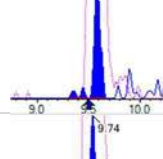
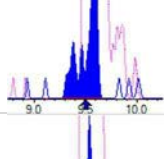
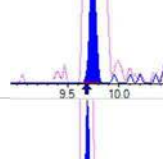
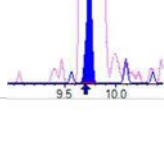
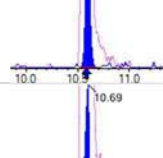
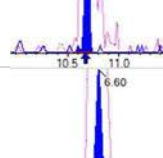
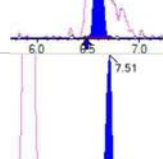
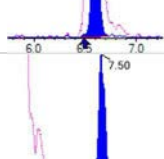
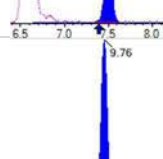
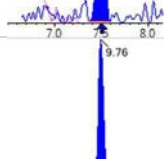
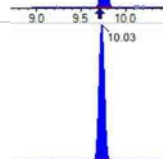
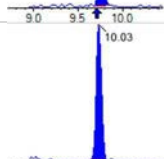
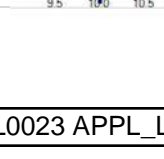
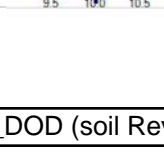
LOW-CONCENTRATION CALIBRATION VERIFICATION**EPA 1633 SPLP****Laboratory:** APPL, LLC**SDG:****Client:** AECOM**Project:** Red Hill AFFF Assessment Sampling**Calibration:** 2252011**Laboratory ID:** SB03942-LCV1**Sequence:** SB03942**Standard ID:** 22L0300

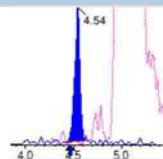
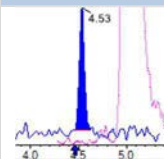
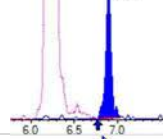
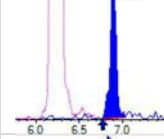
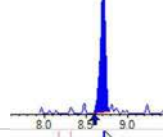
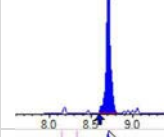
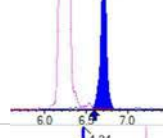
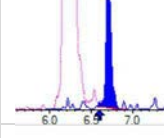
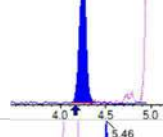
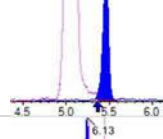
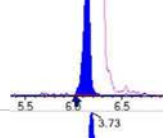
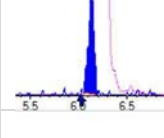
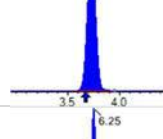
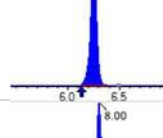
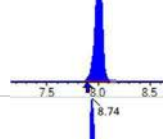
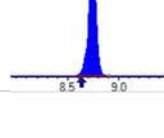
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HFPO-DA	0.200	0.227	13.3	30.00
ADONA	0.189	0.212	12.0	30.00
PFEESA	0.178	0.179	0.7	30.00
PFMPA	0.200	0.201	0.7	30.00
PFMBA	0.200	0.190	-4.9	30.00
NFDHA	0.200	0.233	16.4	30.00
9CL-PF3ONS	0.187	0.180	-3.8	30.00
11CL-PF3OUDS	0.189	0.205	8.6	30.00
3:3FTCA	0.400	0.374	-6.6	30.00
5:3FTCA	0.400	0.397	-0.7	30.00
7:3FTCA	0.400	0.360	-10.0	30.00

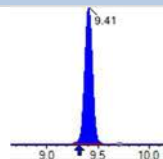
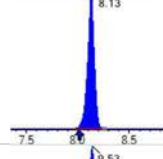
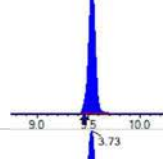
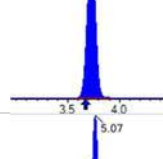
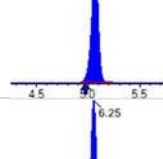
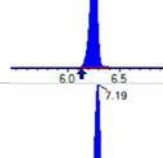
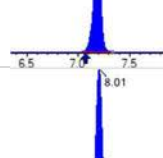
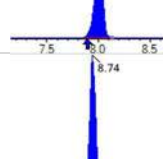
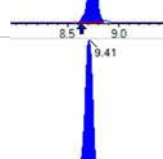
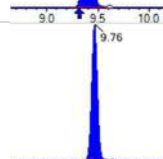
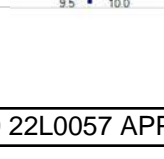
* Values outside of QC limits

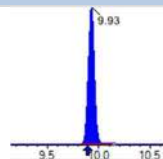
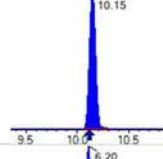
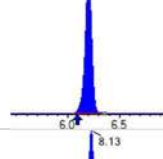
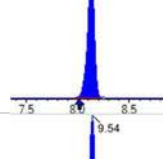
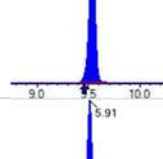
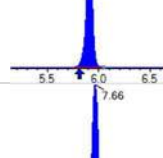
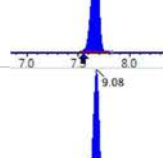
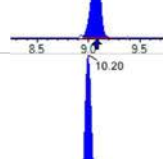
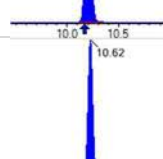
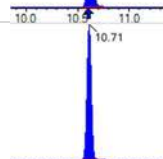
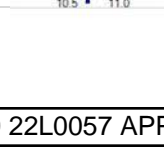
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 41141	(3.73, 1.00) (0.00, N/A, 0.0)	47.8	N/A 0.0 0.0	0.3803 [0.4000]	95.1%			
PFPeA	(262.9 / 219.0) 30554 (262.9 / 69.0) 325	(5.07, 1.00) (0.00, N/A, 2.1)	211.2 7.3	0.0106 95.0 91.7	0.2041 [0.2000]	102.1%			
PFHxA	(313.0 / 269.0) 24328 (313.0 / 119.0) 3145	(6.25, 1.00) (0.00, N/A, 0.2)	88.1 38.8	0.1293 132.2 139.4	0.0988 [0.1000]	98.8%			
PFHpA	(363.0 / 319.0) 21393 (363.0 / 169.0) 6469	(7.19, 1.00) (0.00, N/A, -0.1)	70.0 77.3	0.3024 97.1 97.0	0.0949 [0.1000]	94.9%			
PFOA	(413.0 / 369.0) 29346 (413.0 / 169.0) 7150	(8.01, 1.00) (0.01, N/A, 0.8)	66.8 96.1	0.2436 74.5 74.1	0.1126 [0.1000]	112.6%			
PFNA	(463.0 / 419.0) 24226 (463.0 / 169.0) 5709	(8.74, 1.00) (0.00, N/A, -0.1)	78.3 64.7	0.2356 122.3 102.7	0.1267 [0.1000]	126.7%			
PFDA	(513.0 / 469.0) 27534 (513.0 / 169.0) 2848	(9.41, 1.00) (0.00, N/A, 0.6)	46.1 562.6	0.1034 108.2 95.8	0.1046 [0.1000]	104.6%			
PFUnA	(563.0 / 519.0) 31130 (563.0 / 169.0) 2602	(9.76, 1.00) (0.00, N/A, 1.4)	106.3 159.9	0.0836 96.2 81.6	0.0996 [0.1000]	99.6%			
PFDoA	(613.0 / 569.0) 35466 (613.0 / 169.0) 5220	(9.93, 1.00) (0.00, N/A, -0.5)	112.8 105.5	0.1472 105.7 125.5	0.1003 [0.1000]	100.3%			
PFTrDA	(663.0 / 619.0) 32812 (663.0 / 169.0) 7308	(10.04, 1.01) (N/A, 0.02, -0.9)	177.8 52.5	0.2227 108.8 104.3	0.1071 [0.1000]	107.1%			
PFTeDA	(713.0 / 669.0) 25181 (713.0 / 169.0) 4661	(10.15, 1.00) (0.00, N/A, -0.1)	133.2 23.0	0.1851 91.0 105.2	0.0908 [0.1000]	90.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 30287 (298.9 / 99.0) 25468	(6.20, 1.00) (0.00, N/A, 0.0)	220.5 193.2	0.8409 136.6 134.6	0.0780 [0.0885]	88.2%			
PFPeS	(349.0 / 80.0) 63750 (349.0 / 99.0) 24470	(7.25, 0.89) (N/A, 0.12, -0.1)	300.6 207.2	0.3838 107.8 111.9	0.0901 [0.0938]	96.0%			
PFHxS	(399.0 / 80.0) 53825 (399.0 / 99.0) 19797	(8.13, 1.00) (0.00, N/A, 0.1)	1871.9 426.5	0.3678 109.4 108.3	0.0875 [0.0911]	96.0%			
PFHpS	(449.0 / 80.0) 44546 (449.0 / 99.0) 13518	(8.90, 0.93) (N/A, 0.11, -0.3)	190.4 137.1	0.3035 110.9 109.1	0.0894 [0.0951]	93.9%			
PFOS	(499.0 / 80.0) 68479 (499.0 / 99.0) 15540	(9.54, 1.00) (0.01, N/A, 0.0)	69.2 62.3	0.2269 93.3 105.7	0.1105 [0.0927]	119.1%			
PFNS	(549.0 / 80.0) 76706 (549.0 / 99.0) 15698	(9.80, 1.03) (N/A, 0.03, 0.4)	274.7 136.4	0.2047 83.9 82.0	0.1115 [0.0960]	116.2%			
PFDS	(599.0 / 80.0) 73955 (599.0 / 99.0) 18474	(9.94, 1.04) (N/A, 0.03, 0.4)	264.5 367.6	0.2498 111.0 120.4	0.0969 [0.0963]	100.6%			
PFDoS	(698.9 / 80.0) 38269 (698.9 / 99.0) 6612	(10.13, 1.06) (N/A, 0.01, -0.1)	242.4 521.6	0.1728 70.6 69.8	0.1199 [0.0970]	123.7%			
4:2FTS	(327.0 / 307.0) 75753 (327.0 / 81.0) 38274	(5.91, 1.00) (0.00, N/A, 0.4)	381.0 164.8	0.5052 102.3 97.9	0.3697 [0.3738]	98.9%			
6:2FTS	(427.0 / 407.0) 43176 (427.0 / 81.0) 32621	(7.66, 1.00) (0.00, N/A, 0.0)	217.3 151.6	0.7555 97.1 116.7	0.3978 [0.3796]	104.8%			
8:2FTS	(527.0 / 507.0) 47587 (527.0 / 81.0) 25167	(9.07, 1.00) (0.00, N/A, -0.1)	1490.9 106.9	0.5289 93.4 65.8	0.4729 [0.3833]	123.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 80611 (498.0 / 478.0) 1500	(10.20, 1.00) (0.00, N/A, -0.5)	247.9 35.5	0.0186 89.3 79.4	0.1123 [0.1000]	112.3%			
NMeFOSA	(511.9 / 219.0) 59421 (511.9 / 169.0) 35780	(10.62, 1.00) (0.00, N/A, -0.1)	465.5 523.4	0.6021 83.6 93.3	0.4444 [0.4000]	111.1%			
NEIFOSA	(526.0 / 219.0) 61287 (526.0 / 169.0) 68369	(10.71, 1.00) (0.00, N/A, 0.0)	501.1 494.4	1.1156 105.5 109.6	0.4290 [0.4000]	107.2%			
NMeFOSAA	(570.0 / 419.0) 12306 (570.0 / 483.0) 7076	(9.58, 1.00) (0.01, N/A, 0.0)	368.8 69.6	0.5750 93.5 119.2	0.1250 [0.1000]	125.0%			
NEIFOSAA	(584.0 / 419.0) 8076 (584.0 / 526.0) 4721	(9.74, 1.00) (0.01, N/A, 0.2)	355.9 1475.7	0.5846 79.7 93.7	0.0714 [0.1000]	71.4%			
NMeFOSE	(616.1 / 59.0) 10963	(10.59, 1.00) (0.00, N/A, 0.0)	146.1	N/A 0.0 0.0	0.3407 [0.4000]	85.2%			
NEtFOSE	(630.0 / 59.0) 1997	(10.69, 1.00) (0.01, N/A, 0.0)	179.0	N/A 0.0 0.0	0.3470 [0.4000]	86.7%			
HFPO-DA	(285.0 / 169.0) 20222 (285.0 / 185.0) 49730	(6.60, 1.00) (0.00, N/A, 0.0)	267.0 240.0	2.4592 89.6 85.8	0.2266 [0.2000]	113.3%			
ADONA	(377.0 / 85.0) 83921 (377.0 / 251.0) 10260	(7.51, 1.14) (N/A, 0.12, 0.4)	313.2 33.1	0.1223 98.2 88.3	0.2117 [0.1885]	112.3%			
9CI-Pf3ONS	(531.0 / 351.0) 214078 (533.0 / 353.0) 63026	(9.76, 1.48) (N/A, 0.04, 0.2)	432.7 156.3	0.2944 99.5 94.4	0.1799 [0.1867]	96.4%			
11CI-PF3OUDS	(631.0 / 451.0) 113702 (633.0 / 453.0) 33919	(10.03, 1.52) (N/A, 0.02, -0.1)	1815.6 193.5	0.2983 90.2 106.0	0.2052 [0.1886]	108.8%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 1930 (241.0 / 117.0) 3721	(4.54, 0.90) (N/A, 0.09, 0.5)	89.5 54.6	1.9279 115.2 112.0	0.3736 [0.4000]	93.4%			
5:3FTCA	(341.0 / 236.7) 17273 (341.0 / 217.0) 25568	(6.90, 1.10) (N/A, 0.13, 0.1)	160.2 86.0	1.4802 101.1 95.6	0.3972 [0.4000]	99.3%			
7:3FTCA	(441.0 / 317.0) 18017 (441.0 / 337.0) 16081	(8.71, 1.39) (N/A, 0.11, 0.0)	89.1 136.9	0.8925 106.6 110.2	0.3601 [0.4000]	90.0%			
PFEESA	(315.0 / 135.0) 48322 (315.0 / 83.0) 13710	(6.71, 1.07) (N/A, 0.12, 0.3)	335.2 78.3	0.2837 92.4 95.3	0.1793 [0.1785]	100.5%			
PFMPA	(229.0 / 85.0) 8272	(4.24, 0.84) (N/A, 0.07, 0.0)	230.1	N/A 0.0 0.0	0.2014 [0.2000]	100.7%			
PFMBA	(279.0 / 85.0) 27001	(5.46, 1.08) (N/A, 0.10, 0.0)	305.6	N/A 0.0 0.0	0.1902 [0.2000]	95.1%			
NFDHA	(295.0 / 201.0) 28882 (295.0 / 85.0) 22243	(6.13, 0.98) (N/A, 0.12, 0.3)	266.3 73.4	0.7701 87.2 82.7	0.2327 [0.2000]	116.4%			
13C3_PFBa_IIS	(216.0 / 172.0) 157154	(3.73, N/A) (N/A, 0.06, N/A)	815.8	N/A	1.1290 [1.0000]	112.9% {96.4%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 234843	(6.25, N/A) (N/A, 0.11, N/A)	769.3	N/A	1.0170 [1.0000]	101.7% {105.1%}			
13C4_PFOA_IIS	(417.0 / 372.0) 229877	(8.00, N/A) (N/A, 0.12, N/A)	722.5	N/A	1.0456 [1.0000]	104.6% {94.3%}			
13C5_PFNAl_IIS	(468.0 / 423.0) 195190	(8.74, N/A) (N/A, 0.11, N/A)	470.1	N/A	1.0540 [1.0000]	105.4% {108.3%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 207631	(9.41, N/A) (N/A, 0.10, N/A)	424.3	N/A	1.1235 [1.0000]	112.3% { 103.8% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 408283	(8.13, N/A) (N/A, 0.12, N/A)	765.0	N/A	1.0113 [1.0000]	101.1% { 98.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 298315	(9.53, N/A) (N/A, 0.08, N/A)	545.7	N/A	0.9346 [1.0000]	93.5% { 88.4% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1326737	(3.73, N/A) (N/A, 0.06, N/A)	902.1	N/A	8.2026 [8.0000]	102.5% { 106.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 681681	(5.07, N/A) (N/A, 0.09, N/A)	719.6	N/A	4.1718 [4.0000]	104.3% { 102.8% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 573169	(6.25, N/A) (N/A, 0.12, N/A)	669.8	N/A	2.1209 [2.0000]	106.0% { 108.6% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 494854	(7.19, N/A) (N/A, 0.12, N/A)	684.7	N/A	2.0990 [2.0000]	104.9% { 106.4% }			
13C8_PFOA_EIS	(421.0 / 376.0) 529997	(8.01, N/A) (N/A, 0.12, N/A)	899.8	N/A	2.1024 [2.0000]	105.1% { 103.7% }			
13C9_PFNA_EIS	(472.0 / 427.0) 222867	(8.74, N/A) (N/A, 0.11, N/A)	308.1	N/A	1.0383 [1.0000]	103.8% { 121.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 276540	(9.41, N/A) (N/A, 0.10, N/A)	273.5	N/A	0.9365 [1.0000]	93.6% { 110.4% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 395399	(9.76, N/A) (N/A, 0.04, N/A)	569.5	N/A	0.9413 [1.0000]	94.1% { 122.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 410361	(9.93, N/A) (N/A, 0.03, N/A)	304.9	N/A	0.9788 [1.0000]	97.9% { 111.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 312962	(10.15, N/A) (N/A, 0.03, N/A)	459.9	N/A	1.1240 [1.0000]	112.4% { 113.2% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1415655	(6.20, N/A) (N/A, 0.11, N/A)	648.7	N/A	2.0508 [2.0000]	102.5% { 100.7% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 792061	(8.13, N/A) (N/A, 0.12, N/A)	965.5	N/A	2.1565 [2.0000]	107.8% { 114.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1142315	(9.54, N/A) (N/A, 0.08, N/A)	557.9	N/A	2.2311 [2.0000]	111.6% { 107.4% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 247848	(5.91, N/A) (N/A, 0.11, N/A)	722.0	N/A	4.2391 [4.0000]	106.0% { 110.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 282391	(7.66, N/A) (N/A, 0.12, N/A)	608.0	N/A	4.0117 [4.0000]	100.3% { 98.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 254040	(9.08, N/A) (N/A, 0.11, N/A)	494.1	N/A	3.6051 [4.0000]	90.1% { 112.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1518867	(10.20, N/A) (N/A, 0.03, N/A)	833.6	N/A	2.3469 [2.0000]	117.3% { 107.3% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 328052	(10.62, N/A) (N/A, 0.02, N/A)	724.7	N/A	2.3216 [2.0000]	116.1% { 96.8% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 316775	(10.71, N/A) (N/A, 0.02, N/A)	1067.4	N/A	2.4285 [2.0000]	121.4% { 105.0% }			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-LCV1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (2)
 Acquired: 2022/12/21 - 16:58

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 505276	(9.58 , N/A) (N/A , 0.07 , N/A)	474.8	N/A	4.1503 [4.0000]	103.8% { 87.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 504083	(9.73 , N/A) (N/A , 0.05 , N/A)	624.1	N/A	4.6975 [4.0000]	117.4% { 111.6% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 509850	(10.59 , N/A) (N/A , 0.02 , N/A)	886.1	N/A	25.6974 [20.0000]	128.5% { 108.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 224772	(10.68 , N/A) (N/A , 0.02 , N/A)	1294.7	N/A	24.8849 [20.0000]	124.4% { 102.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1174695	(6.60 , N/A) (N/A , 0.12 , N/A)	735.5	N/A	8.1755 [8.0000]	102.2% { 96.7% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633 SPLP

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03942

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03942-CCV1	PFBA	20.0	21.3	106	ng/mL	+/- 30.00%
	PFPEA	10.0	9.76	97.6	ng/mL	+/- 30.00%
	PFHXA	5.00	5.10	102	ng/mL	+/- 30.00%
	PFHPA	5.00	5.07	101	ng/mL	+/- 30.00%
	PFOA	5.00	4.50	90.0	ng/mL	+/- 30.00%
	PFNA	5.00	5.23	105	ng/mL	+/- 30.00%
	PFDA	5.00	4.94	98.7	ng/mL	+/- 30.00%
	PFUnA	5.00	5.37	107	ng/mL	+/- 30.00%
	PFDOA	5.00	5.16	103	ng/mL	+/- 30.00%
	PFTRDA	5.00	5.01	100	ng/mL	+/- 30.00%
	PFTEDA	5.00	4.83	96.5	ng/mL	+/- 30.00%
	PFBS	4.42	4.73	107	ng/mL	+/- 30.00%
	PFPEs	4.70	5.08	108	ng/mL	+/- 30.00%
	PFHXS	4.58	4.78	104	ng/mL	+/- 30.00%
	PFHPS	4.78	5.06	106	ng/mL	+/- 30.00%
	PFOS	4.65	4.75	102	ng/mL	+/- 30.00%
	PFNS	4.80	5.09	106	ng/mL	+/- 30.00%
	PFDS	4.82	5.54	115	ng/mL	+/- 30.00%
	PFDOS	4.85	4.62	95.3	ng/mL	+/- 30.00%
	4:2FTS	18.8	17.7	94.1	ng/mL	+/- 30.00%
	6:2FTS	19.0	19.9	105	ng/mL	+/- 30.00%
	8:2FTS	19.2	18.6	96.9	ng/mL	+/- 30.00%
	PFOSA	5.00	5.61	112	ng/mL	+/- 30.00%
	NMeFOSA	20.0	19.7	98.4	ng/mL	+/- 30.00%
	NEtFOSA	20.0	23.4	117	ng/mL	+/- 30.00%
	NMeFOSAA	5.00	5.01	100	ng/mL	+/- 30.00%
	NEtFOSAA	5.00	4.63	92.7	ng/mL	+/- 30.00%
	NMeFOSE	20.0	19.7	98.7	ng/mL	+/- 30.00%
	NEtFOSE	20.0	17.1	85.4	ng/mL	+/- 30.00%
	HFPO-DA	10.0	9.65	96.5	ng/mL	+/- 30.00%

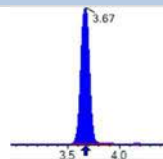
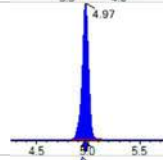
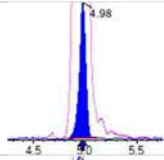
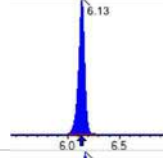
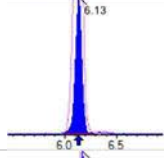
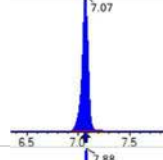
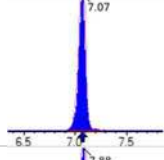
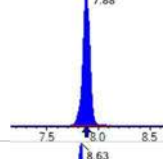
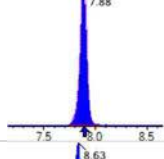
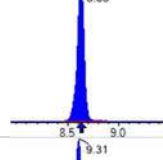
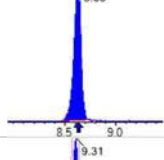
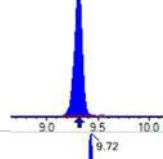
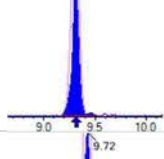
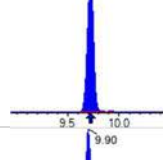
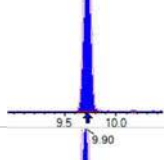
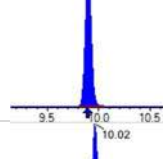
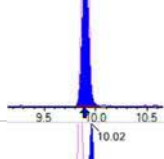
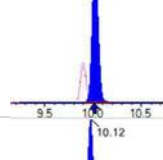
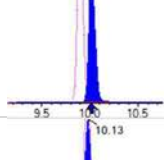
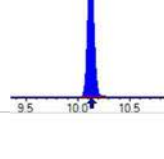
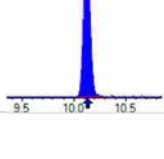
INITIAL AND CONTINUING CALIBRATION CHECK

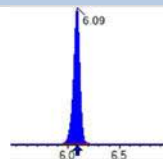
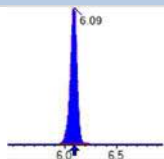
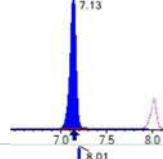
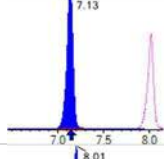
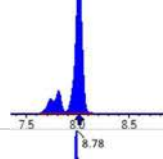
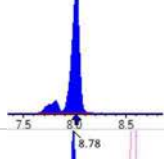
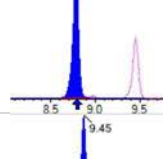
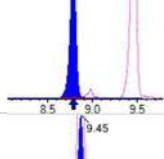
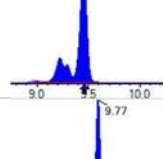
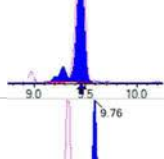
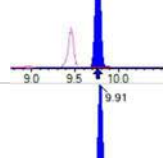
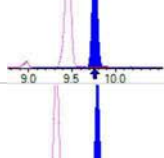
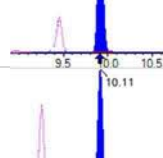
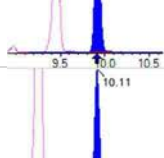
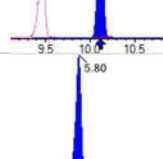
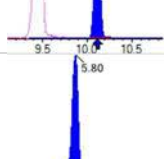
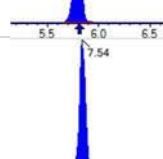
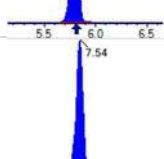
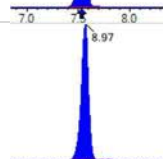
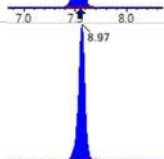
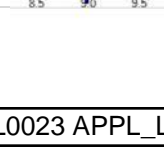
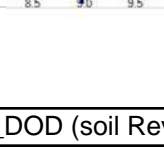
EPA 1633 SPLP

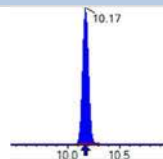
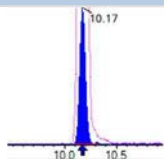
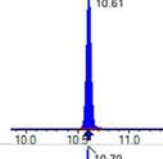
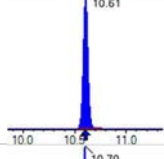
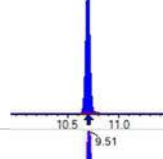
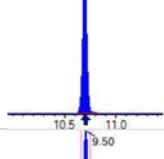
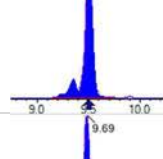
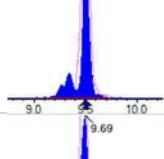
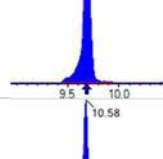
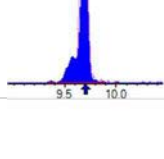
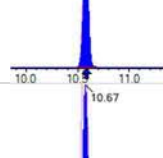
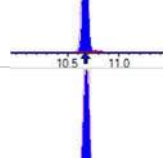
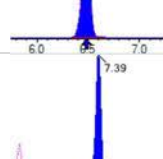
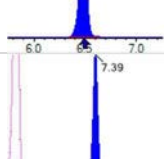
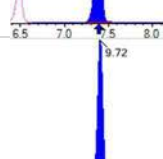
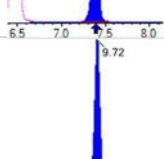
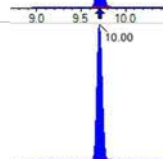
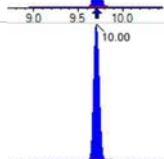
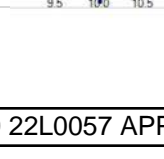
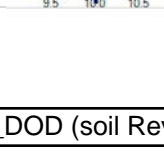
Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

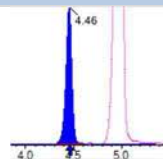
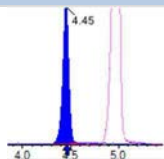
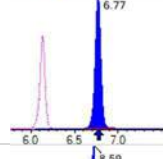
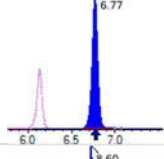
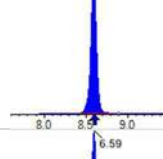
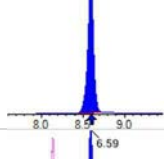
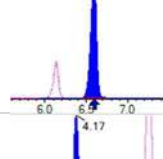
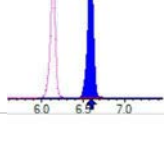
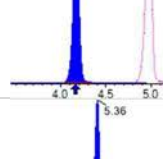
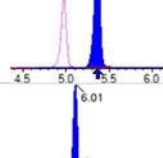
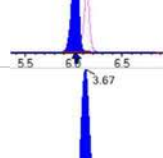
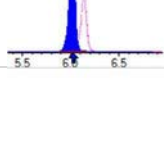
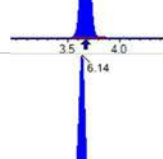
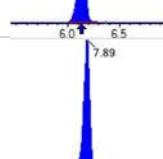
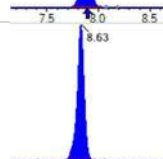

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 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03942

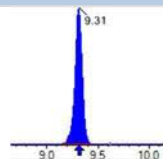
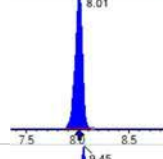
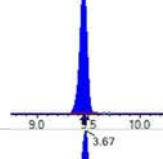
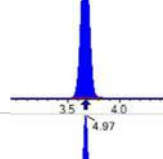
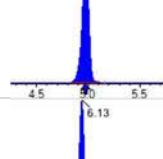
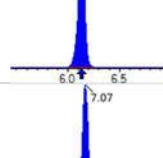
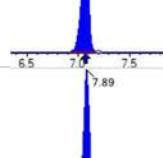
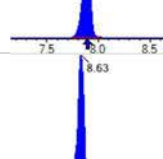
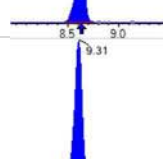
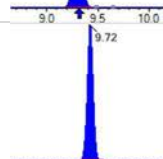
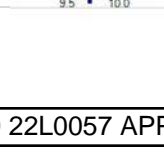
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03942-CCV1	ADONA	9.45	8.72	92.3	ng/mL	+/- 30.00%
	PFEESA	8.90	8.69	97.6	ng/mL	+/- 30.00%
	PFMPA	10.0	10.4	104	ng/mL	+/- 30.00%
	PFMBA	10.0	9.66	96.6	ng/mL	+/- 30.00%
	NFDHA	10.0	10.5	105	ng/mL	+/- 30.00%
	9CL-PF3ONS	9.35	8.93	95.5	ng/mL	+/- 30.00%
	11CL-PF3OUDS	9.45	9.94	105	ng/mL	+/- 30.00%
	3:3FTCA	20.0	20.0	100	ng/mL	+/- 30.00%
	5:3FTCA	20.0	21.0	105	ng/mL	+/- 30.00%
	7:3FTCA	20.0	20.9	105	ng/mL	+/- 30.00%

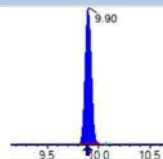
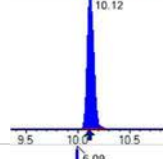
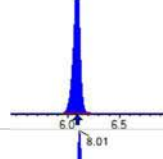
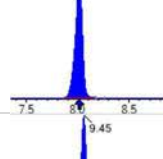
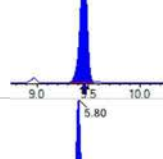
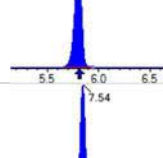
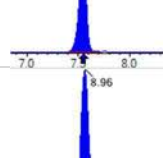
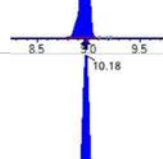
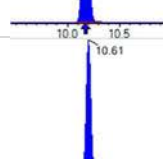
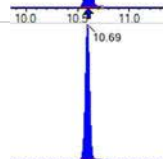
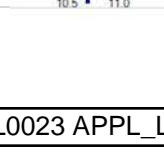
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 2174476	(3.67, 1.00) (0.00, N/A, 0.0)	66.4	N/A 0.0 0.0	21.2960 [20.0000]	106.5%			
PFPeA	(262.9 / 219.0) 1421038 (262.9 / 69.0) 16479	(4.97, 1.00) (0.00, N/A, -0.2)	769.7 307.4	0.0116 103.6 100.0	9.7578 [10.0000]	97.6%			
PFHxA	(313.0 / 269.0) 1155377 (313.0 / 119.0) 107117	(6.13, 1.00) (0.00, N/A, 0.1)	732.4 463.6	0.0927 94.8 100.0	5.0999 [5.0000]	102.0%			
PFHpA	(363.0 / 319.0) 1075352 (363.0 / 169.0) 335324	(7.07, 1.00) (0.00, N/A, 0.2)	619.6 576.6	0.3118 100.1 100.0	5.0724 [5.0000]	101.4%			
PFOA	(413.0 / 369.0) 1131251 (413.0 / 169.0) 372156	(7.88, 1.00) (0.00, N/A, -0.1)	619.2 786.0	0.3290 100.7 100.0	4.5014 [5.0000]	90.0%			
PFNA	(463.0 / 419.0) 822179 (463.0 / 169.0) 188690	(8.63, 1.00) (0.00, N/A, 0.1)	484.5 83.3	0.2295 119.1 100.0	5.2258 [5.0000]	104.5%			
PFDA	(513.0 / 469.0) 1177171 (513.0 / 169.0) 127064	(9.31, 1.00) (0.00, N/A, -0.1)	406.9 196.9	0.1079 112.9 100.0	4.9374 [5.0000]	98.7%			
PFUnA	(563.0 / 519.0) 1365730 (563.0 / 169.0) 139955	(9.72, 1.00) (0.00, N/A, 0.1)	556.0 499.7	0.1025 118.0 100.0	5.3704 [5.0000]	107.4%			
PFDoA	(613.0 / 569.0) 1642828 (613.0 / 169.0) 192706	(9.90, 1.00) (0.00, N/A, -0.1)	939.2 381.1	0.1173 84.3 100.0	5.1630 [5.0000]	103.3%			
PFTrDA	(663.0 / 619.0) 1381698 (663.0 / 169.0) 294912	(10.02, 1.01) (N/A, 0.00, 0.2)	921.5 438.8	0.2134 104.3 100.0	5.0120 [5.0000]	100.2%			
PFTeDA	(713.0 / 669.0) 1182445 (713.0 / 169.0) 207970	(10.12, 1.00) (0.00, N/A, -0.2)	920.8 324.1	0.1759 86.5 100.0	4.8261 [5.0000]	96.5%			

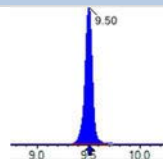
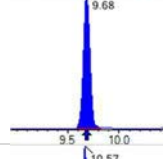
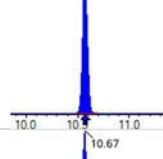
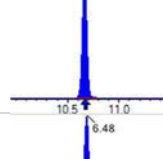
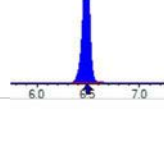
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1824397 (298.9 / 99.0) 1139616	(6.09, 1.00) (0.00, N/A, 0.0)	893.9 772.5	0.6247 101.5 100.0	4.7334 [4.4237]	107.0%			
PFPeS	(349.0 / 80.0) 3142368 (349.0 / 99.0) 1077724	(7.13, 0.89) (N/A, 0.00, 0.1)	637.6 758.7	0.3430 96.3 100.0	5.0812 [4.6919]	108.3%			
PFHxS	(399.0 / 80.0) 2572646 (399.0 / 99.0) 873924	(8.01, 1.00) (0.00, N/A, 0.0)	3488.4 15248.1	0.3397 101.1 100.0	4.7835 [4.5549]	105.0%			
PFHpS	(449.0 / 80.0) 2348191 (449.0 / 99.0) 652896	(8.78, 0.93) (N/A, 0.00, 0.1)	673.6 485.2	0.2780 101.6 100.0	5.0617 [4.7570]	106.4%			
PFOS	(499.0 / 80.0) 2739054 (499.0 / 99.0) 588080	(9.45, 1.00) (0.00, N/A, 0.0)	1078.5 128.0	0.2147 88.3 100.0	4.7463 [4.6375]	102.3%			
PFNS	(549.0 / 80.0) 3257558 (549.0 / 99.0) 813252	(9.77, 1.03) (N/A, 0.00, 0.3)	640.2 641.1	0.2497 102.3 100.0	5.0885 [4.7994]	106.0%			
PFDS	(599.0 / 80.0) 3939581 (599.0 / 99.0) 817304	(9.91, 1.05) (N/A, 0.00, 0.0)	1071.8 715.2	0.2075 92.2 100.0	5.5432 [4.8155]	115.1%			
PFDoS	(698.9 / 80.0) 1373285 (698.9 / 99.0) 340150	(10.11, 1.07) (N/A, 0.00, 0.2)	916.3 724.3	0.2477 101.2 100.0	4.6232 [4.8478]	95.4%			
4:2FTS	(327.0 / 307.0) 3294092 (327.0 / 81.0) 1699485	(5.80, 1.00) (0.00, N/A, 0.3)	772.7 625.3	0.5159 104.4 100.0	17.6821 [18.6906]	94.6%			
6:2FTS	(427.0 / 407.0) 2198841 (427.0 / 81.0) 1423593	(7.54, 1.00) (0.00, N/A, -0.2)	790.2 844.0	0.6474 83.2 100.0	19.8599 [18.9808]	104.6%			
8:2FTS	(527.0 / 507.0) 1659747 (527.0 / 81.0) 1333035	(8.97, 1.00) (0.00, N/A, 0.0)	433.2 579.9	0.8032 141.9 100.0	18.6047 [19.1658]	97.1%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 3757008 (498.0 / 478.0) 88096	(10.17, 1.00) (0.00, N/A, 0.0)	966.7 391.4	0.0234 112.5 100.0	5.6144 [5.0000]	112.3%			
NMeFOSA	(511.9 / 219.0) 2718517 (511.9 / 169.0) 1754469	(10.61, 1.00) (0.00, N/A, 0.1)	927.3 879.5	0.6454 89.6 100.0	19.6775 [20.0000]	98.4%			
NEIFOSA	(526.0 / 219.0) 3181045 (526.0 / 169.0) 3237653	(10.70, 1.00) (0.00, N/A, 0.0)	1649.6 1083.0	1.0178 96.2 100.0	23.3868 [20.0000]	116.9%			
NMeFOSAA	(570.0 / 419.0) 566827 (570.0 / 483.0) 273365	(9.51, 1.00) (0.00, N/A, 0.2)	401.3 402.1	0.4823 78.5 100.0	5.0086 [5.0000]	100.2%			
NEIFOSAA	(584.0 / 419.0) 469839 (584.0 / 526.0) 293059	(9.69, 1.00) (0.00, N/A, -0.2)	753.8 4474894.1	0.6237 85.1 100.0	4.6338 [5.0000]	92.7%			
NMeFOSE	(616.1 / 59.0) 584251	(10.58, 1.00) (0.01, N/A, 0.0)	1087.4	N/A 0.0 0.0	19.7387 [20.0000]	98.7%			
NEtFOSE	(630.0 / 59.0) 95675	(10.67, 1.00) (0.01, N/A, 0.0)	1067.8	N/A 0.0 0.0	17.0764 [20.0000]	85.4%			
HFPO-DA	(285.0 / 169.0) 891449 (285.0 / 185.0) 2553589	(6.48, 1.00) (0.00, N/A, 0.0)	931.6 831.9	2.8645 104.4 100.0	9.6538 [10.0000]	96.5%			
ADONA	(377.0 / 85.0) 3576160 (377.0 / 251.0) 495225	(7.39, 1.14) (N/A, 0.00, 0.0)	786.9 709.3	0.1385 111.2 100.0	8.7192 [9.4270]	92.5%			
9CI-Pf3ONS	(531.0 / 351.0) 9962731 (533.0 / 353.0) 3107279	(9.72, 1.50) (N/A, 0.00, 0.0)	754.9 645.0	0.3119 105.4 100.0	8.9314 [9.3325]	95.7%			
11CI-PF3OUDS	(631.0 / 451.0) 5699783 (633.0 / 453.0) 1604004	(10.00, 1.54) (N/A, 0.00, 0.0)	956.5 941.5	0.2814 85.1 100.0	9.9428 [9.4321]	105.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 100595 (241.0 / 117.0) 173210	(4.46, 0.90) (N/A, 0.00, 0.1)	815.2 529.5	1.7219 102.9 100.0	20.0147 [20.0000]	100.1%			
5:3FTCA	(341.0 / 236.7) 841775 (341.0 / 217.0) 1303653	(6.77, 1.10) (N/A, 0.00, 0.1)	549.8 534.2	1.5487 105.8 100.0	21.0284 [20.0000]	105.1%			
7:3FTCA	(441.0 / 317.0) 962716 (441.0 / 337.0) 780016	(8.59, 1.40) (N/A, 0.00, -0.1)	525.4 478.6	0.8102 96.7 100.0	20.9013 [20.0000]	104.5%			
PFEESA	(315.0 / 135.0) 2154534 (315.0 / 83.0) 641642	(6.59, 1.07) (N/A, 0.00, 0.2)	688.1 821.7	0.2978 97.0 100.0	8.6866 [8.9246]	97.3%			
PFMPA	(229.0 / 85.0) 414964	(4.17, 0.84) (N/A, 0.00, 0.0)	960.5	N/A 0.0 0.0	10.3821 [10.0000]	103.8%			
PFMBA	(279.0 / 85.0) 1334725	(5.36, 1.08) (N/A, 0.00, 0.0)	849.7	N/A 0.0 0.0	9.6612 [10.0000]	96.6%			
NFDHA	(295.0 / 201.0) 1199591 (295.0 / 85.0) 1116467	(6.01, 0.98) (N/A, 0.00, -0.1)	719.2 1027.9	0.9307 105.4 100.0	10.5013 [10.0000]	105.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 163023	(3.67, N/A) (N/A, 0.00, N/A)	831.5	N/A	1.1712 [1.0000]	117.1% { 100.0% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 223496	(6.14, N/A) (N/A, 0.00, N/A)	655.8	N/A	0.9679 [1.0000]	96.8% { 100.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 243666	(7.89, N/A) (N/A, 0.00, N/A)	562.9	N/A	1.1083 [1.0000]	110.8% { 100.0% }			
13C5_PFNA_IIS	(468.0 / 423.0) 180309	(8.63, N/A) (N/A, 0.00, N/A)	459.4	N/A	0.9737 [1.0000]	97.4% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 199943	(9.31, N/A) (N/A, 0.00, N/A)	441.0	N/A	1.0819 [1.0000]	108.2% { 100.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 413657	(8.01, N/A) (N/A, 0.00, N/A)	842.9	N/A	1.0246 [1.0000]	102.5% { 100.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 337597	(9.45, N/A) (N/A, 0.00, N/A)	493.3	N/A	1.0577 [1.0000]	105.8% { 100.0% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1252106	(3.67, N/A) (N/A, 0.00, N/A)	952.6	N/A	7.4625 [8.0000]	93.3% { 100.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 663275	(4.97, N/A) (N/A, 0.00, N/A)	844.7	N/A	4.2653 [4.0000]	106.6% { 100.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 527577	(6.13, N/A) (N/A, 0.00, N/A)	712.5	N/A	2.0513 [2.0000]	102.6% { 100.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 465157	(7.07, N/A) (N/A, 0.00, N/A)	508.0	N/A	2.0732 [2.0000]	103.7% { 100.0% }			
13C8_PFOA_EIS	(421.0 / 376.0) 511118	(7.89, N/A) (N/A, 0.00, N/A)	831.0	N/A	1.9127 [2.0000]	95.6% { 100.0% }			
13C9_PFNA_EIS	(472.0 / 427.0) 183353	(8.63, N/A) (N/A, 0.00, N/A)	403.2	N/A	0.9248 [1.0000]	92.5% { 100.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 250483	(9.31, N/A) (N/A, 0.00, N/A)	434.8	N/A	0.8808 [1.0000]	88.1% { 100.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 321796	(9.72, N/A) (N/A, 0.00, N/A)	405.6	N/A	0.7956 [1.0000]	79.6% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 369097	(9.90, N/A) (N/A, 0.00, N/A)	437.6	N/A	0.9142 [1.0000]	91.4% { 100.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 276447	(10.12, N/A) (N/A, 0.00, N/A)	597.1	N/A	1.0311 [1.0000]	103.1% { 100.0% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1406036	(6.09, N/A) (N/A, 0.00, N/A)	764.6	N/A	2.0104 [2.0000]	100.5% { 100.0% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 692357	(8.01, N/A) (N/A, 0.00, N/A)	740.3	N/A	1.8606 [2.0000]	93.0% { 100.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1063346	(9.45, N/A) (N/A, 0.00, N/A)	269.2	N/A	1.8352 [2.0000]	91.8% { 100.0% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 225369	(5.80, N/A) (N/A, 0.00, N/A)	577.6	N/A	3.8045 [4.0000]	95.1% { 100.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 288039	(7.54, N/A) (N/A, 0.00, N/A)	698.3	N/A	4.0387 [4.0000]	101.0% { 100.0% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 225236	(8.96, N/A) (N/A, 0.00, N/A)	409.3	N/A	3.1548 [4.0000]	78.9% { 100.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1416106	(10.18, N/A) (N/A, 0.00, N/A)	844.7	N/A	1.9335 [2.0000]	96.7% { 100.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 338962	(10.61, N/A) (N/A, 0.00, N/A)	786.7	N/A	2.1197 [2.0000]	106.0% { 100.0% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 301588	(10.69, N/A) (N/A, 0.00, N/A)	831.9	N/A	2.0430 [2.0000]	102.2% { 100.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 580901	(9.50, N/A) (N/A, 0.00, N/A)	387.0	N/A	4.2162 [4.0000]	105.4% { 100.0% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 451752	(9.68, N/A) (N/A, 0.00, N/A)	396.3	N/A	3.7200 [4.0000]	93.0% { 100.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 469009	(10.57, N/A) (N/A, 0.00, N/A)	970.8	N/A	20.8883 [20.0000]	104.4% { 100.0% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 218847	(10.67, N/A) (N/A, 0.00, N/A)	1095.4	N/A	21.4097 [20.0000]	107.0% { 100.0% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1215395	(6.48, N/A) (N/A, 0.00, N/A)	894.4	N/A	8.8882 [8.0000]	111.1% { 100.0% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633 SPLP

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03942

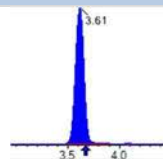
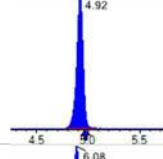
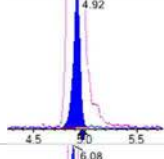
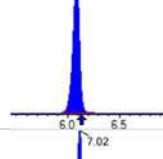
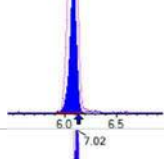
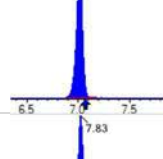
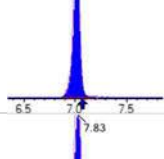
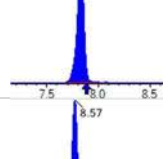
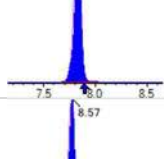
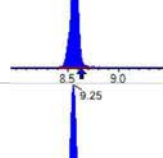
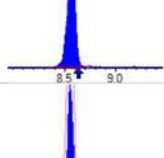
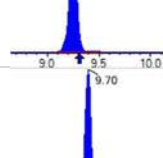
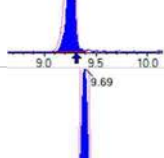
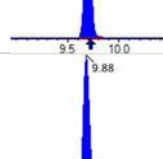
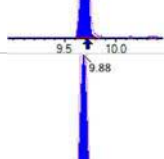
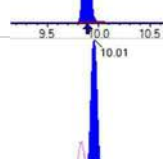
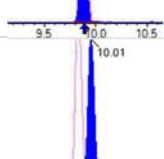
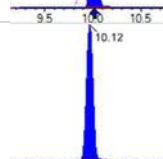
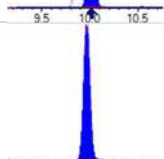
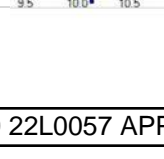
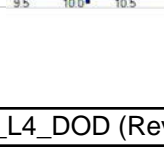
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03942-CCV2	PFBA	20.0	20.0	100	ng/mL	+/- 30.00%
	PFPEA	10.0	9.74	97.4	ng/mL	+/- 30.00%
	PFHXA	5.00	5.63	113	ng/mL	+/- 30.00%
	PFHPA	5.00	5.47	109	ng/mL	+/- 30.00%
	PFOA	5.00	4.56	91.2	ng/mL	+/- 30.00%
	PFNA	5.00	5.24	105	ng/mL	+/- 30.00%
	PFDA	5.00	4.81	96.1	ng/mL	+/- 30.00%
	PFUnA	5.00	5.43	109	ng/mL	+/- 30.00%
	PFDOA	5.00	4.52	90.4	ng/mL	+/- 30.00%
	PFTRDA	5.00	5.45	109	ng/mL	+/- 30.00%
	PFTEDA	5.00	4.76	95.3	ng/mL	+/- 30.00%
	PFBS	4.42	4.43	100	ng/mL	+/- 30.00%
	PFPEs	4.70	4.68	99.6	ng/mL	+/- 30.00%
	PFHXS	4.58	4.33	94.6	ng/mL	+/- 30.00%
	PFHPS	4.78	4.89	102	ng/mL	+/- 30.00%
	PFOS	4.65	4.65	100	ng/mL	+/- 30.00%
	PFNS	4.80	4.74	98.7	ng/mL	+/- 30.00%
	PFDS	4.82	5.20	108	ng/mL	+/- 30.00%
	PFDOS	4.85	5.33	110	ng/mL	+/- 30.00%
	4:2FTS	18.8	16.8	89.5	ng/mL	+/- 30.00%
	6:2FTS	19.0	14.0	73.9	ng/mL	+/- 30.00%
	8:2FTS	19.2	16.7	86.7	ng/mL	+/- 30.00%
	PFOSA	5.00	4.62	92.4	ng/mL	+/- 30.00%
	NMeFOSA	20.0	21.3	107	ng/mL	+/- 30.00%
	NEtFOSA	20.0	21.3	107	ng/mL	+/- 30.00%
	NMeFOSAA	5.00	5.20	104	ng/mL	+/- 30.00%
	NEtFOSAA	5.00	5.18	104	ng/mL	+/- 30.00%
	NMeFOSE	20.0	19.8	99.0	ng/mL	+/- 30.00%
	NEtFOSE	20.0	16.6	83.1	ng/mL	+/- 30.00%
	HFPO-DA	10.0	10.1	101	ng/mL	+/- 30.00%

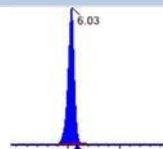
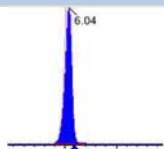
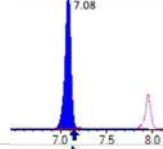
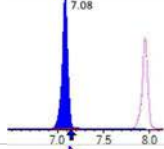
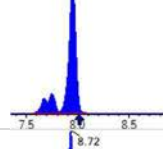
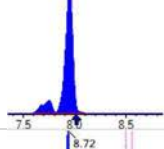
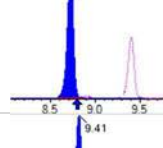
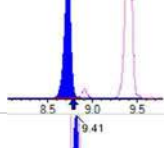
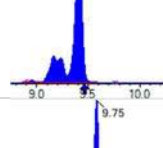
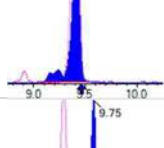
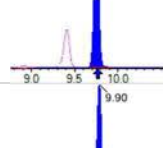
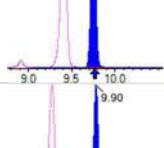
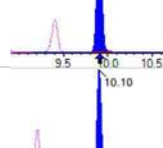
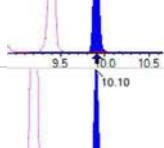
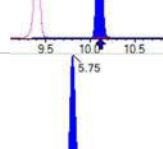
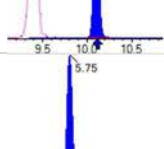
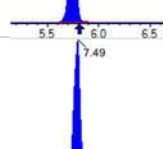
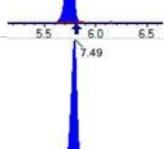
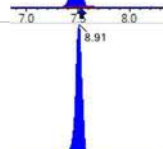
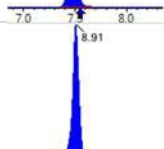

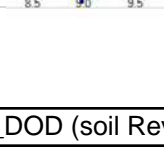
INITIAL AND CONTINUING CALIBRATION CHECK

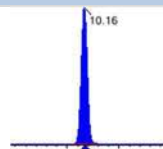
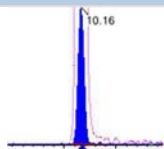
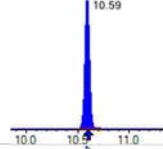
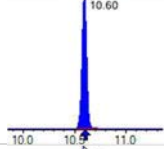
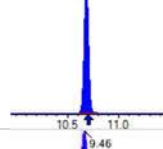
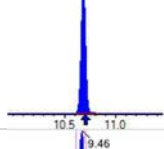
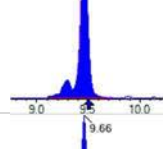
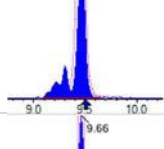
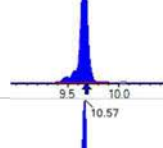
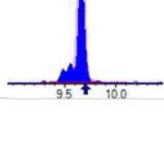
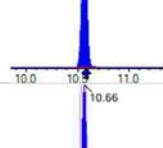
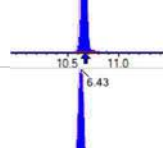
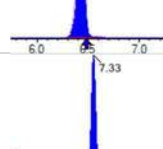
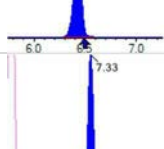
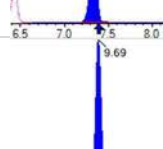
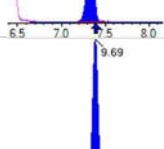
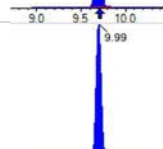
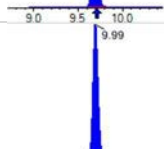
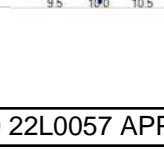
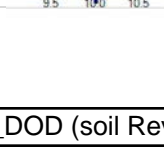
EPA 1633 SPLP

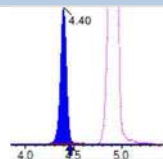
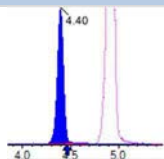
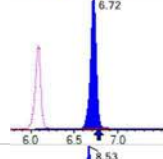
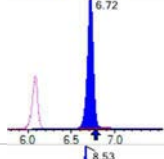
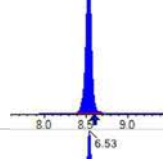
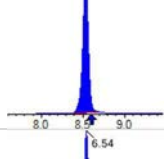
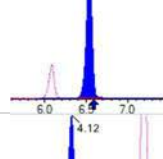
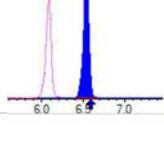
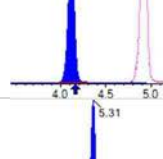
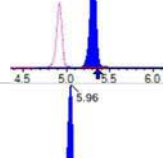
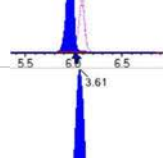
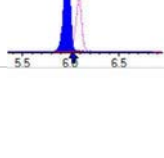
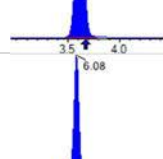
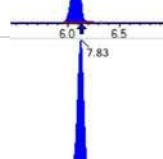
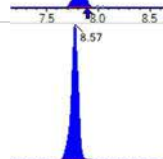
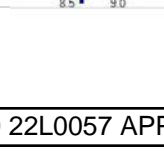
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Instrument ID:	Saphira	Calibration:	2252011
Standard ID:	22L0304	Sequence:	SB03942

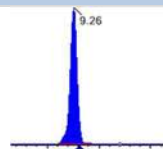
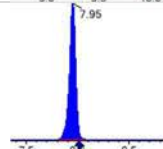
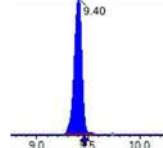
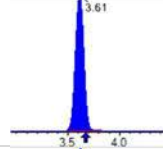
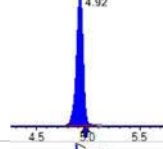
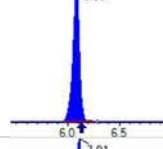
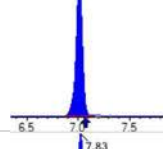
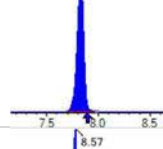
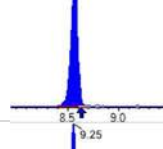
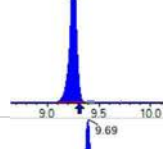
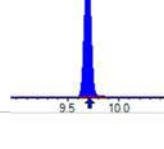
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
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	PFEESA	8.90	9.25	104	ng/mL	+/- 30.00%
	PFMPA	10.0	10.1	101	ng/mL	+/- 30.00%
	PFMBA	10.0	9.55	95.5	ng/mL	+/- 30.00%
	NFDHA	10.0	11.5	115	ng/mL	+/- 30.00%
	9CL-PF3ONS	9.35	8.72	93.2	ng/mL	+/- 30.00%
	11CL-PF3OUDS	9.45	9.92	105	ng/mL	+/- 30.00%
	3:3FTCA	20.0	20.2	101	ng/mL	+/- 30.00%
	5:3FTCA	20.0	22.2	111	ng/mL	+/- 30.00%
	7:3FTCA	20.0	22.4	112	ng/mL	+/- 30.00%

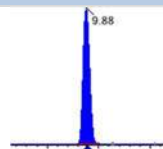
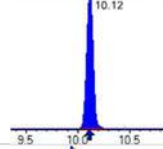
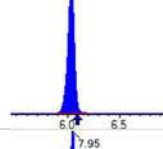
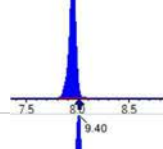
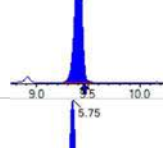
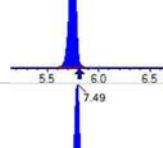
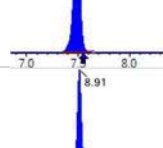
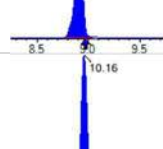
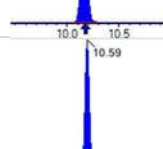
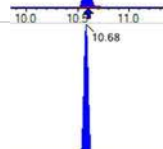
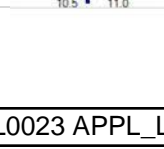
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 2017426	(3.61, 1.00) (0.00, N/A, 0.0)	69.3	N/A 0.0 0.0	20.0459 [20.0000]	100.2%			
PFPeA	(262.9 / 219.0) 1426081 (262.9 / 69.0) 16916	(4.92, 1.00) (0.00, N/A, 0.0)	722.8 232.9	0.0119 106.0 102.3	9.7400 [10.0000]	97.4%			
PFHxA	(313.0 / 269.0) 1144606 (313.0 / 119.0) 114469	(6.08, 1.00) (0.00, N/A, 0.1)	466.0 402.5	0.1000 102.3 107.9	5.6298 [5.0000]	112.6%			
PFHpA	(363.0 / 319.0) 1120334 (363.0 / 169.0) 331709	(7.02, 1.00) (0.00, N/A, -0.1)	606.5 634.3	0.2961 95.1 95.0	5.4687 [5.0000]	109.4%			
PFOA	(413.0 / 369.0) 1093832 (413.0 / 169.0) 349631	(7.83, 1.00) (0.00, N/A, -0.1)	637.8 677.2	0.3196 97.8 97.2	4.5607 [5.0000]	91.2%			
PFNA	(463.0 / 419.0) 846774 (463.0 / 169.0) 172322	(8.57, 1.00) (0.00, N/A, -0.1)	546.4 107.7	0.2035 105.6 88.7	5.2440 [5.0000]	104.9%			
PFDA	(513.0 / 469.0) 1220682 (513.0 / 169.0) 112804	(9.25, 1.00) (0.00, N/A, 0.0)	457.4 287.0	0.0924 96.7 85.6	4.8057 [5.0000]	96.1%			
PFUnA	(563.0 / 519.0) 1470388 (563.0 / 169.0) 125268	(9.70, 1.00) (0.00, N/A, 0.3)	676.8 322.1	0.0852 98.1 83.1	5.4346 [5.0000]	108.7%			
PFDoA	(613.0 / 569.0) 1446202 (613.0 / 169.0) 223485	(9.88, 1.00) (0.00, N/A, -0.2)	812.5 546.7	0.1545 111.0 131.7	4.5204 [5.0000]	90.4%			
PFTrDA	(663.0 / 619.0) 1509502 (663.0 / 169.0) 294380	(10.01, 1.01) (N/A, -0.01, -0.1)	1057.7 533.9	0.1950 95.3 91.4	5.4458 [5.0000]	108.9%			
PFTeDA	(713.0 / 669.0) 1060074 (713.0 / 169.0) 224910	(10.12, 1.00) (0.00, N/A, 0.0)	666.3 519.4	0.2122 104.3 120.6	4.7629 [5.0000]	95.3%			

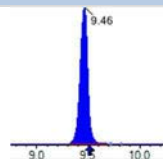
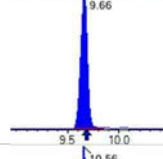
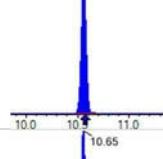
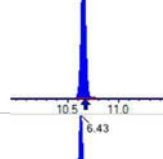
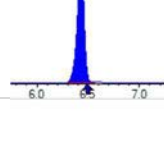
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1711618 (298.9 / 99.0) 1049906	(6.03, 1.00) (0.00, N/A, -0.2)	743.7 554.1	0.6134 99.7 98.2	4.4310 [4.4237]	100.2%			
PFPeS	(349.0 / 80.0) 3145322 (349.0 / 99.0) 1105369	(7.08, 0.89) (N/A, -0.05, 0.0)	742.7 647.2	0.3514 98.7 102.5	4.6811 [4.6919]	99.8%			
PFHxS	(399.0 / 80.0) 2532441 (399.0 / 99.0) 868340	(7.95, 1.00) (0.00, N/A, 0.1)	2159.7 4129.2	0.3429 102.0 100.9	4.3338 [4.5549]	95.1%			
PFHpS	(449.0 / 80.0) 2308503 (449.0 / 99.0) 644897	(8.72, 0.93) (N/A, -0.06, 0.0)	726.5 606.0	0.2794 102.1 100.5	4.8906 [4.7570]	102.8%			
PFOS	(499.0 / 80.0) 2731592 (499.0 / 99.0) 597975	(9.41, 1.00) (0.00, N/A, -0.1)	562.3 106.4	0.2189 90.0 102.0	4.6519 [4.6375]	100.3%			
PFNS	(549.0 / 80.0) 3086171 (549.0 / 99.0) 772017	(9.75, 1.04) (N/A, -0.02, -0.1)	913.7 671.6	0.2502 102.5 100.2	4.7379 [4.7994]	98.7%			
PFDS	(599.0 / 80.0) 3761826 (599.0 / 99.0) 858464	(9.90, 1.05) (N/A, -0.01, 0.1)	674.6 875.7	0.2282 101.4 110.0	5.2021 [4.8155]	108.0%			
PFDoS	(698.9 / 80.0) 1611184 (698.9 / 99.0) 345131	(10.10, 1.07) (N/A, -0.01, 0.0)	909.4 914.1	0.2142 87.6 86.5	5.3308 [4.8478]	110.0%			
4:2FTS	(327.0 / 307.0) 3253889 (327.0 / 81.0) 2008258	(5.75, 1.00) (0.00, N/A, 0.0)	763.6 819.0	0.6172 124.9 119.6	16.8323 [18.6906]	90.1%			
6:2FTS	(427.0 / 407.0) 1738654 (427.0 / 81.0) 1399319	(7.49, 1.00) (0.00, N/A, 0.0)	737.3 736.5	0.8048 103.4 124.3	14.0459 [18.9808]	74.0%			
8:2FTS	(527.0 / 507.0) 1800269 (527.0 / 81.0) 1147665	(8.91, 1.00) (-0.01, N/A, 0.0)	472.9 635.4	0.6375 112.6 79.4	16.6517 [19.1658]	86.9%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 3295389 (498.0 / 478.0) 77127	(10.16, 1.00) (0.00, N/A, 0.1)	847.4 453.1	0.0234 112.3 99.8	4.6202 [5.0000]	92.4%			
NMeFOSA	(511.9 / 219.0) 2816208 (511.9 / 169.0) 1862577	(10.59, 1.00) (0.00, N/A, -0.1)	1064.3 1170.9	0.6614 91.8 102.5	21.3302 [20.0000]	106.7%			
NEIFOSA	(526.0 / 219.0) 2932044 (526.0 / 169.0) 2972822	(10.68, 1.00) (0.00, N/A, 0.0)	1105.0 1160.1	1.0139 95.9 99.6	21.3340 [20.0000]	106.7%			
NMeFOSAA	(570.0 / 419.0) 518953 (570.0 / 483.0) 243963	(9.46, 1.00) (0.00, N/A, -0.1)	373.5 313.1	0.4701 76.5 97.5	5.1966 [5.0000]	103.9%			
NEIFOSAA	(584.0 / 419.0) 487971 (584.0 / 526.0) 310756	(9.66, 1.00) (0.00, N/A, -0.1)	642.0 1559.6	0.6368 86.9 102.1	5.1844 [5.0000]	103.7%			
NMeFOSE	(616.1 / 59.0) 606096	(10.57, 1.00) (0.01, N/A, 0.0)	1258.4	N/A 0.0 0.0	19.7982 [20.0000]	99.0%			
NEtFOSE	(630.0 / 59.0) 85912	(10.66, 1.00) (0.01, N/A, 0.0)	791.9	N/A 0.0 0.0	16.6257 [20.0000]	83.1%			
HFPO-DA	(285.0 / 169.0) 878148 (285.0 / 185.0) 2511539	(6.43, 1.00) (0.00, N/A, 0.1)	722.2 853.5	2.8600 104.2 99.8	10.0580 [10.0000]	100.6%			
ADONA	(377.0 / 85.0) 3884854 (377.0 / 251.0) 470526	(7.33, 1.14) (N/A, -0.06, -0.1)	897.1 707.4	0.1211 97.3 87.5	10.0178 [9.4270]	106.3%			
9CI-Pf3ONS	(531.0 / 351.0) 9200810 (533.0 / 353.0) 2912345	(9.69, 1.51) (N/A, -0.02, 0.1)	703.1 936.1	0.3165 107.0 101.5	8.7162 [9.3325]	93.4%			
11CI-PF3OUDS	(631.0 / 451.0) 5378921 (633.0 / 453.0) 1576898	(9.99, 1.55) (N/A, -0.01, 0.1)	890.4 823.4	0.2932 88.6 104.2	9.9240 [9.4321]	105.2%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 102261 (241.0 / 117.0) 164901	(4.40, 0.89) (N/A, -0.06, 0.0)	578.4 533.9	1.6125 96.4 93.7	20.2372 [20.0000]	101.2%			
5:3FTCA	(341.0 / 236.7) 798790 (341.0 / 217.0) 1279814	(6.72, 1.10) (N/A, -0.05, 0.0)	627.3 605.9	1.6022 109.5 103.5	22.2351 [20.0000]	111.2%			
7:3FTCA	(441.0 / 317.0) 926553 (441.0 / 337.0) 773270	(8.53, 1.40) (N/A, -0.06, 0.0)	453.9 413.2	0.8346 99.7 103.0	22.4152 [20.0000]	112.1%			
PFEESA	(315.0 / 135.0) 2058385 (315.0 / 83.0) 633661	(6.53, 1.07) (N/A, -0.06, -0.1)	776.5 809.8	0.3078 100.3 103.4	9.2474 [8.9246]	103.6%			
PFMPA	(229.0 / 85.0) 405513	(4.12, 0.84) (N/A, -0.05, 0.0)	896.8	N/A 0.0 0.0	10.0913 [10.0000]	100.9%			
PFMBA	(279.0 / 85.0) 1326009	(5.31, 1.08) (N/A, -0.05, 0.0)	796.8	N/A 0.0 0.0	9.5467 [10.0000]	95.5%			
NFDHA	(295.0 / 201.0) 1174312 (295.0 / 85.0) 1042492	(5.96, 0.98) (N/A, -0.05, 0.1)	552.9 1001.0	0.8877 100.6 95.4	11.4548 [10.0000]	114.5%			
13C3_PFBA_IIS	(216.0 / 172.0) 150873	(3.61, N/A) (N/A, -0.05, N/A)	628.6	N/A	1.0839 [1.0000]	108.4% { 92.5% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 233705	(6.08, N/A) (N/A, -0.05, N/A)	523.5	N/A	1.0121 [1.0000]	101.2% { 104.6% }			
13C4_PFOA_IIS	(417.0 / 372.0) 232379	(7.83, N/A) (N/A, -0.06, N/A)	800.8	N/A	1.0570 [1.0000]	105.7% { 95.4% }			
13C5_PFNA_IIS	(468.0 / 423.0) 171234	(8.57, N/A) (N/A, -0.06, N/A)	445.8	N/A	0.9247 [1.0000]	92.5% { 95.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 202021	(9.26, N/A) (N/A, -0.05, N/A)	339.3	N/A	1.0931 [1.0000]	109.3% { 101.0% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 444007	(7.95, N/A) (N/A, -0.06, N/A)	738.8	N/A	1.0998 [1.0000]	110.0% { 107.3% }			
13C4_PFOS_IIS	(502.8 / 79.9) 325821	(9.40, N/A) (N/A, -0.05, N/A)	513.5	N/A	1.0208 [1.0000]	102.1% { 96.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1234118	(3.61, N/A) (N/A, -0.05, N/A)	711.2	N/A	7.9476 [8.0000]	99.3% { 98.6% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 666844	(4.92, N/A) (N/A, -0.05, N/A)	766.0	N/A	4.1009 [4.0000]	102.5% { 100.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 473465	(6.08, N/A) (N/A, -0.05, N/A)	579.4	N/A	1.7605 [2.0000]	88.0% { 89.7% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 449491	(7.01, N/A) (N/A, -0.06, N/A)	473.8	N/A	1.9159 [2.0000]	95.8% { 96.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 487784	(7.83, N/A) (N/A, -0.06, N/A)	814.9	N/A	1.9141 [2.0000]	95.7% { 95.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 188185	(8.57, N/A) (N/A, -0.06, N/A)	326.4	N/A	0.9994 [1.0000]	99.9% { 102.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 266855	(9.25, N/A) (N/A, -0.06, N/A)	423.5	N/A	0.9288 [1.0000]	92.9% { 106.5% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 342361	(9.69, N/A) (N/A, -0.02, N/A)	727.9	N/A	0.8377 [1.0000]	83.8% { 106.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 371113	(9.88, N/A) (N/A, -0.02, N/A)	430.0	N/A	0.9098 [1.0000]	91.0% { 100.5% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 251129	(10.12, N/A) (N/A, 0.00, N/A)	544.0	N/A	0.9270 [1.0000]	92.7% { 90.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1409135	(6.03, N/A) (N/A, -0.05, N/A)	624.5	N/A	1.8771 [2.0000]	93.9% { 100.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 752242	(7.95, N/A) (N/A, -0.06, N/A)	938.0	N/A	1.8833 [2.0000]	94.2% { 108.6% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1081958	(9.40, N/A) (N/A, -0.05, N/A)	287.3	N/A	1.9349 [2.0000]	96.7% { 101.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 233857	(5.75, N/A) (N/A, -0.06, N/A)	790.2	N/A	3.6780 [4.0000]	91.9% { 103.8% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 322032	(7.49, N/A) (N/A, -0.05, N/A)	767.2	N/A	4.2067 [4.0000]	105.2% { 111.8% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 272960	(8.91, N/A) (N/A, -0.05, N/A)	368.3	N/A	3.5620 [4.0000]	89.0% { 121.2% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1509387	(10.16, N/A) (N/A, -0.02, N/A)	697.1	N/A	2.1354 [2.0000]	106.8% { 106.6% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 323936	(10.59, N/A) (N/A, -0.01, N/A)	952.0	N/A	2.0990 [2.0000]	104.9% { 95.6% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 304728	(10.68, N/A) (N/A, -0.01, N/A)	1027.3	N/A	2.1389 [2.0000]	106.9% { 101.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 512601	(9.46, N/A) (N/A, -0.04, N/A)	418.5	N/A	3.8550 [4.0000]	96.4% { 88.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 419361	(9.66, N/A) (N/A, -0.02, N/A)	391.0	N/A	3.5781 [4.0000]	89.5% { 92.8% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 485083	(10.56, N/A) (N/A, -0.01, N/A)	1206.1	N/A	22.3851 [20.0000]	111.9% { 103.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 201843	(10.65, N/A) (N/A, -0.01, N/A)	1636.9	N/A	20.4599 [20.0000]	102.3% { 92.2% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1149151	(6.43, N/A) (N/A, -0.05, N/A)	556.2	N/A	8.0366 [8.0000]	100.5% { 94.5% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633 SPLP

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03942

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03942-CCV3	PFBA	20.0	20.9	104	ng/mL	+/- 30.00%
	PFPEA	10.0	9.59	95.9	ng/mL	+/- 30.00%
	PFHXA	5.00	5.05	101	ng/mL	+/- 30.00%
	PFHPA	5.00	5.17	103	ng/mL	+/- 30.00%
	PFOA	5.00	4.69	93.8	ng/mL	+/- 30.00%
	PFNA	5.00	5.23	105	ng/mL	+/- 30.00%
	PFDA	5.00	4.94	98.8	ng/mL	+/- 30.00%
	PFUnA	5.00	5.17	103	ng/mL	+/- 30.00%
	PFDOA	5.00	5.12	102	ng/mL	+/- 30.00%
	PFTRDA	5.00	6.00	120	ng/mL	+/- 30.00%
	PFTEDA	5.00	5.07	101	ng/mL	+/- 30.00%
	PFBS	4.42	4.62	104	ng/mL	+/- 30.00%
	PFPEs	4.70	4.99	106	ng/mL	+/- 30.00%
	PFHXS	4.58	4.60	101	ng/mL	+/- 30.00%
	PFHPS	4.78	4.60	96.3	ng/mL	+/- 30.00%
	PFOS	4.65	4.63	99.5	ng/mL	+/- 30.00%
	PFNS	4.80	4.52	94.1	ng/mL	+/- 30.00%
	PFDS	4.82	4.76	98.8	ng/mL	+/- 30.00%
	PFDOS	4.85	4.69	96.7	ng/mL	+/- 30.00%
	4:2FTS	18.8	18.2	96.8	ng/mL	+/- 30.00%
	6:2FTS	19.0	20.3	107	ng/mL	+/- 30.00%
	8:2FTS	19.2	19.6	102	ng/mL	+/- 30.00%
	PFOSA	5.00	4.72	94.5	ng/mL	+/- 30.00%
	NMeFOSA	20.0	20.9	104	ng/mL	+/- 30.00%
	NEtFOSA	20.0	21.4	107	ng/mL	+/- 30.00%
	NMeFOSAA	5.00	5.11	102	ng/mL	+/- 30.00%
	NEtFOSAA	5.00	4.34	86.7	ng/mL	+/- 30.00%
	NMeFOSE	20.0	21.8	109	ng/mL	+/- 30.00%
	NEtFOSE	20.0	18.9	94.7	ng/mL	+/- 30.00%
	HFPO-DA	10.0	9.57	95.7	ng/mL	+/- 30.00%

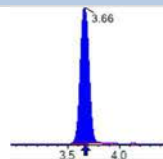
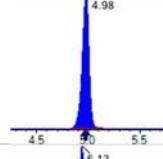
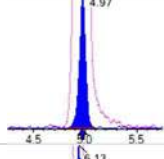
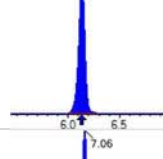
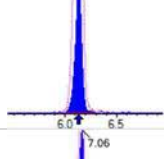
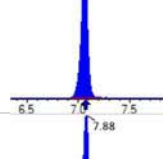
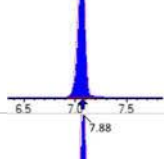
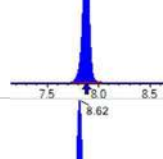
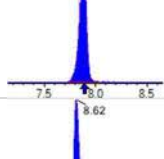
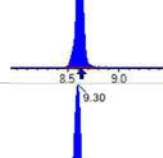
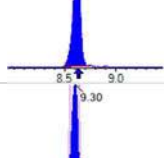
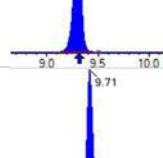
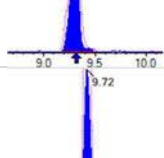
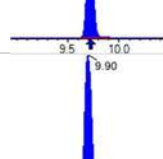
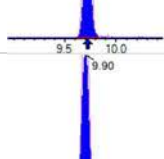
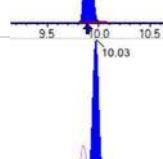
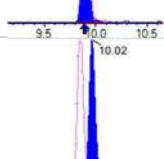
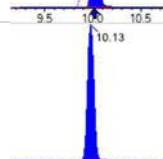
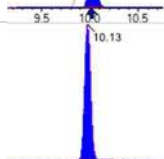
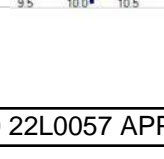
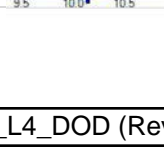
INITIAL AND CONTINUING CALIBRATION CHECK

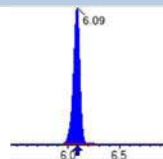
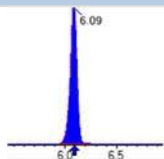
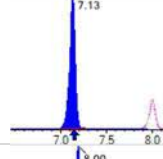
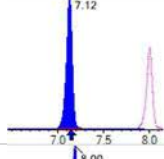
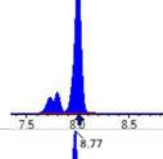
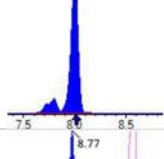
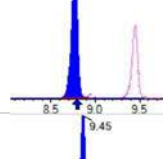
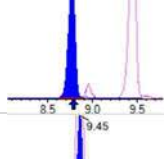
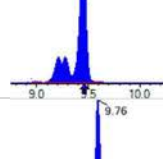
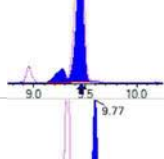
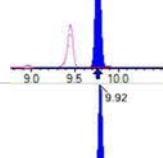
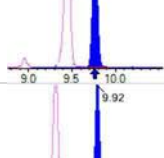
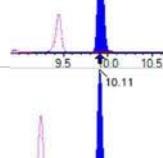
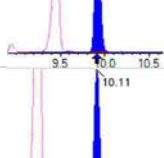
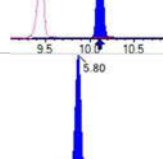
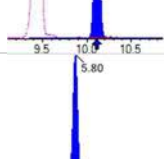
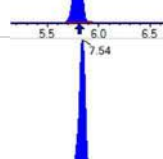
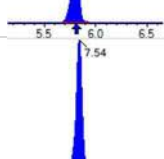
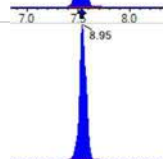
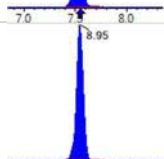
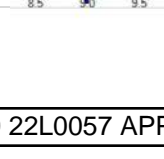
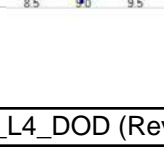
EPA 1633 SPLP

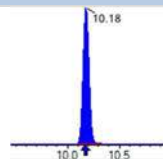
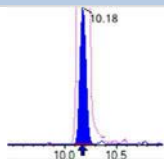
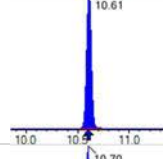
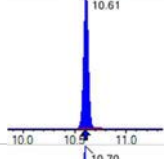
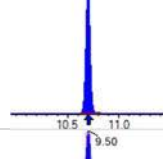
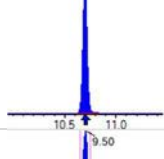
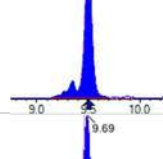
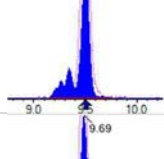
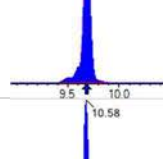
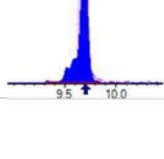
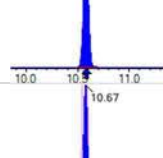
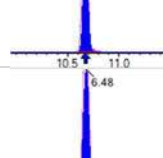
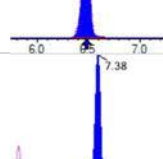
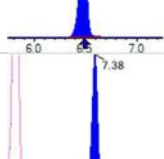
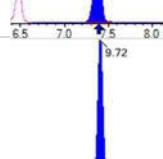
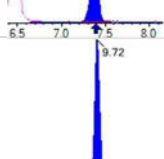
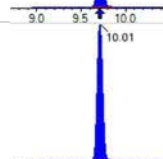
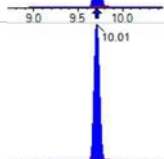
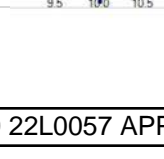
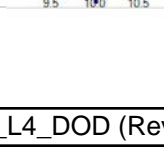
Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

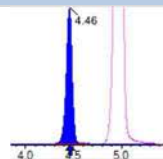
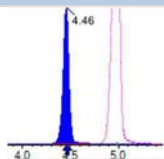
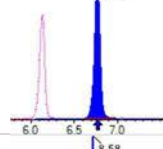
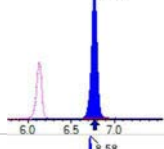
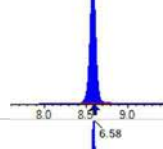
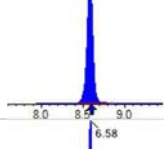
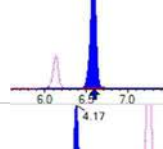
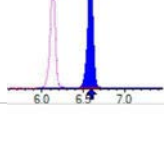
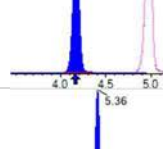
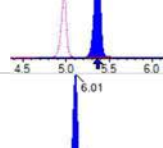
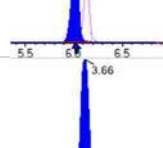
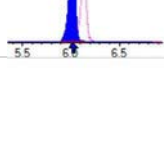
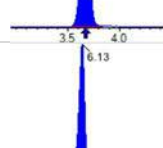
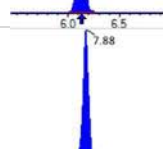
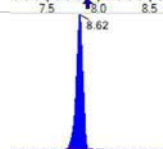

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03942

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03942-CCV3	ADONA	9.45	9.33	98.7	ng/mL	+/- 30.00%
	PFEESA	8.90	8.89	99.9	ng/mL	+/- 30.00%
	PFMPA	10.0	10.1	101	ng/mL	+/- 30.00%
	PFMBA	10.0	10.1	101	ng/mL	+/- 30.00%
	NFDHA	10.0	10.2	102	ng/mL	+/- 30.00%
	9CL-PF3ONS	9.35	8.80	94.1	ng/mL	+/- 30.00%
	11CL-PF3OUDS	9.45	9.93	105	ng/mL	+/- 30.00%
	3:3FTCA	20.0	20.6	103	ng/mL	+/- 30.00%
	5:3FTCA	20.0	19.0	95.0	ng/mL	+/- 30.00%
	7:3FTCA	20.0	19.2	96.2	ng/mL	+/- 30.00%

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 2024371	(3.66, 1.00) (0.00, N/A, 0.0)	69.0	N/A 0.0 0.0	20.8697 [20.0000]	104.3%			
PFPeA	(262.9 / 219.0) 1408714 (262.9 / 69.0) 16873	(4.98, 1.00) (0.00, N/A, 0.1)	664.6 351.2	0.0120 107.0 103.3	9.5910 [10.0000]	95.9%			
PFHxA	(313.0 / 269.0) 1187923 (313.0 / 119.0) 112819	(6.13, 1.00) (0.00, N/A, 0.1)	745.3 407.4	0.0950 97.1 102.4	5.0528 [5.0000]	101.1%			
PFHpA	(363.0 / 319.0) 1078927 (363.0 / 169.0) 303317	(7.06, 1.00) (0.00, N/A, -0.1)	500.9 704.0	0.2811 90.3 90.2	5.1659 [5.0000]	103.3%			
PFOA	(413.0 / 369.0) 1216771 (413.0 / 169.0) 380964	(7.88, 1.00) (0.00, N/A, -0.1)	724.5 745.4	0.3131 95.8 95.2	4.6880 [5.0000]	93.8%			
PFNA	(463.0 / 419.0) 897043 (463.0 / 169.0) 178918	(8.62, 1.00) (0.00, N/A, 0.0)	573.7 105.8	0.1995 103.5 86.9	5.2298 [5.0000]	104.6%			
PFDA	(513.0 / 469.0) 1154457 (513.0 / 169.0) 106550	(9.30, 1.00) (0.00, N/A, -0.1)	449.3 296.8	0.0923 96.6 85.5	4.9417 [5.0000]	98.8%			
PFUnA	(563.0 / 519.0) 1367164 (563.0 / 169.0) 137059	(9.71, 1.00) (0.00, N/A, -0.2)	685.2 385.3	0.1003 115.4 97.8	5.1726 [5.0000]	103.5%			
PFDoA	(613.0 / 569.0) 1602794 (613.0 / 169.0) 220504	(9.90, 1.00) (0.00, N/A, -0.2)	556.5 362.4	0.1376 98.8 117.3	5.1225 [5.0000]	102.5%			
PFTrDA	(663.0 / 619.0) 1625924 (663.0 / 169.0) 336854	(10.03, 1.01) (N/A, 0.01, 0.4)	860.6 619.0	0.2072 101.2 97.1	5.9977 [5.0000]	120.0%			
PFTeDA	(713.0 / 669.0) 1163954 (713.0 / 169.0) 215666	(10.13, 1.00) (0.00, N/A, 0.2)	855.5 470.4	0.1853 91.1 105.3	5.0748 [5.0000]	101.5%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1723252 (298.9 / 99.0) 1138756	(6.09, 1.00) (0.00, N/A, 0.0)	522.0 605.4	0.6608 107.4 105.8	4.6174 [4.4237]	104.4%			
PFPeS	(349.0 / 80.0) 3144976 (349.0 / 99.0) 1156696	(7.13, 0.89) (N/A, -0.01, 0.1)	768.0 829.7	0.3678 103.3 107.2	4.9937 [4.6919]	106.4%			
PFHxS	(399.0 / 80.0) 2521385 (399.0 / 99.0) 834423	(8.00, 1.00) (0.00, N/A, 0.2)	3080.8 5757.6	0.3309 98.5 97.4	4.6036 [4.5549]	101.1%			
PFHpS	(449.0 / 80.0) 2289006 (449.0 / 99.0) 609963	(8.77, 0.93) (N/A, -0.02, 0.1)	541.0 507.1	0.2665 97.4 95.8	4.6040 [4.7570]	96.8%			
PFOS	(499.0 / 80.0) 2862914 (499.0 / 99.0) 580951	(9.45, 1.00) (0.00, N/A, 0.0)	919.8 143.7	0.2029 83.4 94.5	4.6290 [4.6375]	99.8%			
PFNS	(549.0 / 80.0) 3099939 (549.0 / 99.0) 788682	(9.76, 1.03) (N/A, 0.00, -0.1)	1043.7 633.7	0.2544 104.3 101.9	4.5184 [4.7994]	94.1%			
PFDS	(599.0 / 80.0) 3626423 (599.0 / 99.0) 902954	(9.92, 1.05) (N/A, 0.00, 0.0)	482.0 932.7	0.2490 110.6 120.0	4.7612 [4.8155]	98.9%			
PFDoS	(698.9 / 80.0) 1492426 (698.9 / 99.0) 332787	(10.11, 1.07) (N/A, 0.00, -0.1)	819.2 647.3	0.2230 91.1 90.0	4.6882 [4.8478]	96.7%			
4:2FTS	(327.0 / 307.0) 3413470 (327.0 / 81.0) 2140473	(5.80, 1.00) (0.00, N/A, -0.1)	849.6 1001.4	0.6271 126.9 121.5	18.2013 [18.6906]	97.4%			
6:2FTS	(427.0 / 407.0) 1953704 (427.0 / 81.0) 1369895	(7.54, 1.00) (0.00, N/A, 0.1)	642.7 666.3	0.7012 90.1 108.3	20.3340 [18.9808]	107.1%			
8:2FTS	(527.0 / 507.0) 1907864 (527.0 / 81.0) 1192967	(8.95, 1.00) (-0.01, N/A, -0.1)	540.3 687.8	0.6253 110.5 77.9	19.6307 [19.1658]	102.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 3321950 (498.0 / 478.0) 65847	(10.18, 1.00) (0.00, N/A, 0.0)	993.0 317.1	0.0198 95.1 84.5	4.7231 [5.0000]	94.5%			
NMeFOSA	(511.9 / 219.0) 2689187 (511.9 / 169.0) 1827560	(10.61, 1.00) (0.00, N/A, -0.1)	768.2 747.4	0.6796 94.4 105.3	20.8590 [20.0000]	104.3%			
NEIFOSA	(526.0 / 219.0) 3132422 (526.0 / 169.0) 3211344	(10.70, 1.00) (0.00, N/A, 0.0)	1469.4 1335.0	1.0252 96.9 100.7	21.3715 [20.0000]	106.9%			
NMeFOSAA	(570.0 / 419.0) 518787 (570.0 / 483.0) 249491	(9.50, 1.00) (0.00, N/A, 0.0)	325.1 318.0	0.4809 78.2 99.7	5.1129 [5.0000]	102.3%			
NEIFOSAA	(584.0 / 419.0) 494635 (584.0 / 526.0) 285740	(9.69, 1.00) (0.01, N/A, 0.0)	1064.9 1109.4	0.5777 78.8 92.6	4.3372 [5.0000]	86.7%			
NMeFOSE	(616.1 / 59.0) 664365	(10.58, 1.00) (0.01, N/A, 0.0)	967.1	N/A 0.0 0.0	21.8478 [20.0000]	109.2%			
NEtFOSE	(630.0 / 59.0) 117244	(10.67, 1.00) (0.00, N/A, 0.0)	1278.0	N/A 0.0 0.0	18.9325 [20.0000]	94.7%			
HFPO-DA	(285.0 / 169.0) 882586 (285.0 / 185.0) 2449499	(6.48, 1.00) (0.00, N/A, 0.1)	635.1 1011.7	2.7754 101.1 96.9	9.5697 [10.0000]	95.7%			
ADONA	(377.0 / 85.0) 3820199 (377.0 / 251.0) 454642	(7.38, 1.14) (N/A, -0.01, 0.0)	809.7 594.3	0.1190 95.6 85.9	9.3257 [9.4270]	98.9%			
9CI-Pf3ONS	(531.0 / 351.0) 9805062 (533.0 / 353.0) 3278869	(9.72, 1.50) (N/A, 0.00, 0.1)	869.1 1165.8	0.3344 113.0 107.2	8.7961 [9.3325]	94.3%			
11CI-PF3OUDS	(631.0 / 451.0) 5685188 (633.0 / 453.0) 1703843	(10.01, 1.55) (N/A, 0.00, 0.1)	1001.6 996.6	0.2997 90.6 106.5	9.9297 [9.4321]	105.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 104259 (241.0 / 117.0) 174388	(4.46, 0.90) (N/A, 0.00, 0.1)	668.4 551.6	1.6726 100.0 97.1	20.5674 [20.0000]	102.8%			
5:3FTCA	(341.0 / 236.7) 788942 (341.0 / 217.0) 1318809	(6.77, 1.10) (N/A, 0.00, -0.1)	487.0 724.6	1.6716 114.2 107.9	18.9913 [20.0000]	95.0%			
7:3FTCA	(441.0 / 317.0) 919770 (441.0 / 337.0) 748947	(8.58, 1.40) (N/A, -0.01, -0.1)	510.5 506.4	0.8143 97.2 100.5	19.2421 [20.0000]	96.2%			
PFEESA	(315.0 / 135.0) 2288494 (315.0 / 83.0) 685799	(6.58, 1.07) (N/A, -0.01, -0.1)	812.5 917.0	0.2997 97.6 100.6	8.8909 [8.9246]	99.6%			
PFMPA	(229.0 / 85.0) 405609	(4.17, 0.84) (N/A, 0.00, 0.0)	889.6	N/A 0.0 0.0	10.0618 [10.0000]	100.6%			
PFMBA	(279.0 / 85.0) 1402899	(5.36, 1.08) (N/A, 0.00, 0.0)	908.6	N/A 0.0 0.0	10.0684 [10.0000]	100.7%			
NFDHA	(295.0 / 201.0) 1209280 (295.0 / 85.0) 1064405	(6.01, 0.98) (N/A, 0.00, 0.0)	585.4 1017.5	0.8802 99.7 94.6	10.2008 [10.0000]	102.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 153011	(3.66, N/A) (N/A, 0.00, N/A)	655.4	N/A	1.0993 [1.0000]	109.9% { 93.9% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 236169	(6.13, N/A) (N/A, 0.00, N/A)	716.6	N/A	1.0227 [1.0000]	102.3% { 105.7% }			
13C4_PFOA_IIS	(417.0 / 372.0) 226242	(7.88, N/A) (N/A, -0.01, N/A)	921.7	N/A	1.0291 [1.0000]	102.9% { 92.8% }			
13C5_PFNA_IIS	(468.0 / 423.0) 189838	(8.62, N/A) (N/A, -0.01, N/A)	333.2	N/A	1.0251 [1.0000]	102.5% { 105.3% }			

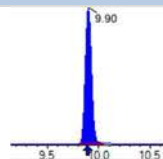
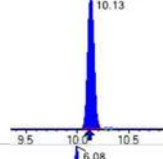
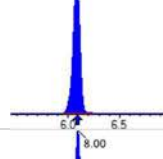
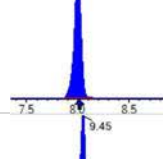
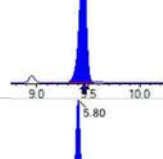
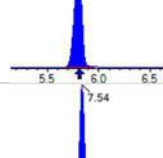
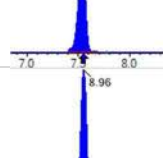
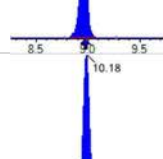
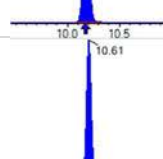
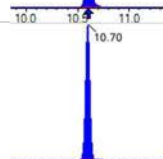
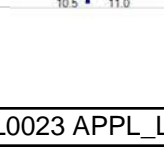


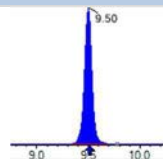
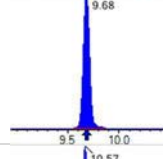
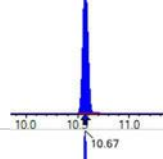
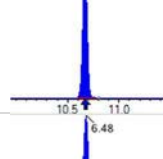
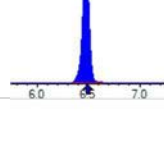
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCV3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (30)
 Acquired: 2022/12/22 - 00:49

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 191280	(9.30, N/A) (N/A, -0.01, N/A)	225.9	N/A	1.0350 [1.0000]	103.5% { 95.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 443899	(8.00, N/A) (N/A, -0.01, N/A)	793.0	N/A	1.0995 [1.0000]	110.0% { 107.3% }			
13C4_PFOS_IIS	(502.8 / 79.9) 316540	(9.45, N/A) (N/A, -0.01, N/A)	445.3	N/A	0.9917 [1.0000]	99.2% { 93.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1189485	(3.66, N/A) (N/A, 0.00, N/A)	804.1	N/A	7.5532 [8.0000]	94.4% { 95.0% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 668957	(4.98, N/A) (N/A, 0.00, N/A)	691.6	N/A	4.0710 [4.0000]	101.8% { 100.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 547502	(6.13, N/A) (N/A, 0.00, N/A)	538.5	N/A	2.0145 [2.0000]	100.7% { 103.8% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 458249	(7.06, N/A) (N/A, -0.01, N/A)	546.7	N/A	1.9328 [2.0000]	96.6% { 98.5% }			
13C8_PFOA_EIS	(421.0 / 376.0) 527878	(7.88, N/A) (N/A, -0.01, N/A)	784.2	N/A	2.1276 [2.0000]	106.4% { 103.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 199895	(8.62, N/A) (N/A, -0.02, N/A)	584.6	N/A	0.9576 [1.0000]	95.8% { 109.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 245433	(9.30, N/A) (N/A, -0.01, N/A)	332.6	N/A	0.9022 [1.0000]	90.2% { 98.0% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 334447	(9.72, N/A) (N/A, 0.00, N/A)	335.9	N/A	0.8643 [1.0000]	86.4% { 103.9% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 362950	(9.90, N/A) (N/A, 0.00, N/A)	618.7	N/A	0.9397 [1.0000]	94.0% { 98.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 258790	(10.13, N/A) (N/A, 0.01, N/A)	415.1	N/A	1.0089 [1.0000]	100.9% { 93.6% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1361464	(6.08, N/A) (N/A, 0.00, N/A)	761.7	N/A	1.8140 [2.0000]	90.7% { 96.8% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 705070	(8.00, N/A) (N/A, -0.01, N/A)	903.4	N/A	1.7657 [2.0000]	88.3% { 101.8% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1139581	(9.45, N/A) (N/A, -0.01, N/A)	260.2	N/A	2.0977 [2.0000]	104.9% { 107.2% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 226874	(5.80, N/A) (N/A, 0.00, N/A)	566.6	N/A	3.5690 [4.0000]	89.2% { 100.7% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 249960	(7.54, N/A) (N/A, -0.01, N/A)	664.2	N/A	3.2661 [4.0000]	81.7% { 86.8% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 245375	(8.96, N/A) (N/A, 0.00, N/A)	512.5	N/A	3.2028 [4.0000]	80.1% { 108.9% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1488424	(10.18, N/A) (N/A, 0.00, N/A)	783.7	N/A	2.1675 [2.0000]	108.4% { 105.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 316314	(10.61, N/A) (N/A, 0.00, N/A)	919.5	N/A	2.1097 [2.0000]	105.5% { 93.3% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 324982	(10.70, N/A) (N/A, 0.00, N/A)	592.9	N/A	2.3480 [2.0000]	117.4% { 107.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 520823	(9.50, N/A) (N/A, -0.01, N/A)	373.5	N/A	4.0316 [4.0000]	100.8% { 89.7% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 508120	(9.68, N/A) (N/A, 0.00, N/A)	287.2	N/A	4.4625 [4.0000]	111.6% { 112.5% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 481835	(10.57, N/A) (N/A, 0.00, N/A)	1331.1	N/A	22.8871 [20.0000]	114.4% { 102.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 241891	(10.67, N/A) (N/A, 0.00, N/A)	1648.9	N/A	25.2384 [20.0000]	126.2% { 110.5% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1213887	(6.48, N/A) (N/A, -0.01, N/A)	890.9	N/A	8.4008 [8.0000]	105.0% { 99.9% }			

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 1633 SPLP

Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03942

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03942-CCV4	PFBA	20.0	20.5	103	ng/mL	+/- 30.00%
	PFPEA	10.0	9.89	98.9	ng/mL	+/- 30.00%
	PFHXA	5.00	5.00	100	ng/mL	+/- 30.00%
	PFHPA	5.00	5.95	119	ng/mL	+/- 30.00%
	PFOA	5.00	4.87	97.4	ng/mL	+/- 30.00%
	PFNA	5.00	4.90	98.0	ng/mL	+/- 30.00%
	PFDA	5.00	4.61	92.2	ng/mL	+/- 30.00%
	PFUnA	5.00	5.25	105	ng/mL	+/- 30.00%
	PFDOA	5.00	4.57	91.4	ng/mL	+/- 30.00%
	PFTRDA	5.00	4.92	98.4	ng/mL	+/- 30.00%
	PFTEDA	5.00	4.79	95.7	ng/mL	+/- 30.00%
	PFBS	4.42	4.35	98.5	ng/mL	+/- 30.00%
	PFPEs	4.70	4.88	104	ng/mL	+/- 30.00%
	PFHXS	4.58	4.45	97.1	ng/mL	+/- 30.00%
	PFHPS	4.78	4.77	99.9	ng/mL	+/- 30.00%
	PFOS	4.65	4.18	89.9	ng/mL	+/- 30.00%
	PFNS	4.80	4.35	90.7	ng/mL	+/- 30.00%
	PFDS	4.82	4.26	88.4	ng/mL	+/- 30.00%
	PFDOS	4.85	4.24	87.5	ng/mL	+/- 30.00%
	4:2FTS	18.8	18.0	96.0	ng/mL	+/- 30.00%
	6:2FTS	19.0	19.5	103	ng/mL	+/- 30.00%
	8:2FTS	19.2	21.0	109	ng/mL	+/- 30.00%
	PFOSA	5.00	5.35	107	ng/mL	+/- 30.00%
	NMeFOSA	20.0	21.6	108	ng/mL	+/- 30.00%
	NEtFOSA	20.0	21.6	108	ng/mL	+/- 30.00%
	NMeFOSAA	5.00	5.41	108	ng/mL	+/- 30.00%
	NEtFOSAA	5.00	4.70	94.1	ng/mL	+/- 30.00%
	NMeFOSE	20.0	21.9	110	ng/mL	+/- 30.00%
	NEtFOSE	20.0	20.2	101	ng/mL	+/- 30.00%
	HFPO-DA	10.0	9.92	99.2	ng/mL	+/- 30.00%

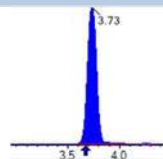
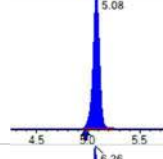
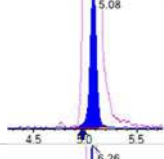
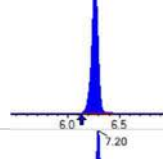
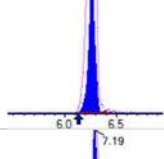
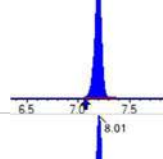
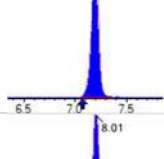
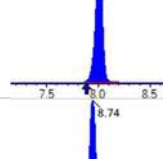
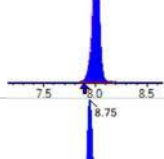
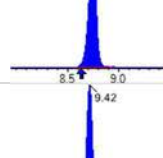
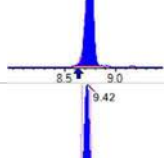
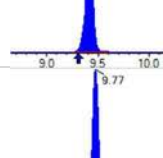
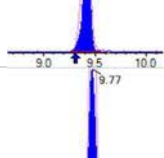
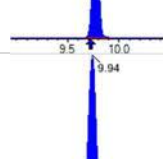
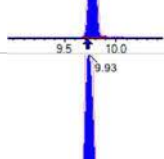
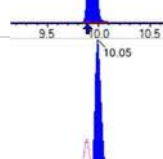
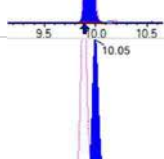
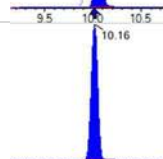
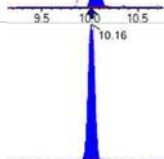
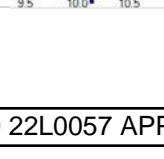
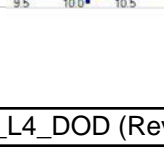
INITIAL AND CONTINUING CALIBRATION CHECK

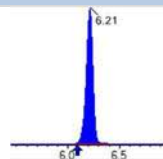
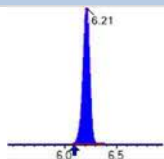
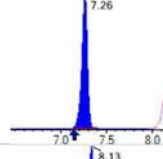
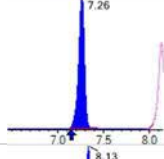
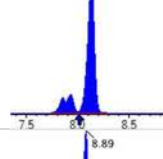
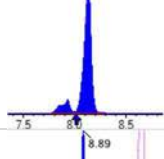
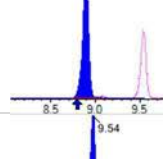
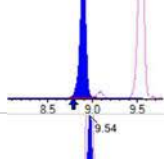
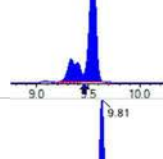
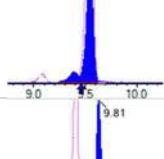
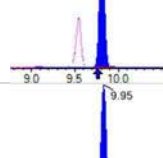
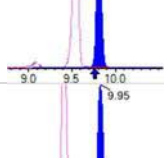
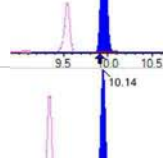
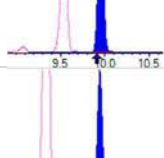
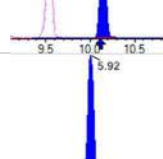
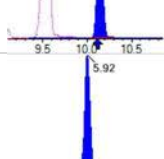
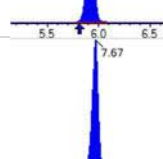
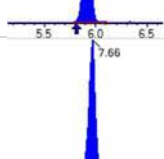
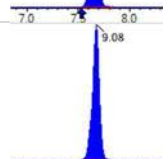
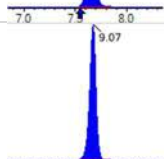
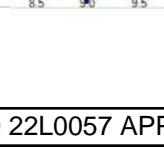
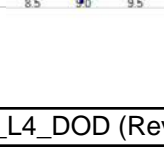
EPA 1633 SPLP

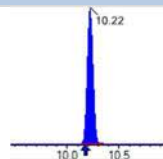
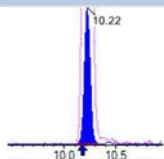
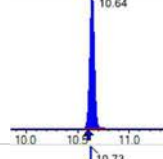
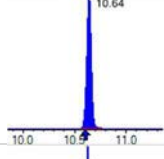
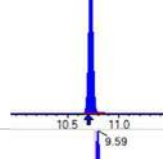
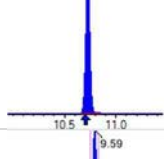
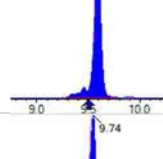
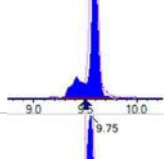
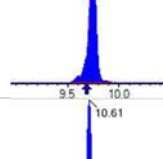
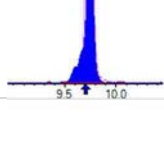
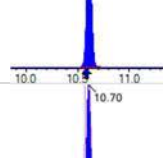
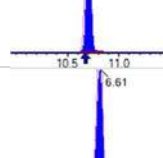
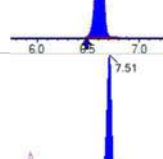
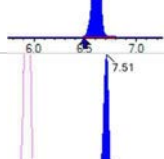
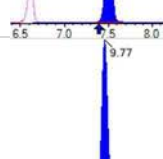
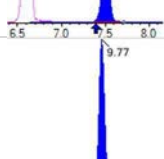
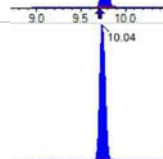
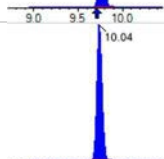
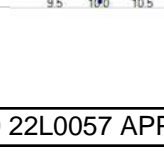
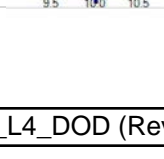
Laboratory: APPL, LLC
 Client: AECOM
 Instrument ID: Saphira
 Standard ID: 22L0304

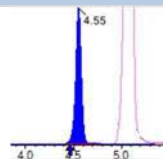
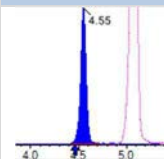
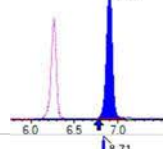
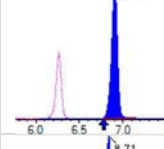
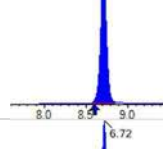
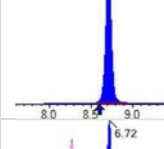
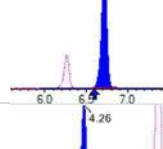
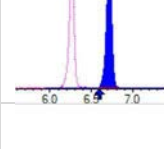
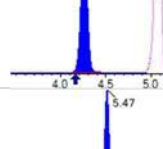
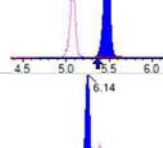
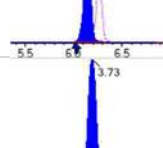
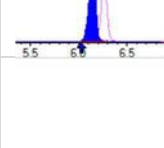
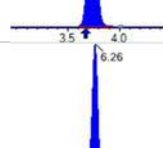
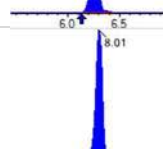
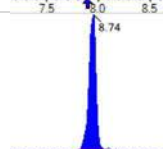

Work Order: 22L0057
 Project: Red Hill AFFF Assessment Sampling
 Calibration: 2252011
 Sequence: SB03942

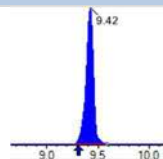
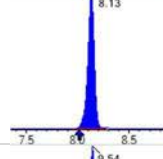
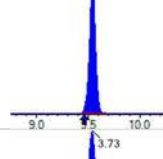
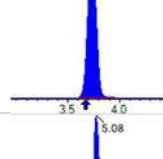
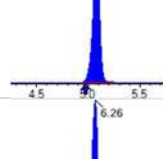
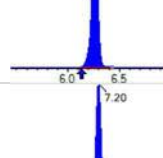
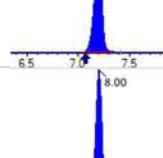
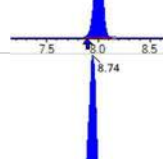
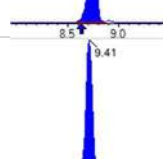
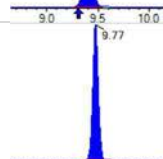
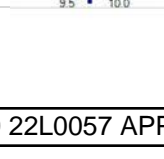
Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
SB03942-CCV4	ADONA	9.45	9.41	99.5	ng/mL	+/- 30.00%
	PFEESA	8.90	8.51	95.6	ng/mL	+/- 30.00%
	PFMPA	10.0	10.0	100	ng/mL	+/- 30.00%
	PFMBA	10.0	9.77	97.7	ng/mL	+/- 30.00%
	NFDHA	10.0	9.60	96.0	ng/mL	+/- 30.00%
	9CL-PF3ONS	9.35	9.41	101	ng/mL	+/- 30.00%
	11CL-PF3OUDS	9.45	9.84	104	ng/mL	+/- 30.00%
	3:3FTCA	20.0	20.8	104	ng/mL	+/- 30.00%
	5:3FTCA	20.0	19.1	95.5	ng/mL	+/- 30.00%
	7:3FTCA	20.0	19.8	99.0	ng/mL	+/- 30.00%

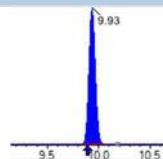
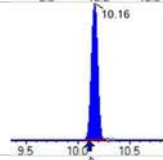
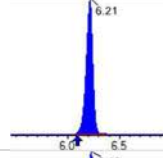
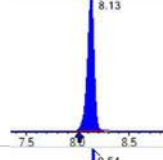
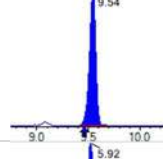
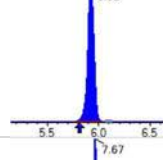
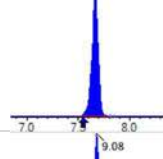
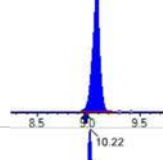
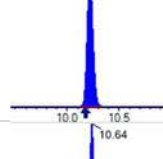
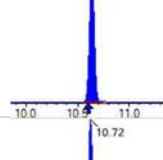
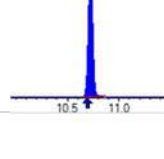
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 2046471	(3.73, 1.00) (0.00, N/A, 0.0)	76.6	N/A 0.0 0.0	20.5114 [20.0000]	102.6%			
PFPeA	(262.9 / 219.0) 1379976 (262.9 / 69.0) 15523	(5.08, 1.00) (0.00, N/A, 0.0)	847.7 278.3	0.0112 100.5 97.0	9.8896 [10.0000]	98.9%			
PFHxA	(313.0 / 269.0) 1147750 (313.0 / 119.0) 97584	(6.26, 1.00) (0.00, N/A, 0.1)	569.7 565.1	0.0850 87.0 91.7	5.0043 [5.0000]	100.1%			
PFHpA	(363.0 / 319.0) 1163134 (363.0 / 169.0) 313887	(7.20, 1.00) (0.00, N/A, 0.3)	596.5 513.2	0.2699 86.6 86.5	5.9482 [5.0000]	119.0%			
PFOA	(413.0 / 369.0) 1145932 (413.0 / 169.0) 388825	(8.01, 1.00) (0.00, N/A, 0.0)	622.0 715.9	0.3393 103.8 103.1	4.8722 [5.0000]	97.4%			
PFNA	(463.0 / 419.0) 865815 (463.0 / 169.0) 196083	(8.74, 1.00) (0.00, N/A, -0.1)	469.2 133.1	0.2265 117.5 98.7	4.8975 [5.0000]	98.0%			
PFDA	(513.0 / 469.0) 1316618 (513.0 / 169.0) 128093	(9.42, 1.00) (0.00, N/A, -0.1)	471.7 286.4	0.0973 101.8 90.1	4.6100 [5.0000]	92.2%			
PFUnA	(563.0 / 519.0) 1540520 (563.0 / 169.0) 150400	(9.77, 1.00) (0.00, N/A, 0.2)	1015.4 372.9	0.0976 112.4 95.3	5.2463 [5.0000]	104.9%			
PFDoA	(613.0 / 569.0) 1678553 (613.0 / 169.0) 218191	(9.94, 1.00) (0.00, N/A, 0.1)	875.4 412.0	0.1300 93.4 110.8	4.5695 [5.0000]	91.4%			
PFTrDA	(663.0 / 619.0) 1565486 (663.0 / 169.0) 321054	(10.05, 1.01) (N/A, 0.03, -0.3)	1117.1 552.0	0.2051 100.2 96.1	4.9188 [5.0000]	98.4%			
PFTeDA	(713.0 / 669.0) 1214126 (713.0 / 169.0) 255040	(10.16, 1.00) (0.00, N/A, 0.1)	757.6 542.2	0.2101 103.3 119.4	4.7864 [5.0000]	95.7%			

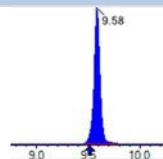
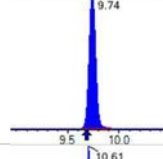
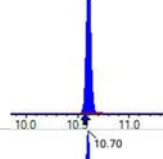
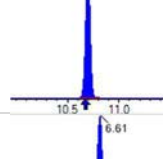
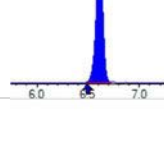
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 1547492 (298.9 / 99.0) 1058828	(6.21, 1.00) (0.00, N/A, 0.2)	669.6 639.0	0.6842 111.2 109.5	4.3521 [4.4237]	98.4%			
PFPeS	(349.0 / 80.0) 3195936 (349.0 / 99.0) 1134180	(7.26, 0.89) (N/A, 0.13, 0.0)	800.1 665.4	0.3549 99.7 103.5	4.8821 [4.6919]	104.1%			
PFHxS	(399.0 / 80.0) 2532187 (399.0 / 99.0) 845792	(8.13, 1.00) (0.00, N/A, 0.1)	3147.7 4006.0	0.3340 99.4 98.3	4.4479 [4.5549]	97.7%			
PFHpS	(449.0 / 80.0) 2530088 (449.0 / 99.0) 728672	(8.89, 0.93) (N/A, 0.11, 0.1)	516.0 717.9	0.2880 105.2 103.6	4.7741 [4.7570]	100.4%			
PFOS	(499.0 / 80.0) 2756429 (499.0 / 99.0) 577357	(9.54, 1.00) (0.00, N/A, 0.0)	114.8 173.8	0.2095 86.1 97.6	4.1811 [4.6375]	90.2%			
PFNS	(549.0 / 80.0) 3182142 (549.0 / 99.0) 810054	(9.81, 1.03) (N/A, 0.04, 0.1)	973.9 823.0	0.2546 104.3 102.0	4.3512 [4.7994]	90.7%			
PFDS	(599.0 / 80.0) 3457888 (599.0 / 99.0) 921307	(9.95, 1.04) (N/A, 0.04, 0.2)	1074.1 675.4	0.2664 118.4 128.4	4.2591 [4.8155]	88.4%			
PFDoS	(698.9 / 80.0) 1439570 (698.9 / 99.0) 339123	(10.14, 1.06) (N/A, 0.03, 0.2)	807.1 691.8	0.2356 96.3 95.1	4.2424 [4.8478]	87.5%			
4:2FTS	(327.0 / 307.0) 3237949 (327.0 / 81.0) 1674182	(5.92, 1.00) (0.00, N/A, 0.3)	771.7 747.7	0.5171 104.7 100.2	18.0421 [18.6906]	96.5%			
6:2FTS	(427.0 / 407.0) 2040306 (427.0 / 81.0) 1361394	(7.67, 1.00) (0.00, N/A, 0.1)	764.8 654.3	0.6672 85.7 103.1	19.5159 [18.9808]	102.8%			
8:2FTS	(527.0 / 507.0) 1973810 (527.0 / 81.0) 1385177	(9.08, 1.00) (0.00, N/A, 0.1)	628.6 661.9	0.7018 124.0 87.4	20.9711 [19.1658]	109.4%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 3682976 (498.0 / 478.0) 79385	(10.22, 1.00) (0.00, N/A, -0.1)	789.2 403.9	0.0216 103.4 91.9	5.3489 [5.0000]	107.0%			
NMeFOSA	(511.9 / 219.0) 2862053 (511.9 / 169.0) 1823062	(10.64, 1.00) (0.00, N/A, 0.0)	970.9 997.9	0.6370 88.4 98.7	21.5937 [20.0000]	108.0%			
NEIFOSA	(526.0 / 219.0) 3153429 (526.0 / 169.0) 3218471	(10.73, 1.00) (0.00, N/A, 0.0)	1151.4 1241.2	1.0206 96.5 100.3	21.5963 [20.0000]	108.0%			
NMeFOSAA	(570.0 / 419.0) 585752 (570.0 / 483.0) 261444	(9.59, 1.00) (0.01, N/A, 0.1)	538.5 421.6	0.4463 72.6 92.5	5.4127 [5.0000]	108.3%			
NEIFOSAA	(584.0 / 419.0) 522223 (584.0 / 526.0) 291920	(9.74, 1.00) (0.01, N/A, 0.0)	1977.9 3503.3	0.5590 76.2 89.6	4.7028 [5.0000]	94.1%			
NMeFOSE	(616.1 / 59.0) 664836	(10.61, 1.00) (0.00, N/A, 0.0)	928.2	N/A 0.0 0.0	21.9091 [20.0000]	109.5%			
NEtFOSE	(630.0 / 59.0) 109269	(10.70, 1.00) (0.01, N/A, 0.0)	1141.4	N/A 0.0 0.0	20.1745 [20.0000]	100.9%			
HFPO-DA	(285.0 / 169.0) 850730 (285.0 / 185.0) 2314431	(6.61, 1.00) (0.00, N/A, 0.1)	748.4 704.3	2.7205 99.1 95.0	9.9154 [10.0000]	99.2%			
ADONA	(377.0 / 85.0) 3584843 (377.0 / 251.0) 464996	(7.51, 1.14) (N/A, 0.12, 0.0)	913.2 517.6	0.1297 104.2 93.7	9.4068 [9.4270]	99.8%			
9CI-Pf3ONS	(531.0 / 351.0) 9737798 (533.0 / 353.0) 3421987	(9.77, 1.48) (N/A, 0.05, -0.1)	712.9 738.1	0.3514 118.7 112.7	9.4139 [9.3325]	100.9%			
11CI-PF3OUDS	(631.0 / 451.0) 5240339 (633.0 / 453.0) 1637030	(10.04, 1.52) (N/A, 0.03, 0.0)	1374.8 1174.4	0.3124 94.4 111.0	9.8384 [9.4321]	104.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 100323 (241.0 / 117.0) 165871	(4.55, 0.90) (N/A, 0.10, 0.1)	579.3 680.9	1.6534 98.8 96.0	20.8321 [20.0000]	104.2%			
5:3FTCA	(341.0 / 236.7) 774341 (341.0 / 217.0) 1215456	(6.90, 1.10) (N/A, 0.13, -0.1)	566.1 548.1	1.5697 107.2 101.4	19.1073 [20.0000]	95.5%			
7:3FTCA	(441.0 / 317.0) 923276 (441.0 / 337.0) 806717	(8.71, 1.39) (N/A, 0.12, 0.0)	498.7 536.4	0.8738 104.3 107.8	19.7999 [20.0000]	99.0%			
PFEESA	(315.0 / 135.0) 2135793 (315.0 / 83.0) 646367	(6.72, 1.07) (N/A, 0.13, 0.0)	726.4 816.7	0.3026 98.6 101.6	8.5058 [8.9246]	95.3%			
PFMPA	(229.0 / 85.0) 384110	(4.26, 0.84) (N/A, 0.09, 0.0)	946.3	N/A 0.0 0.0	10.0297 [10.0000]	100.3%			
PFMBA	(279.0 / 85.0) 1293598	(5.47, 1.08) (N/A, 0.11, 0.0)	827.3	N/A 0.0 0.0	9.7723 [10.0000]	97.7%			
NFDHA	(295.0 / 201.0) 1110761 (295.0 / 85.0) 1023816	(6.14, 0.98) (N/A, 0.13, 0.0)	724.4 1209.2	0.9217 104.4 99.0	9.6047 [10.0000]	96.0%			
13C3_PFBA_IIS	(216.0 / 172.0) 148112	(3.73, N/A) (N/A, 0.07, N/A)	656.0	N/A	1.0641 [1.0000]	106.4% { 90.9% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 240281	(6.26, N/A) (N/A, 0.13, N/A)	709.7	N/A	1.0405 [1.0000]	104.1% { 107.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 229571	(8.01, N/A) (N/A, 0.12, N/A)	618.4	N/A	1.0442 [1.0000]	104.4% { 94.2% }			
13C5_PFNA_IIS	(468.0 / 423.0) 201083	(8.74, N/A) (N/A, 0.11, N/A)	289.7	N/A	1.0859 [1.0000]	108.6% { 111.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 180746	(9.42, N/A) (N/A, 0.11, N/A)	433.9	N/A	0.9780 [1.0000]	97.8% { 90.4% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 438390	(8.13, N/A) (N/A, 0.12, N/A)	817.4	N/A	1.0859 [1.0000]	108.6% { 106.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 324729	(9.54, N/A) (N/A, 0.09, N/A)	445.8	N/A	1.0174 [1.0000]	101.7% { 96.2% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1223475	(3.73, N/A) (N/A, 0.07, N/A)	814.9	N/A	8.0260 [8.0000]	100.3% { 97.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 635526	(5.08, N/A) (N/A, 0.10, N/A)	643.7	N/A	3.8013 [4.0000]	95.0% { 95.8% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 534107	(6.26, N/A) (N/A, 0.13, N/A)	636.8	N/A	1.9316 [2.0000]	96.6% { 101.2% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 429042	(7.20, N/A) (N/A, 0.13, N/A)	584.4	N/A	1.7787 [2.0000]	88.9% { 92.2% }			
13C8_PFOA_EIS	(421.0 / 376.0) 478344	(8.00, N/A) (N/A, 0.12, N/A)	496.4	N/A	1.9000 [2.0000]	95.0% { 93.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 206027	(8.74, N/A) (N/A, 0.11, N/A)	368.7	N/A	0.9318 [1.0000]	93.2% { 112.4% }			
13C6_PFDA_EIS	(519.0 / 474.0) 300049	(9.41, N/A) (N/A, 0.10, N/A)	521.8	N/A	1.1672 [1.0000]	116.7% { 119.8% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 371561	(9.77, N/A) (N/A, 0.05, N/A)	375.9	N/A	1.0162 [1.0000]	101.6% { 115.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 426110	(9.93, N/A) (N/A, 0.04, N/A)	601.2	N/A	1.1676 [1.0000]	116.8% { 115.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 286210	(10.16, N/A) (N/A, 0.04, N/A)	487.9	N/A	1.1809 [1.0000]	118.1% { 103.5% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1297131	(6.21, N/A) (N/A, 0.12, N/A)	626.9	N/A	1.7500 [2.0000]	87.5% { 92.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 732880	(8.13, N/A) (N/A, 0.11, N/A)	729.8	N/A	1.8584 [2.0000]	92.9% { 105.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1214739	(9.54, N/A) (N/A, 0.09, N/A)	316.3	N/A	2.1796 [2.0000]	109.0% { 114.2% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 217107	(5.92, N/A) (N/A, 0.12, N/A)	605.0	N/A	3.4583 [4.0000]	86.5% { 96.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 271982	(7.67, N/A) (N/A, 0.12, N/A)	771.4	N/A	3.5985 [4.0000]	90.0% { 94.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 237631	(9.08, N/A) (N/A, 0.12, N/A)	370.7	N/A	3.1407 [4.0000]	78.5% { 105.5% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1457094	(10.22, N/A) (N/A, 0.04, N/A)	904.4	N/A	2.0683 [2.0000]	103.4% { 102.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 325193	(10.64, N/A) (N/A, 0.03, N/A)	841.8	N/A	2.1142 [2.0000]	105.7% { 95.9% }			
D5_NeIFOSA_EIS	(531.1 / 169.0) 323756	(10.72, N/A) (N/A, 0.03, N/A)	1081.0	N/A	2.2801 [2.0000]	114.0% { 107.4% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 555478	(9.58, N/A) (N/A, 0.08, N/A)	461.4	N/A	4.1915 [4.0000]	104.8% { 95.6% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 494751	(9.74, N/A) (N/A, 0.06, N/A)	360.3	N/A	4.2355 [4.0000]	105.9% { 109.5% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 480830	(10.61, N/A) (N/A, 0.04, N/A)	1425.4	N/A	22.2634 [20.0000]	111.3% { 102.5% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 211558	(10.70, N/A) (N/A, 0.03, N/A)	1286.7	N/A	21.5169 [20.0000]	107.6% { 96.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1129284	(6.61, N/A) (N/A, 0.13, N/A)	755.9	N/A	7.6816 [8.0000]	96.0% { 92.9% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03941-ICB1	PFBA	0.00	ng/mL	0.75	U
	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.0144	ng/mL	0.10	U
	PFOA	0.0144	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0146	ng/mL	0.10	U
	PFOS	0.0146	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03941-ICB1	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.0124	ng/mL	0.10	U
	PFOSA	0.0124	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U
PFMPA	0.00	ng/mL	0.20	U	

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03941-ICB1	PFMBA	0.00	ng/mL	0.20	U
	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	8.24	ng/mL		
	13C4-PFBA	8.24	ng/mL		
	13C5-PFPEA	4.11	ng/mL		
	13C5-PFPEA	4.11	ng/mL		
	13C5-PFHXA	1.95	ng/mL		
	13C5-PFHXA	1.95	ng/mL		
	13C4-PFHFA	2.08	ng/mL		
	13C4-PFHFA	2.08	ng/mL		
	13C8-PFOA	2.18	ng/mL		
	13C8-PFOA	2.18	ng/mL		
	13C9-PFNA	1.04	ng/mL		
	13C9-PFNA	1.04	ng/mL		
	13C6-PFDA	1.03	ng/mL		
	13C6-PFDA	1.03	ng/mL		
	13C7-PFUnA	1.08	ng/mL		
	13C7-PFUnA	1.08	ng/mL		
	13C2-PFDOA	1.09	ng/mL		
	13C2-PFDOA	1.09	ng/mL		
	13C2-PFTEDA	1.15	ng/mL		

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03941-ICB1	13C2-PFTEDA	1.15	ng/mL		
	13C3-PFBS	2.21	ng/mL		
	13C3-PFBS	2.21	ng/mL		
	13C3-PFHXS	2.21	ng/mL		
	13C3-PFHXS	2.21	ng/mL		
	13C8-PFOS	2.47	ng/mL		
	13C8-PFOS	2.47	ng/mL		
	13C2-4:2FTS	4.05	ng/mL		
	13C2-4:2FTS	4.05	ng/mL		
	13C2-6:2FTS	4.81	ng/mL		
	13C2-6:2FTS	4.81	ng/mL		
	13C2-8:2FTS	4.00	ng/mL		
	13C2-8:2FTS	4.00	ng/mL		
	13C8-PFOSA	2.42	ng/mL		
	13C8-PFOSA	2.42	ng/mL		
	D5-NETFOSA	2.32	ng/mL		
	D5-NETFOSA	2.32	ng/mL		
	D3-NMEFOSA	2.31	ng/mL		
	D3-NMEFOSA	2.31	ng/mL		
	D3-NMEFOSAA	4.78	ng/mL		
	D3-NMEFOSAA	4.78	ng/mL		
	D5-NETFOSAA	4.58	ng/mL		
	D5-NETFOSAA	4.58	ng/mL		
	D7-NMEFOSE	21.9	ng/mL		
	D7-NMEFOSE	21.9	ng/mL		
	D9-NETFOSE	21.3	ng/mL		
	D9-NETFOSE	21.3	ng/mL		
	13C3-HFPO-DA	8.60	ng/mL		
	13C3-HFPO-DA	8.60	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03941-ICB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21A (9)
 Acquired: 2022/12/21 - 16:08

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 3496 (413.0 / 169.0) 986	(7.98, 1.00) (0.01, N/A, -0.4)	15.4 42.4	0.2821 86.3 86.3	0.0144	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

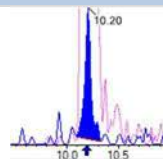
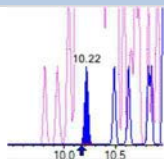
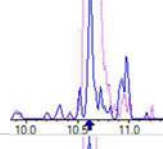
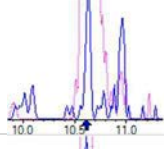
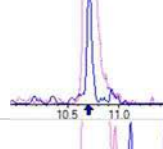
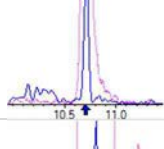
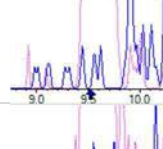
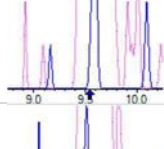
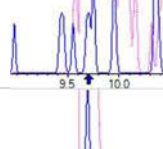
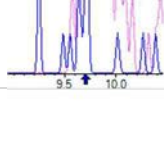
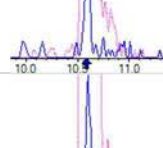
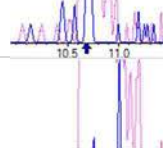
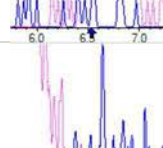
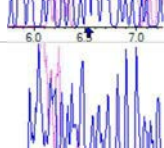
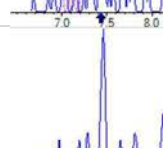
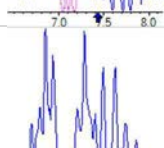
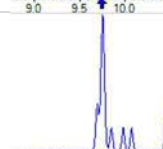
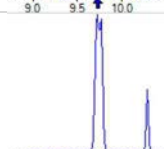
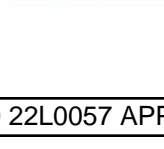
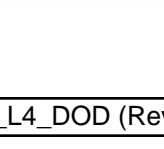


Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03941-ICB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21A (9)
 Acquired: 2022/12/21 - 16:08

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 9898 (499.0 / 99.0) 1897	(9.52 , 1.00) (0.00 , N/A , -1.2)	48.5 19.3	0.1916 78.8 78.8	0.0146	N/A			MI5 DG 2022-12-21
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 9076 (498.0 / 478.0) 300	(10.20, 1.00) (0.00, N/A, -0.8)	34.8 12.4	0.0330 158.5 158.5	0.0124	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

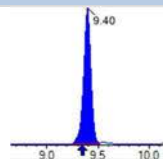
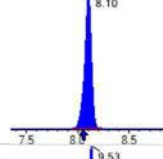
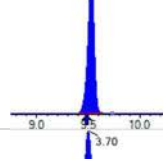
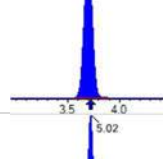
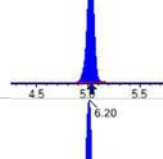
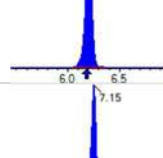
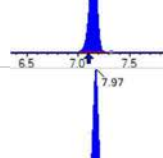
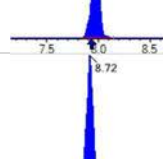
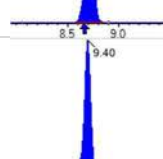
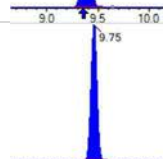
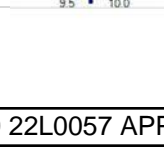


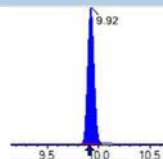
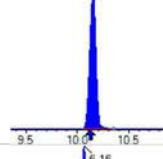
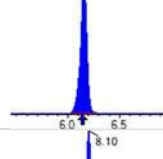
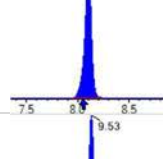
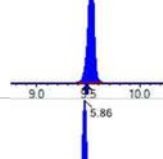
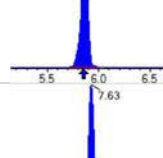
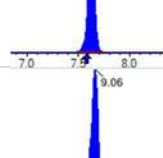
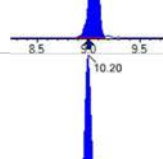
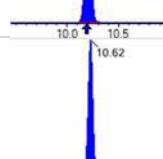
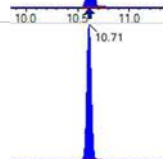
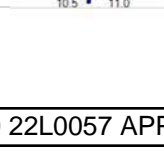
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

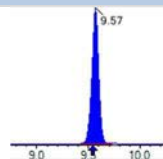
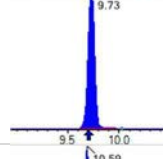
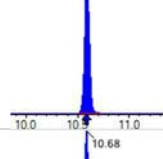
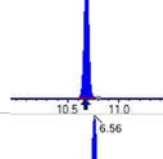
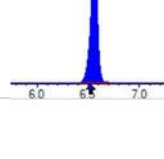
Sample I.D.: SB03941-ICB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21A (9)
 Acquired: 2022/12/21 - 16:08

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 137297	(3.70, N/A) (N/A, -0.02, N/A)	766.0	N/A	0.9864 [1.0000]	98.6% { 90.5% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 223416	(6.20, N/A) (N/A, 0.02, N/A)	460.7	N/A	0.9675 [1.0000]	96.8% { 95.5% }			
13C4_PFOA_IIS	(417.0 / 372.0) 206725	(7.97, N/A) (N/A, 0.05, N/A)	562.5	N/A	0.9403 [1.0000]	94.0% { 86.9% }			
13C5_PFNA_IIS	(468.0 / 423.0) 186093	(8.72, N/A) (N/A, 0.05, N/A)	497.6	N/A	1.0049 [1.0000]	100.5% { 92.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 184687	(9.40, N/A) (N/A, 0.05, N/A)	233.6	N/A	0.9993 [1.0000]	99.9% { 106.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 371811	(8.10, N/A) (N/A, 0.05, N/A)	662.9	N/A	0.9210 [1.0000]	92.1% { 88.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 294523	(9.53, N/A) (N/A, 0.05, N/A)	539.0	N/A	0.9228 [1.0000]	92.3% { 89.8% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1164618	(3.70, N/A) (N/A, -0.02, N/A)	949.7	N/A	8.2417 [8.0000]	103.0% { 97.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 639563	(5.02, N/A) (N/A, -0.01, N/A)	719.9	N/A	4.1143 [4.0000]	102.9% { 91.9% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 500638	(6.20, N/A) (N/A, 0.02, N/A)	697.9	N/A	1.9473 [2.0000]	97.4% { 92.9% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 466966	(7.15, N/A) (N/A, 0.04, N/A)	691.4	N/A	2.0820 [2.0000]	104.1% { 95.1% }			
13C8_PFOA_EIS	(421.0 / 376.0) 494304	(7.97, N/A) (N/A, 0.05, N/A)	917.1	N/A	2.1804 [2.0000]	109.0% { 99.3% }			
13C9_PFNA_EIS	(472.0 / 427.0) 213587	(8.72, N/A) (N/A, 0.05, N/A)	564.9	N/A	1.0438 [1.0000]	104.4% { 97.6% }			
13C6_PFDA_EIS	(519.0 / 474.0) 271082	(9.40, N/A) (N/A, 0.05, N/A)	432.0	N/A	1.0320 [1.0000]	103.2% { 96.4% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 404733	(9.75, N/A) (N/A, 0.03, N/A)	435.5	N/A	1.0833 [1.0000]	108.3% { 101.6% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 407883	(9.92, N/A) (N/A, 0.02, N/A)	595.7	N/A	1.0938 [1.0000]	109.4% { 105.2% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 285097	(10.15, N/A) (N/A, 0.02, N/A)	425.4	N/A	1.1512 [1.0000]	115.1% { 117.9% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1390129	(6.16, N/A) (N/A, 0.01, N/A)	781.9	N/A	2.2113 [2.0000]	110.6% { 101.2% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 737924	(8.10, N/A) (N/A, 0.05, N/A)	828.7	N/A	2.2062 [2.0000]	110.3% { 97.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1246594	(9.53, N/A) (N/A, 0.05, N/A)	598.1	N/A	2.4662 [2.0000]	123.3% { 104.7% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 215896	(5.86, N/A) (N/A, 0.01, N/A)	739.4	N/A	4.0548 [4.0000]	101.4% { 96.3% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 308341	(7.63, N/A) (N/A, 0.04, N/A)	911.4	N/A	4.8100 [4.0000]	120.3% { 112.4% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 256399	(9.06, N/A) (N/A, 0.06, N/A)	310.1	N/A	3.9955 [4.0000]	99.9% { 86.6% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1544524	(10.20, N/A) (N/A, 0.02, N/A)	1476.0	N/A	2.4173 [2.0000]	120.9% { 105.4% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 322844	(10.62, N/A) (N/A, 0.02, N/A)	1120.4	N/A	2.3142 [2.0000]	115.7% { 97.8% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 298222	(10.71, N/A) (N/A, 0.01, N/A)	1079.5	N/A	2.3157 [2.0000]	115.8% { 104.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 574276	(9.57, N/A) (N/A, 0.04, N/A)	542.0	N/A	4.7778 [4.0000]	119.4% { 112.5% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 485417	(9.73, N/A) (N/A, 0.03, N/A)	310.2	N/A	4.5818 [4.0000]	114.5% { 103.0% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 428343	(10.59, N/A) (N/A, 0.01, N/A)	811.6	N/A	21.8673 [20.0000]	109.3% { 99.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 189842	(10.68, N/A) (N/A, 0.01, N/A)	1103.1	N/A	21.2885 [20.0000]	106.4% { 104.1% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1175027	(6.56, N/A) (N/A, 0.03, N/A)	697.1	N/A	8.5961 [8.0000]	107.5% { 100.0% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB1	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB1	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	8.32	ng/mL		
	13C5-PFPEA	4.35	ng/mL		
	13C5-PFHXA	2.03	ng/mL		
	13C4-PFHPA	2.15	ng/mL		
	13C8-PFOA	1.83	ng/mL		
	13C9-PFNA	0.974	ng/mL		
	13C6-PFDA	1.14	ng/mL		
	13C7-PFUnA	1.00	ng/mL		
	13C2-PFDOA	1.09	ng/mL		
	13C2-PFTEDA	1.26	ng/mL		
	13C3-PFBS	1.99	ng/mL		
	13C3-PFHXS	2.08	ng/mL		
	13C8-PFOS	2.17	ng/mL		
	13C2-4:2FTS	4.15	ng/mL		
	13C2-6:2FTS	4.46	ng/mL		
	13C2-8:2FTS	4.51	ng/mL		
	13C8-PFOSA	2.42	ng/mL		
	D5-NETFOSA	2.33	ng/mL		
	D3-NMEFOSA	2.27	ng/mL		
	D3-NMEFOSAA	4.12	ng/mL		
	D5-NETFOSAA	4.72	ng/mL		
	D7-NMEFOSE	23.0	ng/mL		
	D9-NETFOSE	22.1	ng/mL		
	13C3-HFPO-DA	8.85	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (1)
 Acquired: 2022/12/21 - 16:46

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (1)
 Acquired: 2022/12/21 - 16:46

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

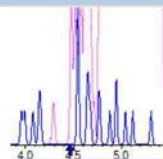
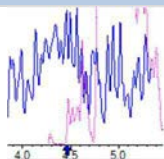
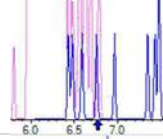
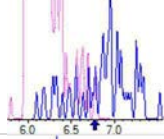
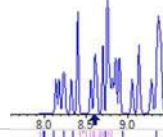
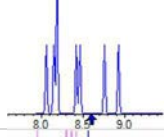
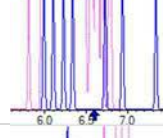
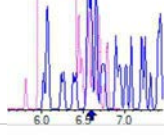
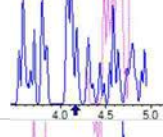
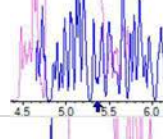
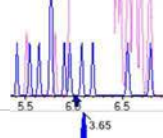
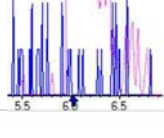
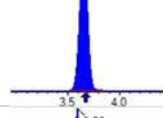
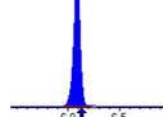
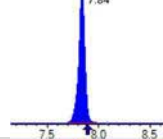
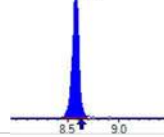


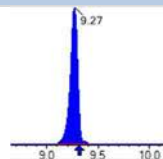
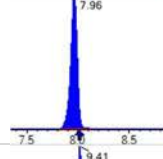
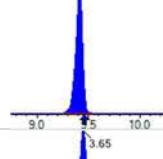
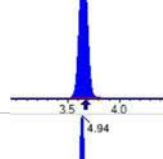
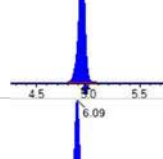
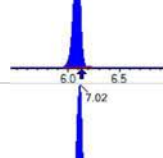
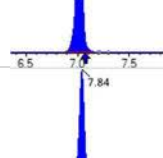
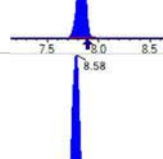
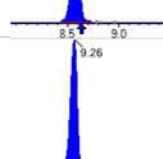
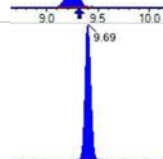
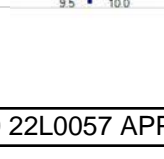
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

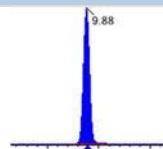
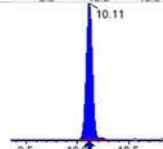
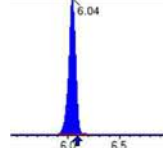
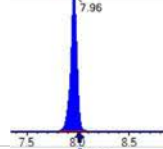
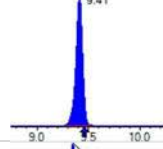
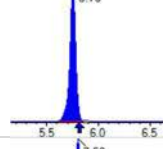
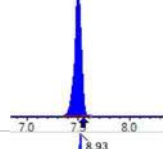
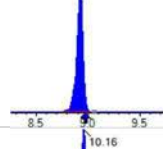
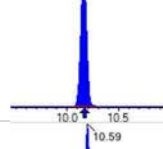
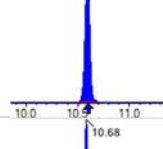
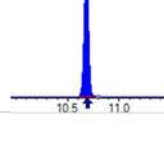
Sample I.D.: SB03942-CCB1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

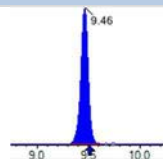
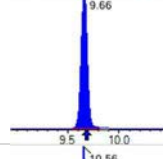
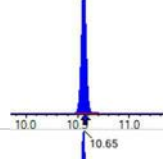
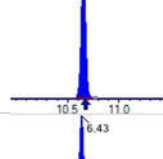
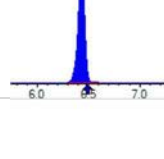
Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (1)
 Acquired: 2022/12/21 - 16:46

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-Imin, ΔRT-CVmin, ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 156629	(3.65, N/A) (N/A, -0.02, N/A)	970.0	N/A	1.1253 [1.0000]	112.5% { 96.1% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 224999	(6.09, N/A) (N/A, -0.05, N/A)	474.4	N/A	0.9744 [1.0000]	97.4% { 100.7% }			
13C4_PFOA_IIS	(417.0 / 372.0) 239801	(7.84, N/A) (N/A, -0.05, N/A)	684.3	N/A	1.0908 [1.0000]	109.1% { 98.4% }			
13C5_PFNA_IIS	(468.0 / 423.0) 187963	(8.58, N/A) (N/A, -0.05, N/A)	362.0	N/A	1.0150 [1.0000]	101.5% { 104.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 171105	(9.27, N/A) (N/A, -0.04, N/A)	464.7	N/A	0.9258 [1.0000]	92.6% {85.6%}			
18O2_PFHxS_IIS	(403.0 / 83.9) 392855	(7.96, N/A) (N/A, -0.05, N/A)	884.5	N/A	0.9731 [1.0000]	97.3% {95.0%}			
13C4_PFOS_IIS	(502.8 / 79.9) 309774	(9.41, N/A) (N/A, -0.04, N/A)	475.1	N/A	0.9705 [1.0000]	97.1% {91.8%}			
13C4_PFBA_EIS	(217.0 / 172.0) 1340552	(3.65, N/A) (N/A, -0.02, N/A)	985.7	N/A	8.3158 [8.0000]	103.9% {107.1%}			
13C5_PFPeA_EIS	(267.9 / 223.0) 681098	(4.94, N/A) (N/A, -0.03, N/A)	811.1	N/A	4.3506 [4.0000]	108.8% {102.7%}			
13C5_PFHxA_EIS	(318.0 / 273.0) 526457	(6.09, N/A) (N/A, -0.05, N/A)	615.5	N/A	2.0333 [2.0000]	101.7% {99.8%}			
13C4_PFHpA_EIS	(367.0 / 322.0) 486617	(7.02, N/A) (N/A, -0.05, N/A)	670.1	N/A	2.1544 [2.0000]	107.7% {104.6%}			
13C8_PFOA_EIS	(421.0 / 376.0) 481068	(7.84, N/A) (N/A, -0.05, N/A)	637.5	N/A	1.8293 [2.0000]	91.5% {94.1%}			
13C9_PFNA_EIS	(472.0 / 427.0) 201401	(8.58, N/A) (N/A, -0.05, N/A)	286.6	N/A	0.9744 [1.0000]	97.4% {109.8%}			
13C6_PFDA_EIS	(519.0 / 474.0) 276656	(9.26, N/A) (N/A, -0.05, N/A)	564.4	N/A	1.1369 [1.0000]	113.7% {110.4%}			
13C7_PFUnA_EIS	(570.0 / 525.0) 346094	(9.69, N/A) (N/A, -0.02, N/A)	450.9	N/A	0.9999 [1.0000]	100.0% {107.6%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 377063	(9.88, N/A) (N/A, -0.02, N/A)	378.9	N/A	1.0914 [1.0000]	109.1% {102.2%}			
13C2_PFTeDA_EIS	(715.0 / 670.0) 289934	(10.11, N/A) (N/A, 0.00, N/A)	414.2	N/A	1.2636 [1.0000]	126.4% {104.9%}			
13C3_PFBs_EIS	(302.0 / 80.0) 1321049	(6.04, N/A) (N/A, -0.05, N/A)	750.5	N/A	1.9889 [2.0000]	99.4% {94.0%}			
13C3_PFHxS_EIS	(402.0 / 80.0) 733531	(7.96, N/A) (N/A, -0.05, N/A)	911.3	N/A	2.0756 [2.0000]	103.8% {105.9%}			
13C8_PFOS_EIS	(507.0 / 80.0) 1151375	(9.41, N/A) (N/A, -0.04, N/A)	475.0	N/A	2.1657 [2.0000]	108.3% {108.3%}			
13C2_4:2FTS_EIS	(329.0 / 81.0) 233235	(5.75, N/A) (N/A, -0.05, N/A)	712.8	N/A	4.1458 [4.0000]	103.6% {103.5%}			
13C2_6:2FTS_EIS	(429.0 / 81.0) 302320	(7.50, N/A) (N/A, -0.05, N/A)	896.0	N/A	4.4635 [4.0000]	111.6% {105.0%}			
13C2_8:2FTS_EIS	(529.0 / 81.0) 305733	(8.93, N/A) (N/A, -0.04, N/A)	487.8	N/A	4.5091 [4.0000]	112.7% {135.7%}			
13C8_PFOsa_EIS	(506.0 / 78.0) 1628473	(10.16, N/A) (N/A, -0.02, N/A)	941.7	N/A	2.4232 [2.0000]	121.2% {115.0%}			
D3_NMeFOSA_EIS	(515.0 / 169.0) 332778	(10.59, N/A) (N/A, -0.01, N/A)	895.1	N/A	2.2680 [2.0000]	113.4% {98.2%}			
D5_NEiFOSA_EIS	(531.1 / 169.0) 315843	(10.68, N/A) (N/A, -0.01, N/A)	1082.4	N/A	2.3318 [2.0000]	116.6% {104.7%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-Imin, Δ RT-CVmin, Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration True ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 521364	(9.46, N/A) (N/A, -0.04, N/A)	319.8	N/A	4.1240 [4.0000]	103.1% {89.8%}			
D5_EtFOSAA_EIS	(589.0 / 419.0) 525715	(9.66, N/A) (N/A, -0.02, N/A)	301.6	N/A	4.7179 [4.0000]	117.9% {116.4%}			
D7_NMeFOSE_EIS	(623.2 / 58.9) 473569	(10.56, N/A) (N/A, -0.01, N/A)	1559.1	N/A	22.9859 [20.0000]	114.9% {101.0%}			
D9_NEtFOSE_EIS	(639.2 / 58.9) 207453	(10.65, N/A) (N/A, -0.01, N/A)	1083.1	N/A	22.1180 [20.0000]	110.6% {94.8%}			
13C3_HFPODA_EIS	(287.0 / 169.0) 1217964	(6.43, N/A) (N/A, -0.05, N/A)	821.7	N/A	8.8475 [8.0000]	110.6% {100.2%}			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB2	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.00	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB2	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	7.75	ng/mL		
	13C5-PFPEA	4.38	ng/mL		
	13C5-PFHXA	2.00	ng/mL		
	13C4-PFHPA	2.16	ng/mL		
	13C8-PFOA	2.14	ng/mL		
	13C9-PFNA	0.969	ng/mL		
	13C6-PFDA	1.09	ng/mL		
	13C7-PFUnA	1.03	ng/mL		
	13C2-PFDOA	1.07	ng/mL		
	13C2-PFTEDA	1.14	ng/mL		
	13C3-PFBS	1.87	ng/mL		
	13C3-PFHXS	1.87	ng/mL		
	13C8-PFOS	1.87	ng/mL		
	13C2-4:2FTS	3.91	ng/mL		
	13C2-6:2FTS	4.04	ng/mL		
	13C2-8:2FTS	3.44	ng/mL		
	13C8-PFOSA	2.16	ng/mL		
	D5-NETFOSA	2.08	ng/mL		
	D3-NMEFOSA	2.11	ng/mL		
	D3-NMEFOSAA	3.97	ng/mL		
	D5-NETFOSAA	3.79	ng/mL		
	D7-NMEFOSE	21.3	ng/mL		
	D9-NETFOSAE	20.9	ng/mL		
	13C3-HFPO-DA	8.39	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (4)
 Acquired: 2022/12/21 - 17:49

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (4)
 Acquired: 2022/12/21 - 17:49

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) N/A (499.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (4)
 Acquired: 2022/12/21 - 17:49

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

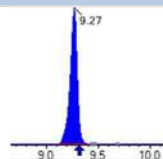
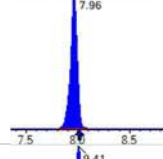
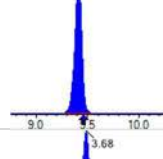
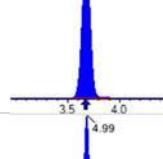
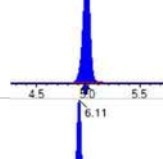
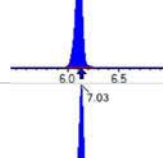
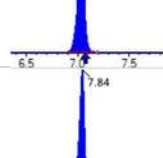
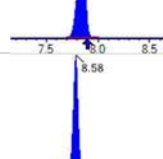
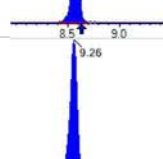
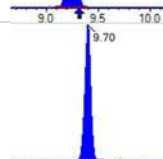
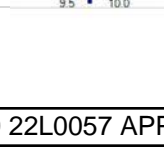


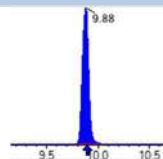
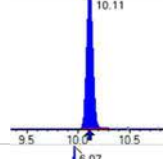
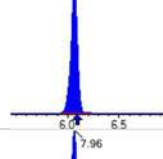
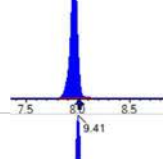
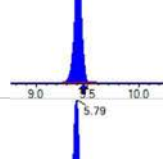
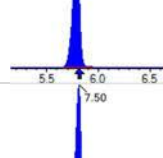
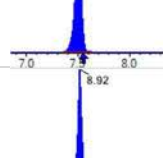
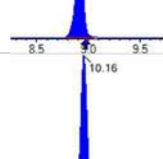
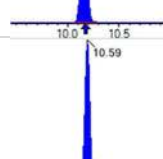
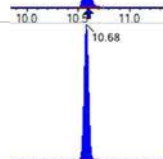
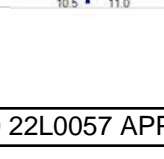
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

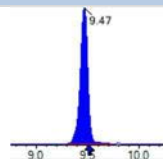
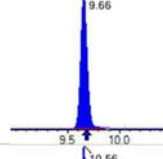
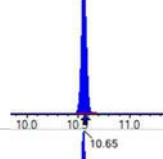
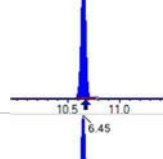
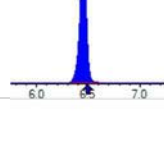
Sample I.D.: SB03942-CCB2
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (4)
 Acquired: 2022/12/21 - 17:49

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 170740	(3.68, N/A) (N/A, 0.01, N/A)	589.0	N/A	1.2266 [1.0000]	122.7% { 104.7% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 241408	(6.11, N/A) (N/A, -0.03, N/A)	610.6	N/A	1.0454 [1.0000]	104.5% { 108.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 230431	(7.84, N/A) (N/A, -0.05, N/A)	677.8	N/A	1.0481 [1.0000]	104.8% { 94.6% }			
13C5_PFNA_IIS	(468.0 / 423.0) 203225	(8.58, N/A) (N/A, -0.05, N/A)	550.4	N/A	1.0974 [1.0000]	109.7% { 112.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 179039	(9.27, N/A) (N/A, -0.05, N/A)	391.5	N/A	0.9688 [1.0000]	96.9% { 89.5% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 436720	(7.96, N/A) (N/A, -0.05, N/A)	732.1	N/A	1.0818 [1.0000]	108.2% { 105.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 337827	(9.41, N/A) (N/A, -0.04, N/A)	442.5	N/A	1.0584 [1.0000]	105.8% { 100.1% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1361944	(3.68, N/A) (N/A, 0.01, N/A)	762.8	N/A	7.7503 [8.0000]	96.9% { 108.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 736131	(4.99, N/A) (N/A, 0.01, N/A)	817.4	N/A	4.3825 [4.0000]	109.6% { 111.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 556950	(6.11, N/A) (N/A, -0.02, N/A)	642.8	N/A	2.0048 [2.0000]	100.2% { 105.6% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 522616	(7.03, N/A) (N/A, -0.04, N/A)	670.0	N/A	2.1565 [2.0000]	107.8% { 112.4% }			
13C8_PFOA_EIS	(421.0 / 376.0) 540602	(7.84, N/A) (N/A, -0.04, N/A)	604.6	N/A	2.1393 [2.0000]	107.0% { 105.8% }			
13C9_PFNA_EIS	(472.0 / 427.0) 216473	(8.58, N/A) (N/A, -0.05, N/A)	470.2	N/A	0.9687 [1.0000]	96.9% { 118.1% }			
13C6_PFDA_EIS	(519.0 / 474.0) 278745	(9.26, N/A) (N/A, -0.05, N/A)	453.4	N/A	1.0947 [1.0000]	109.5% { 111.3% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 372777	(9.70, N/A) (N/A, -0.02, N/A)	509.1	N/A	1.0292 [1.0000]	102.9% { 115.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 385606	(9.88, N/A) (N/A, -0.02, N/A)	499.7	N/A	1.0667 [1.0000]	106.7% { 104.5% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 273135	(10.11, N/A) (N/A, -0.01, N/A)	481.6	N/A	1.1377 [1.0000]	113.8% { 98.8% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1382001	(6.07, N/A) (N/A, -0.02, N/A)	563.3	N/A	1.8717 [2.0000]	93.6% { 98.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 733558	(7.96, N/A) (N/A, -0.05, N/A)	746.5	N/A	1.8672 [2.0000]	93.4% { 106.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1082602	(9.41, N/A) (N/A, -0.05, N/A)	425.7	N/A	1.8672 [2.0000]	93.4% { 101.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 244732	(5.79, N/A) (N/A, -0.02, N/A)	584.4	N/A	3.9132 [4.0000]	97.8% { 108.6% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 304531	(7.50, N/A) (N/A, -0.04, N/A)	888.9	N/A	4.0445 [4.0000]	101.1% { 105.7% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 259002	(8.92, N/A) (N/A, -0.05, N/A)	486.1	N/A	3.4362 [4.0000]	85.9% { 115.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1586035	(10.16, N/A) (N/A, -0.02, N/A)	740.6	N/A	2.1641 [2.0000]	108.2% { 112.0% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 338029	(10.59, N/A) (N/A, -0.01, N/A)	824.1	N/A	2.1125 [2.0000]	105.6% { 99.7% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 307061	(10.68, N/A) (N/A, -0.01, N/A)	811.5	N/A	2.0787 [2.0000]	103.9% { 101.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 546755	(9.47, N/A) (N/A, -0.04, N/A)	419.2	N/A	3.9657 [4.0000]	99.1% { 94.1% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 460120	(9.66, N/A) (N/A, -0.03, N/A)	379.8	N/A	3.7863 [4.0000]	94.7% { 101.9% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 477892	(10.56, N/A) (N/A, -0.01, N/A)	1218.0	N/A	21.2695 [20.0000]	106.3% { 101.9% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 213498	(10.65, N/A) (N/A, -0.01, N/A)	1094.1	N/A	20.8722 [20.0000]	104.4% { 97.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1239563	(6.45, N/A) (N/A, -0.03, N/A)	957.5	N/A	8.3923 [8.0000]	104.9% { 102.0% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB3	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0321	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB3	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	8.32	ng/mL		
	13C5-PFPEA	4.24	ng/mL		
	13C5-PFHXA	2.07	ng/mL		
	13C4-PFHPA	2.02	ng/mL		
	13C8-PFOA	2.13	ng/mL		
	13C9-PFNA	0.922	ng/mL		
	13C6-PFDA	1.09	ng/mL		
	13C7-PFUnA	0.965	ng/mL		
	13C2-PFDOA	0.986	ng/mL		
	13C2-PFTEDA	0.969	ng/mL		
	13C3-PFBS	2.04	ng/mL		
	13C3-PFHXS	2.00	ng/mL		
	13C8-PFOS	2.15	ng/mL		
	13C2-4:2FTS	4.04	ng/mL		
	13C2-6:2FTS	4.06	ng/mL		
	13C2-8:2FTS	3.87	ng/mL		
	13C8-PFOSA	2.33	ng/mL		
	D5-NETFOSA	2.55	ng/mL		
	D3-NMEFOSA	2.35	ng/mL		
	D3-NMEFOSAA	4.80	ng/mL		
	D5-NETFOSAA	3.80	ng/mL		
	D7-NMEFOSE	23.3	ng/mL		
	D9-NETFOSAE	22.6	ng/mL		
	13C3-HFPO-DA	8.43	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (6)
 Acquired: 2022/12/21 - 19:44

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
Instrument: Saphira
Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB3
DF, IV: 1, 10.0µL
Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
Path: S2022-12-21B (6)
Acquired: 2022/12/21 - 19:44

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 19479 (499.0 / 99.0) 9410	(9.45 , 1.00) (0.00 , N/A , 1.5)	33.9 22.9	0.4831 198.6 225.0	0.0321	N/A			IR2,
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

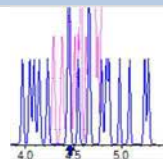
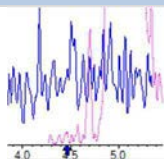
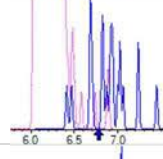
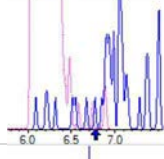
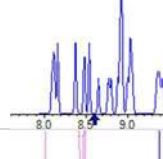
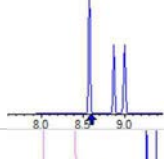
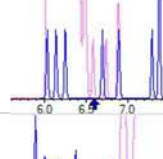
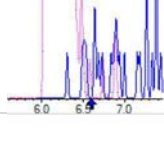
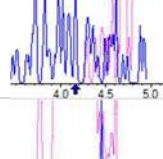
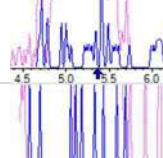
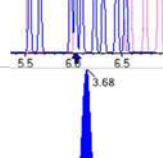
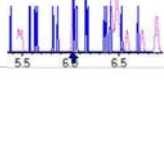
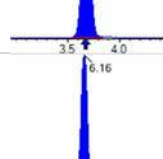
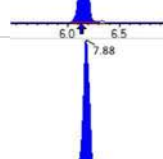
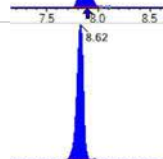
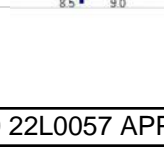


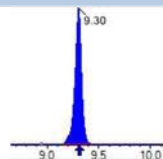
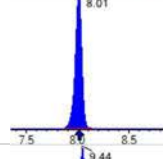
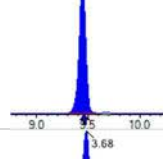
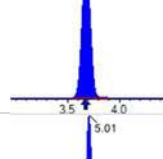
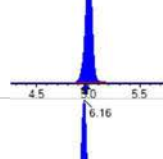
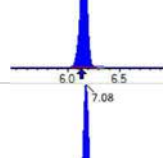
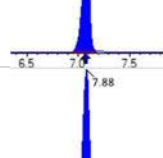
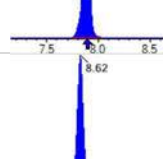
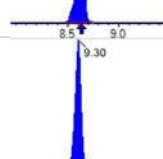
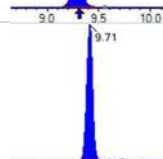
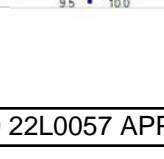
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

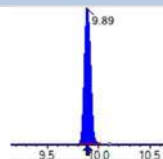
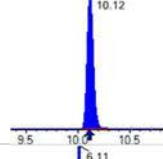
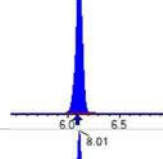
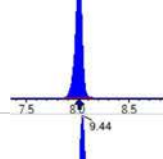
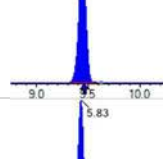
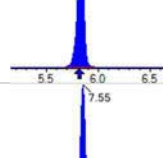
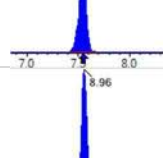
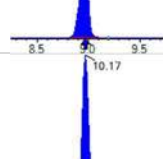
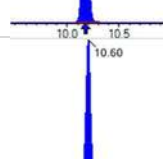
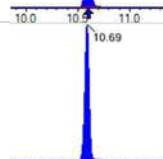
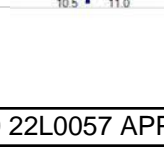
Sample I.D.: SB03942-CCB3
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

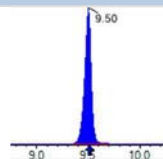
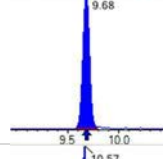
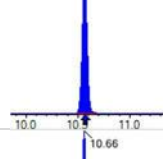
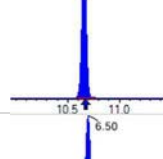
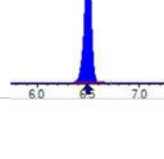
Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (6)
 Acquired: 2022/12/21 - 19:44

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-PF3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 143887	(3.68, N/A) (N/A, 0.01, N/A)	695.3	N/A	1.0337 [1.0000]	103.4% { 88.3% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 223621	(6.16, N/A) (N/A, 0.02, N/A)	391.0	N/A	0.9684 [1.0000]	96.8% { 100.1% }			
13C4_PFOA_IIS	(417.0 / 372.0) 216490	(7.88, N/A) (N/A, 0.00, N/A)	564.3	N/A	0.9847 [1.0000]	98.5% { 88.8% }			
13C5_PFNA_IIS	(468.0 / 423.0) 190613	(8.62, N/A) (N/A, 0.00, N/A)	334.1	N/A	1.0293 [1.0000]	102.9% { 105.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 196423	(9.30, N/A) (N/A, -0.01, N/A)	425.7	N/A	1.0628 [1.0000]	106.3% { 98.2% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 413568	(8.01, N/A) (N/A, 0.00, N/A)	810.6	N/A	1.0244 [1.0000]	102.4% { 100.0% }			
13C4_PFOS_IIS	(502.8 / 79.9) 302782	(9.44, N/A) (N/A, -0.01, N/A)	418.5	N/A	0.9486 [1.0000]	94.9% { 89.7% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1232006	(3.68, N/A) (N/A, 0.01, N/A)	739.7	N/A	8.3193 [8.0000]	104.0% { 98.4% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 660256	(5.01, N/A) (N/A, 0.03, N/A)	700.0	N/A	4.2435 [4.0000]	106.1% { 99.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 532778	(6.16, N/A) (N/A, 0.02, N/A)	558.1	N/A	2.0704 [2.0000]	103.5% { 101.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 453864	(7.08, N/A) (N/A, 0.01, N/A)	546.0	N/A	2.0217 [2.0000]	101.1% { 97.6% }			
13C8_PFOA_EIS	(421.0 / 376.0) 505212	(7.88, N/A) (N/A, 0.00, N/A)	698.6	N/A	2.1280 [2.0000]	106.4% { 98.8% }			
13C9_PFNA_EIS	(472.0 / 427.0) 193237	(8.62, N/A) (N/A, -0.01, N/A)	586.2	N/A	0.9219 [1.0000]	92.2% { 105.4% }			
13C6_PFDA_EIS	(519.0 / 474.0) 305354	(9.30, N/A) (N/A, -0.01, N/A)	459.0	N/A	1.0930 [1.0000]	109.3% { 121.9% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 383541	(9.71, N/A) (N/A, 0.00, N/A)	316.6	N/A	0.9652 [1.0000]	96.5% { 119.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 391164	(9.89, N/A) (N/A, -0.01, N/A)	474.7	N/A	0.9863 [1.0000]	98.6% { 106.0% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 255263	(10.12, N/A) (N/A, 0.00, N/A)	483.4	N/A	0.9691 [1.0000]	96.9% { 92.3% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1424441	(6.11, N/A) (N/A, 0.02, N/A)	637.7	N/A	2.0371 [2.0000]	101.9% { 101.3% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 744630	(8.01, N/A) (N/A, 0.00, N/A)	731.1	N/A	2.0015 [2.0000]	100.1% { 107.6% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1117331	(9.44, N/A) (N/A, -0.01, N/A)	561.0	N/A	2.1502 [2.0000]	107.5% { 105.1% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 239435	(5.83, N/A) (N/A, 0.03, N/A)	715.1	N/A	4.0429 [4.0000]	101.1% { 106.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 289587	(7.55, N/A) (N/A, 0.00, N/A)	733.5	N/A	4.0613 [4.0000]	101.5% { 100.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 276487	(8.96, N/A) (N/A, 0.00, N/A)	540.3	N/A	3.8735 [4.0000]	96.8% { 122.8% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1530890	(10.17, N/A) (N/A, 0.00, N/A)	879.8	N/A	2.3306 [2.0000]	116.5% { 108.1% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 337562	(10.60, N/A) (N/A, -0.01, N/A)	848.9	N/A	2.3537 [2.0000]	117.7% { 99.6% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 337642	(10.69, N/A) (N/A, -0.01, N/A)	1405.1	N/A	2.5503 [2.0000]	127.5% { 112.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 593336	(9.50, N/A) (N/A, 0.00, N/A)	285.1	N/A	4.8017 [4.0000]	120.0% { 102.1% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 413818	(9.68, N/A) (N/A, 0.00, N/A)	311.1	N/A	3.7994 [4.0000]	95.0% { 91.6% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 469973	(10.57, N/A) (N/A, -0.01, N/A)	919.2	N/A	23.3381 [20.0000]	116.7% { 100.2% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 207461	(10.66, N/A) (N/A, -0.01, N/A)	1071.9	N/A	22.6297 [20.0000]	113.1% { 94.8% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1153541	(6.50, N/A) (N/A, 0.01, N/A)	664.8	N/A	8.4311 [8.0000]	105.4% { 94.9% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB4	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0125	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB4	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	8.19	ng/mL		
	13C5-PFPEA	4.30	ng/mL		
	13C5-PFHXA	1.98	ng/mL		
	13C4-PFHPA	1.88	ng/mL		
	13C8-PFOA	2.17	ng/mL		
	13C9-PFNA	1.05	ng/mL		
	13C6-PFDA	1.02	ng/mL		
	13C7-PFUnA	0.919	ng/mL		
	13C2-PFDOA	0.942	ng/mL		
	13C2-PFTEDA	1.05	ng/mL		
	13C3-PFBS	2.06	ng/mL		
	13C3-PFHXS	1.92	ng/mL		
	13C8-PFOS	1.88	ng/mL		
	13C2-4:2FTS	4.16	ng/mL		
	13C2-6:2FTS	4.24	ng/mL		
	13C2-8:2FTS	3.33	ng/mL		
	13C8-PFOSA	2.13	ng/mL		
	D5-NETFOSA	2.18	ng/mL		
	D3-NMEFOSA	2.12	ng/mL		
	D3-NMEFOSAA	4.41	ng/mL		
	D5-NETFOSAA	4.26	ng/mL		
	D7-NMEFOSE	22.8	ng/mL		
	D9-NETFOSAE	22.8	ng/mL		
	13C3-HFPO-DA	8.18	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (31)
 Acquired: 2022/12/22 - 01:01

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
Instrument: Saphira
Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB4
DF, IV: 1, 10.0µL
Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
Path: S2022-12-21B (31)
Acquired: 2022/12/22 - 01:01

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 7662 (499.0 / 99.0) 1686	(9.44 , 1.00) (-0.01 , N/A , 0.7)	29.5 27.2	0.2200 90.5 102.5	0.0125	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (31)
 Acquired: 2022/12/22 - 01:01

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

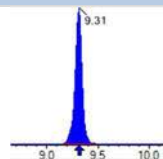
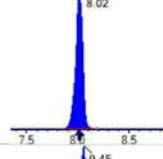
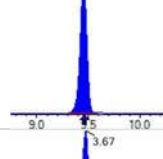
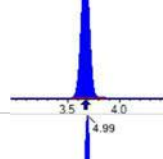
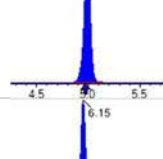
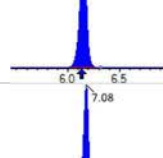
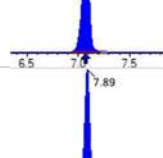
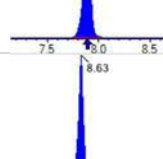
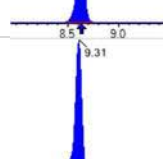
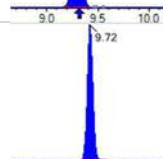
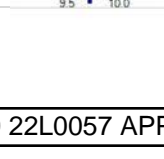


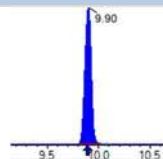
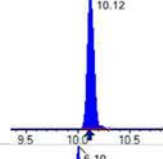
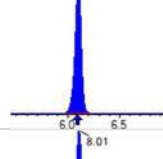
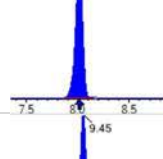
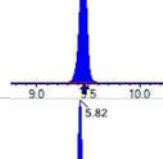
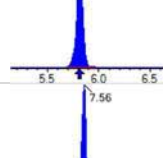
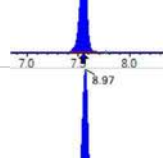
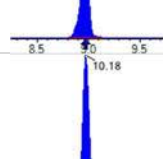
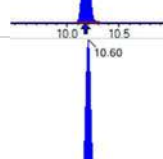
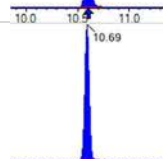
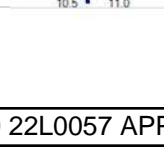
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

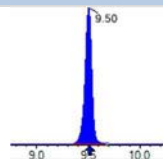
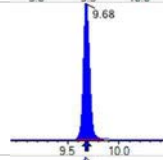
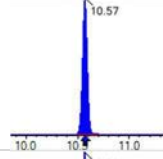
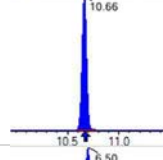
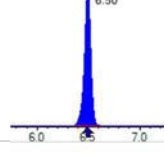
Sample I.D.: SB03942-CCB4
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (31)
 Acquired: 2022/12/22 - 01:01

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 147658	(3.67, N/A) (N/A, 0.00, N/A)	742.3	N/A	1.0608 [1.0000]	106.1% { 90.6% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 235193	(6.15, N/A) (N/A, 0.01, N/A)	642.5	N/A	1.0185 [1.0000]	101.9% { 105.2% }			
13C4_PFOA_IIS	(417.0 / 372.0) 213398	(7.89, N/A) (N/A, 0.00, N/A)	702.0	N/A	0.9707 [1.0000]	97.1% { 87.6% }			
13C5_PFNA_IIS	(468.0 / 423.0) 183484	(8.63, N/A) (N/A, 0.00, N/A)	565.2	N/A	0.9908 [1.0000]	99.1% { 101.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 190729	(9.31, N/A) (N/A, 0.00, N/A)	459.5	N/A	1.0320 [1.0000]	103.2% { 95.4% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 419632	(8.02, N/A) (N/A, 0.00, N/A)	767.5	N/A	1.0394 [1.0000]	103.9% { 101.4% }			
13C4_PFOS_IIS	(502.8 / 79.9) 349264	(9.45, N/A) (N/A, 0.00, N/A)	471.8	N/A	1.0943 [1.0000]	109.4% { 103.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1244599	(3.67, N/A) (N/A, 0.00, N/A)	878.8	N/A	8.1897 [8.0000]	102.4% { 99.4% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 703198	(4.99, N/A) (N/A, 0.02, N/A)	873.5	N/A	4.2971 [4.0000]	107.4% { 106.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 535139	(6.15, N/A) (N/A, 0.01, N/A)	695.9	N/A	1.9772 [2.0000]	98.9% { 101.4% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 443162	(7.08, N/A) (N/A, 0.01, N/A)	560.3	N/A	1.8769 [2.0000]	93.8% { 95.3% }			
13C8_PFOA_EIS	(421.0 / 376.0) 507238	(7.89, N/A) (N/A, 0.00, N/A)	901.2	N/A	2.1675 [2.0000]	108.4% { 99.2% }			
13C9_PFNA_EIS	(472.0 / 427.0) 211111	(8.63, N/A) (N/A, 0.00, N/A)	627.4	N/A	1.0463 [1.0000]	104.6% { 115.1% }			
13C6_PFDA_EIS	(519.0 / 474.0) 276057	(9.31, N/A) (N/A, 0.00, N/A)	464.9	N/A	1.0177 [1.0000]	101.8% { 110.2% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 354738	(9.72, N/A) (N/A, 0.00, N/A)	610.1	N/A	0.9194 [1.0000]	91.9% { 110.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 362823	(9.90, N/A) (N/A, 0.00, N/A)	596.0	N/A	0.9421 [1.0000]	94.2% { 98.3% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 269584	(10.12, N/A) (N/A, 0.00, N/A)	533.7	N/A	1.0540 [1.0000]	105.4% { 97.5% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1464075	(6.10, N/A) (N/A, 0.01, N/A)	867.5	N/A	2.0636 [2.0000]	103.2% { 104.1% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 726152	(8.01, N/A) (N/A, 0.00, N/A)	904.5	N/A	1.9236 [2.0000]	96.2% { 104.9% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1126362	(9.45, N/A) (N/A, 0.00, N/A)	742.2	N/A	1.8791 [2.0000]	94.0% { 105.9% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 250171	(5.82, N/A) (N/A, 0.02, N/A)	671.2	N/A	4.1631 [4.0000]	104.1% { 111.0% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 306761	(7.56, N/A) (N/A, 0.01, N/A)	705.3	N/A	4.2400 [4.0000]	106.0% { 106.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 241109	(8.97, N/A) (N/A, 0.01, N/A)	455.9	N/A	3.3291 [4.0000]	83.2% { 107.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1612590	(10.18, N/A) (N/A, 0.00, N/A)	813.8	N/A	2.1283 [2.0000]	106.4% { 113.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 350295	(10.60, N/A) (N/A, 0.00, N/A)	1153.7	N/A	2.1174 [2.0000]	105.9% { 103.3% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 333388	(10.69, N/A) (N/A, -0.01, N/A)	1249.2	N/A	2.1830 [2.0000]	109.2% { 110.5% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 628747	(9.50, N/A) (N/A, 0.00, N/A)	396.7	N/A	4.4111 [4.0000]	110.3% { 108.2% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 534795	(9.68, N/A) (N/A, 0.00, N/A)	377.8	N/A	4.2567 [4.0000]	106.4% { 118.4% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 528718	(10.57, N/A) (N/A, 0.00, N/A)	1000.5	N/A	22.7610 [20.0000]	113.8% { 112.7% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 240978	(10.66, N/A) (N/A, 0.00, N/A)	1257.8	N/A	22.7873 [20.0000]	113.9% { 110.1% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1177226	(6.50, N/A) (N/A, 0.01, N/A)	696.0	N/A	8.1809 [8.0000]	102.3% { 96.9% }			

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB5	PFBA	0.00	ng/mL	0.40	U
	PFPEA	0.00	ng/mL	0.20	U
	PFHXA	0.00	ng/mL	0.10	U
	PFHPA	0.00	ng/mL	0.10	U
	PFOA	0.00	ng/mL	0.10	U
	PFNA	0.00	ng/mL	0.10	U
	PFDA	0.00	ng/mL	0.10	U
	PFUnA	0.00	ng/mL	0.10	U
	PFDOA	0.00	ng/mL	0.10	U
	PFTRDA	0.00	ng/mL	0.10	U
	PFTEDA	0.00	ng/mL	0.10	U
	PFBS	0.00	ng/mL	0.10	U
	PFPEs	0.00	ng/mL	0.10	U
	PFHXS	0.00	ng/mL	0.10	U
	PFHPS	0.00	ng/mL	0.10	U
	PFOS	0.0194	ng/mL	0.10	U
	PFNS	0.00	ng/mL	0.10	U
	PFDS	0.00	ng/mL	0.10	U
	PFDOS	0.00	ng/mL	0.10	U
	4:2FTS	0.00	ng/mL	0.40	U
	6:2FTS	0.00	ng/mL	0.40	U
	8:2FTS	0.00	ng/mL	0.40	U
	PFOSA	0.00	ng/mL	0.10	U
	NMeFOSA	0.00	ng/mL	0.40	U
	NEtFOSA	0.00	ng/mL	0.40	U
	NMeFOSAA	0.00	ng/mL	0.10	U
	NEtFOSAA	0.00	ng/mL	0.10	U
	NMeFOSE	0.00	ng/mL	0.40	U
	NEtFOSE	0.00	ng/mL	0.40	U
	HFPO-DA	0.00	ng/mL	0.20	U
	ADONA	0.00	ng/mL	0.20	U
	PFEESA	0.00	ng/mL	0.20	U
	PFMPA	0.00	ng/mL	0.20	U

ANALYSIS SEQUENCE BLANKS

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03942
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sam
 Instrument: Saphira

Lab Sample ID	Analyte	Found	Units	RL	C
SB03942-CCB5	PFMBA	0.00	ng/mL	0.20	U
	NFDHA	0.00	ng/mL	0.20	U
	9CL-PF3ONS	0.00	ng/mL	0.20	U
	11CL-PF3OUDS	0.00	ng/mL	0.20	U
	3:3FTCA	0.00	ng/mL	0.40	U
	5:3FTCA	0.00	ng/mL	0.40	U
	7:3FTCA	0.00	ng/mL	0.40	U
	13C4-PFBA	8.01	ng/mL		
	13C5-PFPEA	4.76	ng/mL		
	13C5-PFHXA	2.35	ng/mL		
	13C4-PFHPA	2.32	ng/mL		
	13C8-PFOA	1.91	ng/mL		
	13C9-PFNA	0.913	ng/mL		
	13C6-PFDA	1.02	ng/mL		
	13C7-PFUnA	0.973	ng/mL		
	13C2-PFDOA	1.19	ng/mL		
	13C2-PFTEDA	1.28	ng/mL		
	13C3-PFBS	1.92	ng/mL		
	13C3-PFHXS	1.89	ng/mL		
	13C8-PFOS	2.02	ng/mL		
	13C2-4:2FTS	4.32	ng/mL		
	13C2-6:2FTS	4.69	ng/mL		
	13C2-8:2FTS	4.32	ng/mL		
	13C8-PFOSA	2.13	ng/mL		
	D5-NETFOSA	2.42	ng/mL		
	D3-NMEFOSA	2.38	ng/mL		
	D3-NMEFOSAA	4.40	ng/mL		
	D5-NETFOSAA	4.63	ng/mL		
	D7-NMEFOSE	24.4	ng/mL		
	D9-NETFOSAE	22.9	ng/mL		
	13C3-HFPO-DA	9.62	ng/mL		



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB5
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (41)
 Acquired: 2022/12/22 - 03:34

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) N/A (413.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: SB03942-CCB5
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (41)
 Acquired: 2022/12/22 - 03:34

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 11221 (499.0 / 99.0) 2306	(9.40 , 1.00) (0.00 , N/A , -0.1)	31.7 24.5	0.2055 84.5 95.7	0.0194	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



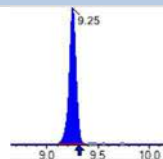
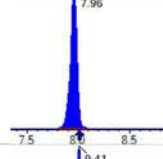
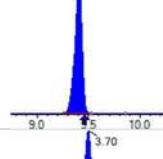
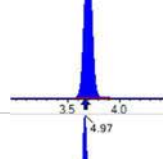
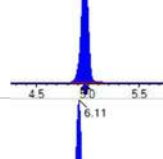
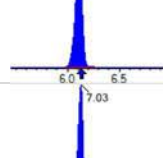
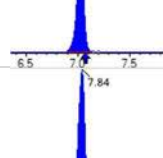
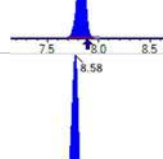
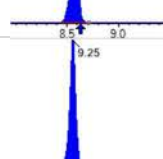
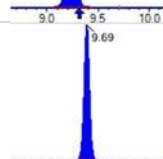
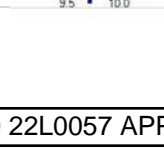
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 Instrument: Saphira
 Type: Sciex Q3 5500

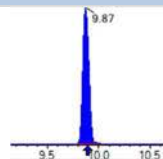
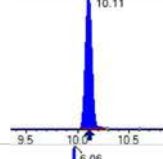
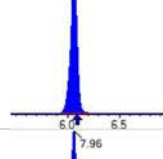
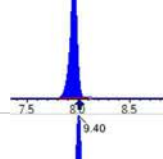
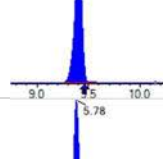
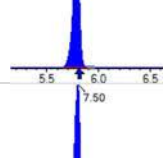
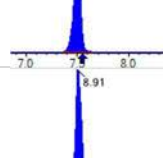
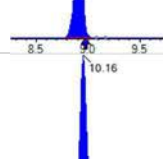
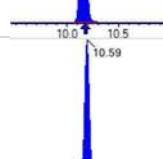
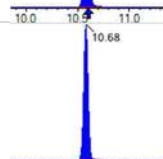
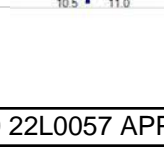
Sample I.D.: SB03942-CCB5
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

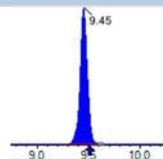
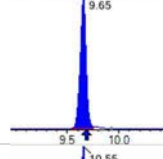
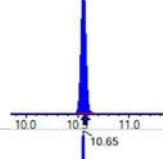
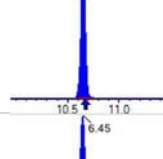
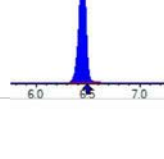
Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (41)
 Acquired: 2022/12/22 - 03:34

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 157754	(3.70, N/A) (N/A, 0.03, N/A)	663.7	N/A	1.1333 [1.0000]	113.3% { 96.8% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 207195	(6.11, N/A) (N/A, -0.03, N/A)	509.9	N/A	0.8973 [1.0000]	89.7% { 92.7% }			
13C4_PFOA_IIS	(417.0 / 372.0) 242858	(7.84, N/A) (N/A, -0.05, N/A)	616.0	N/A	1.1047 [1.0000]	110.5% { 99.7% }			
13C5_PFNA_IIS	(468.0 / 423.0) 214002	(8.57, N/A) (N/A, -0.05, N/A)	372.1	N/A	1.1556 [1.0000]	115.6% { 118.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 175025	(9.25, N/A) (N/A, -0.06, N/A)	267.7	N/A	0.9471 [1.0000]	94.7% { 87.5% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 408336	(7.96, N/A) (N/A, -0.05, N/A)	768.3	N/A	1.0115 [1.0000]	101.1% { 98.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 307913	(9.41, N/A) (N/A, -0.05, N/A)	470.0	N/A	0.9647 [1.0000]	96.5% { 91.2% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1300208	(3.70, N/A) (N/A, 0.03, N/A)	721.1	N/A	8.0080 [8.0000]	100.1% { 103.8% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 686645	(4.97, N/A) (N/A, 0.00, N/A)	815.3	N/A	4.7629 [4.0000]	119.1% { 103.5% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 559362	(6.11, N/A) (N/A, -0.02, N/A)	696.7	N/A	2.3460 [2.0000]	117.3% { 106.0% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 482654	(7.03, N/A) (N/A, -0.04, N/A)	463.0	N/A	2.3204 [2.0000]	116.0% { 103.8% }			
13C8_PFOA_EIS	(421.0 / 376.0) 508172	(7.84, N/A) (N/A, -0.05, N/A)	663.7	N/A	1.9080 [2.0000]	95.4% { 99.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 214906	(8.58, N/A) (N/A, -0.05, N/A)	559.1	N/A	0.9132 [1.0000]	91.3% { 117.2% }			
13C6_PFDA_EIS	(519.0 / 474.0) 255023	(9.25, N/A) (N/A, -0.06, N/A)	370.1	N/A	1.0245 [1.0000]	102.4% { 101.8% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 344563	(9.69, N/A) (N/A, -0.03, N/A)	517.0	N/A	0.9731 [1.0000]	97.3% { 107.1% }			

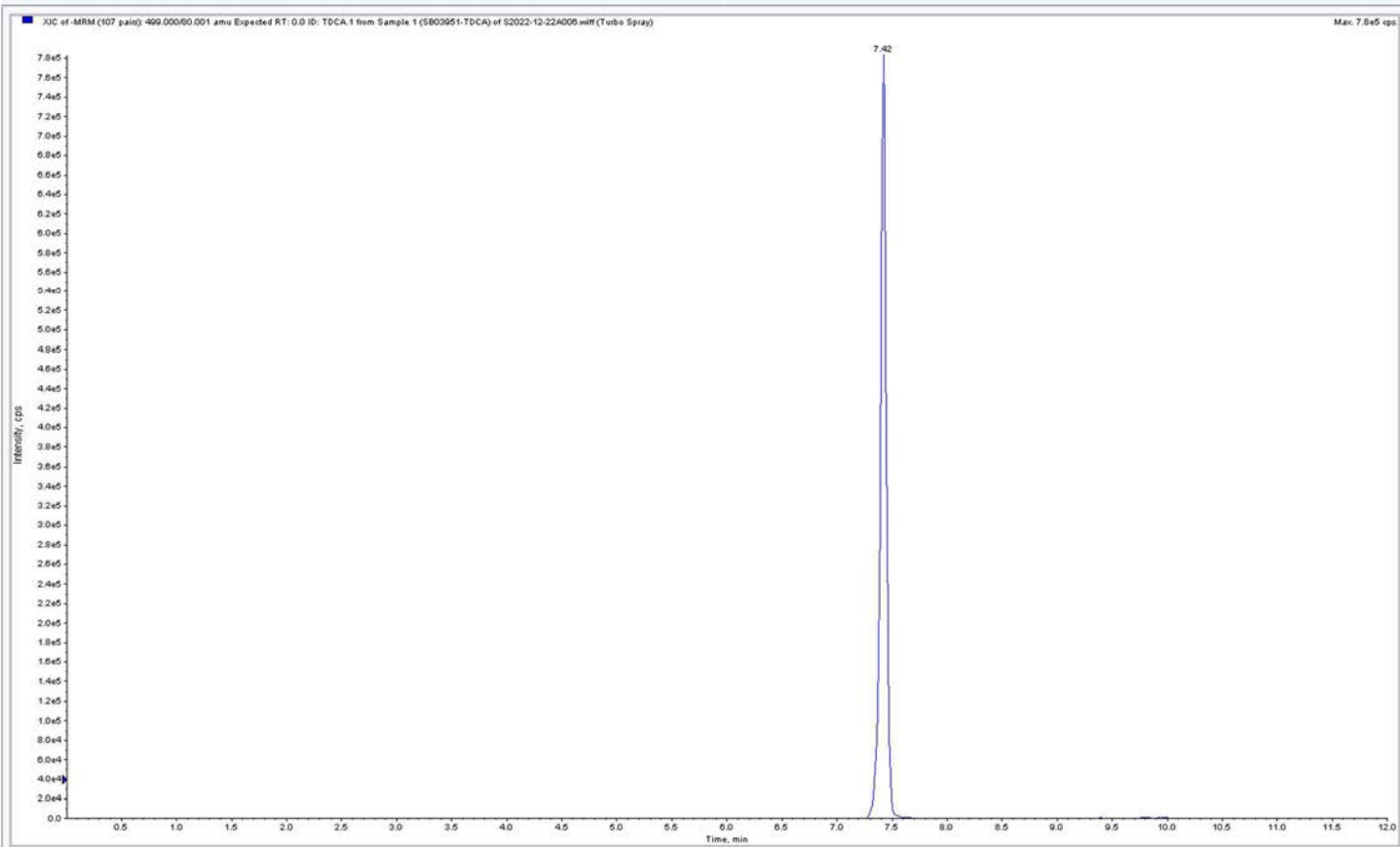
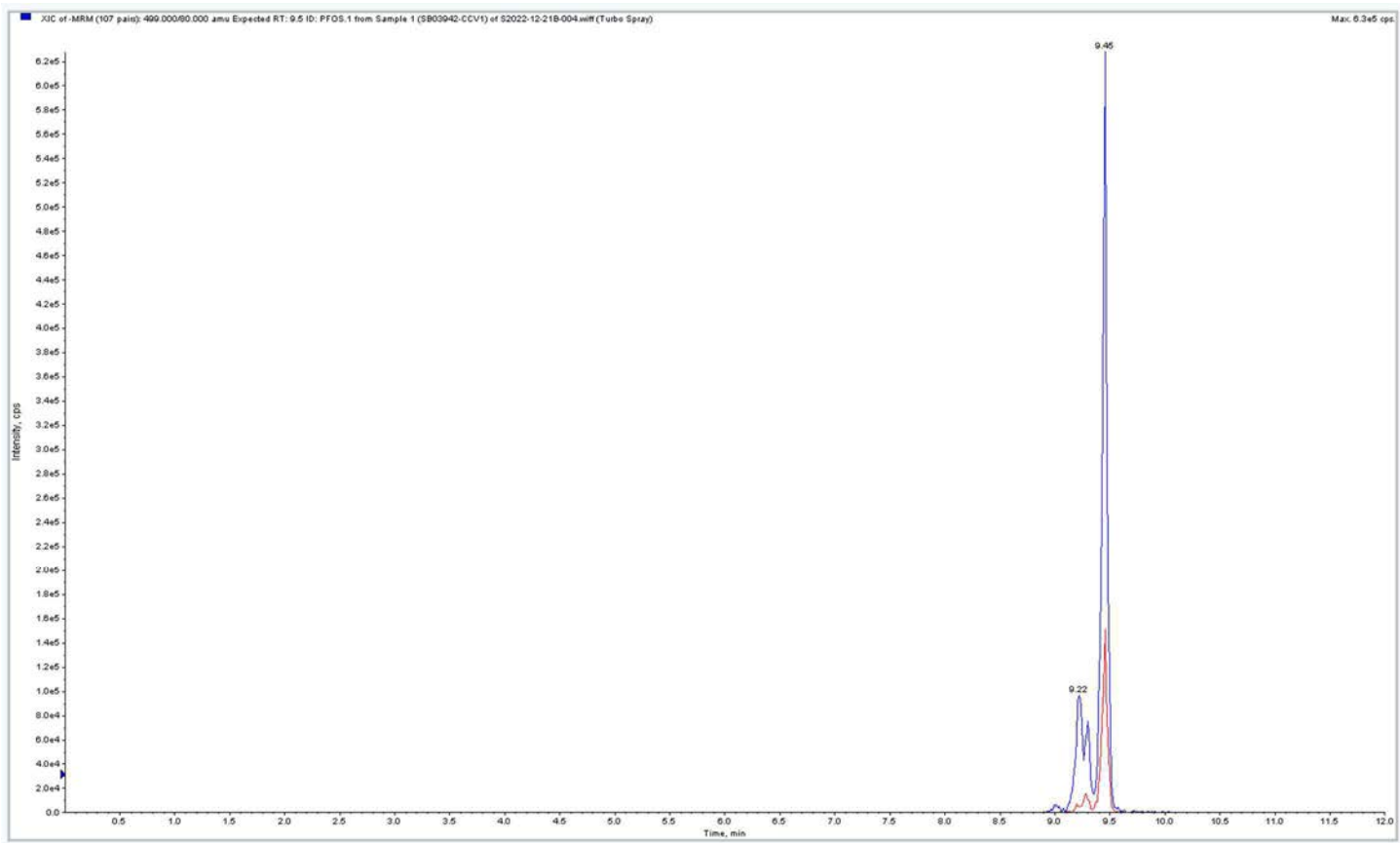
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 422314	(9.87, N/A) (N/A, -0.03, N/A)	687.7	N/A	1.1950 [1.0000]	119.5% { 114.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 299384	(10.11, N/A) (N/A, -0.01, N/A)	552.5	N/A	1.2756 [1.0000]	127.6% { 108.3% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1327330	(6.06, N/A) (N/A, -0.02, N/A)	669.1	N/A	1.9226 [2.0000]	96.1% { 94.4% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 694377	(7.96, N/A) (N/A, -0.05, N/A)	681.3	N/A	1.8903 [2.0000]	94.5% { 100.3% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1065070	(9.40, N/A) (N/A, -0.05, N/A)	405.2	N/A	2.0154 [2.0000]	100.8% { 100.2% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 252658	(5.78, N/A) (N/A, -0.02, N/A)	597.8	N/A	4.3208 [4.0000]	108.0% { 112.1% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 330434	(7.50, N/A) (N/A, -0.04, N/A)	757.4	N/A	4.6936 [4.0000]	117.3% { 114.7% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 304104	(8.91, N/A) (N/A, -0.05, N/A)	430.7	N/A	4.3150 [4.0000]	107.9% { 135.0% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1421143	(10.16, N/A) (N/A, -0.02, N/A)	866.6	N/A	2.1275 [2.0000]	106.4% { 100.4% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 346527	(10.59, N/A) (N/A, -0.02, N/A)	855.2	N/A	2.3760 [2.0000]	118.8% { 102.2% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 325828	(10.68, N/A) (N/A, -0.02, N/A)	1086.7	N/A	2.4200 [2.0000]	121.0% { 108.0% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 553459	(9.45, N/A) (N/A, -0.05, N/A)	391.6	N/A	4.4043 [4.0000]	110.1% { 95.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 512920	(9.65, N/A) (N/A, -0.03, N/A)	558.1	N/A	4.6309 [4.0000]	115.8% { 113.5% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 498903	(10.55, N/A) (N/A, -0.02, N/A)	1356.8	N/A	24.3619 [20.0000]	121.8% { 106.4% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 213633	(10.65, N/A) (N/A, -0.01, N/A)	925.3	N/A	22.9145 [20.0000]	114.6% { 97.6% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1219902	(6.45, N/A) (N/A, -0.03, N/A)	737.7	N/A	9.6230 [8.0000]	120.3% { 100.4% }			

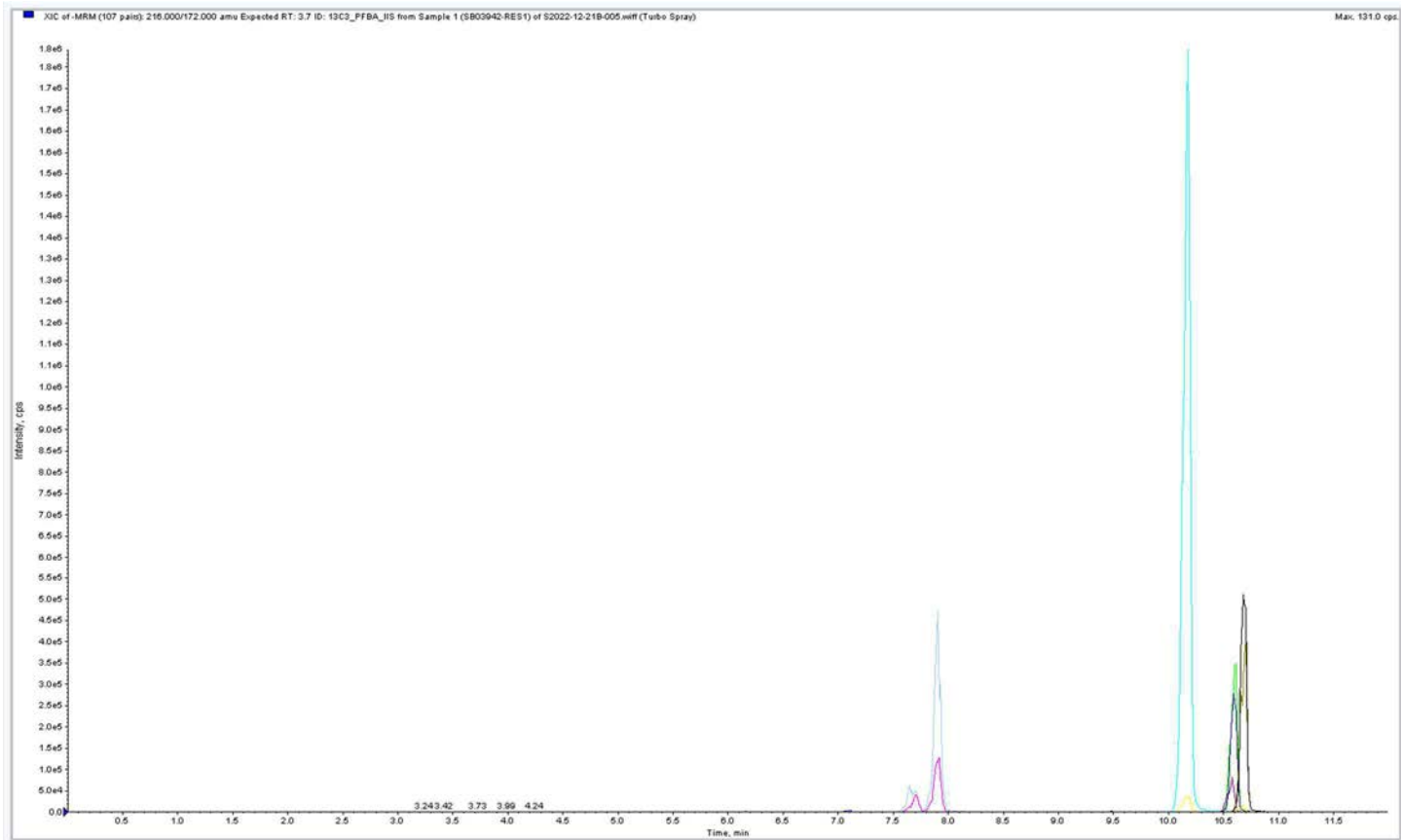
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BILE STANDARD CHECK S2022-12-21B/SB03942

TDCA = 7.42
PFOS = 9.00
TDCA-PFOS = 1.58 > 1.0 PASS



S2022-12-21B/SB03951 Column Resolution



QUALITY CONTROL RAW DATA

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0372-BLK1
Sampled:		File ID:	S2022-12-21B (7)
		Prepared:	12/19/22 12:22
		Analyzed:	12/21/22 19:57
Solids:		Preparation:	PFAS Leachates
		Dilution:	1
Batch:	BBL0372	Sequence:	SB03942
		Calibration:	2252011
		Instrument:	Saphira
Column:	1		

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
PFBA	4.0 U	8.0	4.0	1.0	U
PFPEA	4.0 U	4.0	4.0	0.32	U
PFHXA	2.0 U	2.0	2.0	0.28	U
PFHPA	1.0 U	2.0	1.0	0.20	U
PFOA	1.0 U	2.0	1.0	0.75	IR2, U
PFNA	1.0 U	2.0	1.0	0.41	U
PFDA	1.0 U	2.0	1.0	0.50	U
PFUnA	1.0 U	2.0	1.0	0.80	U
PFDOA	1.0 U	2.0	1.0	0.55	U
PFTRDA	1.5 U	2.0	1.5	1.0	U
PFTEDA	1.0 U	2.0	1.0	1.0	U
PFBS	1.0 U	2.0	1.0	0.18	U
PFPEs	1.0 U	2.0	1.0	0.32	U
PFHXS	1.0 U	2.0	1.0	0.16	U
PFHPS	1.0 U	2.0	1.0	0.26	U
PFOS	0.604 J	2.0	1.0	0.32	J
PFNS	1.0 U	2.0	1.0	0.60	U
PFDS	1.0 U	2.0	1.0	0.75	U
PFDOS	1.0 U	2.0	1.0	0.60	U
4:2FTS	4.0 U	8.0	4.0	1.4	U
6:2FTS	4.0 U	8.0	4.0	1.6	U
8:2FTS	4.0 U	8.0	4.0	0.41	U
PFOSA	1.0 U	2.0	1.0	0.50	U
NMeFOSA	4.0 U	8.0	4.0	2.4	U
NEtFOSA	4.0 U	8.0	4.0	2.0	U
NMeFOSAA	1.0 U	2.0	1.0	0.55	U
NEtFOSAA	1.0 U	2.0	1.0	0.55	U
NMeFOSE	6.0 U	8.0	6.0	5.0	U
NEtFOSE	6.0 U	8.0	6.0	5.0	U
HFPO-DA	2.0 U	4.0	2.0	0.85	U

ANALYSIS DATA SHEET

Blank

Laboratory:	APPL, LLC	Work Order:	22L0057
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0372-BLK1
Sampled:		File ID:	S2022-12-21B (7)
		Prepared:	12/19/22 12:22
Solids:		Analyzed:	12/21/22 19:57
		Preparation:	PFAS Leachates
Dilution:			1
Batch:	BBL0372	Sequence:	SB03942
		Calibration:	2252011
Instrument:			Saphira
Column:	1		

COMPOUND	CONC. (ng/L)	LOQ	LOD	DL	Q
ADONA	2.0 U	4.0	2.0	0.60	U
PFEESA	2.0 U	4.0	2.0	0.55	U
PFMPA	2.0 U	4.0	2.0	0.27	U
PFMBA	2.0 U	4.0	2.0	0.46	U
NFDHA	2.0 U	4.0	2.0	1.5	U
9CL-PF3ONS	2.0 U	4.0	2.0	1.0	U
11CL-PF3OUDS	2.0 U	4.0	2.0	1.0	U
3:3FTCA	4.0 U	8.0	4.0	2.8	U
5:3FTCA	4.0 U	8.0	4.0	2.2	U
7:3FTCA	4.0 U	8.0	4.0	2.8	U



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0372-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (7)
 Acquired: 2022/12/21 - 19:57

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT- CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeA	(262.9 / 219.0) N/A (262.9 / 69.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxA	(313.0 / 269.0) N/A (313.0 / 119.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpA	(363.0 / 319.0) N/A (363.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOA	(413.0 / 369.0) 6785 (413.0 / 169.0) 3550	(7.87, 1.00) (0.00, N/A, 0.0)	21.9 39.3	0.5233 160.1 159.1	0.0244	N/A			IR2,
PFNA	(463.0 / 419.0) N/A (463.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDA	(513.0 / 469.0) N/A (513.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFUnA	(563.0 / 519.0) N/A (563.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoA	(613.0 / 569.0) N/A (613.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTrDA	(663.0 / 619.0) N/A (663.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFTeDA	(713.0 / 669.0) N/A (713.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0372-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (7)
 Acquired: 2022/12/21 - 19:57

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) N/A (298.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFPeS	(349.0 / 80.0) N/A (349.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHxS	(399.0 / 80.0) N/A (399.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFHpS	(449.0 / 80.0) N/A (449.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFOS	(499.0 / 80.0) 18203 (499.0 / 99.0) 3300	(9.44 , 1.00) (0.01 , N/A , 0.3)	22.2 14.6	0.1813 74.6 84.4	0.0302	N/A			
PFNS	(549.0 / 80.0) N/A (549.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDS	(599.0 / 80.0) N/A (599.0 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFDoS	(698.9 / 80.0) N/A (698.9 / 99.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
4:2FTS	(327.0 / 307.0) N/A (327.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
6:2FTS	(427.0 / 407.0) N/A (427.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
8:2FTS	(527.0 / 507.0) N/A (527.0 / 81.0) N/A	(N/A , N/A) (N/A , N/A , N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0372-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (7)
 Acquired: 2022/12/21 - 19:57

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) N/A (498.0 / 478.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSA	(511.9 / 219.0) N/A (511.9 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSA	(526.0 / 219.0) N/A (526.0 / 169.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSAA	(570.0 / 419.0) N/A (570.0 / 483.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSAA	(584.0 / 419.0) N/A (584.0 / 526.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
NMeFOSE	(616.1 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NEtFOSE	(630.0 / 59.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
HFPO-DA	(285.0 / 169.0) N/A (285.0 / 185.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
ADONA	(377.0 / 85.0) N/A (377.0 / 251.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
9Cl-Pf3ONS	(531.0 / 351.0) N/A (533.0 / 353.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
11Cl-Pf3OUDS	(631.0 / 451.0) N/A (633.0 / 453.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			

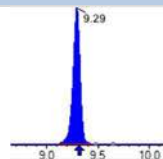
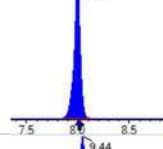
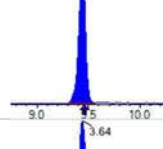
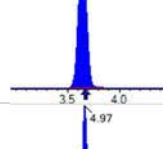
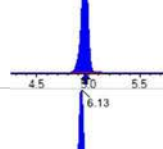
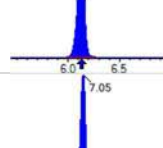
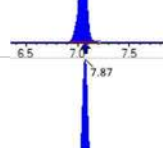
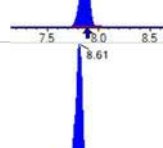
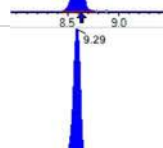
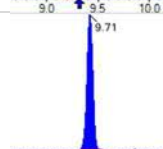
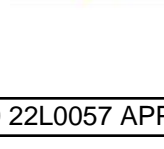


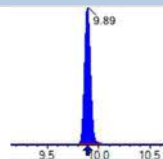
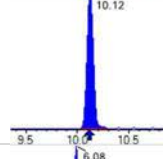
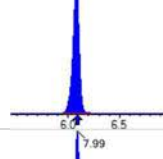
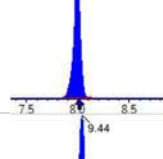
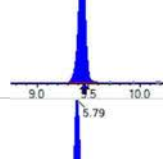
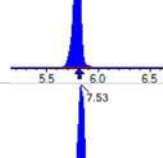
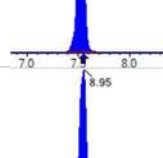
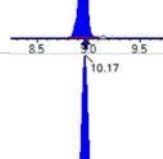
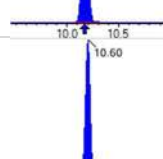
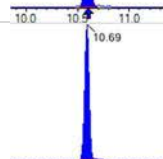
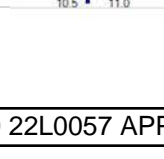
Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

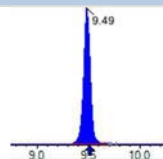
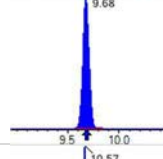
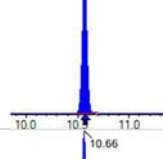
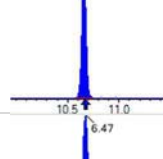
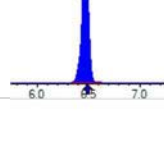
Sample I.D.: BBL0372-BLK1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (7)
 Acquired: 2022/12/21 - 19:57

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (ΔRT-I[min], ΔRT-CV[min], ΔRT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) N/A (241.0 / 117.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
5:3FTCA	(341.0 / 236.7) N/A (341.0 / 217.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
7:3FTCA	(441.0 / 317.0) N/A (441.0 / 337.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFEESA	(315.0 / 135.0) N/A (315.0 / 83.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
PFMPA	(229.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
PFMBA	(279.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A	N/A 0.0 0.0	0.0000	N/A			
NFDHA	(295.0 / 201.0) N/A (295.0 / 85.0) N/A	(N/A, N/A) (N/A, N/A, N/A)	N/A N/A	N/A 0.0 0.0	0.0000	N/A			
13C3_PFBA_IIS	(216.0 / 172.0) 191074	(3.65, N/A) (N/A, -0.02, N/A)	637.8	N/A	1.3727 [1.0000]	137.3% { 117.2% }			
13C2_PFHxA_IIS	(315.1 / 270.0) 315076	(6.13, N/A) (N/A, -0.01, N/A)	468.0	N/A	1.3644 [1.0000]	136.4% { 141.0% }			
13C4_PFOA_IIS	(417.0 / 372.0) 300927	(7.87, N/A) (N/A, -0.02, N/A)	639.1	N/A	1.3688 [1.0000]	136.9% { 123.5% }			
13C5_PFNA_IIS	(468.0 / 423.0) 253692	(8.61, N/A) (N/A, -0.02, N/A)	657.1	N/A	1.3700 [1.0000]	137.0% { 140.7% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 231401	(9.29, N/A) (N/A, -0.02, N/A)	323.6	N/A	1.2521 [1.0000]	125.2% { 115.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 536456	(7.99, N/A) (N/A, -0.02, N/A)	945.2	N/A	1.3288 [1.0000]	132.9% { 129.7% }			
13C4_PFOS_IIS	(502.8 / 79.9) 427065	(9.44, N/A) (N/A, -0.01, N/A)	314.4	N/A	1.3380 [1.0000]	133.8% { 126.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1485899	(3.64, N/A) (N/A, -0.02, N/A)	829.0	N/A	7.5558 [8.0000]	94.4% { 118.7% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 795800	(4.97, N/A) (N/A, -0.01, N/A)	823.1	N/A	3.6300 [4.0000]	90.8% { 120.0% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 633454	(6.13, N/A) (N/A, -0.01, N/A)	663.4	N/A	1.7471 [2.0000]	87.4% { 120.1% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 545278	(7.05, N/A) (N/A, -0.02, N/A)	539.6	N/A	1.7239 [2.0000]	86.2% { 117.2% }			
13C8_PFOA_EIS	(421.0 / 376.0) 565376	(7.87, N/A) (N/A, -0.02, N/A)	811.1	N/A	1.7132 [2.0000]	85.7% { 110.6% }			
13C9_PFNA_EIS	(472.0 / 427.0) 211362	(8.61, N/A) (N/A, -0.02, N/A)	455.8	N/A	0.7577 [1.0000]	75.8% { 115.3% }			
13C6_PFDA_EIS	(519.0 / 474.0) 284249	(9.29, N/A) (N/A, -0.02, N/A)	451.1	N/A	0.8637 [1.0000]	86.4% { 113.5% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 312866	(9.71, N/A) (N/A, 0.00, N/A)	408.8	N/A	0.6683 [1.0000]	66.8% { 97.2% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 359372	(9.89, N/A) (N/A, -0.01, N/A)	631.1	N/A	0.7691 [1.0000]	76.9% { 97.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 255620	(10.12, N/A) (N/A, 0.00, N/A)	419.2	N/A	0.8238 [1.0000]	82.4% { 92.5% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1641989	(6.08, N/A) (N/A, -0.01, N/A)	751.5	N/A	1.8103 [2.0000]	90.5% { 116.8% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 791961	(7.99, N/A) (N/A, -0.02, N/A)	918.1	N/A	1.6411 [2.0000]	82.1% { 114.4% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1110203	(9.44, N/A) (N/A, -0.02, N/A)	397.9	N/A	1.5147 [2.0000]	75.7% { 104.4% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 252530	(5.79, N/A) (N/A, -0.01, N/A)	693.8	N/A	3.2872 [4.0000]	82.2% { 112.1% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 272124	(7.53, N/A) (N/A, -0.02, N/A)	912.0	N/A	2.9422 [4.0000]	73.6% { 94.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 295396	(8.95, N/A) (N/A, -0.02, N/A)	457.1	N/A	3.1904 [4.0000]	79.8% { 131.1% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1442258	(10.17, N/A) (N/A, -0.01, N/A)	957.2	N/A	1.5567 [2.0000]	77.8% { 101.8% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 100919	(10.60, N/A) (N/A, -0.01, N/A)	417.7	N/A	0.4989 [2.0000]	24.9% { 29.8% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 80705	(10.69, N/A) (N/A, -0.01, N/A)	880.4	N/A	0.4322 [2.0000]	21.6% { 26.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 547912	(9.49, N/A) (N/A, -0.02, N/A)	315.7	N/A	3.1437 [4.0000]	78.6% { 94.3% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 523431	(9.68, N/A) (N/A, -0.01, N/A)	552.7	N/A	3.4073 [4.0000]	85.2% { 115.9% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 268251	(10.57, N/A) (N/A, 0.00, N/A)	870.3	N/A	9.4443 [20.0000]	47.2% { 57.2% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 106668	(10.66, N/A) (N/A, -0.01, N/A)	1059.5	N/A	8.2491 [20.0000]	41.2% { 48.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1292001	(6.47, N/A) (N/A, -0.01, N/A)	719.2	N/A	6.7021 [8.0000]	83.8% { 106.3% }			

ANALYSIS DATA SHEET**LCS**

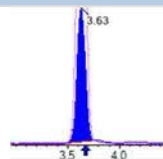
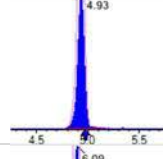
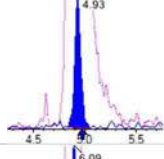
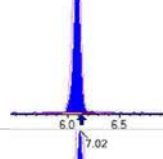
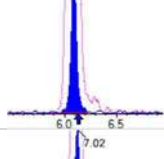
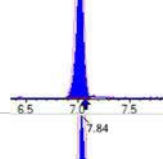
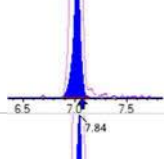
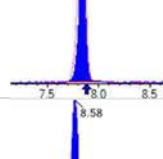
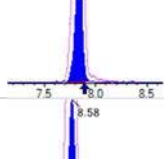
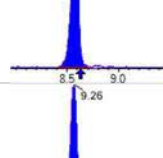
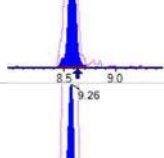
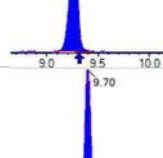
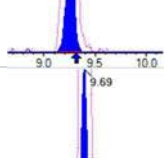
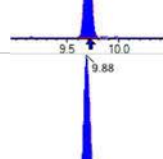
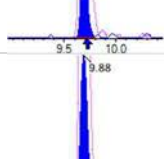
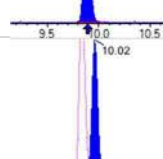
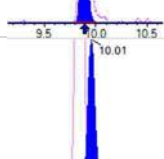
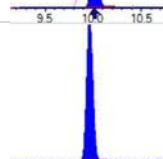
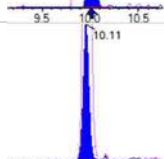
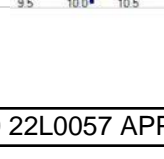
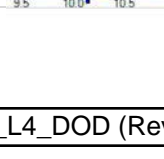
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Matrix:	Solid	Laboratory ID:	BBL0372-BS1
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		Analyzed:	12/21/22 20:09
Solids:		Preparation:	PFAS Leachates
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		Calibration:	2252011
Column:	1	Instrument:	Saphira

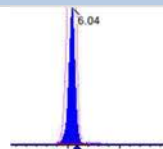
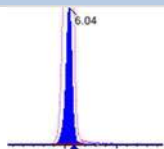
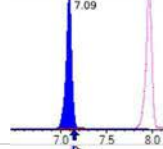
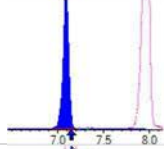
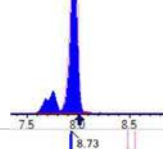
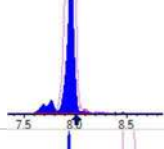
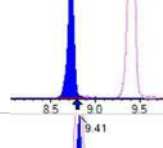
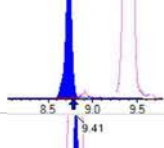
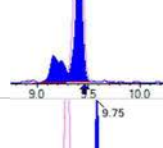
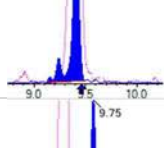
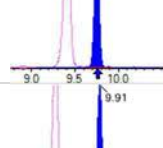
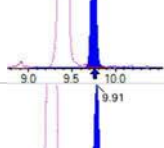
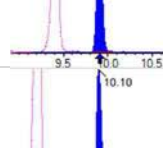
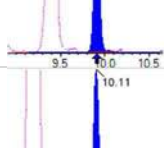
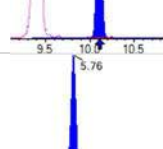
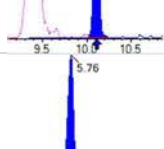
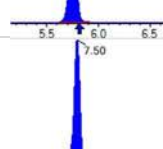
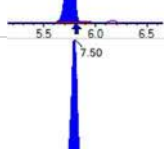
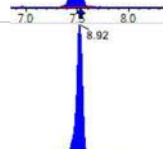
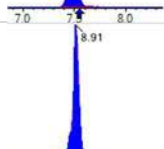

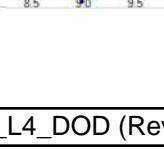
COMPOUND	CONC. (ng/L)	LOQ	DL	Q
PFBA	79.8	8.0	1.0	
PFPEA	39.7	4.0	0.32	
PFHXA	20.9	2.0	0.28	
PFHPA	19.3	2.0	0.20	
PFOA	19.6	2.0	0.75	
PFNA	21.7	2.0	0.41	
PFDA	19.3	2.0	0.50	
PFUnA	19.4	2.0	0.80	
PFDOA	21.4	2.0	0.55	
PFTRDA	20.5	2.0	1.0	
PFTEDA	21.9	2.0	1.0	
PFBS	18.7	2.0	0.18	
PFPEs	20.5	2.0	0.32	
PFHXS	19.1	2.0	0.16	
PFHPS	21.1	2.0	0.26	
PFOS	19.8	2.0	0.32	
PFNS	19.3	2.0	0.60	
PFDS	19.0	2.0	0.75	
PFDOS	20.3	2.0	0.60	
4:2FTS	76.8	8.0	1.4	
6:2FTS	81.0	8.0	1.6	
8:2FTS	77.3	8.0	0.41	
PFOSA	20.5	2.0	0.50	
NMeFOSA	87.1	8.0	2.4	
NEtFOSA	91.7	8.0	2.0	
NMeFOSAA	23.5	2.0	0.55	
NEtFOSAA	23.3	2.0	0.55	
NMeFOSE	71.2	8.0	5.0	
NEtFOSE	58.1	8.0	5.0	
HFPO-DA	37.4	4.0	0.85	

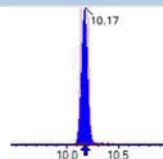
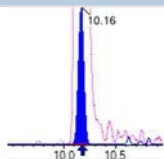
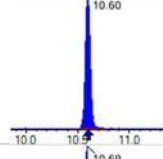
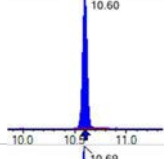
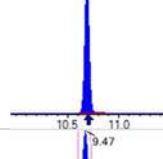
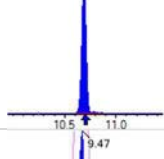
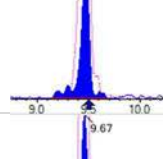
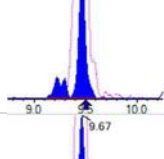
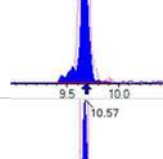
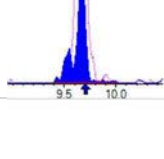
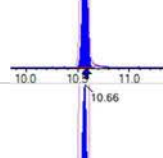
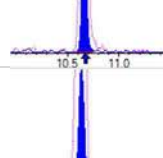
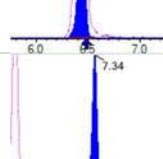
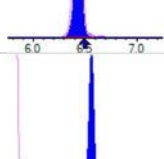
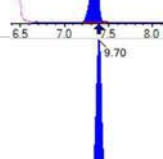
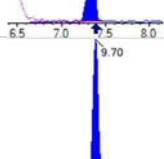
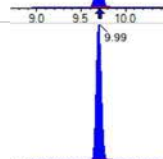
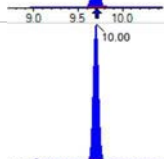
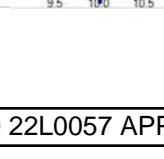
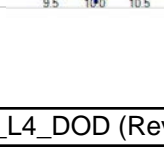
ANALYSIS DATA SHEET**LCS**

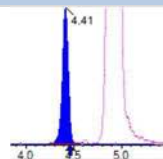
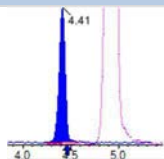
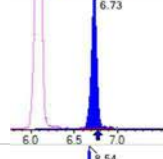
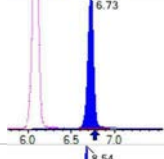
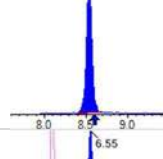
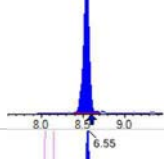
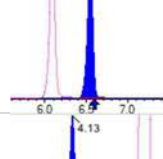
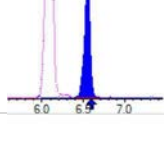
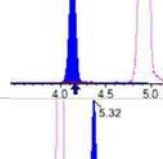
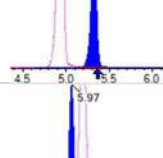
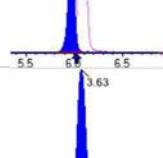
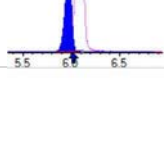
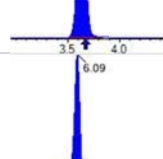
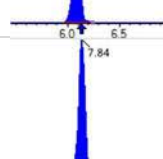
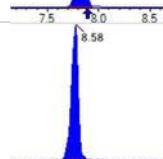
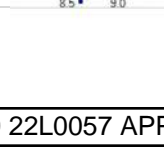
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Solids:		Analyzed:	12/21/22 20:09
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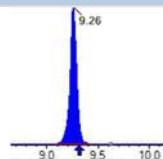
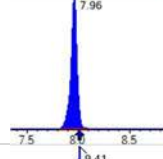
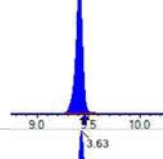
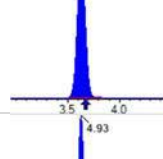
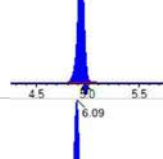
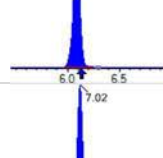
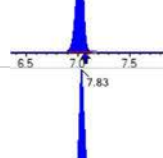
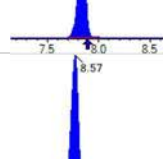
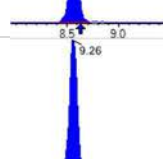
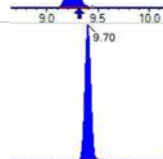
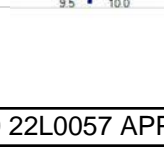
COMPOUND	CONC. (ng/L)	LOQ	DL	Q
ADONA	35.7	4.0	0.60	
PFEESA	36.6	4.0	0.55	
PFMPA	40.7	4.0	0.27	
PFMBA	36.6	4.0	0.46	
NFDHA	44.2	4.0	1.5	
9CL-PF3ONS	29.5	4.0	1.0	
11CL-PF3OUDS	29.1	4.0	1.0	
3:3FTCA	77.0	8.0	2.8	
5:3FTCA	80.7	8.0	2.2	
7:3FTCA	82.3	8.0	2.8	

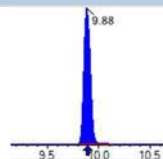
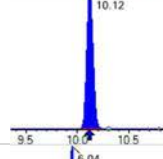
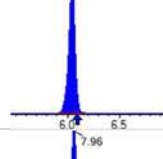
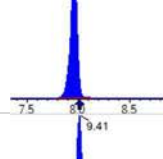
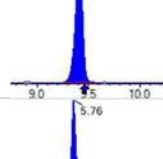
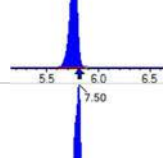
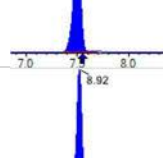
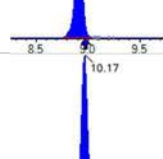
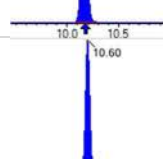
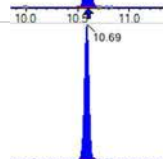
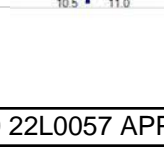
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 457768	(3.63, 1.00) (0.00, N/A, 0.0)	74.7	N/A 0.0 0.0	3.9896 [4.0000]	99.7%			
PFPeA	(262.9 / 219.0) 334815 (262.9 / 69.0) 3544	(4.93, 1.00) (0.00, N/A, 0.3)	738.9 91.6	0.0106 94.6 91.3	1.9863 [2.0000]	99.3%			
PFHxA	(313.0 / 269.0) 259860 (313.0 / 119.0) 25762	(6.09, 1.00) (0.00, N/A, 0.1)	380.9 185.3	0.0991 101.4 106.9	1.0466 [1.0000]	104.7%			
PFHpA	(363.0 / 319.0) 230144 (363.0 / 169.0) 70554	(7.02, 1.00) (0.00, N/A, -0.1)	360.3 305.9	0.3066 98.4 98.3	0.9674 [1.0000]	96.7%			
PFOA	(413.0 / 369.0) 259558 (413.0 / 169.0) 86753	(7.84, 1.00) (0.00, N/A, 0.0)	348.9 496.3	0.3342 102.3 101.6	0.9802 [1.0000]	98.0%			
PFNA	(463.0 / 419.0) 189733 (463.0 / 169.0) 42365	(8.58, 1.00) (0.00, N/A, 0.0)	262.8 135.3	0.2233 115.8 97.3	1.0861 [1.0000]	108.6%			
PFDA	(513.0 / 469.0) 239514 (513.0 / 169.0) 24027	(9.26, 1.00) (0.01, N/A, 0.0)	302.5 1095.8	0.1003 105.0 92.9	0.9648 [1.0000]	96.5%			
PFUnA	(563.0 / 519.0) 276442 (563.0 / 169.0) 20818	(9.70, 1.00) (0.00, N/A, 0.4)	418.0 154.3	0.0753 86.7 73.5	0.9683 [1.0000]	96.8%			
PFDoA	(613.0 / 569.0) 290888 (613.0 / 169.0) 34898	(9.88, 1.00) (0.00, N/A, -0.1)	582.0 106.4	0.1200 86.2 102.3	1.0706 [1.0000]	107.1%			
PFTrDA	(663.0 / 619.0) 241039 (663.0 / 169.0) 47278	(10.02, 1.01) (N/A, 0.00, 0.3)	523.4 417.5	0.1961 95.8 91.9	1.0239 [1.0000]	102.4%			
PFTeDA	(713.0 / 669.0) 201184 (713.0 / 169.0) 42373	(10.12, 1.00) (0.00, N/A, 0.4)	494.5 178.0	0.2106 103.6 119.8	1.0926 [1.0000]	109.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 400509 (298.9 / 99.0) 250905	(6.04, 1.00) (0.00, N/A, -0.1)	698.3 508.0	0.6265 101.8 100.3	0.9373 [0.8847]	105.9%			
PFPeS	(349.0 / 80.0) 690858 (349.0 / 99.0) 246355	(7.09, 0.89) (N/A, -0.05, 0.0)	708.5 613.6	0.3566 100.2 104.0	1.0249 [0.9384]	109.2%			
PFHxS	(399.0 / 80.0) 560434 (399.0 / 99.0) 196306	(7.96, 1.00) (0.00, N/A, -0.1)	1934.2 36979.7	0.3503 104.2 103.1	0.9560 [0.9110]	104.9%			
PFHpS	(449.0 / 80.0) 464864 (449.0 / 99.0) 138540	(8.73, 0.93) (N/A, -0.06, -0.3)	453.1 492.0	0.2980 108.9 107.2	1.0570 [0.9514]	111.1%			
PFOS	(499.0 / 80.0) 540898 (499.0 / 99.0) 103881	(9.41, 1.00) (0.00, N/A, 0.1)	78.5 111.0	0.1921 79.0 89.5	0.9887 [0.9275]	106.6%			
PFNS	(549.0 / 80.0) 585171 (549.0 / 99.0) 159100	(9.75, 1.04) (N/A, -0.01, 0.4)	647.2 340.4	0.2719 111.4 108.9	0.9642 [0.9599]	100.5%			
PFDS	(599.0 / 80.0) 638836 (599.0 / 99.0) 160217	(9.91, 1.05) (N/A, -0.01, -0.1)	909.8 410.7	0.2508 111.4 120.9	0.9482 [0.9631]	98.5%			
PFDoS	(698.9 / 80.0) 285127 (698.9 / 99.0) 62736	(10.10, 1.07) (N/A, -0.01, -0.2)	725.1 272.3	0.2200 89.9 88.8	1.0126 [0.9696]	104.4%			
4:2FTS	(327.0 / 307.0) 808487 (327.0 / 81.0) 437740	(5.76, 1.00) (0.00, N/A, -0.2)	649.0 452.3	0.5414 109.6 104.9	3.8383 [3.7381]	102.7%			
6:2FTS	(427.0 / 407.0) 443299 (427.0 / 81.0) 334939	(7.50, 1.00) (-0.01, N/A, -0.1)	558.7 642.2	0.7556 97.1 116.7	4.0487 [3.7962]	106.7%			
8:2FTS	(527.0 / 507.0) 402499 (527.0 / 81.0) 259585	(8.92, 1.00) (0.00, N/A, 0.4)	388.4 506.0	0.6449 113.9 80.3	3.8667 [3.8332]	100.9%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 675318 (498.0 / 478.0) 17173	(10.17, 1.00) (0.00, N/A, 0.3)	792.7 217.3	0.0254 122.0 108.5	1.0256 [1.0000]	102.6%			
NMeFOSA	(511.9 / 219.0) 159594 (511.9 / 169.0) 106866	(10.60, 1.00) (0.00, N/A, -0.1)	761.0 447.4	0.6696 93.0 103.8	4.3545 [4.0000]	108.9%			
NEIFOSA	(526.0 / 219.0) 139333 (526.0 / 169.0) 142928	(10.69, 1.00) (0.00, N/A, 0.0)	828.8 577.9	1.0258 97.0 100.8	4.5838 [4.0000]	114.6%			
NMeFOSAA	(570.0 / 419.0) 106989 (570.0 / 483.0) 57946	(9.47, 1.00) (0.01, N/A, 0.3)	158.5 1352.2	0.5416 88.1 112.3	1.1737 [1.0000]	117.4%			
NEIFOSAA	(584.0 / 419.0) 104671 (584.0 / 526.0) 63936	(9.67, 1.00) (0.01, N/A, -0.2)	295.0 8364.3	0.6108 83.3 97.9	1.1640 [1.0000]	116.4%			
NMeFOSE	(616.1 / 59.0) 51952	(10.57, 1.00) (0.01, N/A, 0.0)	559.5	N/A 0.0 0.0	3.5591 [4.0000]	89.0%			
NEtFOSE	(630.0 / 59.0) 7015	(10.66, 1.00) (0.01, N/A, 0.0)	184.9	N/A 0.0 0.0	2.9035 [4.0000]	72.6%			
HFPO-DA	(285.0 / 169.0) 186764 (285.0 / 185.0) 580133	(6.44, 1.00) (0.00, N/A, 0.0)	600.0 845.9	3.1062 113.2 108.4	1.8716 [2.0000]	93.6%			
ADONA	(377.0 / 85.0) 790625 (377.0 / 251.0) 105547	(7.34, 1.14) (N/A, -0.04, 0.2)	955.6 310.5	0.1335 107.2 96.4	1.7838 [1.8854]	94.6%			
9CI-Pf3ONS	(531.0 / 351.0) 1845709 (533.0 / 353.0) 568940	(9.70, 1.51) (N/A, -0.02, 0.2)	609.5 520.9	0.3083 104.2 98.8	1.4773 [1.8665]	79.1%			
11CI-PF3OUDS	(631.0 / 451.0) 900836 (633.0 / 453.0) 292329	(9.99, 1.55) (N/A, -0.01, -0.1)	477.9 465.2	0.3245 98.1 115.3	1.4542 [1.8864]	77.1%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 22393 (241.0 / 117.0) 39244	(4.41, 0.89) (N/A, -0.04, 0.1)	474.7 281.2	1.7525 104.7 101.8	3.8493 [4.0000]	96.2%			
5:3FTCA	(341.0 / 236.7) 176959 (341.0 / 217.0) 283071	(6.73, 1.11) (N/A, -0.04, 0.2)	417.7 479.6	1.5996 109.3 103.3	4.0336 [4.0000]	100.8%			
7:3FTCA	(441.0 / 317.0) 207653 (441.0 / 337.0) 169239	(8.54, 1.40) (N/A, -0.05, -0.2)	367.4 284.8	0.8150 97.3 100.6	4.1136 [4.0000]	102.8%			
PFEESA	(315.0 / 135.0) 497621 (315.0 / 83.0) 135281	(6.55, 1.08) (N/A, -0.04, -0.1)	659.9 435.4	0.2719 88.6 91.3	1.8306 [1.7849]	102.6%			
PFMPA	(229.0 / 85.0) 94140	(4.13, 0.84) (N/A, -0.04, 0.0)	797.7	N/A 0.0 0.0	2.0349 [2.0000]	101.7%			
PFMBA	(279.0 / 85.0) 292798	(5.32, 1.08) (N/A, -0.04, 0.0)	745.0	N/A 0.0 0.0	1.8311 [2.0000]	91.6%			
NFDHA	(295.0 / 201.0) 276597 (295.0 / 85.0) 240325	(5.97, 0.98) (N/A, -0.04, 0.1)	606.9 700.7	0.8689 98.4 93.4	2.2093 [2.0000]	110.5%			
13C3_PFBA_IIS	(216.0 / 172.0) 187938	(3.63, N/A) (N/A, -0.03, N/A)	629.6	N/A	1.3502 [1.0000]	135.0% {115.3%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 291882	(6.09, N/A) (N/A, -0.04, N/A)	458.8	N/A	1.2640 [1.0000]	126.4% {130.6%}			
13C4_PFOA_IIS	(417.0 / 372.0) 281582	(7.84, N/A) (N/A, -0.05, N/A)	703.1	N/A	1.2808 [1.0000]	128.1% {115.6%}			
13C5_PFNA_IIS	(468.0 / 423.0) 205985	(8.58, N/A) (N/A, -0.05, N/A)	389.2	N/A	1.1123 [1.0000]	111.2% {114.2%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 227056	(9.26, N/A) (N/A, -0.05, N/A)	274.0	N/A	1.2286 [1.0000]	122.9% { 113.6% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 515436	(7.96, N/A) (N/A, -0.05, N/A)	968.5	N/A	1.2768 [1.0000]	127.7% { 124.6% }			
13C4_PFOS_IIS	(502.8 / 79.9) 421087	(9.41, N/A) (N/A, -0.04, N/A)	742.7	N/A	1.3193 [1.0000]	131.9% { 124.7% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1407024	(3.63, N/A) (N/A, -0.03, N/A)	858.6	N/A	7.2741 [8.0000]	90.9% { 112.4% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 767699	(4.93, N/A) (N/A, -0.04, N/A)	826.1	N/A	3.7801 [4.0000]	94.5% { 115.7% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 578203	(6.09, N/A) (N/A, -0.05, N/A)	596.8	N/A	1.7214 [2.0000]	86.1% { 109.6% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 521986	(7.02, N/A) (N/A, -0.05, N/A)	606.7	N/A	1.7814 [2.0000]	89.1% { 112.2% }			
13C8_PFOA_EIS	(421.0 / 376.0) 538541	(7.83, N/A) (N/A, -0.05, N/A)	613.0	N/A	1.7440 [2.0000]	87.2% { 105.4% }			
13C9_PFNA_EIS	(472.0 / 427.0) 203582	(8.57, N/A) (N/A, -0.06, N/A)	320.0	N/A	0.8988 [1.0000]	89.9% { 111.0% }			
13C6_PFDA_EIS	(519.0 / 474.0) 260824	(9.26, N/A) (N/A, -0.05, N/A)	456.0	N/A	0.8077 [1.0000]	80.8% { 104.1% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 361252	(9.70, N/A) (N/A, -0.02, N/A)	606.8	N/A	0.7865 [1.0000]	78.6% { 112.3% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 315185	(9.88, N/A) (N/A, -0.01, N/A)	600.5	N/A	0.6875 [1.0000]	68.7% { 85.4% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 207762	(10.12, N/A) (N/A, 0.00, N/A)	357.0	N/A	0.6824 [1.0000]	68.2% { 75.2% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1558765	(6.04, N/A) (N/A, -0.04, N/A)	767.4	N/A	1.7887 [2.0000]	89.4% { 110.9% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 754685	(7.96, N/A) (N/A, -0.05, N/A)	710.1	N/A	1.6276 [2.0000]	81.4% { 109.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1008024	(9.41, N/A) (N/A, -0.05, N/A)	363.4	N/A	1.3948 [2.0000]	69.7% { 94.8% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 254811	(5.76, N/A) (N/A, -0.04, N/A)	803.5	N/A	3.4522 [4.0000]	86.3% { 113.1% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 284851	(7.50, N/A) (N/A, -0.04, N/A)	458.0	N/A	3.2054 [4.0000]	80.1% { 98.9% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 262813	(8.92, N/A) (N/A, -0.05, N/A)	397.0	N/A	2.9543 [4.0000]	73.9% { 116.7% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1393431	(10.17, N/A) (N/A, -0.01, N/A)	975.4	N/A	1.5253 [2.0000]	76.3% { 98.4% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 89923	(10.60, N/A) (N/A, -0.01, N/A)	433.6	N/A	0.4508 [2.0000]	22.5% { 26.5% }			
D5_NEiFOSA_EIS	(531.1 / 169.0) 67398	(10.69, N/A) (N/A, -0.01, N/A)	794.4	N/A	0.3660 [2.0000]	18.3% { 22.3% }			S1,



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0372-BS1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (8)
 Acquired: 2022/12/21 - 20:09

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 467898	(9.46, N/A) (N/A, -0.04, N/A)	469.6	N/A	2.7227 [4.0000]	68.1% { 80.5% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 400646	(9.66, N/A) (N/A, -0.03, N/A)	403.3	N/A	2.6450 [4.0000]	66.1% { 88.7% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 231292	(10.56, N/A) (N/A, -0.01, N/A)	1032.5	N/A	8.2587 [20.0000]	41.3% { 49.3% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 94377	(10.66, N/A) (N/A, -0.01, N/A)	825.5	N/A	7.4023 [20.0000]	37.0% { 43.1% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1313384	(6.44, N/A) (N/A, -0.05, N/A)	752.3	N/A	7.3545 [8.0000]	91.9% { 108.1% }			

ANALYSIS DATA SHEET**MRL Check**

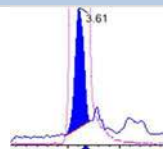
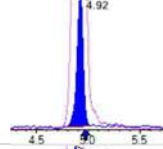
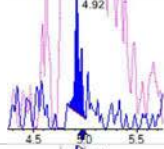
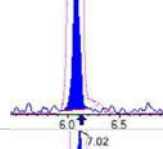
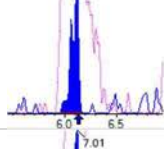
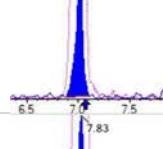
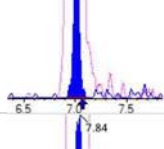
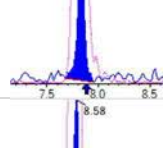
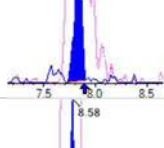
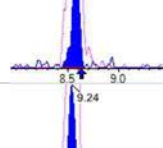
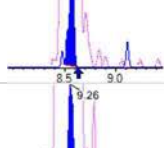
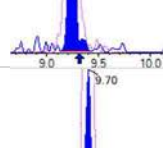
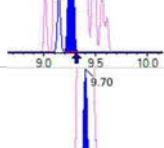
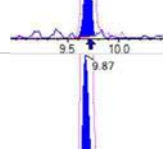
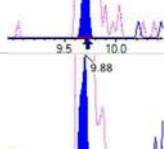
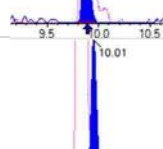
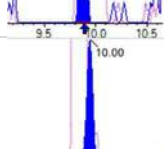
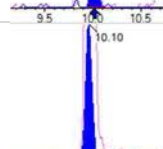
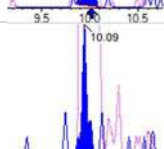
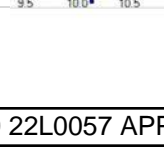
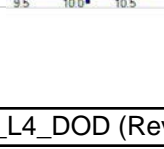
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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0372-MRL1
Sampled:		File ID:	S2022-12-21B (9)
		Prepared:	12/19/22 12:22
		Analyzed:	12/21/22 20:22
Solids:		Preparation:	PFAS Leachates
		Dilution:	1
Batch:	BBL0372	Sequence:	SB03942
		Calibration:	2252011
		Instrument:	Saphira
Column:	1		

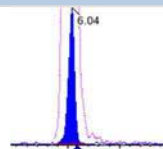
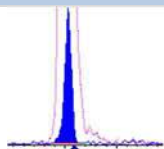
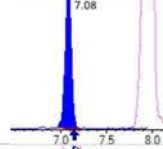
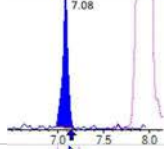
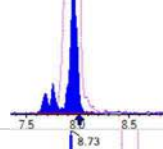
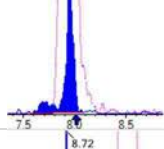
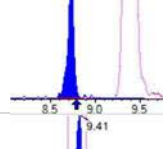
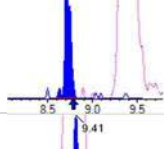
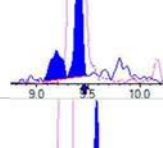
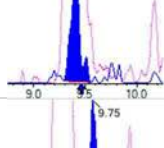
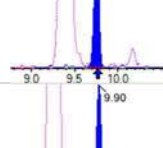
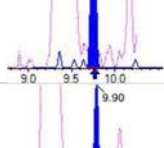
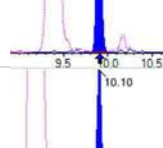
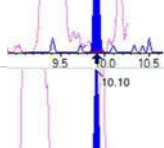
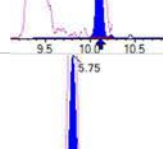
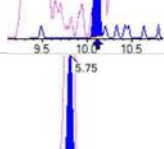
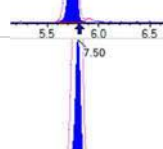
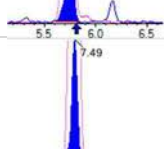
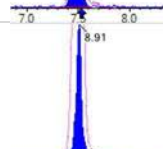
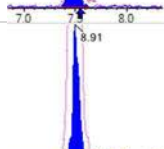

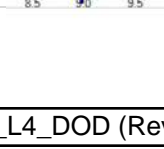
COMPOUND	CONC. (ng/L)	LOQ	DL	Q
PFBA	6.93	8.0	1.0	J
PFPEA	4.18	4.0	0.32	
PFHXA	2.19	2.0	0.28	
PFHPA	2.47	2.0	0.20	
PFOA	2.42	2.0	0.75	
PFNA	2.24	2.0	0.41	
PFDA	2.37	2.0	0.50	
PFUnA	1.90	2.0	0.80	IR2, J
PFDOA	1.26	2.0	0.55	IR2, J
PFTRDA	1.57	2.0	1.0	IR2, J
PFTEDA	1.95	2.0	1.0	J
PFBS	1.81	2.0	0.18	J
PFPEs	1.90	2.0	0.32	J
PFHXS	1.90	2.0	0.16	J
PFHPS	1.67	2.0	0.26	J
PFOS	2.00	2.0	0.32	
PFNS	1.40	2.0	0.60	J
PFDS	1.52	2.0	0.75	J
PFDOS	1.36	2.0	0.60	J
4:2FTS	6.65	8.0	1.4	J
6:2FTS	8.82	8.0	1.6	
8:2FTS	6.56	8.0	0.41	J
PFOSA	1.76	2.0	0.50	J
NMeFOSA	5.78	8.0	2.4	J
NEtFOSA	6.02	8.0	2.0	J
NMeFOSAA	2.08	2.0	0.55	
NEtFOSAA	1.94	2.0	0.55	J
NMeFOSE	7.27	8.0	5.0	J
NEtFOSE	7.22	8.0	5.0	J
HFPO-DA	3.59	4.0	0.85	J

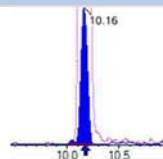
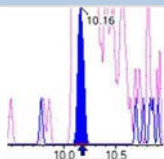
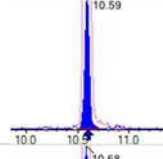
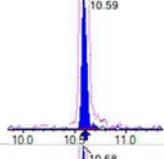
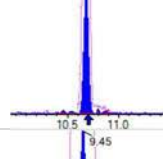
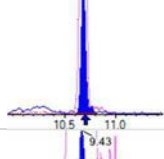
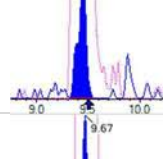
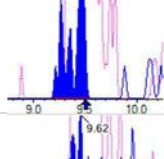
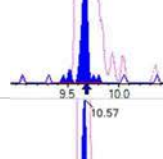
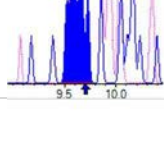
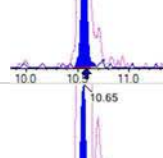
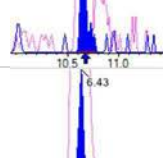
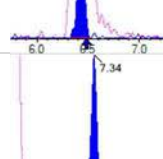
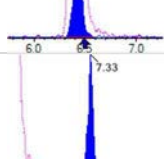
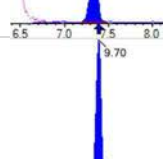
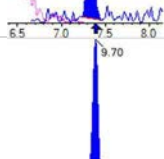
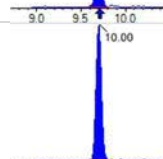
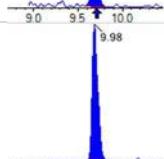
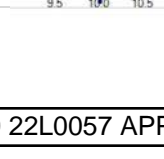
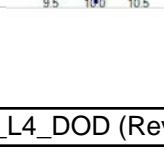
ANALYSIS DATA SHEET**MRL Check**

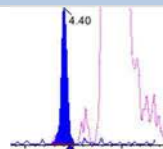
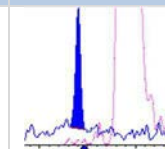
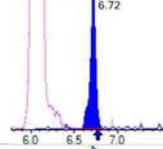
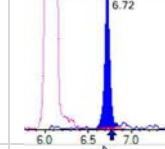
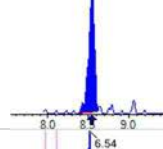
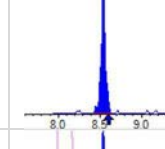
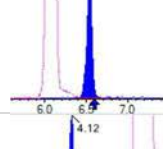
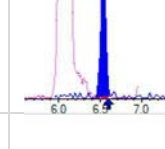
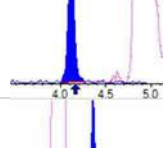
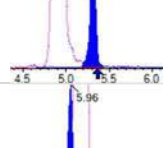
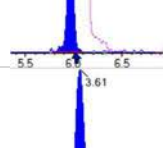
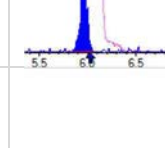
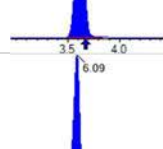
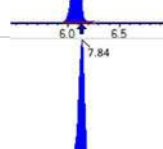
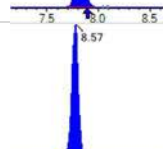

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Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	BBL0372-MRL1
Sampled:		File ID:	S2022-12-21B (9)
		Prepared:	12/19/22 12:22
Solids:		Analyzed:	12/21/22 20:22
		Preparation:	PFAS Leachates
Batch:	BBL0372	Dilution:	1
Column:	1	Sequence:	SB03942
		Calibration:	2252011
		Instrument:	Saphira

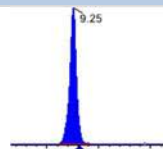
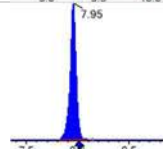
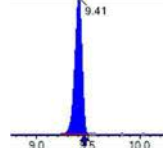
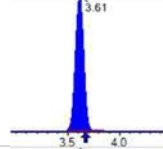
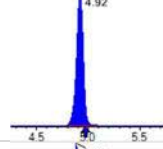
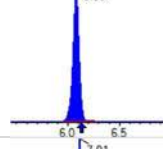
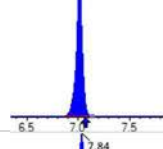
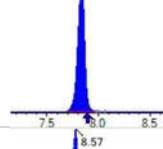
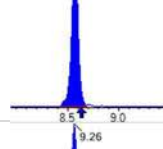
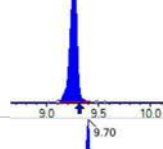
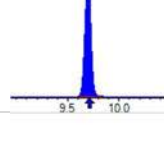
COMPOUND	CONC. (ng/L)	LOQ	DL	Q
ADONA	3.68	4.0	0.60	J
PFEESA	3.22	4.0	0.55	J
PFMPA	3.78	4.0	0.27	J
PFMBA	3.64	4.0	0.46	J
NFDHA	3.61	4.0	1.5	J
9CL-PF3ONS	2.84	4.0	1.0	J
11CL-PF3OUDS	2.80	4.0	1.0	J
3:3FTCA	9.01	8.0	2.8	
5:3FTCA	7.50	8.0	2.2	J
7:3FTCA	7.90	8.0	2.8	J

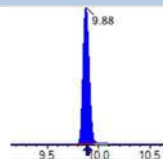
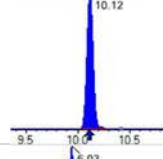
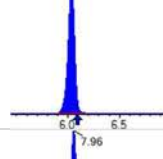
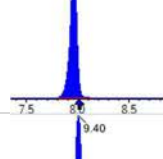
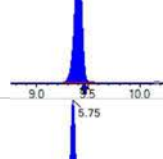
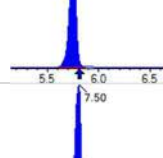
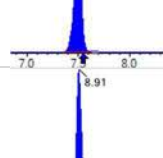
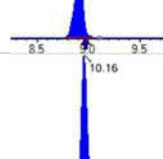
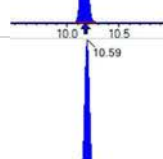
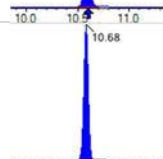
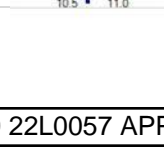
Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBA	(212.9 / 169.0) 40183	(3.61, 1.00) (0.00, N/A, 0.0)	37.8	N/A 0.0 0.0	0.3466 [0.4000]	86.7%			
PFPeA	(262.9 / 219.0) 33176 (262.9 / 69.0) 324	(4.92, 1.00) (0.00, N/A, 0.1)	214.6 14.4	0.0098 87.4 84.3	0.2089 [0.2000]	104.4%			
PFHxA	(313.0 / 269.0) 27389 (313.0 / 119.0) 3293	(6.08, 1.00) (0.00, N/A, -1.4)	76.1 39.5	0.1202 123.0 129.7	0.1096 [0.1000]	109.6%			
PFHpA	(363.0 / 319.0) 29534 (363.0 / 169.0) 7769	(7.02, 1.00) (0.00, N/A, 0.1)	121.5 73.3	0.2631 84.5 84.4	0.1235 [0.1000]	123.5%			
PFOA	(413.0 / 369.0) 31534 (413.0 / 169.0) 8855	(7.83, 1.00) (0.00, N/A, -0.3)	78.9 70.5	0.2808 85.9 85.4	0.1209 [0.1000]	120.9%			
PFNA	(463.0 / 419.0) 18472 (463.0 / 169.0) 4349	(8.58, 1.00) (0.01, N/A, 0.5)	105.2 51.5	0.2355 122.2 102.6	0.1121 [0.1000]	112.1%			
PFDA	(513.0 / 469.0) 26246 (513.0 / 169.0) 1825	(9.24, 1.00) (-0.02, N/A, -1.1)	50.5 35.4	0.0695 72.7 64.4	0.1185 [0.1000]	118.5%			
PFUnA	(563.0 / 519.0) 24320 (563.0 / 169.0) 3449	(9.70, 1.00) (0.00, N/A, 0.0)	77.4 313.6	0.1418 163.3 138.4	0.0948 [0.1000]	94.8%			IR2,
PFDoA	(613.0 / 569.0) 19933 (613.0 / 169.0) 4125	(9.87, 1.00) (0.00, N/A, -0.6)	93.6 30.6	0.2069 148.6 176.4	0.0630 [0.1000]	63.0%			QC,IR2,
PFTTrDA	(663.0 / 619.0) 21553 (663.0 / 169.0) 8171	(10.01, 1.01) (N/A, -0.01, 0.6)	101.1 50.8	0.3791 185.2 177.6	0.0786 [0.1000]	78.6%			IR2,
PFTeDA	(713.0 / 669.0) 21971 (713.0 / 169.0) 2833	(10.10, 1.00) (-0.01, N/A, 0.7)	86.5 25.2	0.1290 63.4 73.3	0.0973 [0.1000]	97.3%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFBS	(298.9 / 80.0) 35555 (298.9 / 99.0) 24215	(6.04, 1.00) (0.00, N/A, 0.3)	249.0 138.2	0.6811 110.7 109.0	0.0907 [0.0885]	102.5%			
PFPeS	(349.0 / 80.0) 65078 (349.0 / 99.0) 20671	(7.08, 0.89) (N/A, -0.05, -0.1)	305.4 120.1	0.3176 89.2 92.6	0.0948 [0.0938]	101.0%			
PFHxS	(399.0 / 80.0) 56809 (399.0 / 99.0) 17411	(7.96, 1.00) (0.00, N/A, 0.5)	2776.7 218.0	0.3065 91.2 90.2	0.0952 [0.0911]	104.5%			
PFHpS	(449.0 / 80.0) 40140 (449.0 / 99.0) 13038	(8.73, 0.93) (N/A, -0.05, 0.8)	178.5 110.4	0.3248 118.7 116.8	0.0835 [0.0951]	87.8%			
PFOS	(499.0 / 80.0) 59841 (499.0 / 99.0) 15276	(9.41, 1.00) (0.01, N/A, 0.1)	97.5 40.7	0.2553 105.0 118.9	0.1001 [0.0927]	107.9%			M14 ABK 12/22/22
PFNS	(549.0 / 80.0) 46281 (549.0 / 99.0) 9579	(9.75, 1.04) (N/A, -0.02, 0.1)	209.2 95.2	0.2070 84.8 82.9	0.0698 [0.0960]	72.7%			
PFDS	(599.0 / 80.0) 56083 (599.0 / 99.0) 9883	(9.90, 1.05) (N/A, -0.01, -0.2)	205.1 71.2	0.1762 78.3 84.9	0.0762 [0.0963]	79.1%			
PFDoS	(698.9 / 80.0) 20928 (698.9 / 99.0) 5282	(10.10, 1.07) (N/A, -0.01, -0.2)	882.0 51.9	0.2524 103.2 101.9	0.0680 [0.0970]	70.1%			
4:2FTS	(327.0 / 307.0) 73847 (327.0 / 81.0) 44468	(5.75, 1.00) (0.00, N/A, -0.1)	607.9 132.1	0.6022 121.9 116.7	0.3326 [0.3738]	89.0%			
6:2FTS	(427.0 / 407.0) 51047 (427.0 / 81.0) 38283	(7.50, 1.00) (0.00, N/A, 0.2)	279.3 215.6	0.7500 96.4 115.8	0.4411 [0.3796]	116.2%			
8:2FTS	(527.0 / 507.0) 35241 (527.0 / 81.0) 23642	(8.91, 1.00) (0.00, N/A, 0.2)	219.7 113.3	0.6709 118.5 83.5	0.3278 [0.3833]	85.5%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
PFOSA	(498.0 / 78.0) 53551 (498.0 / 478.0) 1542	(10.16, 1.00) (0.00, N/A, 0.3)	210.5 23.6	0.0288 138.2 122.8	0.0880 [0.1000]	88.0%			
NMeFOSA	(511.9 / 219.0) 12698 (511.9 / 169.0) 7583	(10.59, 1.00) (0.00, N/A, 0.0)	265.2 215.2	0.5972 82.9 92.5	0.2892 [0.4000]	72.3%			
NEIFOSA	(526.0 / 219.0) 11723 (526.0 / 169.0) 12205	(10.68, 1.00) (0.00, N/A, -0.1)	126902.9 156.3	1.0412 98.4 102.3	0.3012 [0.4000]	75.3%			
NMeFOSAA	(570.0 / 419.0) 10202 (570.0 / 483.0) 4663	(9.45, 1.00) (-0.01, N/A, 1.0)	45.6 141.1	0.4571 74.4 94.8	0.1042 [0.1000]	104.2%			
NEIFOSAA	(584.0 / 419.0) 9305 (584.0 / 526.0) 3738	(9.67, 1.00) (0.01, N/A, 3.0)	2559.7 91.7	0.4017 54.8 64.4	0.0968 [0.1000]	96.8%			
NMeFOSE	(616.1 / 59.0) 6114	(10.57, 1.00) (0.00, N/A, 0.0)	123.0	N/A 0.0 0.0	0.3635 [0.4000]	90.9%			
NEtFOSE	(630.0 / 59.0) 1067	(10.65, 1.00) (0.00, N/A, 0.0)	40.1	N/A 0.0 0.0	0.3611 [0.4000]	90.3%			
HFPO-DA	(285.0 / 169.0) 17147 (285.0 / 185.0) 53897	(6.43, 1.00) (0.00, N/A, 0.2)	192.6 263.1	3.1432 114.5 109.7	0.1795 [0.2000]	89.8%			
ADONA	(377.0 / 85.0) 78157 (377.0 / 251.0) 11701	(7.34, 1.14) (N/A, -0.05, 0.2)	434.4 49.0	0.1497 120.2 108.1	0.1842 [0.1885]	97.7%			
9CI-Pf3ONS	(531.0 / 351.0) 184212 (533.0 / 353.0) 51465	(9.70, 1.51) (N/A, -0.02, 0.2)	405.2 114.1	0.2794 94.4 89.6	0.1422 [0.1867]	76.2%			
11CI-PF3OUDS	(631.0 / 451.0) 82900 (633.0 / 453.0) 26728	(10.00, 1.55) (N/A, -0.01, 0.7)	377.9 1217.7	0.3224 97.5 114.6	0.1398 [0.1886]	74.1%			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
3:3FTCA	(241.0 / 177.0) 2468 (241.0 / 117.0) 3214	(4.40, 0.89) (N/A, -0.05, 0.0)	123.7 49.4	1.3023 77.8 75.6	0.4503 [0.4000]	112.6%			
5:3FTCA	(341.0 / 236.7) 16555 (341.0 / 217.0) 27874	(6.72, 1.11) (N/A, -0.05, 0.0)	147.7 132.4	1.6837 115.0 108.7	0.3751 [0.4000]	93.8%			
7:3FTCA	(441.0 / 317.0) 20066 (441.0 / 337.0) 16631	(8.54, 1.41) (N/A, -0.05, 0.2)	81.0 242.4	0.8288 99.0 102.3	0.3951 [0.4000]	98.8%			
PFEESA	(315.0 / 135.0) 44007 (315.0 / 83.0) 14332	(6.54, 1.08) (N/A, -0.05, 0.3)	322.7 103.4	0.3257 106.1 109.4	0.1609 [0.1785]	90.1%			
PFMPA	(229.0 / 85.0) 8234	(4.12, 0.84) (N/A, -0.05, 0.0)	205.7	N/A 0.0 0.0	0.1889 [0.2000]	94.4%			
PFMBA	(279.0 / 85.0) 27390	(5.31, 1.08) (N/A, -0.05, 0.0)	474.3	N/A 0.0 0.0	0.1818 [0.2000]	90.9%			
NFDHA	(295.0 / 201.0) 22711 (295.0 / 85.0) 23324	(5.96, 0.98) (N/A, -0.05, -0.1)	177.5 88.1	1.0270 116.3 110.3	0.1803 [0.2000]	90.1%			
13C3_PFBA_IIS	(216.0 / 172.0) 188091	(3.61, N/A) (N/A, -0.05, N/A)	767.3	N/A	1.3513 [1.0000]	135.1% {115.4%}			
13C2_PFHxA_IIS	(315.1 / 270.0) 285607	(6.09, N/A) (N/A, -0.05, N/A)	419.0	N/A	1.2368 [1.0000]	123.7% {127.8%}			
13C4_PFOA_IIS	(417.0 / 372.0) 281063	(7.84, N/A) (N/A, -0.05, N/A)	590.3	N/A	1.2784 [1.0000]	127.8% {115.3%}			
13C5_PFNA_IIS	(468.0 / 423.0) 229751	(8.57, N/A) (N/A, -0.06, N/A)	356.5	N/A	1.2407 [1.0000]	124.1% {127.4%}			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-[min], Δ RT- CV[min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDA_IIS	(515.1 / 470.1) 223276	(9.25, N/A) (N/A, -0.06, N/A)	398.4	N/A	1.2081 [1.0000]	120.8% { 111.7% }			
18O2_PFHxS_IIS	(403.0 / 83.9) 539093	(7.95, N/A) (N/A, -0.06, N/A)	818.9	N/A	1.3353 [1.0000]	133.5% { 130.3% }			
13C4_PFOS_IIS	(502.8 / 79.9) 403555	(9.41, N/A) (N/A, -0.05, N/A)	383.4	N/A	1.2644 [1.0000]	126.4% { 119.5% }			
13C4_PFBA_EIS	(217.0 / 172.0) 1421591	(3.61, N/A) (N/A, -0.05, N/A)	791.8	N/A	7.3434 [8.0000]	91.8% { 113.5% }			
13C5_PFPeA_EIS	(267.9 / 223.0) 723384	(4.92, N/A) (N/A, -0.05, N/A)	646.8	N/A	3.6402 [4.0000]	91.0% { 109.1% }			
13C5_PFHxA_EIS	(318.0 / 273.0) 581753	(6.08, N/A) (N/A, -0.05, N/A)	592.7	N/A	1.7700 [2.0000]	88.5% { 110.3% }			
13C4_PFHpA_EIS	(367.0 / 322.0) 524865	(7.01, N/A) (N/A, -0.06, N/A)	640.8	N/A	1.8306 [2.0000]	91.5% { 112.8% }			
13C8_PFOA_EIS	(421.0 / 376.0) 530407	(7.84, N/A) (N/A, -0.05, N/A)	631.7	N/A	1.7208 [2.0000]	86.0% { 103.8% }			
13C9_PFNA_EIS	(472.0 / 427.0) 192008	(8.57, N/A) (N/A, -0.06, N/A)	297.1	N/A	0.7600 [1.0000]	76.0% { 104.7% }			
13C6_PFDA_EIS	(519.0 / 474.0) 232662	(9.26, N/A) (N/A, -0.05, N/A)	308.2	N/A	0.7327 [1.0000]	73.3% { 92.9% }			
13C7_PFUnA_EIS	(570.0 / 525.0) 324478	(9.70, N/A) (N/A, -0.02, N/A)	619.6	N/A	0.7184 [1.0000]	71.8% { 100.8% }			

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT- CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
13C2_PFDa_EIS	(615.0 / 570.0) 367208	(9.88, N/A) (N/A, -0.02, N/A)	26.6	N/A	0.8145 [1.0000]	81.5% { 99.5% }			
13C2_PFTeDA_EIS	(715.0 / 670.0) 254864	(10.12, N/A) (N/A, 0.00, N/A)	411.1	N/A	0.8512 [1.0000]	85.1% { 92.2% }			
13C3_PFBs_EIS	(302.0 / 80.0) 1430440	(6.03, N/A) (N/A, -0.05, N/A)	836.9	N/A	1.5694 [2.0000]	78.5% { 101.7% }			
13C3_PFHxS_EIS	(402.0 / 80.0) 768386	(7.96, N/A) (N/A, -0.05, N/A)	716.1	N/A	1.5844 [2.0000]	79.2% { 111.0% }			
13C8_PFOS_EIS	(507.0 / 80.0) 1101700	(9.40, N/A) (N/A, -0.05, N/A)	464.7	N/A	1.5907 [2.0000]	79.5% { 103.6% }			
13C2_4:2FTS_EIS	(329.0 / 81.0) 268577	(5.75, N/A) (N/A, -0.05, N/A)	594.7	N/A	3.4790 [4.0000]	87.0% { 119.2% }			
13C2_6:2FTS_EIS	(429.0 / 81.0) 301088	(7.50, N/A) (N/A, -0.04, N/A)	540.2	N/A	3.2394 [4.0000]	81.0% { 104.5% }			
13C2_8:2FTS_EIS	(529.0 / 81.0) 271464	(8.91, N/A) (N/A, -0.05, N/A)	522.6	N/A	2.9176 [4.0000]	72.9% { 120.5% }			
13C8_PFOsa_EIS	(506.0 / 78.0) 1287350	(10.16, N/A) (N/A, -0.02, N/A)	892.2	N/A	1.4704 [2.0000]	73.5% { 90.9% }			
D3_NMeFOSA_EIS	(515.0 / 169.0) 107716	(10.59, N/A) (N/A, -0.01, N/A)	720.4	N/A	0.5635 [2.0000]	28.2% { 31.8% }			
D5_NEtFOSA_EIS	(531.1 / 169.0) 86308	(10.68, N/A) (N/A, -0.01, N/A)	740.5	N/A	0.4891 [2.0000]	24.5% { 28.6% }			



Chemist: ABK
 Instrument: Saphira
 Type: Sciex Q3 5500

Sample I.D.: BBL0372-MRL1
 DF, IV: 1, 10.0µL
 Acquisition Method: 1633 2022-12-21.dam

Quant Method: 1633 - S2022-12-21A
 Path: S2022-12-21B (9)
 Acquired: 2022/12/21 - 20:22

Analyte	(Q1 / Q3) Area Counts*min	R.T. (R.T [min], R.R.T.) (Δ RT-I[μ min], Δ RT-CV[μ min], Δ RT ion[s])	S / N	Ion Ratio IR Vs MP% IR Vs CV%	Concentration [True] ng/mL	Q.C. Rec. {Area%CV}	Primary Transition	Confirmation Transition	Flag
D3_MeFOSAA_EIS	(573.0 / 419.0) 502410	(9.46, N/A) (N/A, -0.05, N/A)	471.3	N/A	3.0505 [4.0000]	76.3% { 86.5% }			
D5_EtFOSAA_EIS	(589.0 / 419.0) 428519	(9.66, N/A) (N/A, -0.03, N/A)	423.1	N/A	2.9519 [4.0000]	73.8% { 94.9% }			
D7_NMeFOSE_EIS	(623.2 / 58.9) 266547	(10.56, N/A) (N/A, -0.01, N/A)	993.2	N/A	9.9310 [20.0000]	49.7% { 56.8% }			
D9_NEtFOSE_EIS	(639.2 / 58.9) 115411	(10.65, N/A) (N/A, -0.01, N/A)	1079.6	N/A	9.4453 [20.0000]	47.2% { 52.7% }			
13C3_HFPODA_EIS	(287.0 / 169.0) 1257202	(6.43, N/A) (N/A, -0.05, N/A)	732.5	N/A	7.1945 [8.0000]	89.9% { 103.4% }			

PREPARATION BENCH SHEET

Organics

BBL0372

Matrix: Solid **Prepared using: PFAS - PFAS Leachates**

Analyses		Spiking Solution(s)			Surrogate Solution(s)				
1633 SPLP		22L0269 PFAS - MIX 1633 10ng/mL			22L0359 MPFAC-HIF-ES 20.0ng/mL				
Lab Number	Sample and Source ID	Date Due	Extract by	Prepared	Initial (mL)	Final (mL)	ul Spike	ul Surrogate	Extraction Comments
22L0023-01	ADIT6-IDW-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	107.51	2		200	prepped by HGH extracted by LYA
22L0023-01RE1	ADIT6-IDW-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	107.51	2		200	Added 12/21/2022 by DAG
22L0023-02	ADIT6-IDW-SOFD01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	105.04	2		200	prepped by HGH extracted by LYA
22L0023-02RE1	ADIT6-IDW-SOFD01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	105.04	2		200	Added 12/21/2022 by DAG
22L0023-03	ADIT6-IDW-SOFT01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	108.34	2		200	prepped by HGH extracted by LYA
22L0023-03RE1	ADIT6-IDW-SOFT01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	108.34	2		200	Added 12/21/2022 by DAG
22L0023-04	ADIT6-DU02-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	109.11	2		200	prepped by HGH extracted by LYA
22L0023-04RE1	ADIT6-DU02-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	109.11	2		200	Added 12/21/2022 by DAG
22L0023-05	ADIT6-DU02-SOFD01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	107.57	2		200	prepped by HGH extracted by LYA
22L0023-05RE1	ADIT6-DU02-SOFD01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	107.57	2		200	Added 12/21/2022 by DAG
22L0023-06	ADIT6-DU02-SOFT01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	109.78	2		200	prepped by HGH extracted by LYA
22L0023-06RE1	ADIT6-DU02-SOFT01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	109.78	2		200	Added 12/21/2022 by DAG
22L0023-07	ADIT6-DU04A-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	109	2		200	prepped by HGH extracted by LYA
22L0023-07RE1	ADIT6-DU04A-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	109	2		200	Added 12/21/2022 by DAG
22L0023-08	ADIT6-DU01-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	108.35	2		200	prepped by HGH extracted by LYA
22L0023-08RE1	ADIT6-DU01-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	108.35	2		200	Added 12/21/2022 by DAG
22L0023-09	ADIT6-DU04B-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	106.8	2		200	prepped by HGH extracted by LYA
22L0023-09RE1	ADIT6-DU04B-SON01MI-22DEC	12/16/2022	12/30/2022	12/19/2022 12:22:00PM	106.8	2		200	Added 12/21/2022 by DAG
22L0057-01	ADIT6-DU03-SON01MI-22DEC	12/15/2022	01/04/2023	12/19/2022 12:22:00PM	107.38	2		200	prepped by HGH extracted by LYA
22L0057-01RE1	ADIT6-DU03-SON01MI-22DEC	12/15/2022	01/04/2023	12/19/2022 12:22:00PM	107.38	2		200	Added 12/21/2022 by DAG
BBL0372-BLK1	Blank			12/19/2022 12:22:00PM	100	2	0	200	
BBL0372-BS1	LCS			12/19/2022 12:22:00PM	100	2	200	200	

Spiking Witnessed By _____ Date _____ Preparation Reviewed By _____ Date _____ Extracts Received By _____ Date _____

PREPARATION BENCH SHEET

Organics

Print Date/Time: 12/22/2022 3:34 pm

BBL0372

(Continued)

Matrix: Solid

Prepared using: PFAS - PFAS Leachates

Analyses	MRL Check	Spiking Solution(s)	Surrogate Solution(s)
1633 SPLP		22L0269 PFAS - MIX 1633 10ng/mL	22L0359 MPFAC-HIF-ES 20.0ng/mL
BBL0372-MRL1		12/19/2022 12:22:00PM 100 2	20 200

Start Date/Time _____
 Stop Date/Time _____

Reagents	Standard	Description	LotNum
	22K0511	Reagent -0.3M Formic Acid	M13H051
	22L0094	Reagent - 0.05MFA wash	x
	22L0368	Reagent - 1.0% Ammonia Hydroxide	219481

Batch Comments:
 Spiked by: HIGH
 Balance #: WB2
 Cartridge: Oasis
 concentration: 12/20/2 6:10PM-9:00PM
 12/21/22 6:36AM-7:10AM

Spiking Witnessed By _____ Date _____
 Preparation Reviewed By _____ Date _____
 Extracts Received By _____ Date _____

INJECTION LOG - ANALYSIS SEQUENCE SUMMARY

EPA 1633

Laboratory: APPL, LLC
 Client: AECOM
 Sequence: SB03941
 Calibration: 2252011

SDG:
 Project: Red Hill AFFF Assessment Sampling
 Instrument: Saphira

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	SB03941-CAL1	S2022-12-21A (1)	12/21/22 14:26
Cal Standard	SB03941-CAL1	S2022-12-21A (1)	12/21/22 14:26
Cal Standard	SB03941-CAL2	S2022-12-21A (2)	12/21/22 14:39
Cal Standard	SB03941-CAL2	S2022-12-21A (2)	12/21/22 14:39
Cal Standard	SB03941-CAL3	S2022-12-21A (3)	12/21/22 14:51
Cal Standard	SB03941-CAL3	S2022-12-21A (3)	12/21/22 14:51
Cal Standard	SB03941-CAL4	S2022-12-21A (4)	12/21/22 15:04
Cal Standard	SB03941-CAL4	S2022-12-21A (4)	12/21/22 15:04
Cal Standard	SB03941-CAL5	S2022-12-21A (5)	12/21/22 15:17
Cal Standard	SB03941-CAL5	S2022-12-21A (5)	12/21/22 15:17
Cal Standard	SB03941-CAL6	S2022-12-21A (6)	12/21/22 15:30
Cal Standard	SB03941-CAL6	S2022-12-21A (6)	12/21/22 15:30
Cal Standard	SB03941-CAL7	S2022-12-21A (7)	12/21/22 15:42
Cal Standard	SB03941-CAL7	S2022-12-21A (7)	12/21/22 15:42
Cal Standard	SB03941-CAL8	S2022-12-21A (8)	12/21/22 15:55
Cal Standard	SB03941-CAL8	S2022-12-21A (8)	12/21/22 15:55
Initial Cal Blank	SB03941-ICB1	S2022-12-21A (9)	12/21/22 16:08
Initial Cal Blank	SB03941-ICB1	S2022-12-21A (9)	12/21/22 16:08
Secondary Cal Check	SB03941-SCV1	S2022-12-21A (10)	12/21/22 16:20
Secondary Cal Check	SB03941-SCV1	S2022-12-21A (10)	12/21/22 16:20

INJECTION LOG - ANALYSIS SEQUENCE SUMMARY

EPA 1633 SPLP

Laboratory:	APPL, LLC	SDG:	
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Sequence:	SB03942	Instrument:	Saphira
Calibration:	2252011		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Blank	SB03942-CCB1	S2022-12-21B (1)	12/21/22 16:46
Low Cal Check	SB03942-LCV1	S2022-12-21B (2)	12/21/22 16:58
Calibration Check	SB03942-CCV1	S2022-12-21B (3)	12/21/22 17:11
Calibration Blank	SB03942-CCB2	S2022-12-21B (4)	12/21/22 17:49
Calibration Check	SB03942-CCV2	S2022-12-21B (5)	12/21/22 19:31
Calibration Blank	SB03942-CCB3	S2022-12-21B (6)	12/21/22 19:44
Blank	BBL0372-BLK1	S2022-12-21B (7)	12/21/22 19:57
LCS	BBL0372-BS1	S2022-12-21B (8)	12/21/22 20:09
MRL Check	BBL0372-MRL1	S2022-12-21B (9)	12/21/22 20:22
ADIT6-DU03-SON01MI-22DEC	22L0057-01	S2022-12-21B (28)	12/22/22 00:23
ADIT6-DU03-SON01MI-22DEC	22L0057-01RE1	S2022-12-21B (29)	12/22/22 00:36
Calibration Check	SB03942-CCV3	S2022-12-21B (30)	12/22/22 00:49
Calibration Blank	SB03942-CCB4	S2022-12-21B (31)	12/22/22 01:01
Calibration Check	SB03942-CCV4	S2022-12-21B (40)	12/22/22 03:21
Calibration Blank	SB03942-CCB5	S2022-12-21B (41)	12/22/22 03:34

Solids

SAMPLE DATA

Solids

ANALYSIS DATA SHEET

ADIT6-DU03-SON01MI-22DEC

Laboratory:	APPL, LLC	SDG:	
Client:	AECOM	Project:	Red Hill AFFF Assessment Sampling
Matrix:	Solid	Laboratory ID:	22L0057-01
Sampled:	12/07/22 13:50		
% Solids:	91.07		

Analyte	Concentration (%)	LOQ	LOD	DL	DF	Q	Batch	Analyzed	Method
% Solids	91.1	2.00	1.50	0.750	1		BBL0215	12/12/22 08:39	ISM02.2

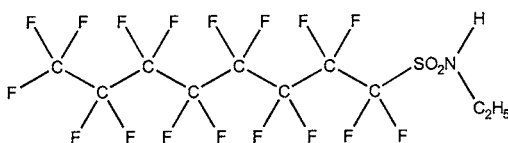


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-EtFOSA-M **LOT NUMBER:** NEtFOSA0821M
COMPOUND: N-ethylperfluoro-1-octanesulfonamide

STRUCTURE: **CAS #:** 4151-50-2



MOLECULAR FORMULA: C₁₀H₆F₁₇NO₂S **MOLECULAR WEIGHT:** 527.20
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 08/12/2021
EXPIRY DATE: (mm/dd/yyyy) 08/12/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 08/16/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

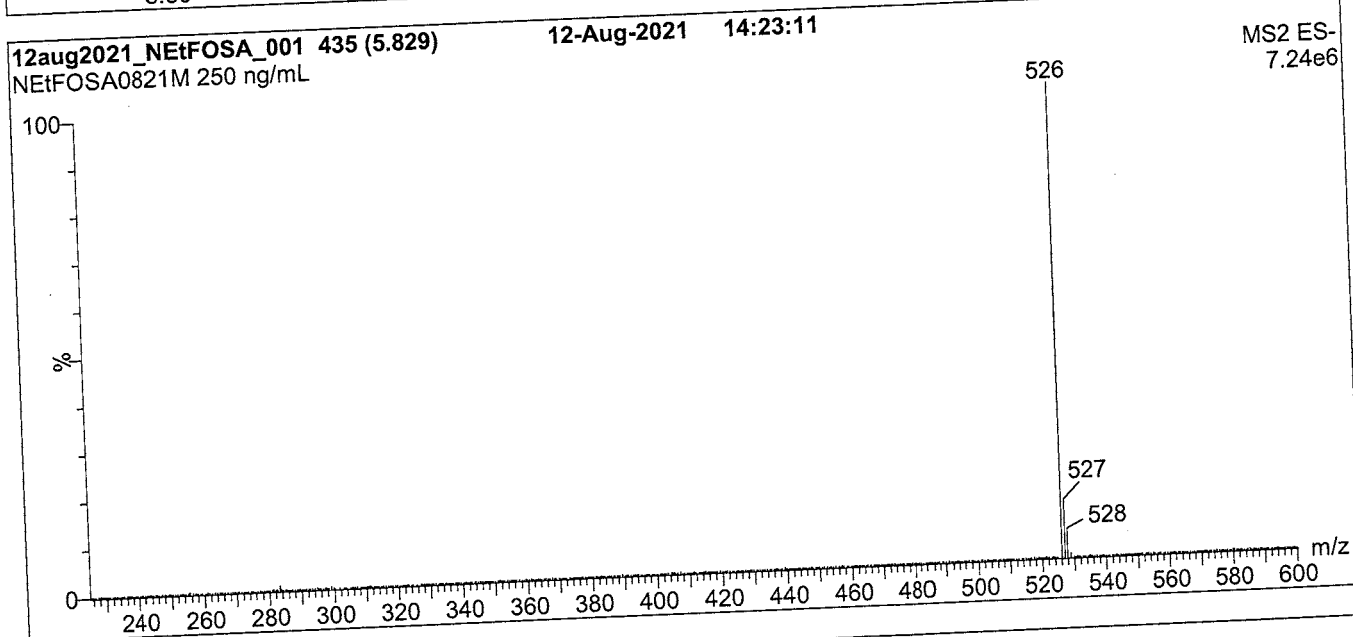
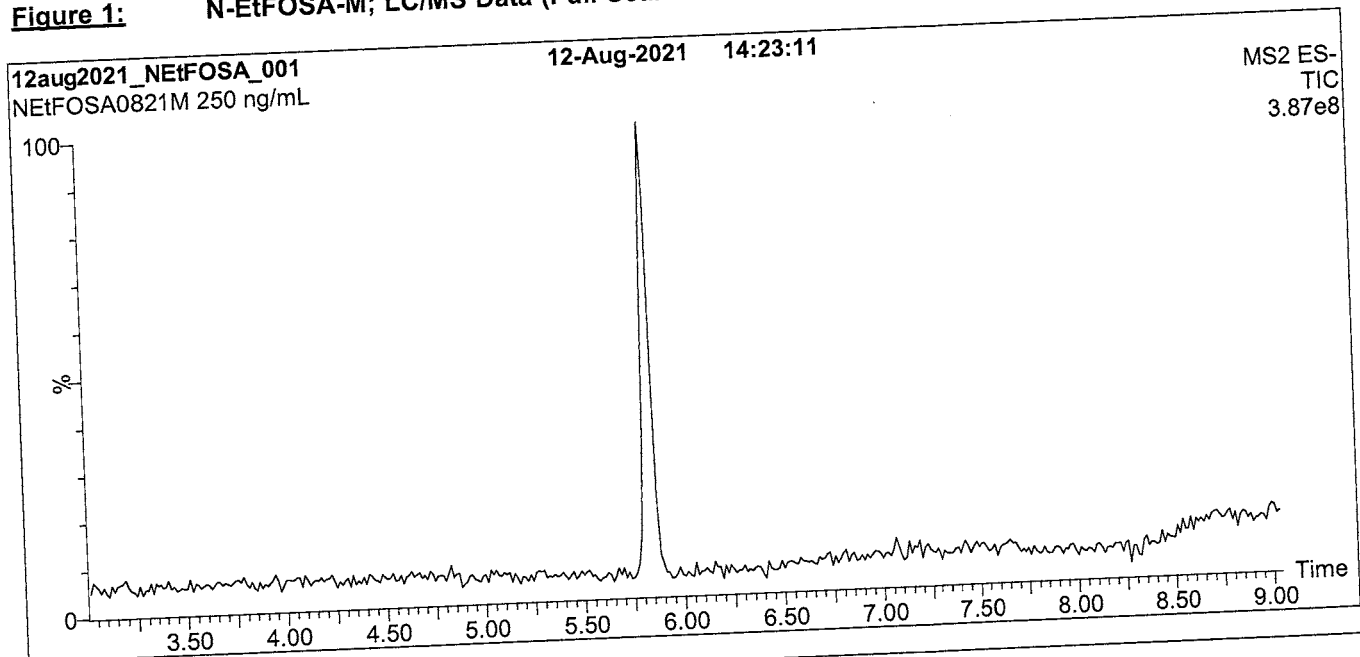
QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



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Figure 1: N-EtFOSA-M; LC/MS Data (Full Scan and Mass Spectrum)



Conditions for Figure 1:

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 30% H₂O / 70% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

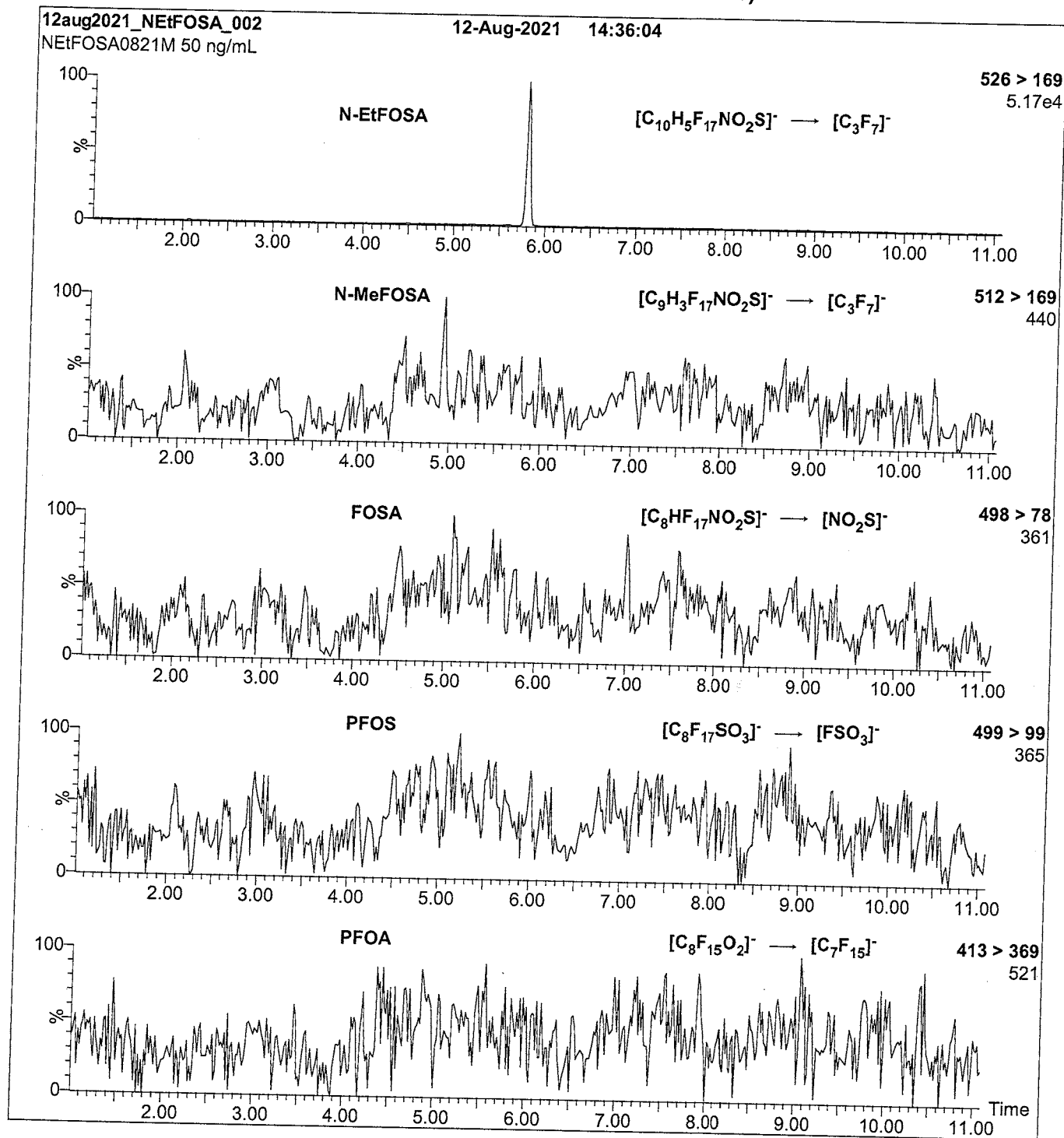
Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 1.00
Cone Voltage (V) = 44.00
Desolvation Temperature ($^{\circ}$ C) = 500
Desolvation Gas Flow (L/hr) = 1000

NEtFOSA0821M (3 of 4)
rev0

Figure 2: N-EtFOSA-M; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (N-EtFOSA-M)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.29e-3

Collision Energy (eV) = 24

Analytical Standard Record

21J0007

Description:	PFAS - SAS N-EtFOSA 50ug/mL	Expires:	08/12/2026
Standard Type:	Analyte Spike	Prepared:	08/12/2021
Solvent:	MeOH	Prepared By:	Wellington Laboratories (Lot#:
Final Volume (mls):	1	Department:	PFAS OSA0821M)
Vials:	1	Last Edit:	12/07/2021 16:05 by HGH

Analyte	Parent	CAS Number	Concentration	Units
N-ETFOSA		4151-50-2	50	ug/mL

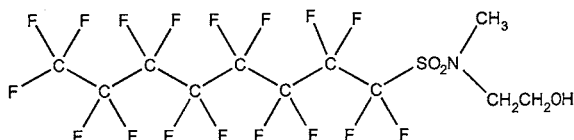


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-MeFOSE-M **LOT NUMBER:** NMeFOSE0921M
COMPOUND: 2-(N-methylperfluoro-1-octanesulfonamido)-ethanol

STRUCTURE: **CAS #:** 24448-09-7



MOLECULAR FORMULA: C₁₁H₈F₁₇NO₃S **MOLECULAR WEIGHT:** 557.22
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/22/2021 (HRGC/LRMS)
 09/23/2021 (LC/MS)
EXPIRY DATE: (mm/dd/yyyy) 09/23/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: HRGC/LRMS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- In order to see the molecular ion (adduct free), the LC mobile phase should be free of ammonium acetate buffer.

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Certified By: _____

B.G. Chittim, General Manager

Date: 09/28/2021
 (mm/dd/yyyy)

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LIMITED WARRANTY:

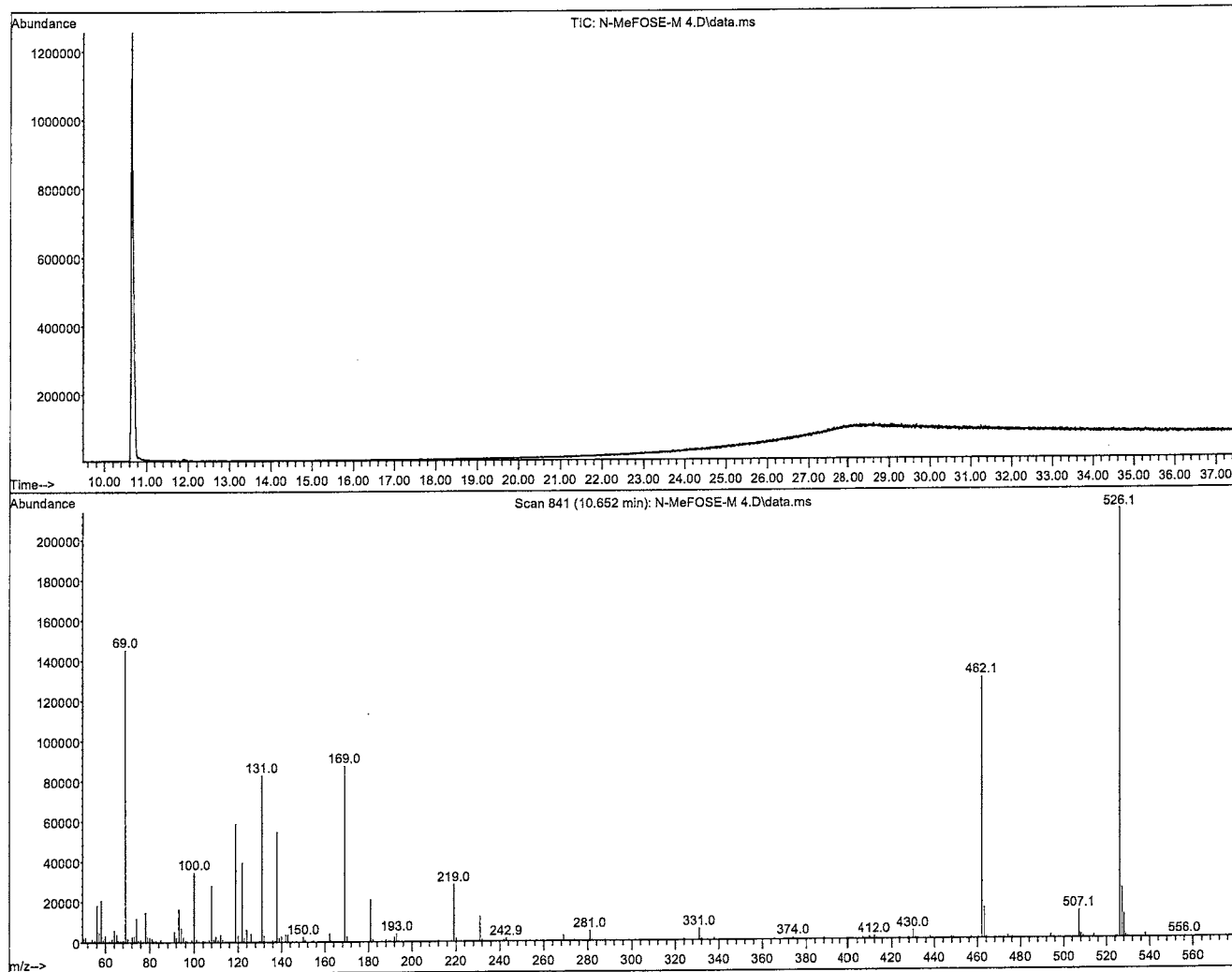
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Figure 1: N-MeFOSE-M; HRGC/LRMS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Agilent 7890A HRGC
 Agilent 5975C MSD

Chromatographic Conditions:

Column: 30 m DB-5 (0.25 mm id, 0.25 μ m film thickness) Agilent J&W

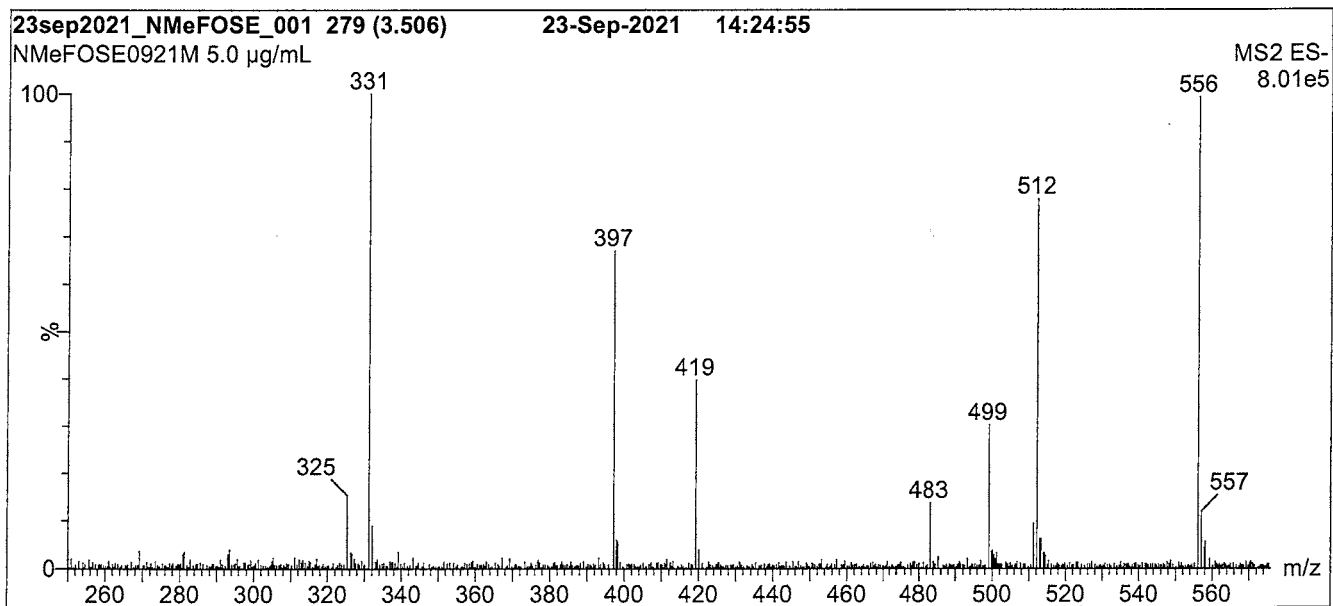
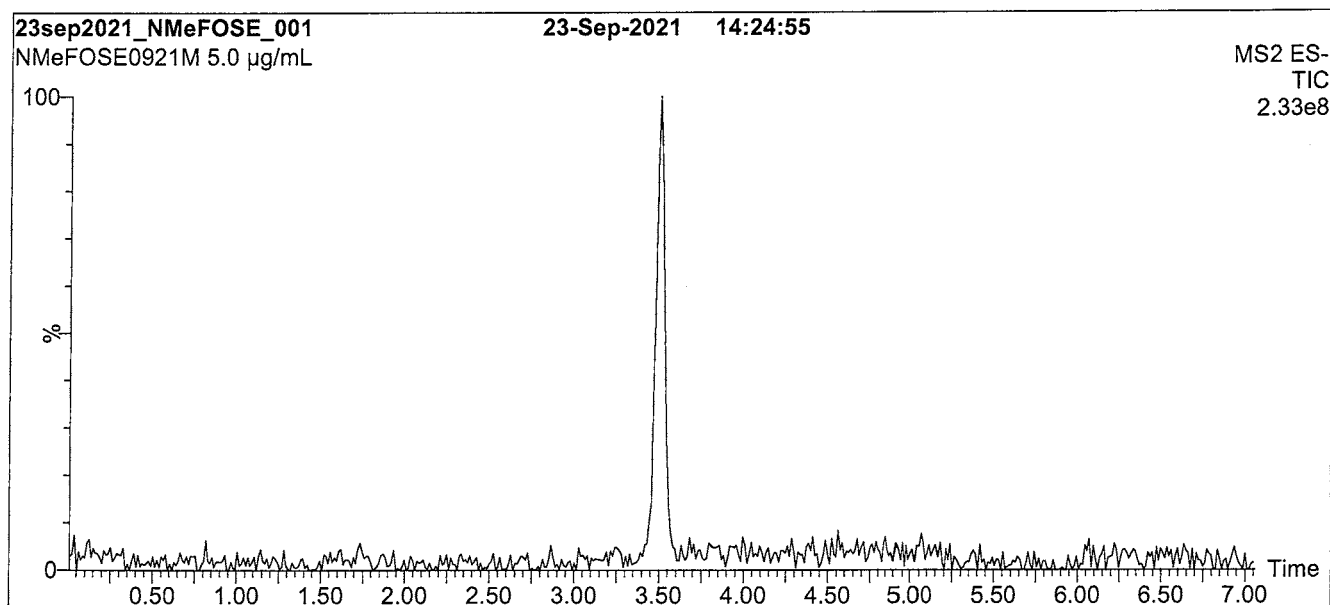
Flow: Constant at 1 mL/min

Injector: 250°C (Splitless Injection)

Oven: 100°C (5 min)
 10°C/min to 310°C
 310°C (10 min)

Ionization: EI+

Detector: 230°C
 Full Scan (50-1000 amu)

Figure 2: N-MeFOSE-M; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 2:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 µm, 2.1 x 100 mm

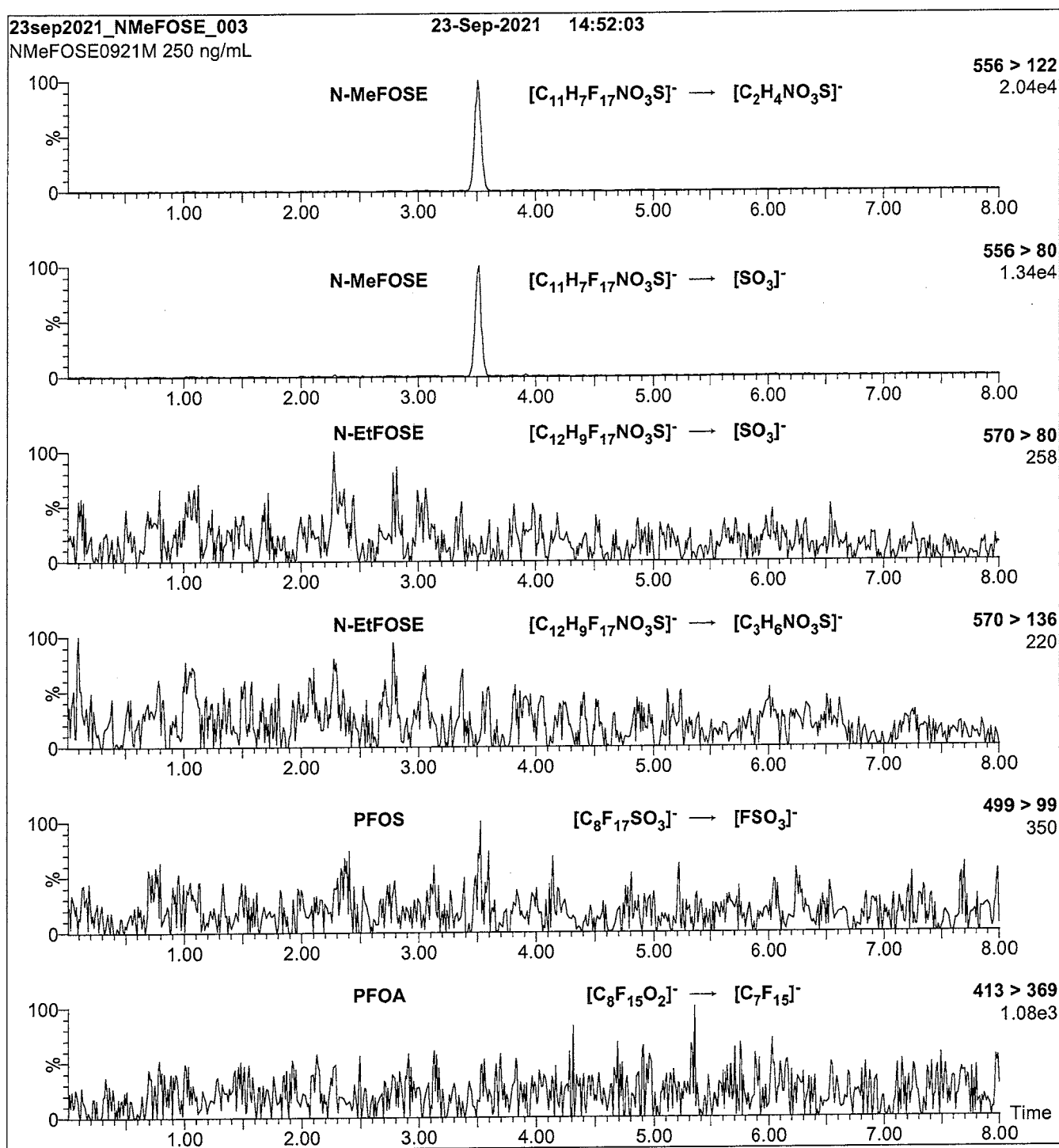
Mobile phase: Gradient
Start: 30% H₂O / 70% MeOH
Ramp to 90% organic over 8 min and hold for
1.5 min before returning to initial conditions in 1 min.
Time: 12 min

Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 65.00
Desolvation Temperature (°C) = 450
Desolvation Gas Flow (L/hr) = 1000

Figure 3: N-MeFOSE-M; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 3:**

Injection: On-column (N-MeFOSE-M)

MS Parameters:

Mobile phase: Same as Figure 2

Collision Gas (mbar) = 3.14e-3

Collision Energy (eV) = 36

Flow: 300 μ L/min

Analytical Standard Record

21J0014

Description:	PFAS - SAS N-MeFOSE 50ug/mL	Expires:	09/23/2026
Standard Type:	Analyte Spike	Prepared:	09/22/2021
Solvent:	MeOH	Prepared By:	Wellington Laboratories (Lot#:
Final Volume (mls):	1.2	Department:	PFAS N-MEFOSE0921M)
Vials:	1	Last Edit:	12/07/2021 16:06 by HGH

Analyte	Parent	CAS Number	Concentration	Units
N-MEFOSE		24448-09-7	50	ug/mL

Analytical Standard Record

21J0014

Description:	PFAS - SAS N-MeFOSE 50ug/mL	Expires:	09/23/2026
Standard Type:	Analyte Spike	Prepared:	09/22/2021
Solvent:	MeOH	Prepared By:	Wellington Laboratories (Lot#:
Final Volume (mls):	1.2	Department:	PFAS (N-MeFOSE0921M)
Vials:	1	Last Edit:	12/07/2021 16:06 by HGH

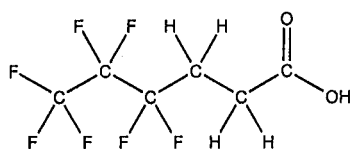
Analyte	Parent	CAS Number	Concentration	Units
N-MEFOSE		24448-09-7	50	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: FPrPA **LOT NUMBER:** FPrPA1020
COMPOUND: 3-Perfluoropropyl propanoic acid
STRUCTURE: **CAS #:** 356-02-5



MOLECULAR FORMULA: $C_8H_5F_7O_2$ **MOLECULAR WEIGHT:** 242.09
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/mL}$ **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 11/12/2020
EXPIRY DATE: (mm/dd/yyyy) 11/12/2025
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains <1% of the unsaturated 3:3 telomer acid ($C_8H_3F_7O_2$) as an impurity determined by ^{19}F NMR.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager **Date:** 11/27/2020
 (mm/dd/yyyy)

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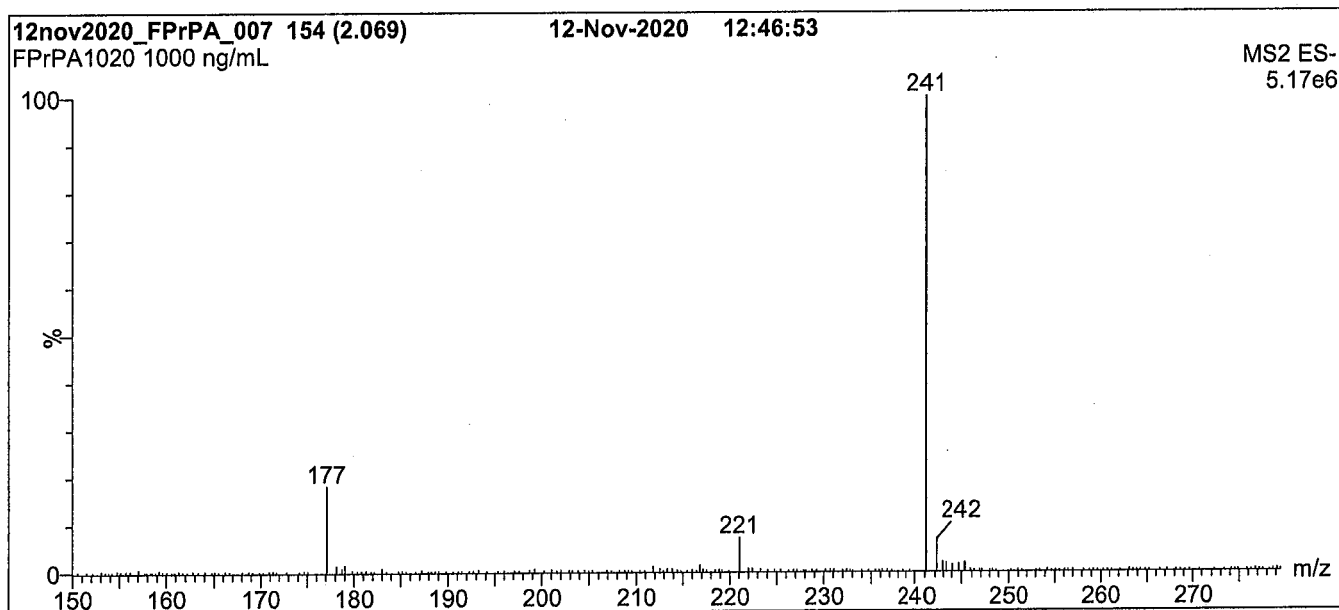
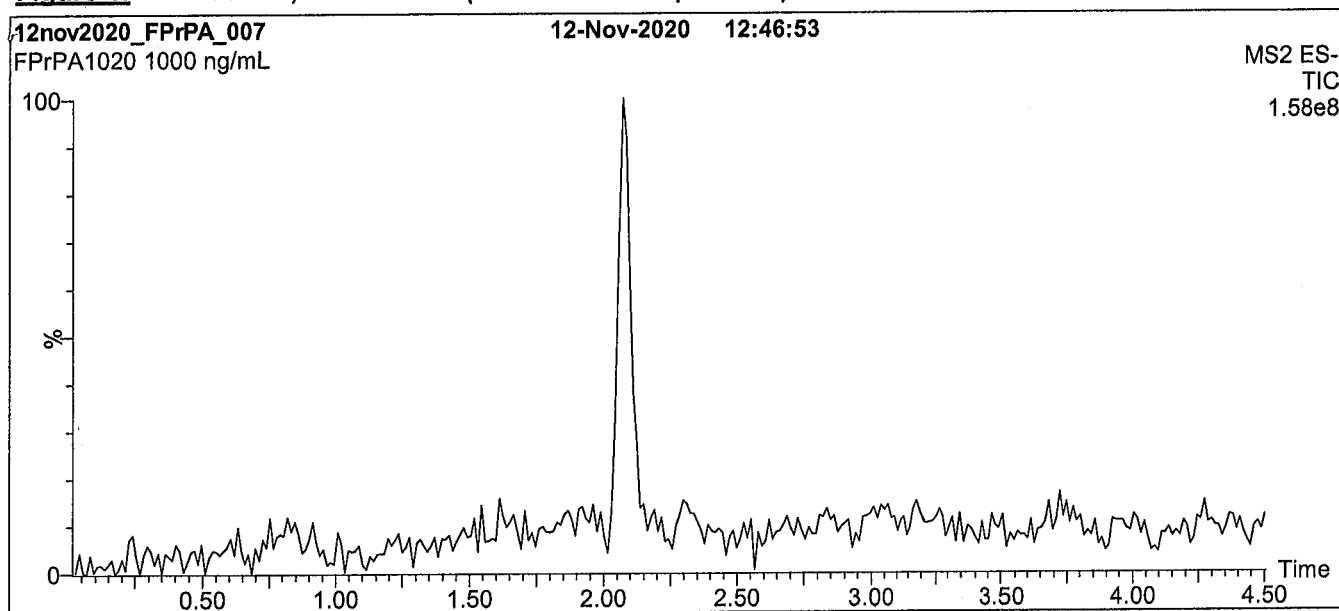
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Figure 1: FPrPA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 60% H₂O / 40% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for 2 min
before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (150 - 850 amu)

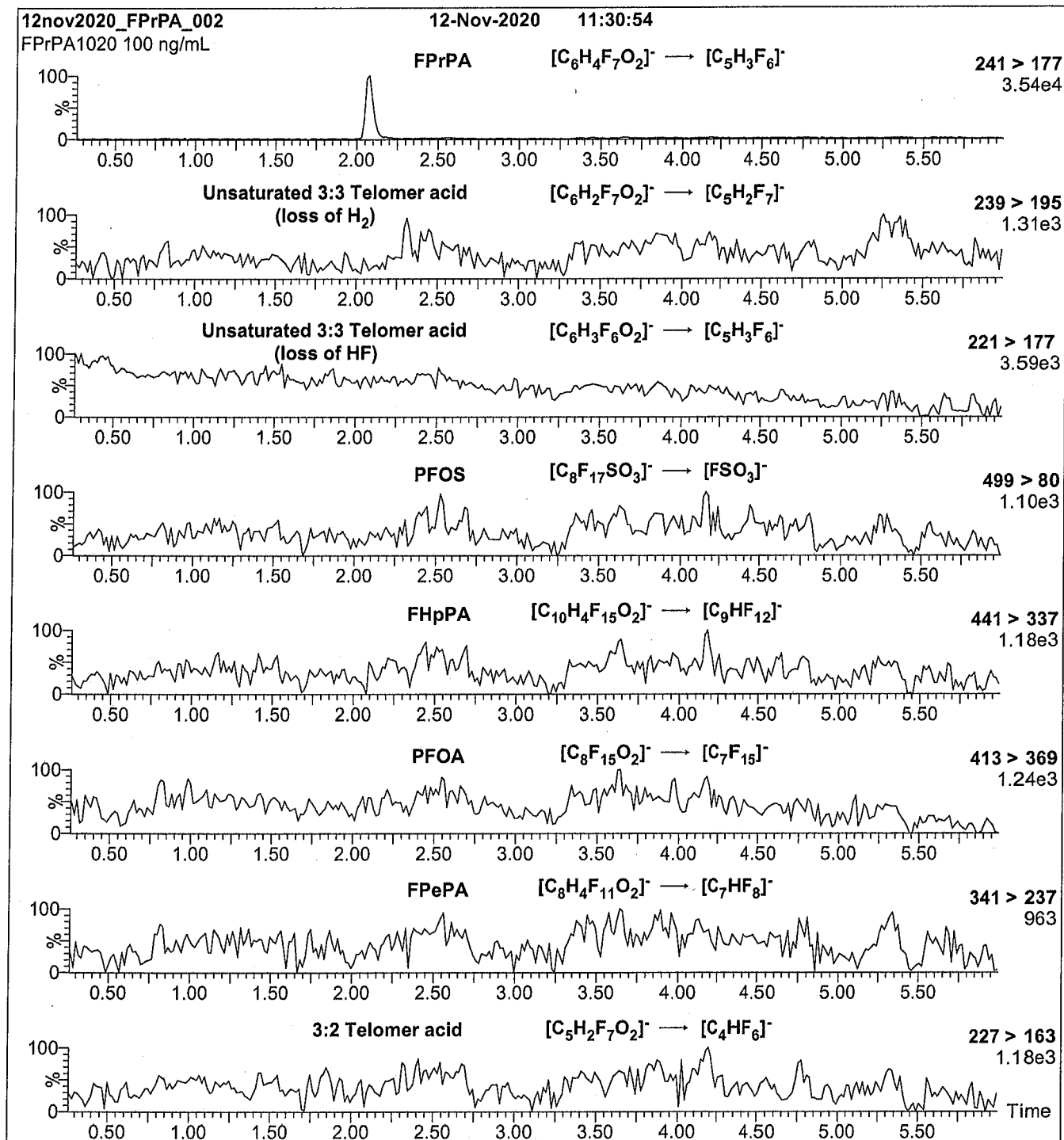
Source: Electrospray (negative)

Capillary Voltage (kV) = 0.50

Cone Voltage (V) = 18.50

Desolvation Temperature ($^{\circ}$ C) = 500

Desolvation Gas Flow (L/hr) = 1000

Figure 2: FPrPA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (FPrPA)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.49e-3

Collision Energy (eV) = 10

Analytical Standard Record

21L0004

Description:	PFAS - SAS 3:3FTA 50ug/mL	Expires:	06/05/2022
Standard Type:	Analyte Spike	Prepared:	12/07/2021
Solvent:	MeOH	Prepared By:	Hart Hedgpeth
Final Volume (mls):	1	Department:	PFAS
Vials:	1	Last Edit:	12/07/2021 16:03 by HGH
Comments:	3:3 FTCA 50.0ug/mL		

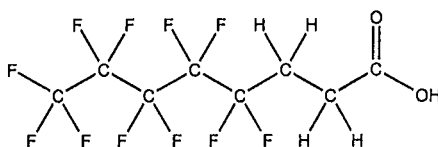
Analyte	Parent	CAS Number	Concentration	Units
3:3 FTA		113507-82-7	50	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: FPePA **LOT NUMBER:** FPePA1120
COMPOUND: 3-Perfluoropentyl propanoic acid
STRUCTURE: **CAS #:** 914637-49-3



MOLECULAR FORMULA: $C_8H_5F_{11}O_2$ **MOLECULAR WEIGHT:** 342.11
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/mL}$ **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 11/11/2020
EXPIRY DATE: (mm/dd/yyyy) 11/11/2025
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Figure 1: LC/MS Data (TIC and Mass Spectrum)
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EXPIRY DATE / PERIOD OF VALIDITY:

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LIMITED WARRANTY:

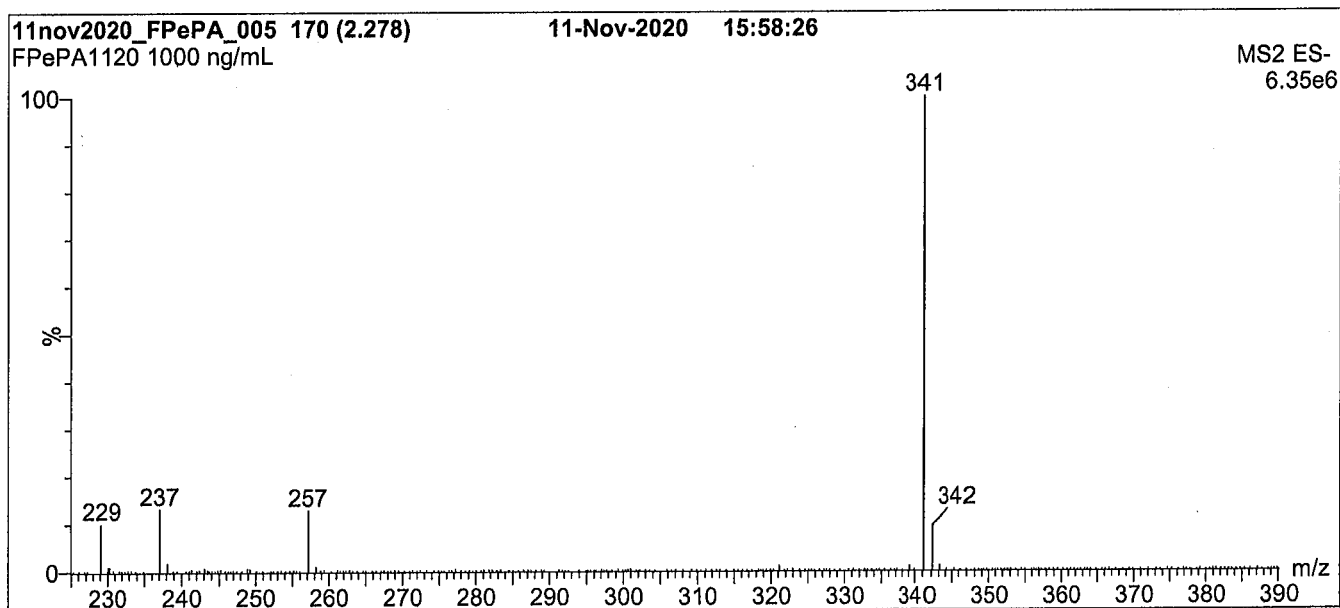
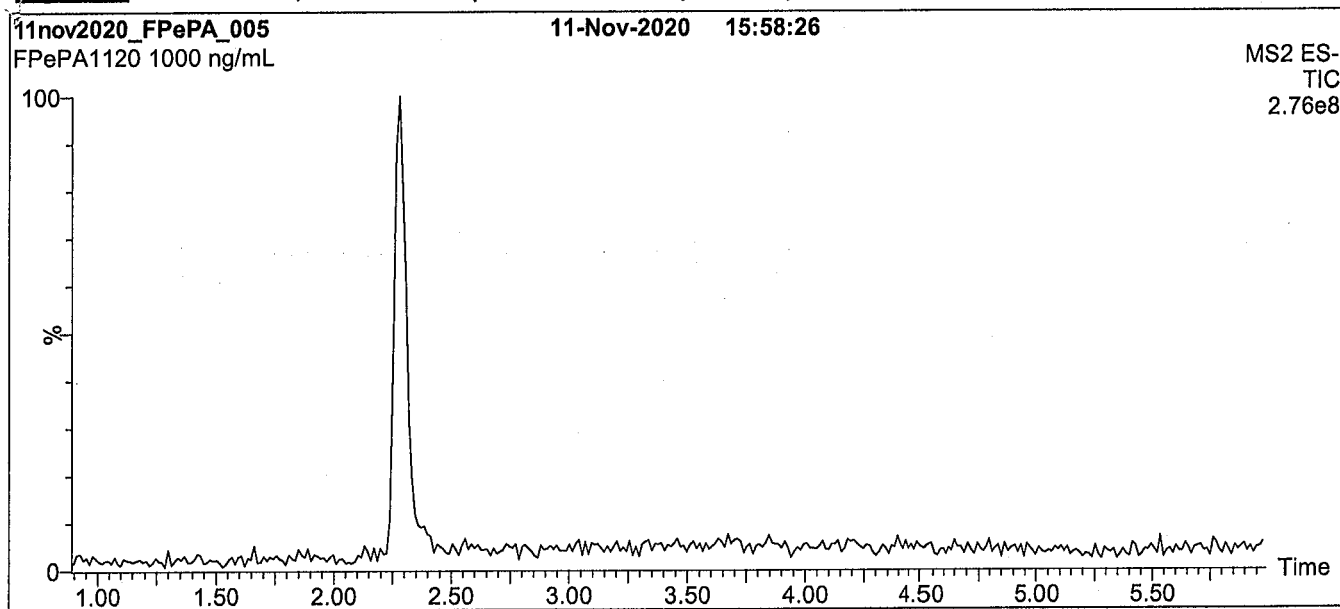
At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).



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Figure 1: FPePA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

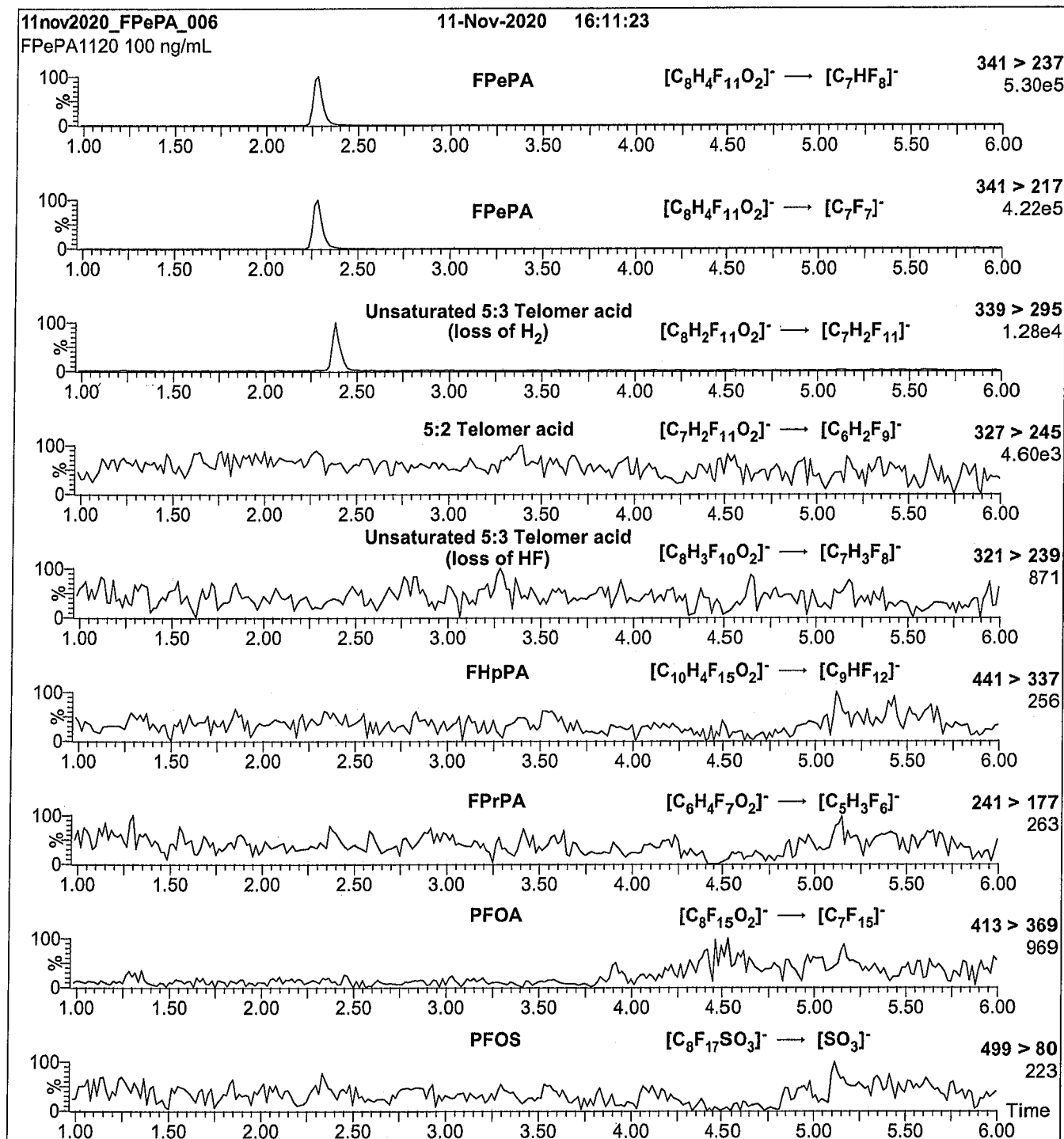
Mobile phase: Gradient
Start: 45% H₂O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 0.50
Cone Voltage (V) = 18.50
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: FPePA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (FPePA)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.24e-3

Collision Energy (eV) = 10

Analytical Standard Record

21L0005

Description:	PFAS - SAS 5:3FTA 50ug/mL	Expires:	06/05/2022
Standard Type:	Analyte Spike	Prepared:	12/07/2021
Solvent:	MeOH	Prepared By:	Hart Hedgpeth
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	12/07/2021 16:03 by HGH
Comments:	5:3 FTCA 50.0ug/mL		

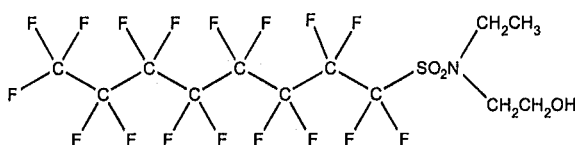
Analyte	Parent	CAS Number	Concentration	Units
5:3 FTA		914637-49-3	50	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-EtFOSE-M **LOT NUMBER:** NEtFOSE0921M
COMPOUND: 2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol
STRUCTURE: **CAS #:** 1691-99-2



MOLECULAR FORMULA: C₁₂H₁₀F₁₇NO₃S **MOLECULAR WEIGHT:** 571.25
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/22/2021 (HRGC/LRMS)
 09/23/2021 (LC/MS)
EXPIRY DATE: (mm/dd/yyyy) 09/23/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: HRGC/LRMS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- In order to see the molecular ion (adduct free), the LC mobile phase should be free of ammonium acetate buffer.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 10/20/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

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where x is expressed as a relative standard uncertainty of the individual parameter.

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LIMITED WARRANTY:

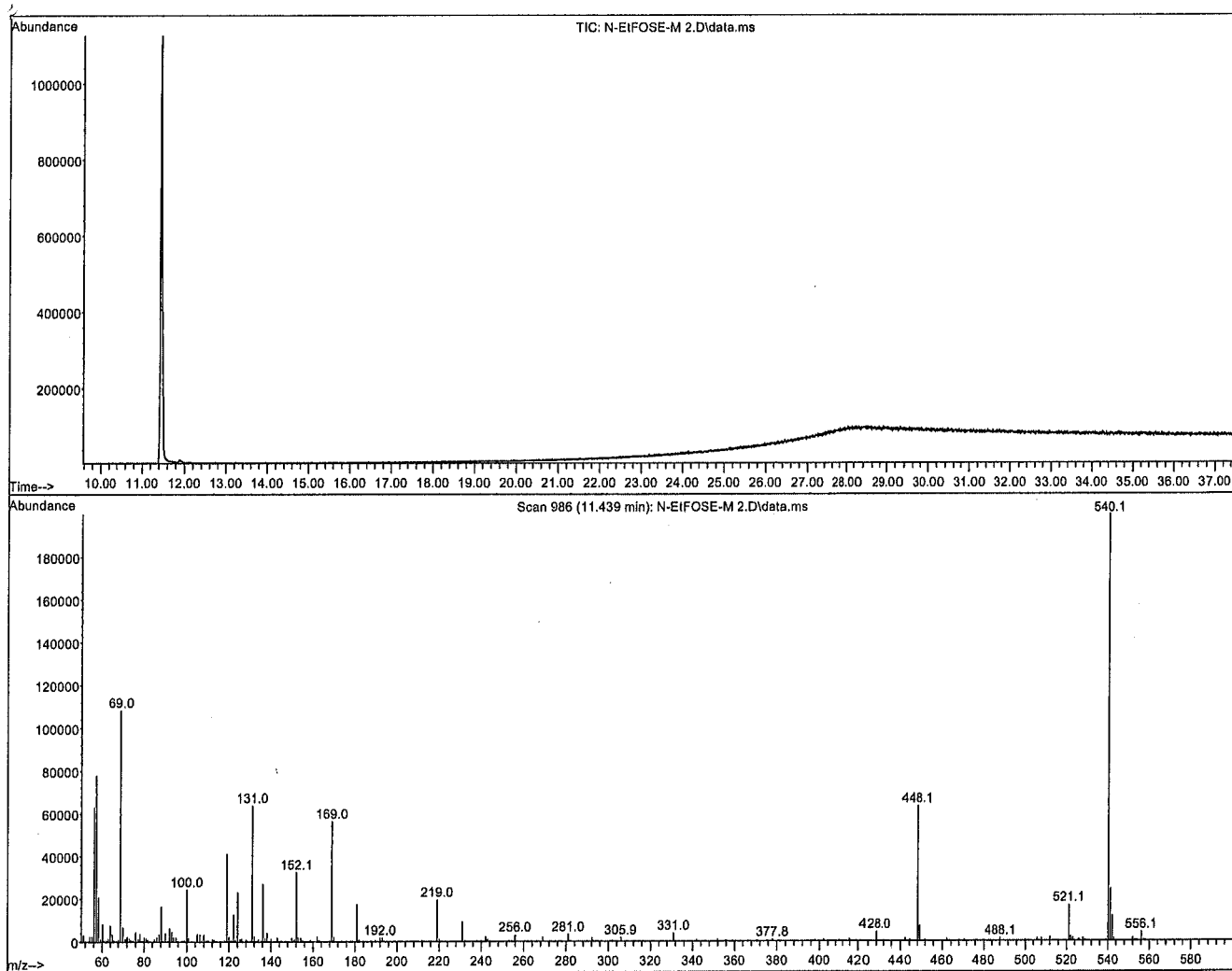
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QUALITY MANAGEMENT:

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Figure 1: N-EtFOSE-M; HRGC/LRMS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Agilent 7890A HRGC
 Agilent 5975C MSD

Chromatographic Conditions:

Column: 30 m DB-5 (0.25 mm id, 0.25 μ m film thickness) Agilent J&W

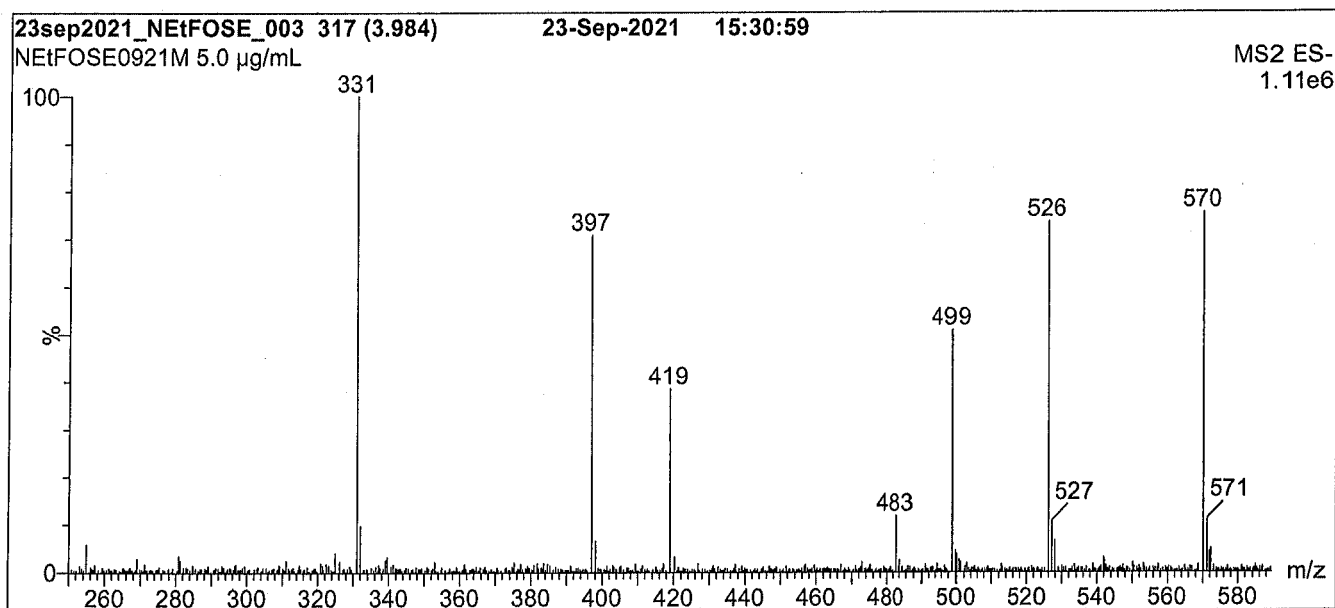
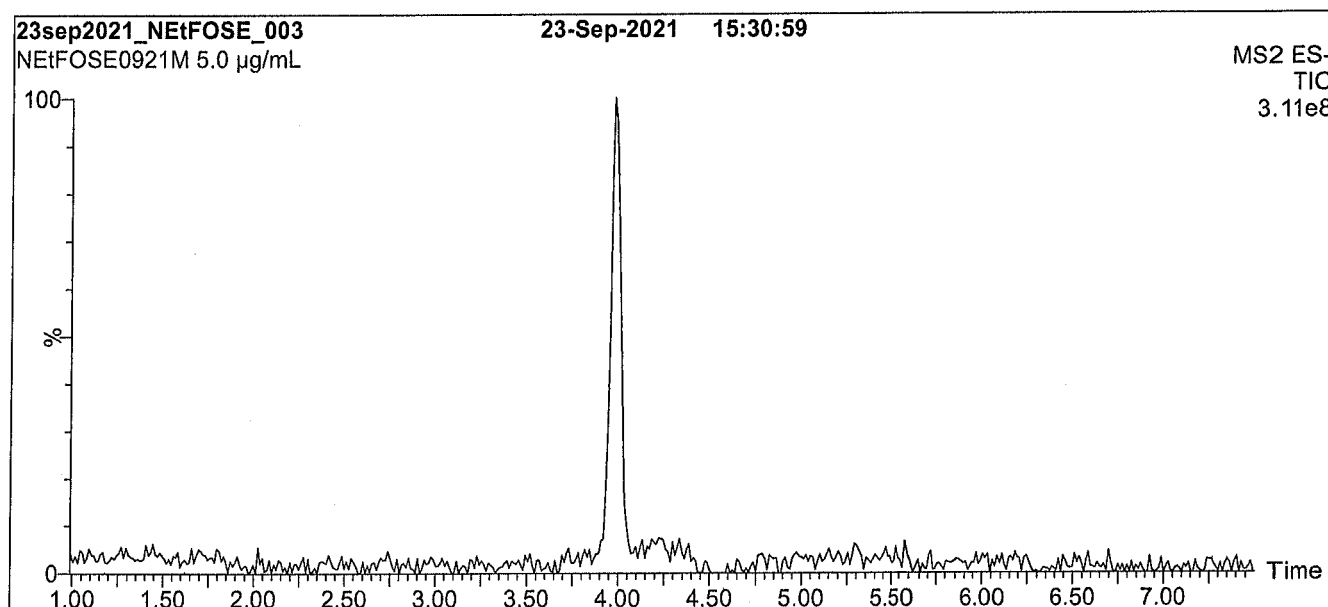
Flow: Constant at 1 mL/min

Injector: 250°C (Splitless Injection)

Oven: 100°C (5 min)
 10°C/min to 325°C
 325°C (10 min)

Ionization: EI+

Detector: 230°C
 Full Scan (50-1000 amu)

Figure 2: N-EtFOSE-M; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 2:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 µm, 2.1 x 100 mm

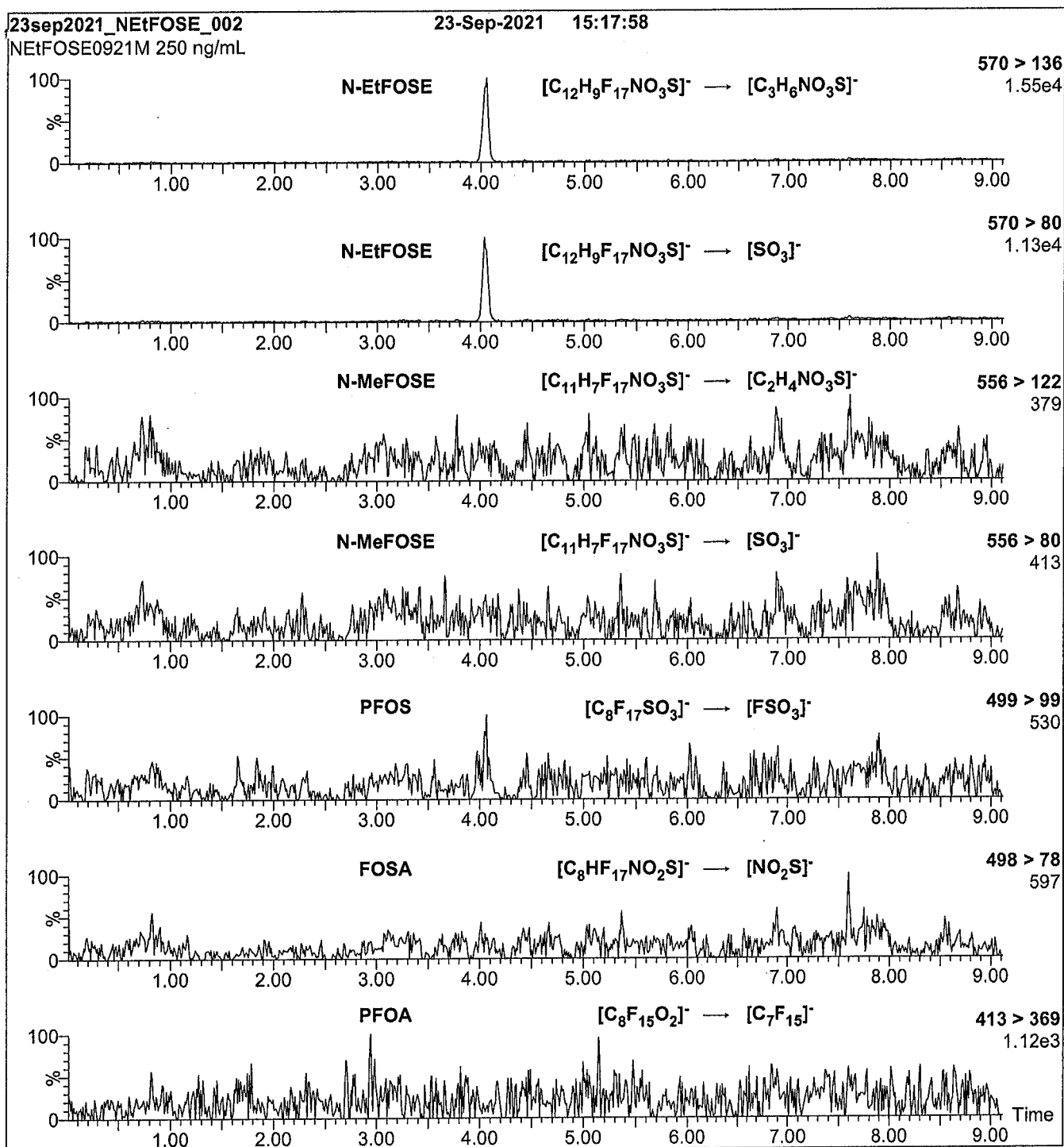
Mobile phase: Gradient
Start: 30% H₂O / 70% MeOH
Ramp to 90% organic over 8 min and hold for
1.5 min before returning to initial conditions in 1 min.
Time: 12 min

Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 65.00
Desolvation Temperature (°C) = 450
Desolvation Gas Flow (L/hr) = 1000

Figure 3: N-EtFOSE-M; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 3:**

Injection: On-column (N-EtFOSE-M)

Mobile phase: Same as Figure 2

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.14e-3

Collision Energy (eV) = 32

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t

Analytical Standard Record

21L0006

Description:	PFAS - SAS EtFOSE 50ug/mL	Expires:	06/05/2022
Standard Type:	Analyte Spike	Prepared:	12/07/2021
Solvent:	MeOH	Prepared By:	Hart Hedgpeth
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	12/07/2021 17:22 by HGH
Comments:	5:3 FTCA 50.0ug/mL		

Analyte	Parent	CAS Number	Concentration	Units
N-ETFOSE		1691-99-2	50	ug/mL

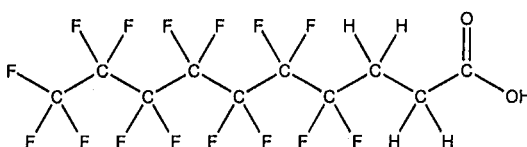


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: FHpPA **LOT NUMBER:** FHpPA1020
COMPOUND: 3-Perfluoroheptyl propanoic acid

STRUCTURE: **CAS #:** 812-70-4



MOLECULAR FORMULA: $C_{10}H_6F_{16}O_2$ **MOLECULAR WEIGHT:** 442.12
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/mL}$ **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 11/12/2020
EXPIRY DATE: (mm/dd/yyyy) 11/12/2025
RECOMMENDED STORAGE: Refrigerate ampoule

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 11/27/2020
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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LIMITED WARRANTY:

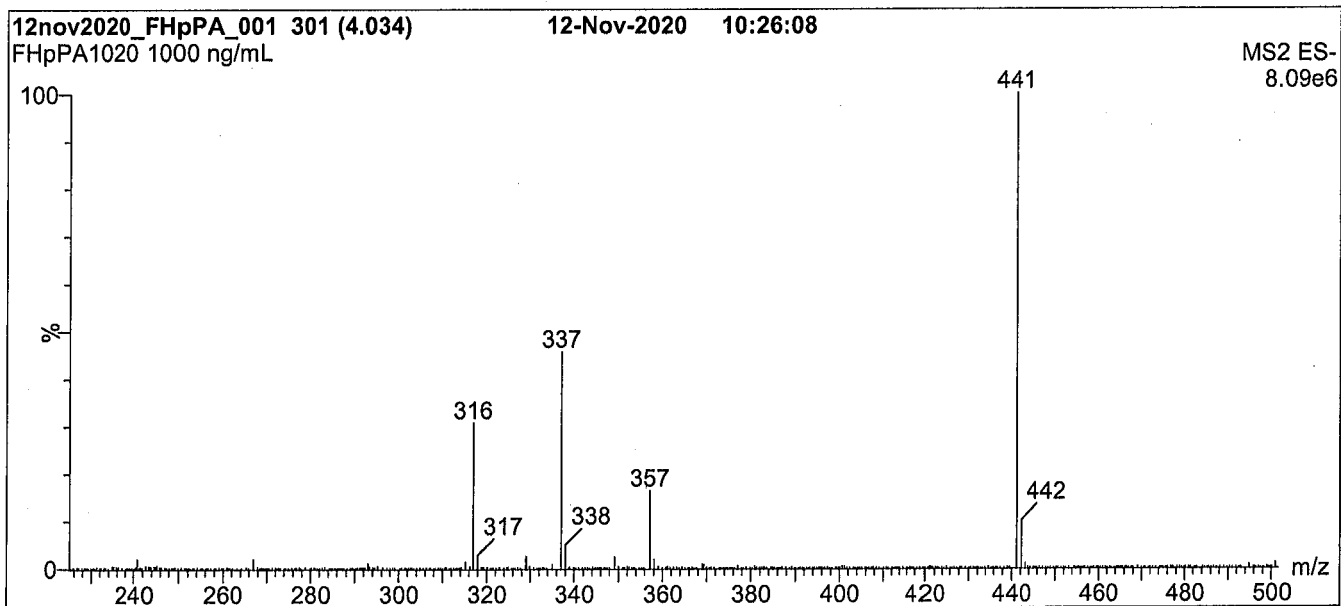
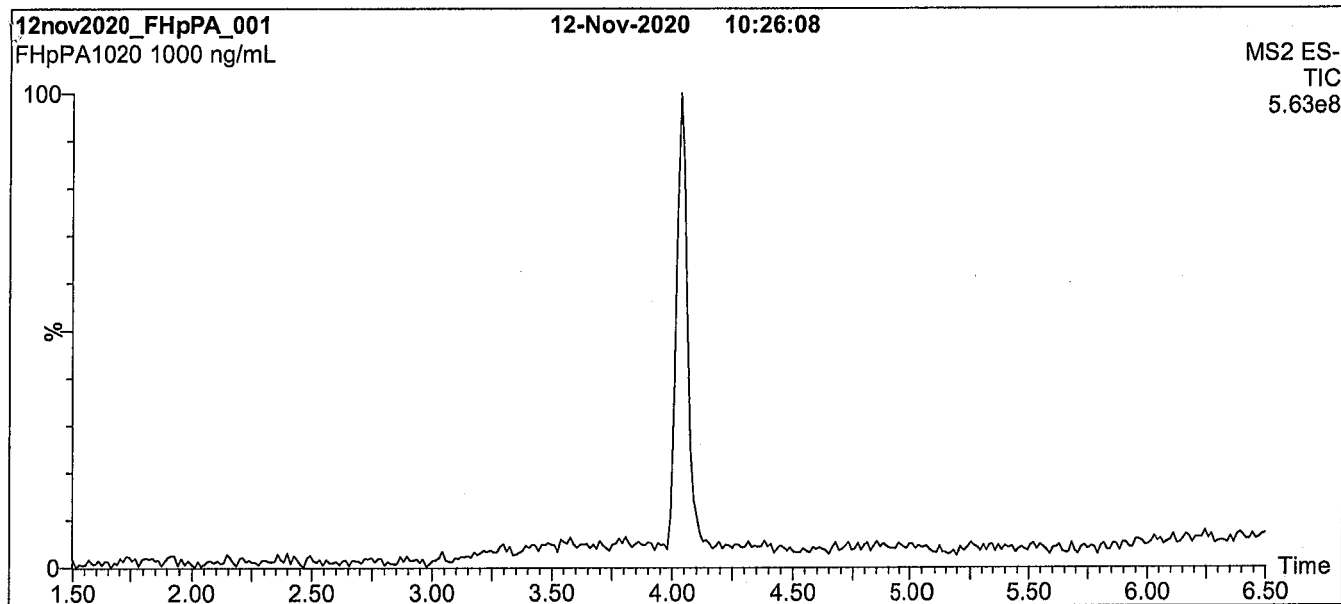
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Figure 1: FHpPA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

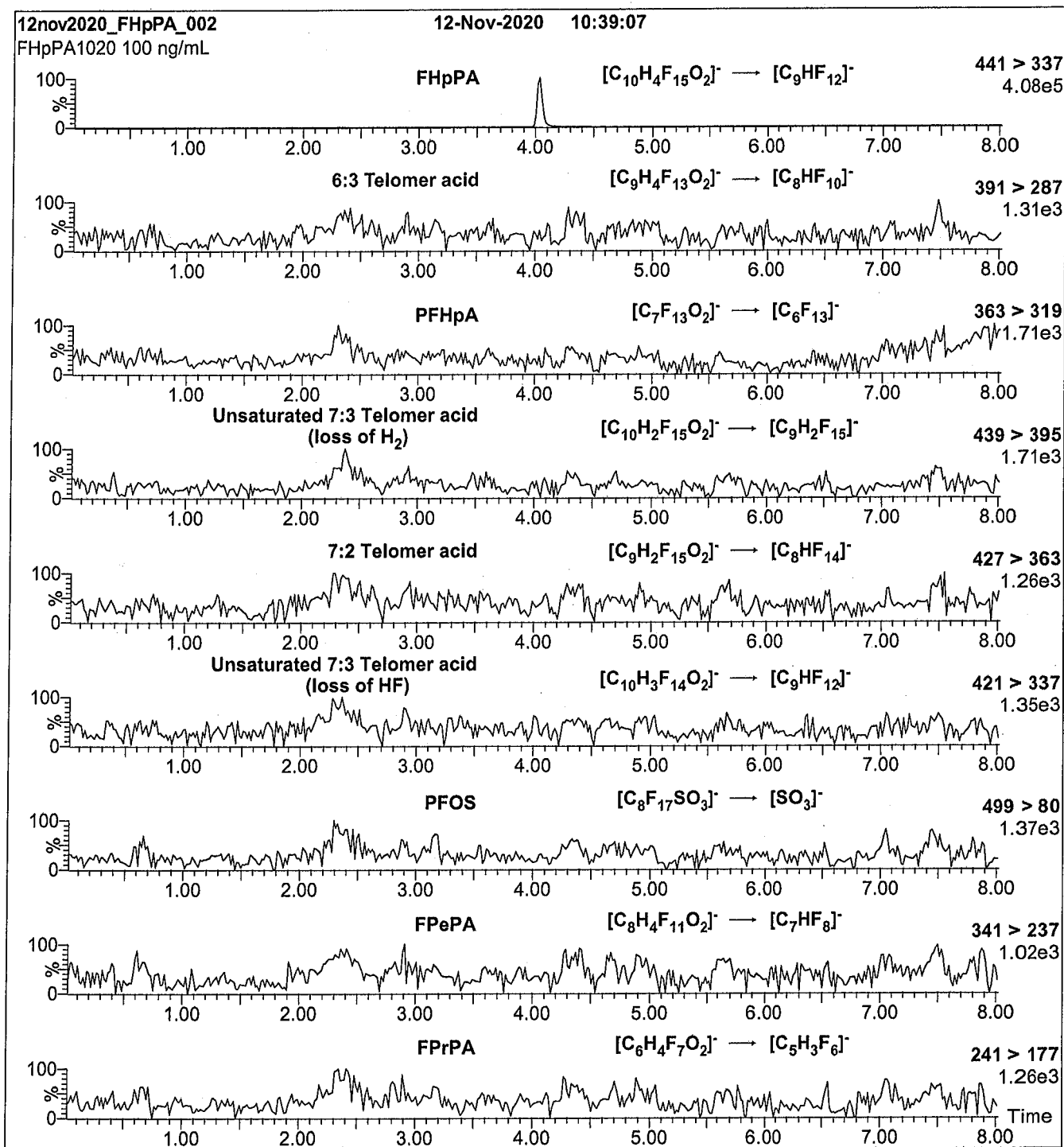
Mobile phase: Gradient
Start: 45% H₂O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 0.50
Cone Voltage (V) = 28.50
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: FHpPA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (FHpPA)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.41e-3

Collision Energy (eV) = 8

Analytical Standard Record

21L0007

Description:	PFAS - SAS 7:3FTA 50ug/mL	Expires:	06/05/2022
Standard Type:	Analyte Spike	Prepared:	12/07/2021
Solvent:	MeOH	Prepared By:	Hart Hedgpeth
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	12/07/2021 16:16 by HGH
Comments:	7:3 FTCA 50.0ug/mL		

Analyte	Parent	CAS Number	Concentration	Units
7:3 FTA		812-70-4	50	ug/mL



WELLINGTON LABORATORIES

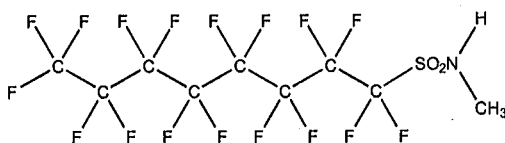
CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-MeFOSA-M
COMPOUND: N-methylperfluoro-1-octanesulfonamide

LOT NUMBER: NMeFOSA0721M

STRUCTURE:

CAS #: 31506-32-8



MOLECULAR FORMULA: $C_9H_4F_{17}NO_2S$
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/mL}$
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 08/03/2021
EXPIRY DATE: (mm/dd/yyyy) 08/03/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

MOLECULAR WEIGHT: 513.17
SOLVENT(S): Methanol

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

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Certified By: 
B.G. Chittim, General Manager

Date: 08/04/2021
(mm/dd/yyyy)

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519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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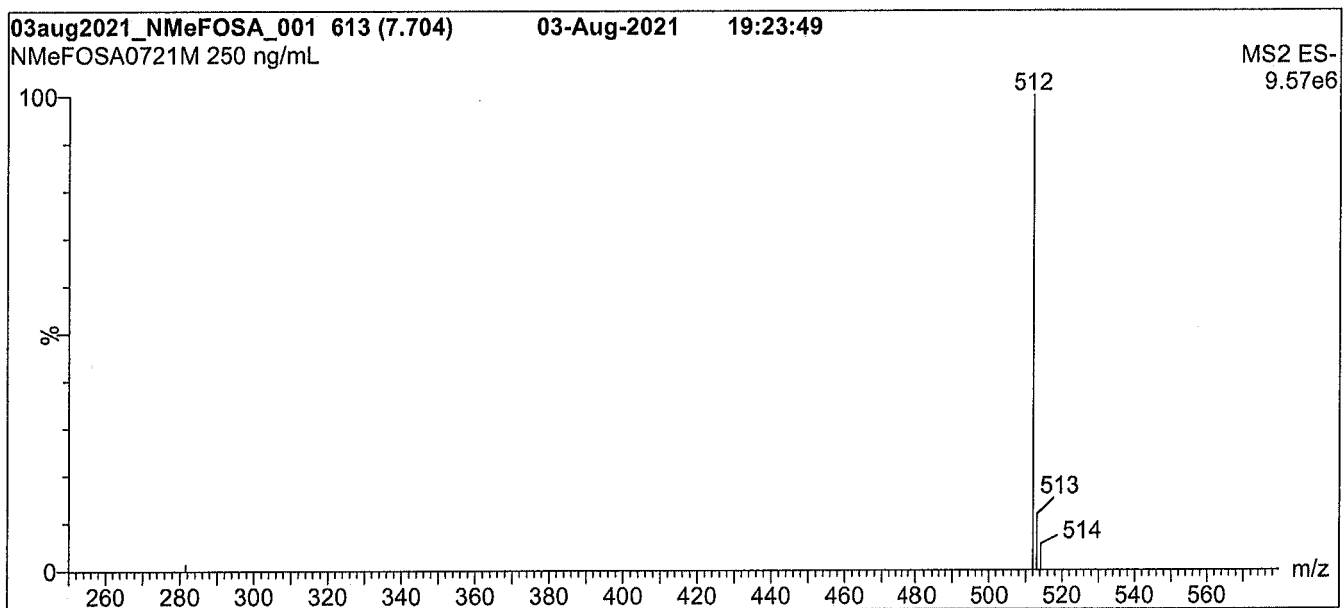
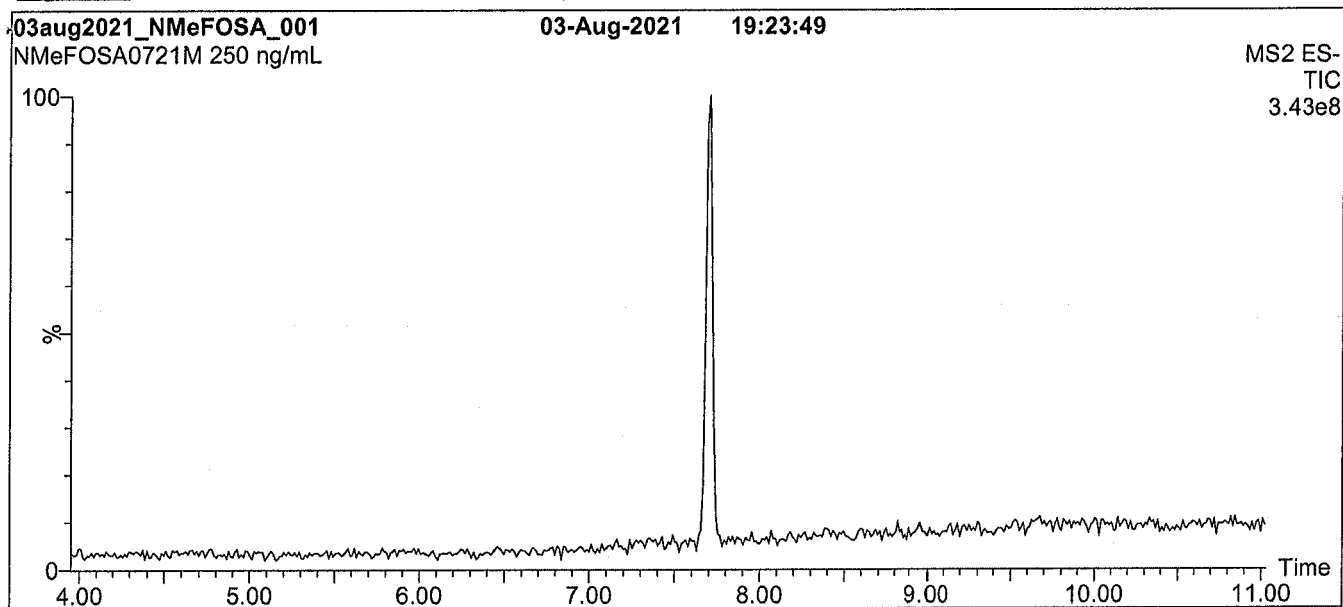
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Figure 1: N-MeFOSA-M; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

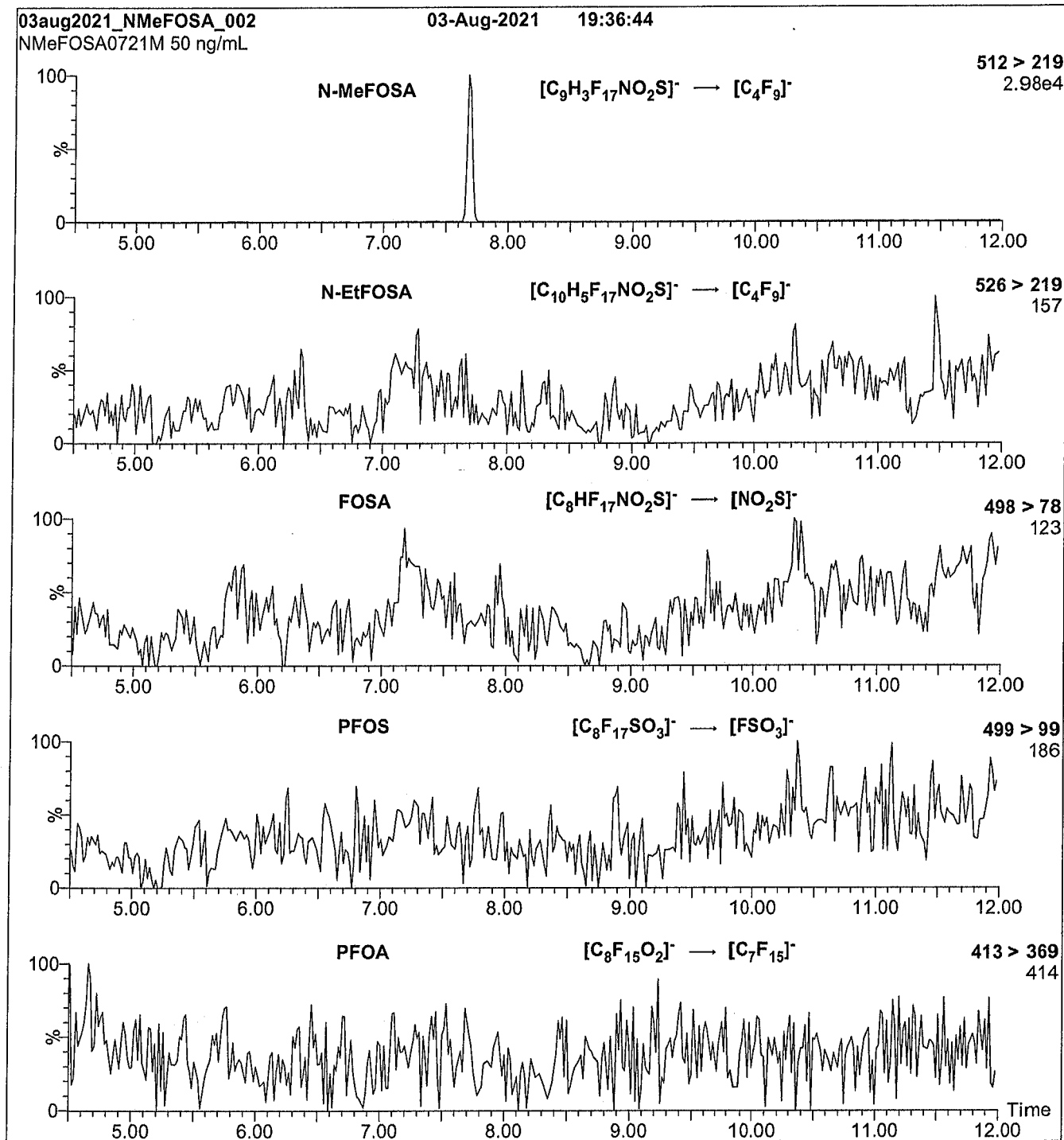
Mobile phase: Gradient
Start: 40% H₂O / 60% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 1.00
Cone Voltage (V) = 44.00
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: N-MeFOSA-M; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (N-MeFOSA-M)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.41e-3

Collision Energy (eV) = 24

Analytical Standard Record

21L0008

Description:	PFAS - SAS N-MeFOSA 50ug/mL	Expires:	06/05/2022
Standard Type:	Analyte Spike	Prepared:	12/07/2021
Solvent:	MeOH	Prepared By:	Hart Hedgpeth
Final Volume (mls):	1	Department:	PFAS
Vials:	1	Last Edit:	12/07/2021 16:18 by HGH

Analyte	Parent	CAS Number	Concentration	Units
N-MEFOSA		31506-32-8	50	ug/mL

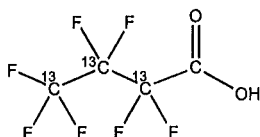


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: M3PFBA **LOT NUMBER:** M3PFBA0721
COMPOUND: Perfluoro-n-(2,3,4-¹³C₃)butanoic acid

STRUCTURE: **CAS #:** Not available



MOLECULAR FORMULA: ¹³C₃¹²CHF₇O₂ **MOLECULAR WEIGHT:** 217.02
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99%¹³C
 (2,3,4-¹³C₃)
LAST TESTED: (mm/dd/yyyy) 08/19/2021
EXPIRY DATE: (mm/dd/yyyy) 08/19/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.
- Contains ~0.2% of perfluoro-n-(¹³C₃)propanoic acid and also contains ~1.0% of perfluoro-n-(1,2,3,4-¹³C₄)butanoic acid due to the naturally occurring isotopic abundance of ¹³C in the unlabelled carbon atom.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 08/25/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

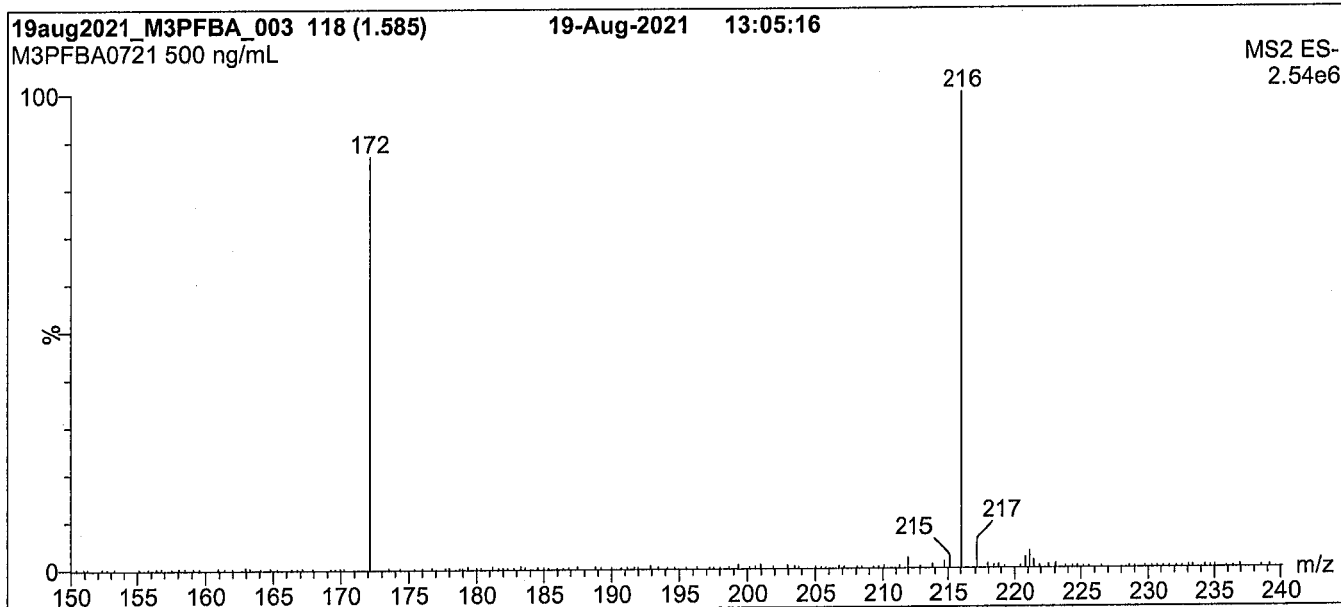
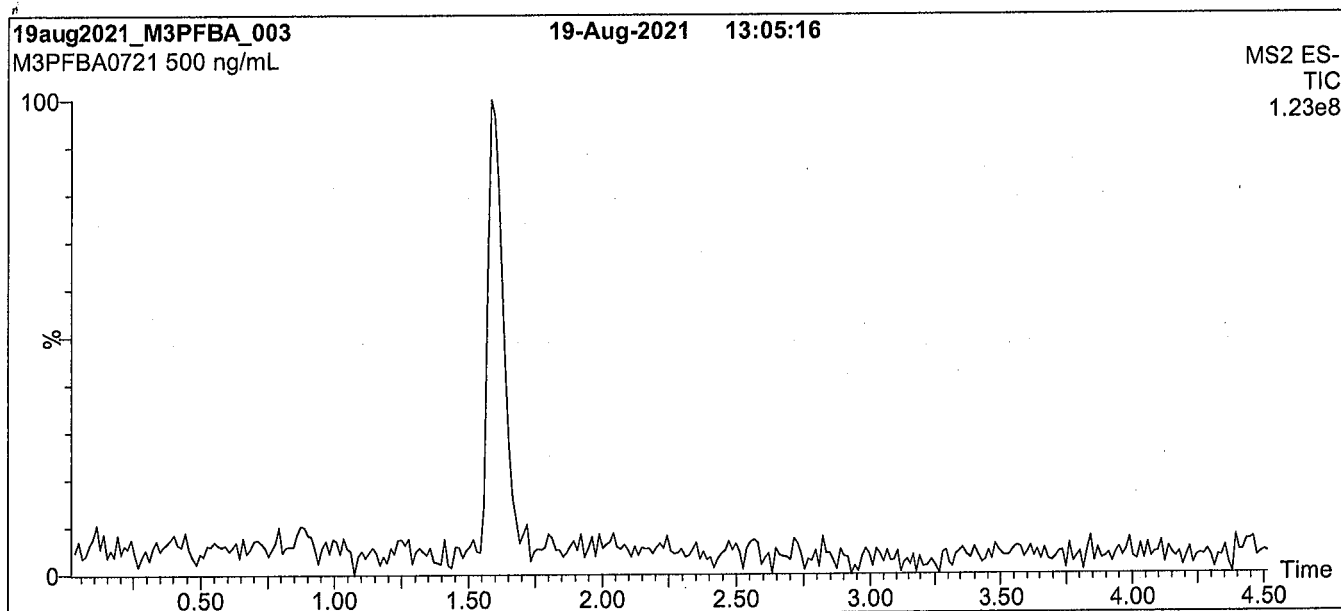
At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: M3PFBA; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 60% H₂O / 40% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.5 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (150 - 850 amu)

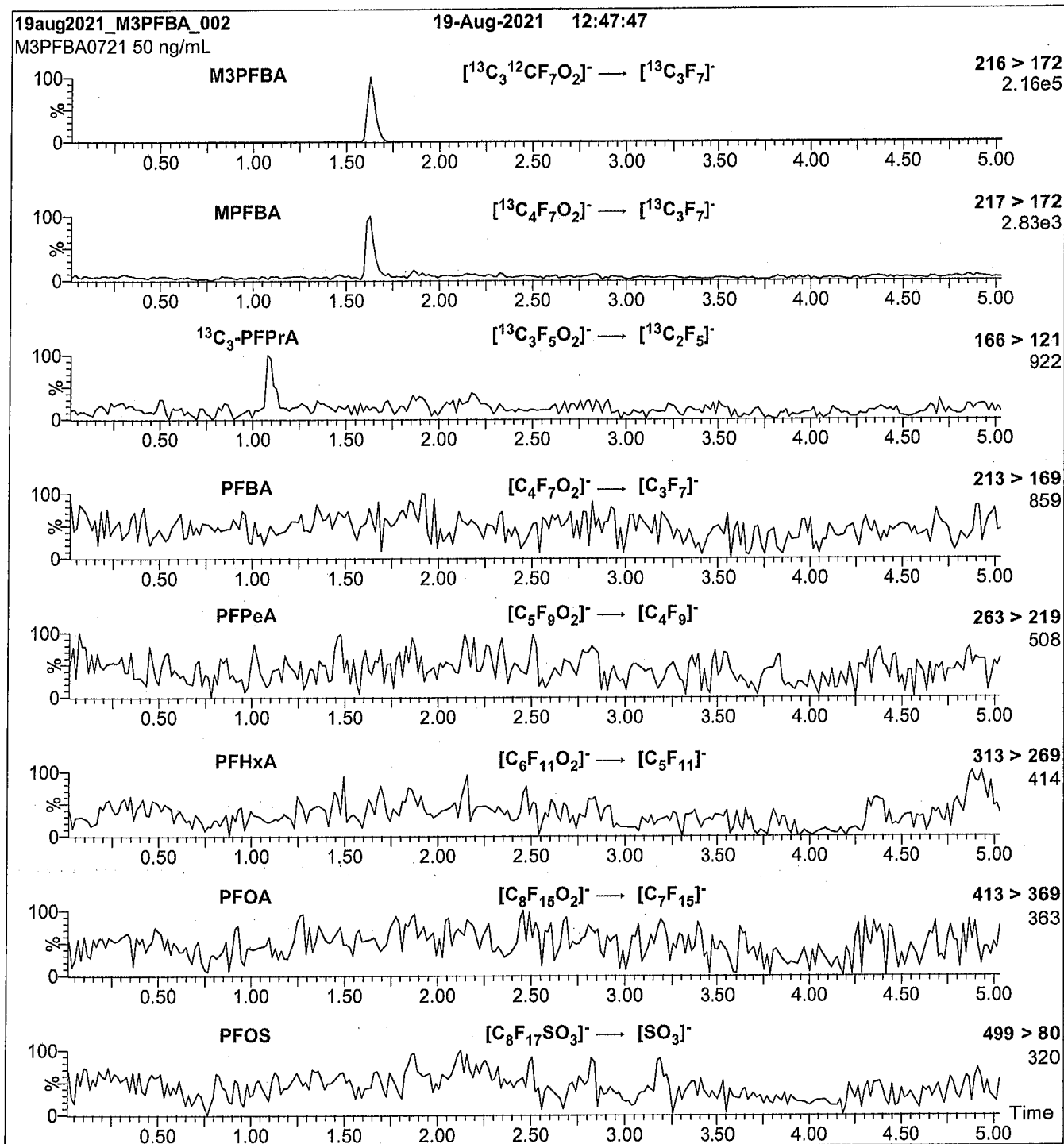
Source: Electrospray (negative)

Capillary Voltage (kV) = 2.00

Cone Voltage (V) = 10.00

Desolvation Temperature ($^{\circ}$ C) = 500

Desolvation Gas Flow (L/hr) = 1000

Figure 2: M3PFBA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (M3PFBA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$ **MS Parameters:**

Collision Gas (mbar) = 3.45e-3

Collision Energy (eV) = 8

Analytical Standard Record

22A0116

Description:	PFAS - IIS M3PFBA 50ug/mL	Expires:	08/19/2026
Standard Type:	Analyte Spike	Prepared:	08/19/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:48 by HGH

Analyte	Parent	CAS Number	Concentration	Units
13C3-PFBA		13C3-PFBA	50	ug/mL

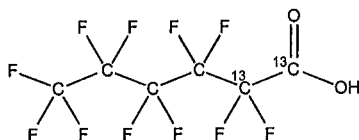


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFHxA **LOT NUMBER:** MPFHxA0921
COMPOUND: Perfluoro-n-(1,2-¹³C₂)hexanoic acid

STRUCTURE: **CAS #:** 960315-47-3



MOLECULAR FORMULA: ¹³C₂¹²C₄HF₁₁O₂ **MOLECULAR WEIGHT:** 316.04
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
 (1,2-¹³C₂)
LAST TESTED: (mm/dd/yyyy) 10/04/2021
EXPIRY DATE: (mm/dd/yyyy) 10/04/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____

B.G. Chittim, General Manager

Date: 10/22/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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HANDLING:

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SYNTHESIS / CHARACTERIZATION:

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UNCERTAINTY:

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$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

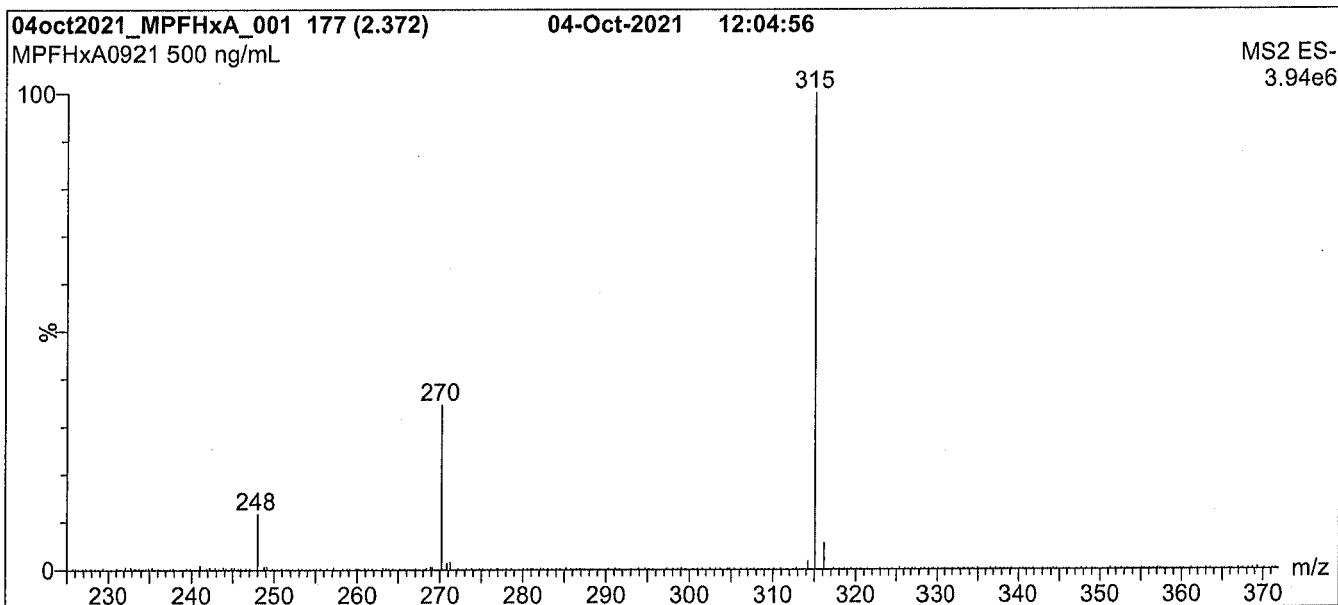
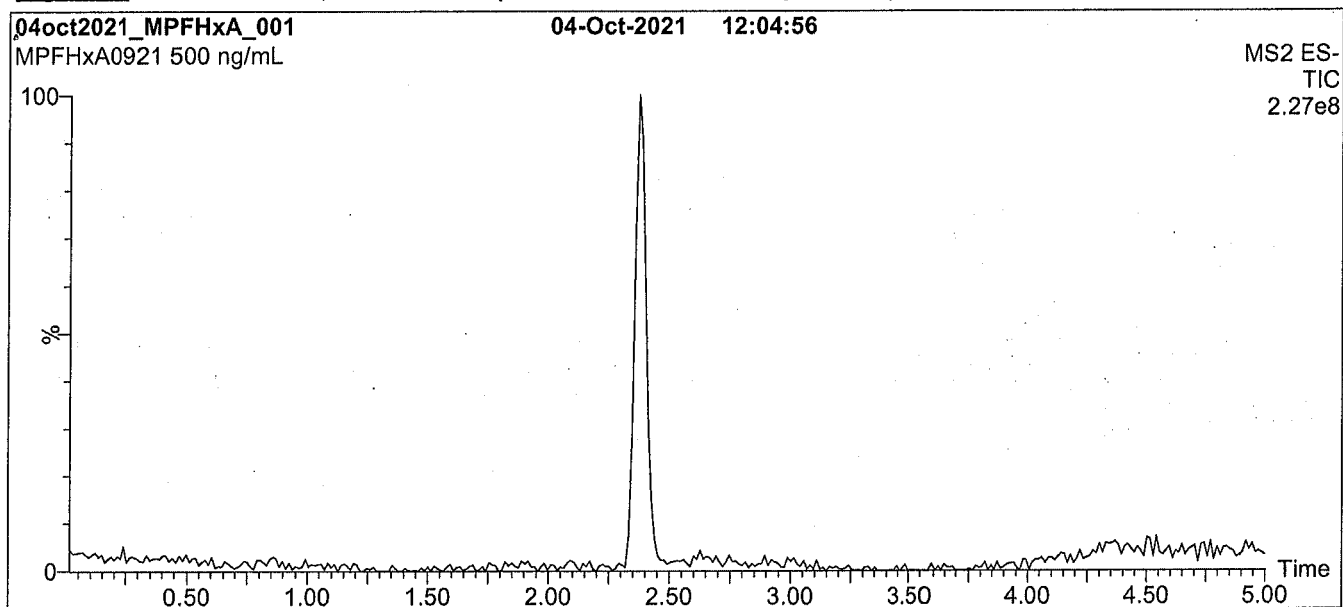
At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

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Figure 1: MPFHxA; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

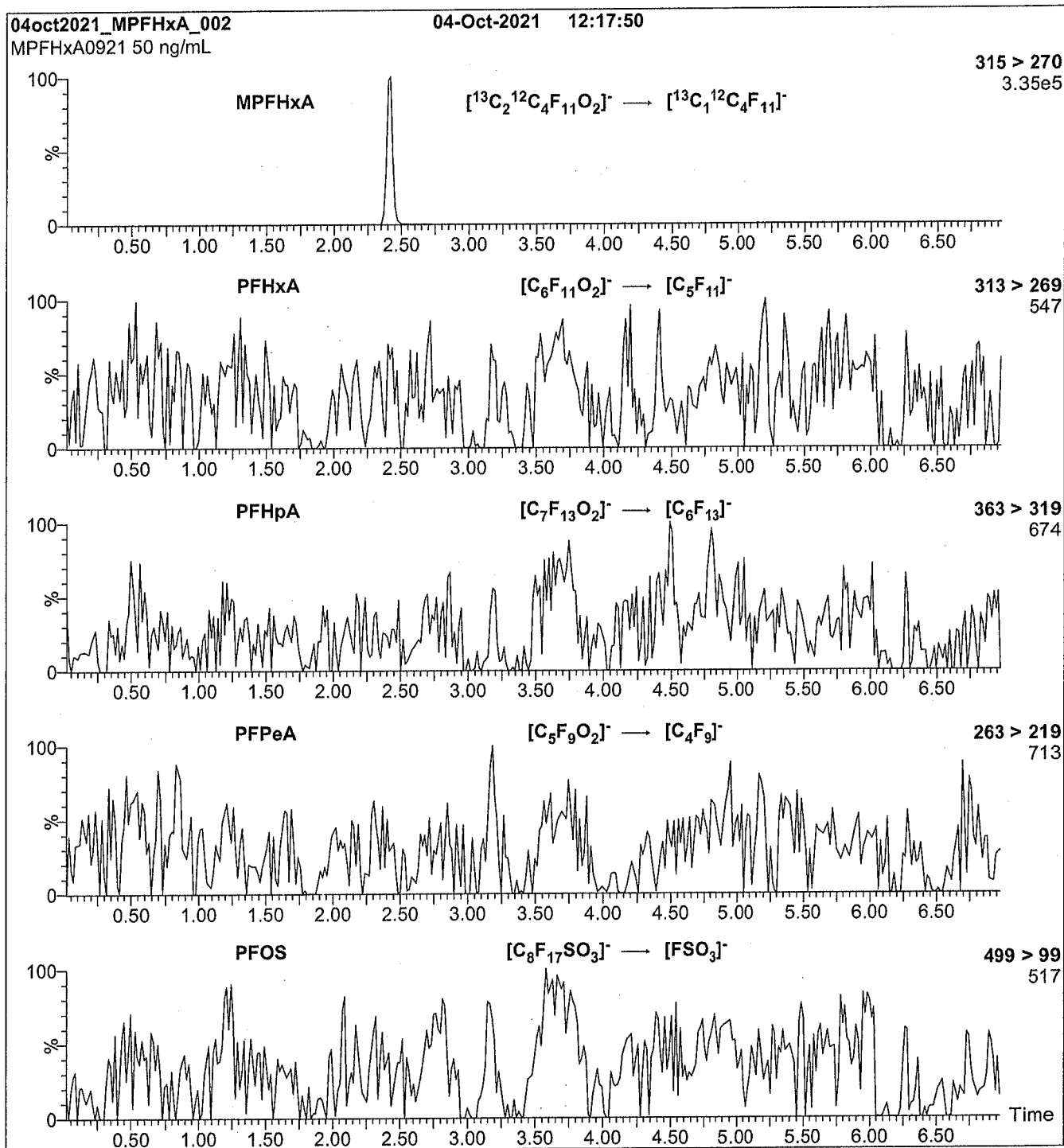
Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 1 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: MPFHxA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (MPFHxA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$ **MS Parameters:**

Collision Gas (mbar) = 3.31e-3

Collision Energy (eV) = 8

Analytical Standard Record

22A0117

Description:	PFAS - IIS MPFHxA 50ug/mL	Expires:	10/04/2026
Standard Type:	Analyte Spike	Prepared:	10/04/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:48 by HGH

Analyte	Parent	CAS Number	Concentration	Units
13C2-PFHxA		13C2-PFHxA	50	ug/mL

Analytical Standard Record

22A0117

Description:	PFAS - IIS MPFHxA 50ug/mL	Expires:	10/04/2026
Standard Type:	Analyte Spike	Prepared:	10/04/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:48 by HGH

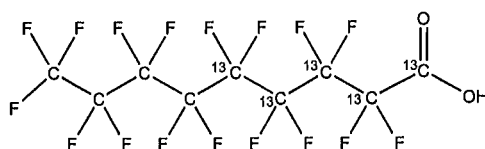
Analyte	Parent	CAS Number	Concentration	Units
13C2-PFHxA		13C2-PFHxA	50	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFNA **LOT NUMBER:** MPFNA1021
COMPOUND: Perfluoro-n-(1,2,3,4,5-¹³C₅)nonanoic acid
STRUCTURE: **CAS #:** 960315-49-5



MOLECULAR FORMULA: $^{13}\text{C}_5^{12}\text{C}_4\text{HF}_{17}\text{O}_2$ **MOLECULAR WEIGHT:** 469.04
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
 (1,2,3,4,5-¹³C₅)
LAST TESTED: (mm/dd/yyyy) 10/29/2021
EXPIRY DATE: (mm/dd/yyyy) 10/29/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 11/01/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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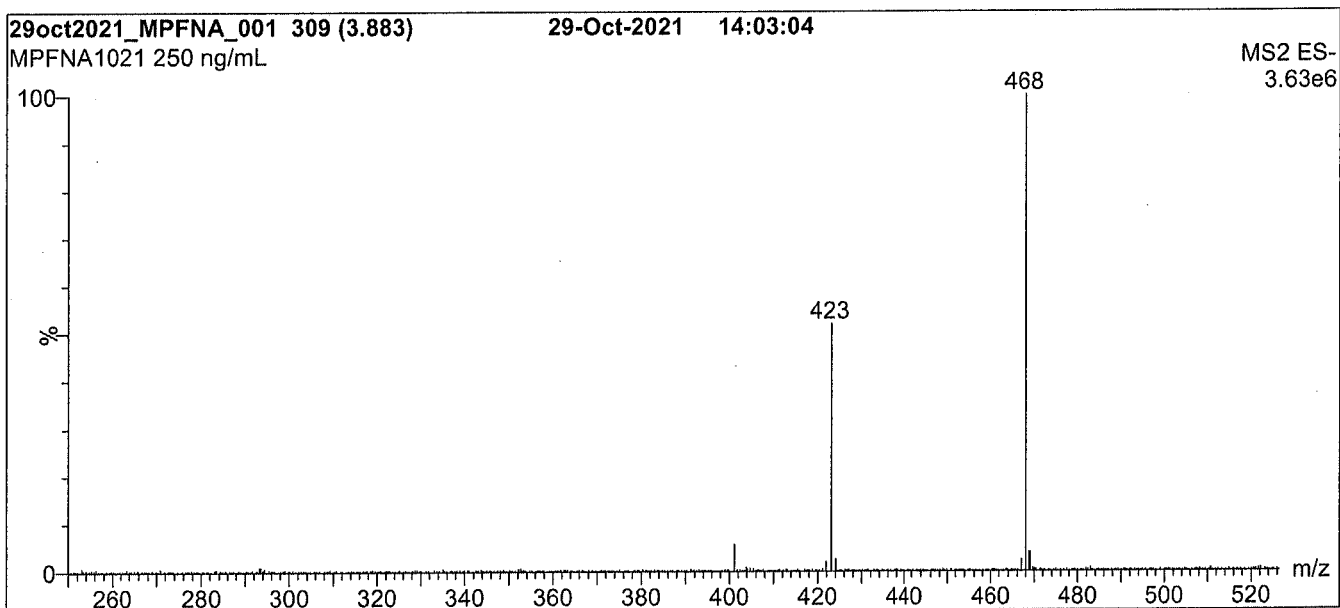
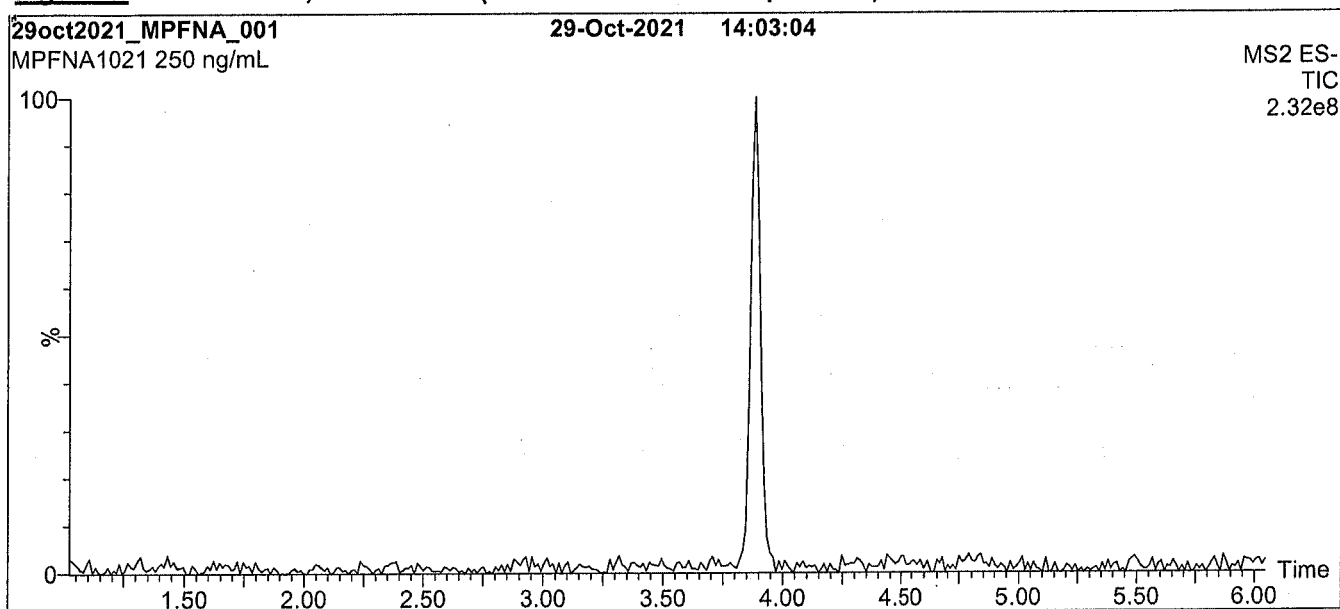
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Figure 1: MPFNA; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 40% H₂O / 60% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

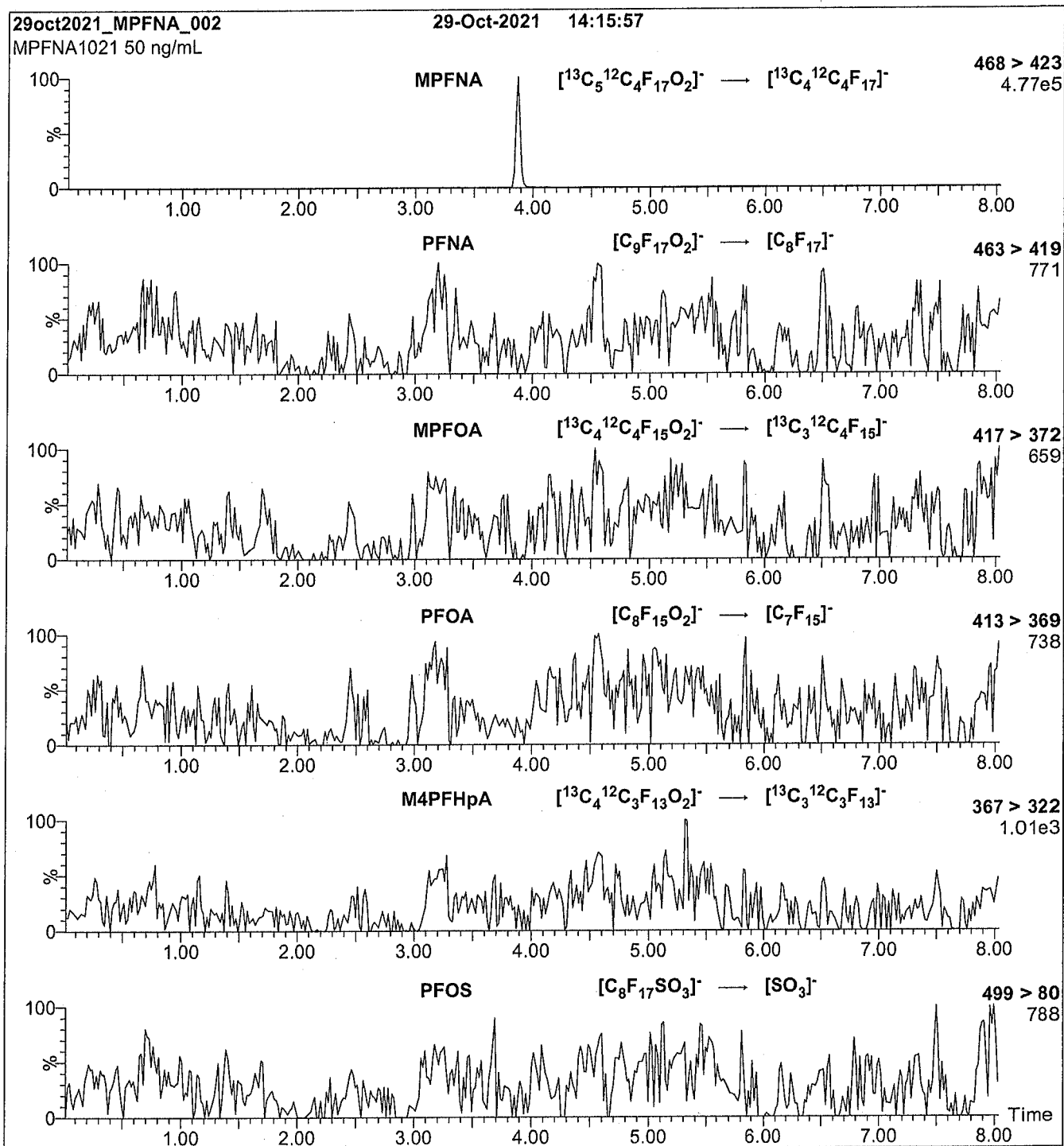
Source: Electrospray (negative)

Capillary Voltage (kV) = 2.00

Cone Voltage (V) = 10.00

Desolvation Temperature (°C) = 500

Desolvation Gas Flow (L/hr) = 1000

Figure 2: MPFNA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (MPFNA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$ **MS Parameters:**

Collision Gas (mbar) = 3.16e-3

Collision Energy (eV) = 10

Analytical Standard Record

22A0118

Description:	PFAS - IIS MPFNA 50ug/mL	Expires:	10/29/2026
Standard Type:	Analyte Spike	Prepared:	10/29/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:48 by HGH

Analyte	Parent	CAS Number	Concentration	Units
13C5-PFNA		13C5-PFNA	50	ug/mL

Analytical Standard Record

22A0118

Description:	PFAS - IIS MPFNA 50ug/mL	Expires:	10/29/2026
Standard Type:	Analyte Spike	Prepared:	10/29/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:48 by HGH

Analyte	Parent	CAS Number	Concentration	Units
13C5-PFNA		13C5-PFNA	50	ug/mL

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where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

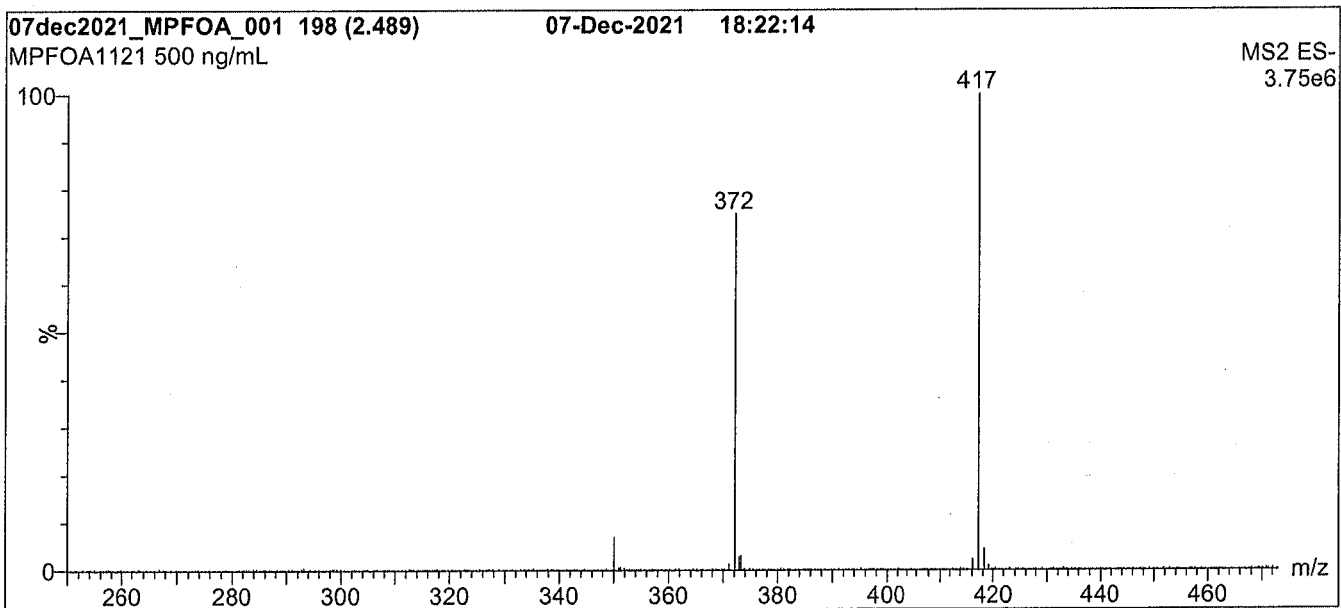
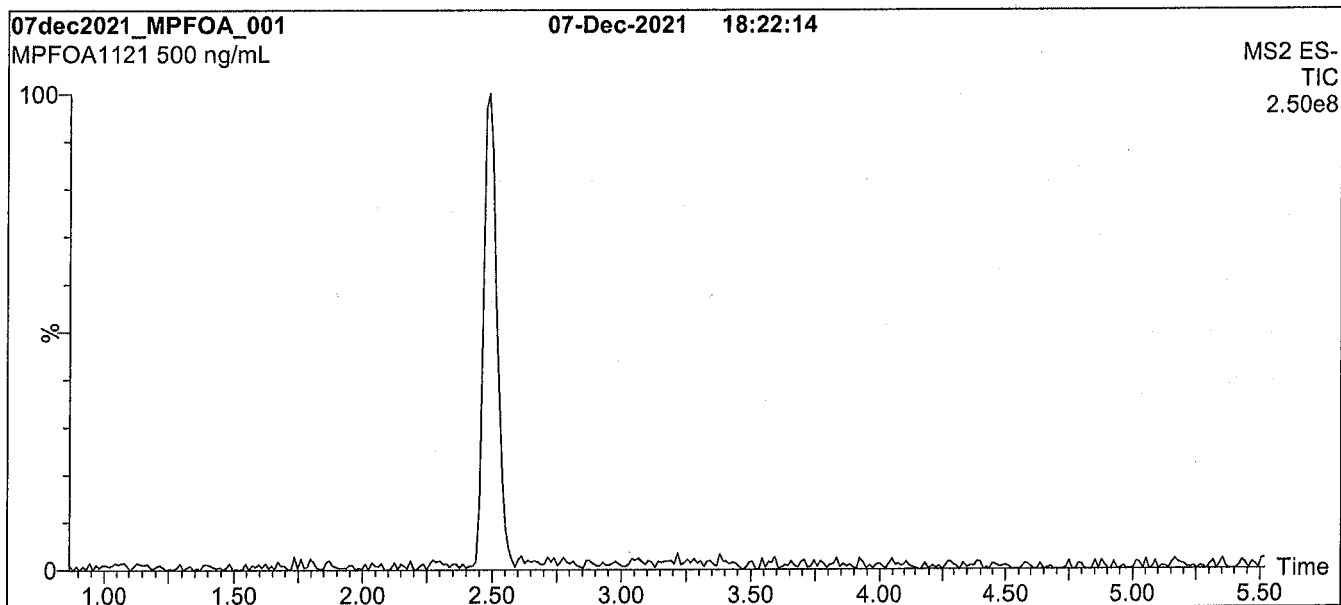
At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: MPFOA; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

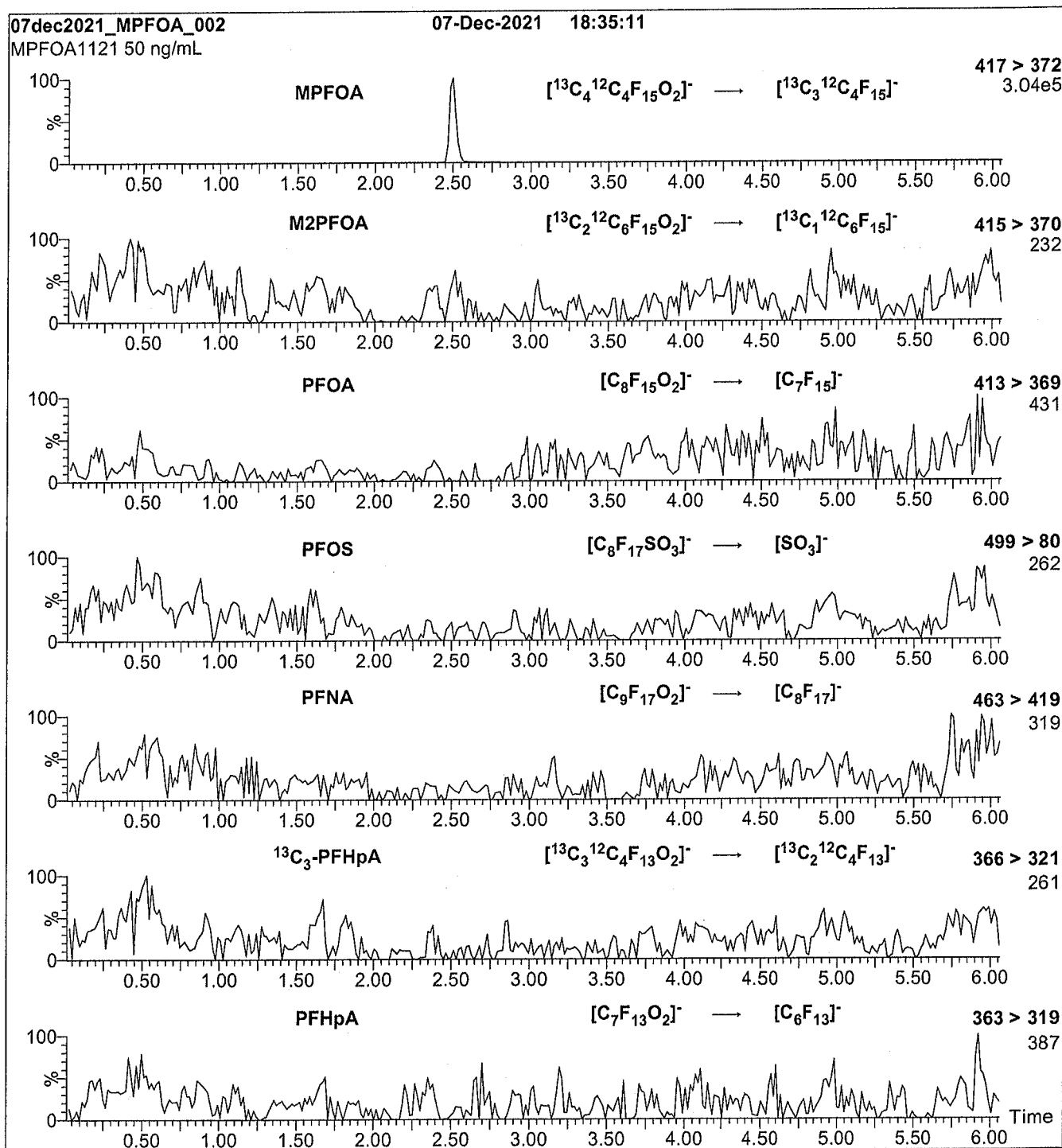
Mobile phase: Gradient
Start: 40% H₂O / 60% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for 2 min
before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: MPFOA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (MPFOA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$ **MS Parameters:**

Collision Gas (mbar) = 3.39e-3

Collision Energy (eV) = 8

Analytical Standard Record

22A0119

Description:	PFAS - IIS MPFOA 50ug/mL	Expires:	12/07/2026
Standard Type:	Analyte Spike	Prepared:	12/07/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:48 by HGH

Analyte	Parent	CAS Number	Concentration	Units
13C4-PFOA		13C4-PFOA	50	ug/mL

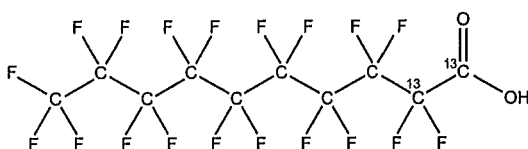


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFDA **LOT NUMBER:** MPFDA1221
COMPOUND: Perfluoro-n-(1,2-¹³C₂)decanoic acid

STRUCTURE: **CAS #:** 960315-50-8



MOLECULAR FORMULA: ¹³C₂¹²C₈HF₁₉O₂ **MOLECULAR WEIGHT:** 516.07
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
 Water (<1%)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
 (1,2-¹³C₂)
LAST TESTED: (mm/dd/yyyy) 12/08/2021
EXPIRY DATE: (mm/dd/yyyy) 12/08/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 12/13/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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LIMITED WARRANTY:

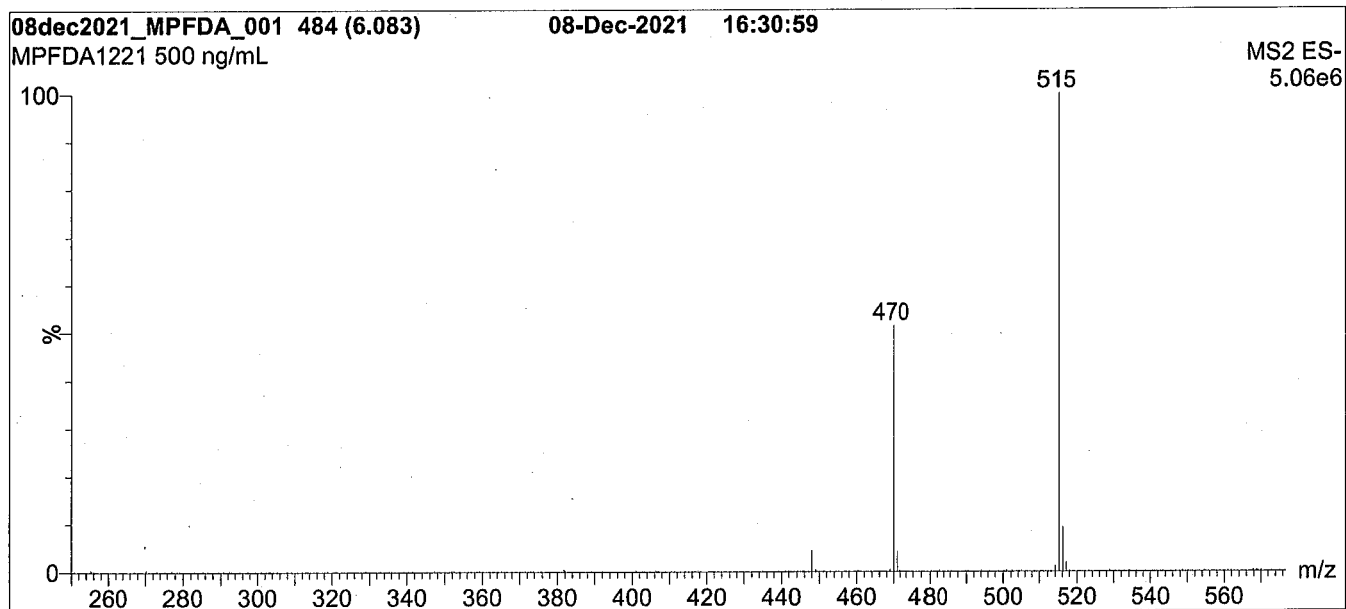
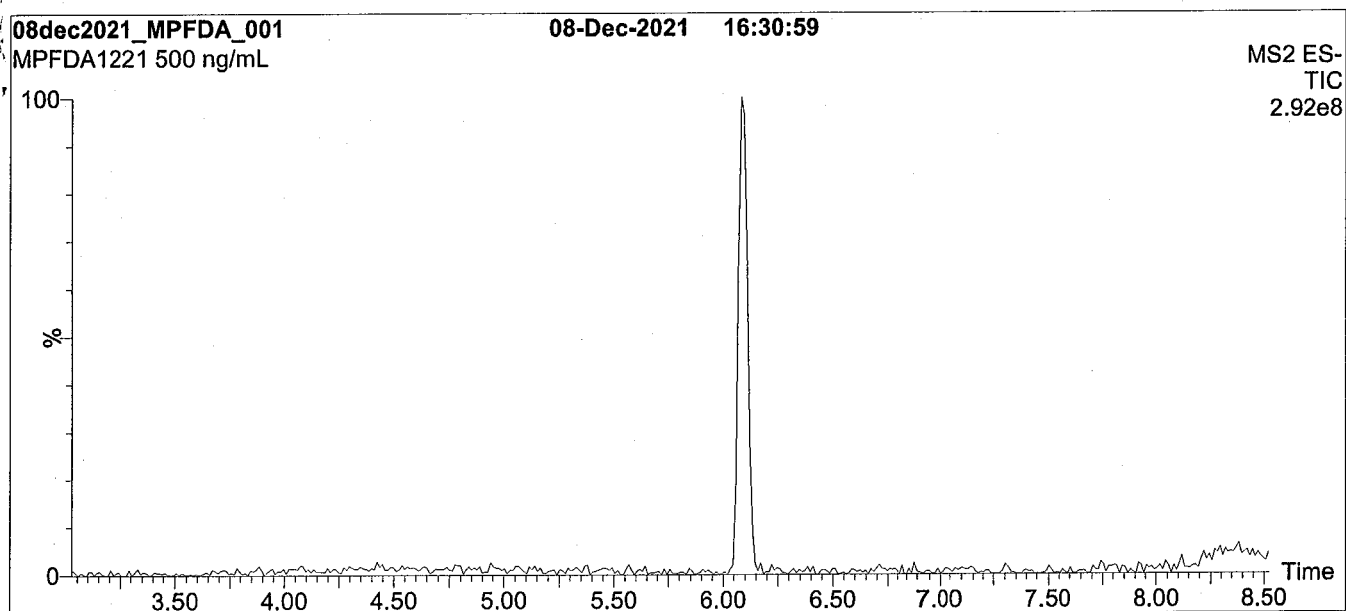
At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



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Figure 1: MPFDA; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

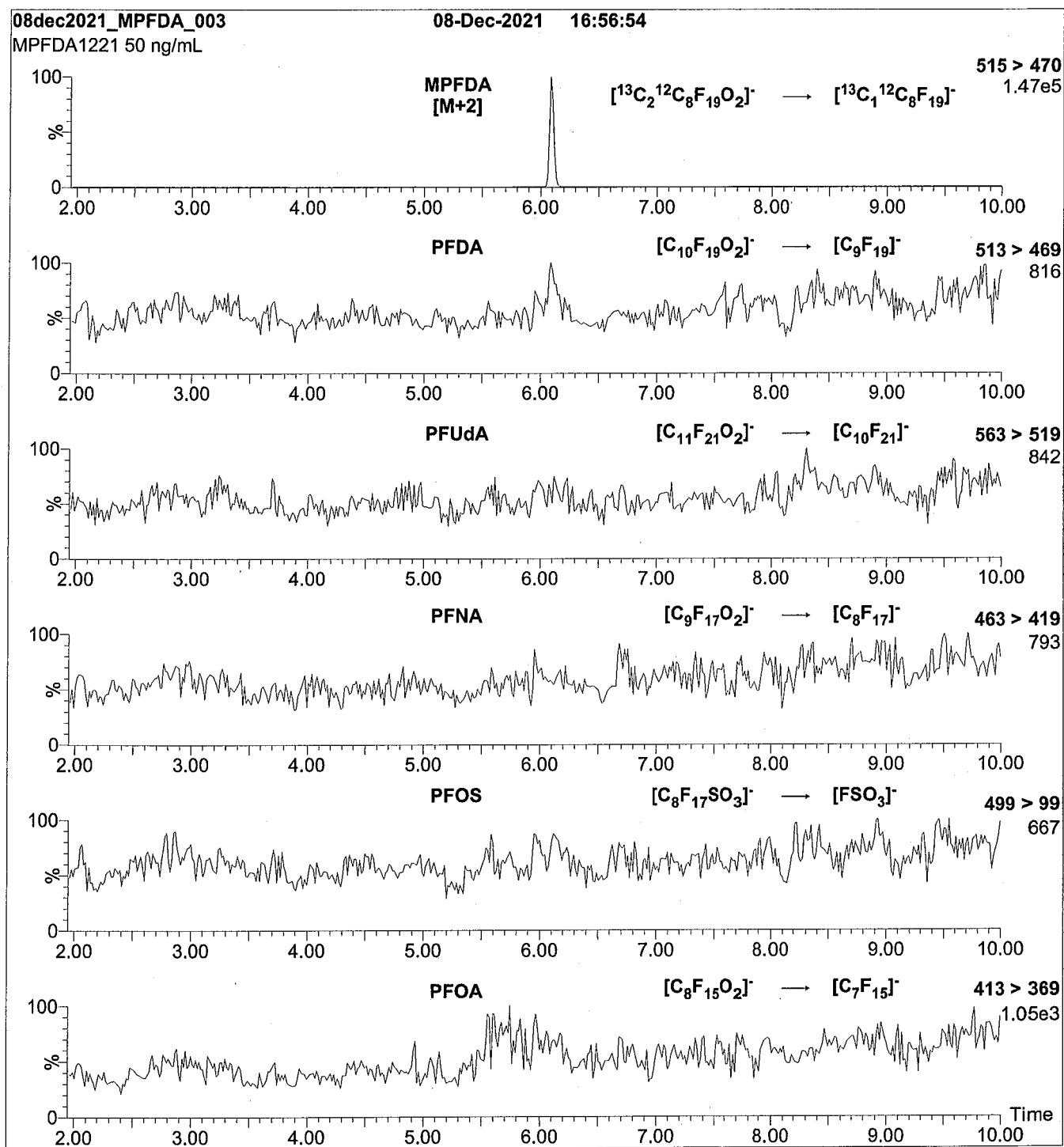
Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 9 min and hold for
1 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature ($^{\circ}$ C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: MPFDA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (MPFDA)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$ **MS Parameters:**

Collision Gas (mbar) = 3.39e-3

Collision Energy (eV) = 10

Analytical Standard Record

22A0120

Description:	PFAS - IIS MPFDA 50ug/mL	Expires:	12/08/2026
Standard Type:	Analyte Spike	Prepared:	12/08/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:49 by HGH

Analyte	Parent	CAS Number	Concentration	Units
13C2-PFDA		13C2-PFDA	50	ug/mL

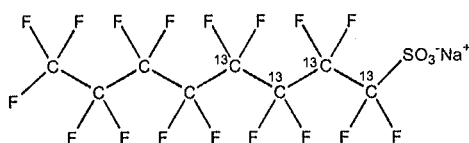


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFOS **LOT NUMBER:** MPFOS0821
COMPOUND: Sodium perfluoro-1-(1,2,3,4-¹³C₄)octanesulfonate

STRUCTURE: **CAS #:** 960315-53-1



MOLECULAR FORMULA: ¹³C₄¹²C₄F₁₇SO₃Na **MOLECULAR WEIGHT:** 526.08
CONCENTRATION: 50.0 ± 2.5 µg/mL (Na salt) **SOLVENT(S):** Methanol
 47.9 ± 2.4 µg/mL (MPFOS acid)
 47.8 ± 2.4 µg/mL (MPFOS anion)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** ≥99% ¹³C
LAST TESTED: (mm/dd/yyyy) 08/18/2021 (1,2,3,4-¹³C₄)
EXPIRY DATE: (mm/dd/yyyy) 08/18/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

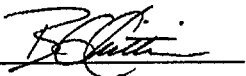
DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains ~0.4% sodium perfluoro-1-(¹³C₃)heptanesulfonate.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager **Date:** 08/19/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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LIMITED WARRANTY:

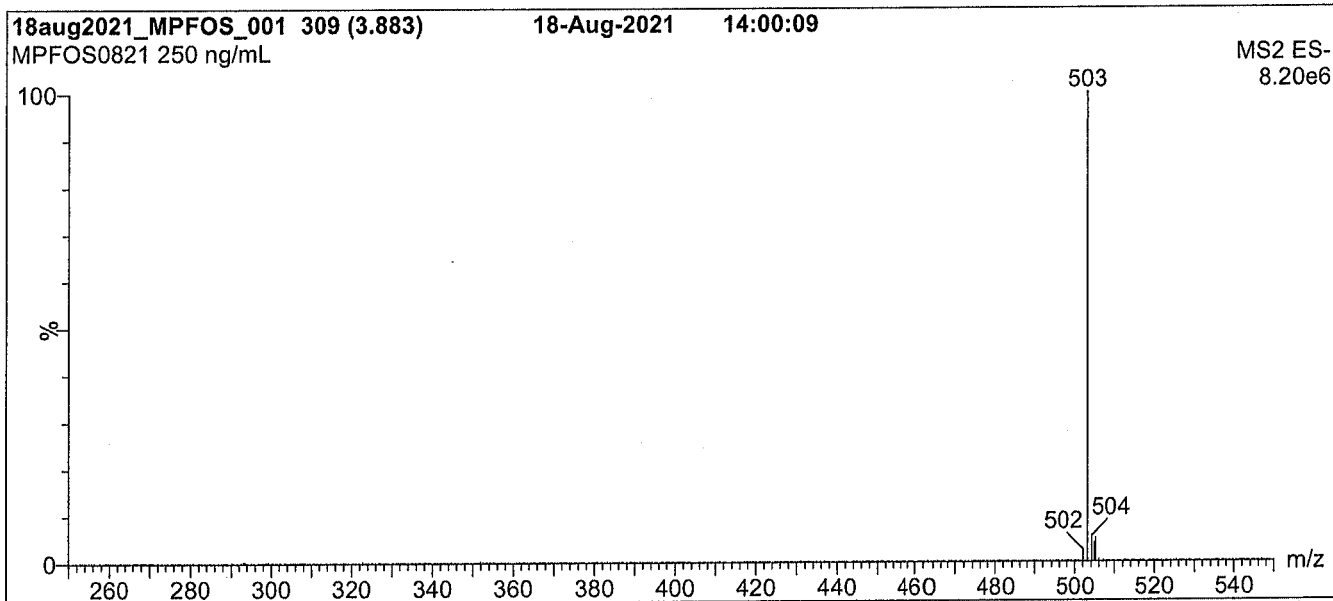
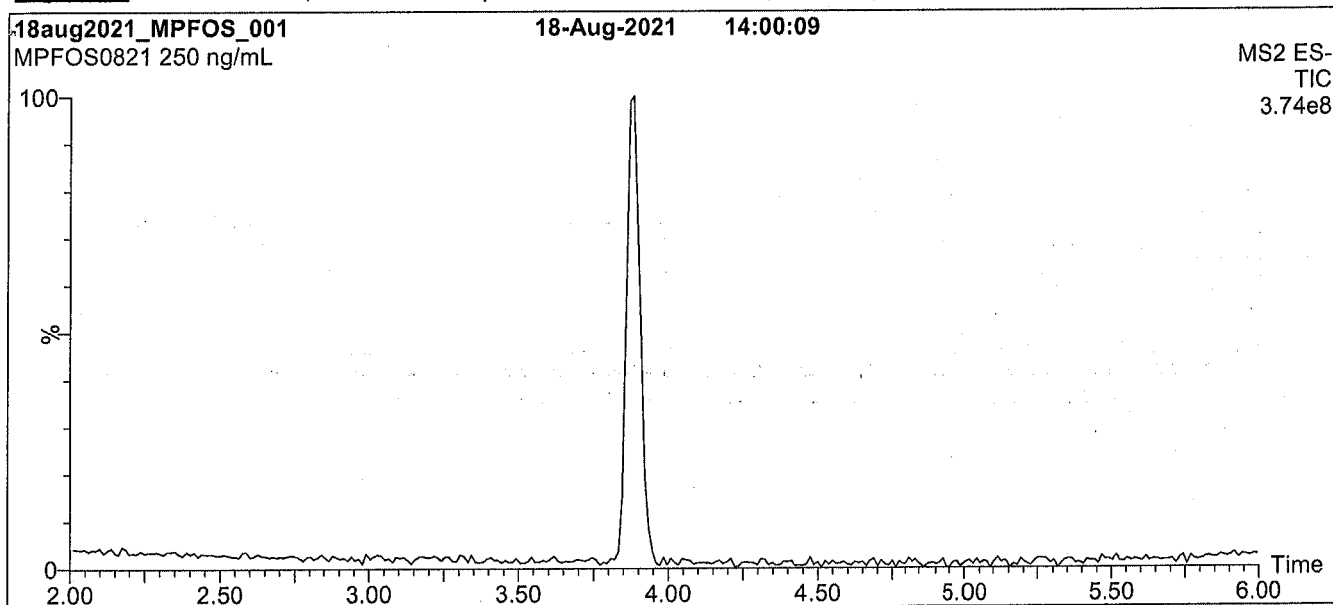
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QUALITY MANAGEMENT:

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Figure 1: MPFOS; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

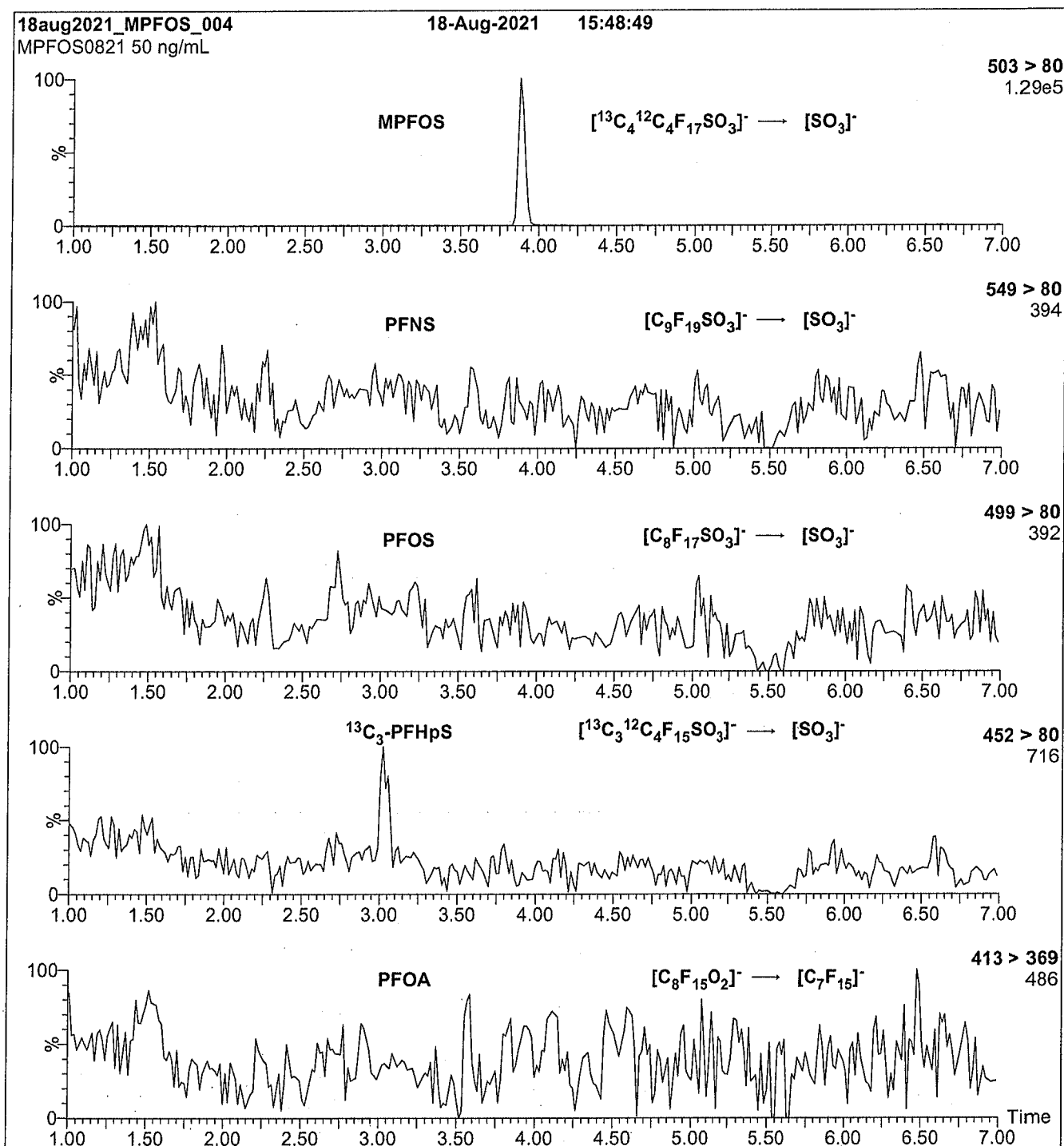
Mobile phase: Gradient
Start: 40% H₂O / 60% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: MPFOS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (MPFOS)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{L}/\text{min}$ **MS Parameters:**

Collision Gas (mbar) = 3.39e-3

Collision Energy (eV) = 42

Analytical Standard Record

22A0121

Description:	PFAS - IIS MPFOS 50ug/mL	Expires:	08/18/2026
Standard Type:	Analyte Spike	Prepared:	08/18/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:49 by HGH

Analyte	Parent	CAS Number	Concentration	Units
13C4-PFOS		13C4-PFOS	50	ug/mL

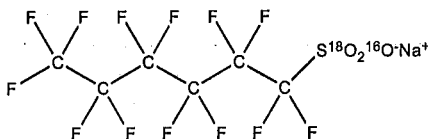


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: MPFHxS **LOT NUMBER:** MPFHxS1021
COMPOUND: Sodium perfluoro-1-hexane(¹⁸O₂)sulfonate

STRUCTURE: **CAS #:** 1585941-14-5



MOLECULAR FORMULA: C₆F₁₃S¹⁸O₂¹⁶ONa **MOLECULAR WEIGHT:** 426.10
CONCENTRATION: 50.0 ± 2.5 µg/mL (Na salt) **SOLVENT(S):** Methanol
 47.4 ± 2.4 µg/mL (MPFHxS acid)
 47.3 ± 2.4 µg/mL (MPFHxS anion)
CHEMICAL PURITY: >98% **ISOTOPIC PURITY:** >94% (¹⁸O₂)
LAST TESTED: (mm/dd/yyyy) 10/29/2021
EXPIRY DATE: (mm/dd/yyyy) 10/29/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)

Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The response factor for MPFHxS (C₆F₁₃S¹⁸O₂¹⁶O) has been observed to be up to 10% lower than for PFHxS (C₆F₁₃S¹⁶O₃) when both compounds are injected together. This difference may vary between instruments.
- Contains ~0.6% of sodium perfluoro-1-octane(¹⁸O₂)sulfonate (¹⁸O₂-PFOS) and ~0.3% of sodium perfluoro-1-heptane(¹⁸O₂)sulfonate (¹⁸O₂-PFHpS).
- Due to the isotopic purity of the starting material (¹⁸O₂ >94%), MPFHxS contains ~0.3% of PFHxS. This value agrees with the theoretical percent relative abundance that is expected based on the stated isotopic purity.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 11/05/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

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where x is expressed as a relative standard uncertainty of the individual parameter.

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LIMITED WARRANTY:

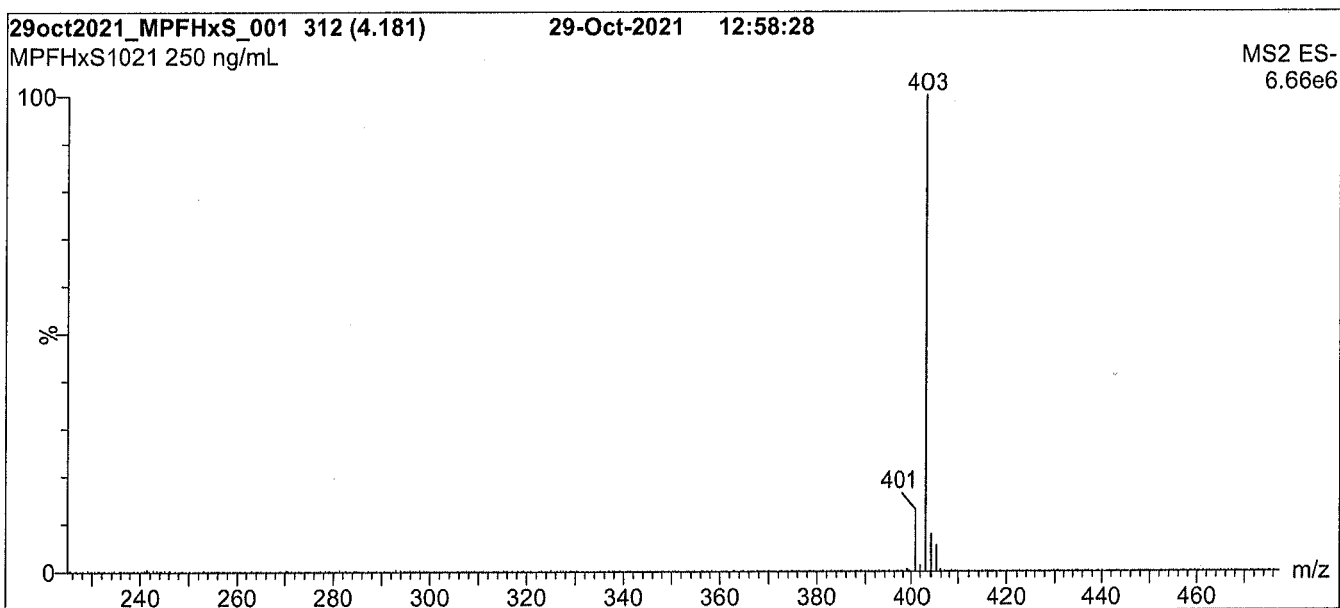
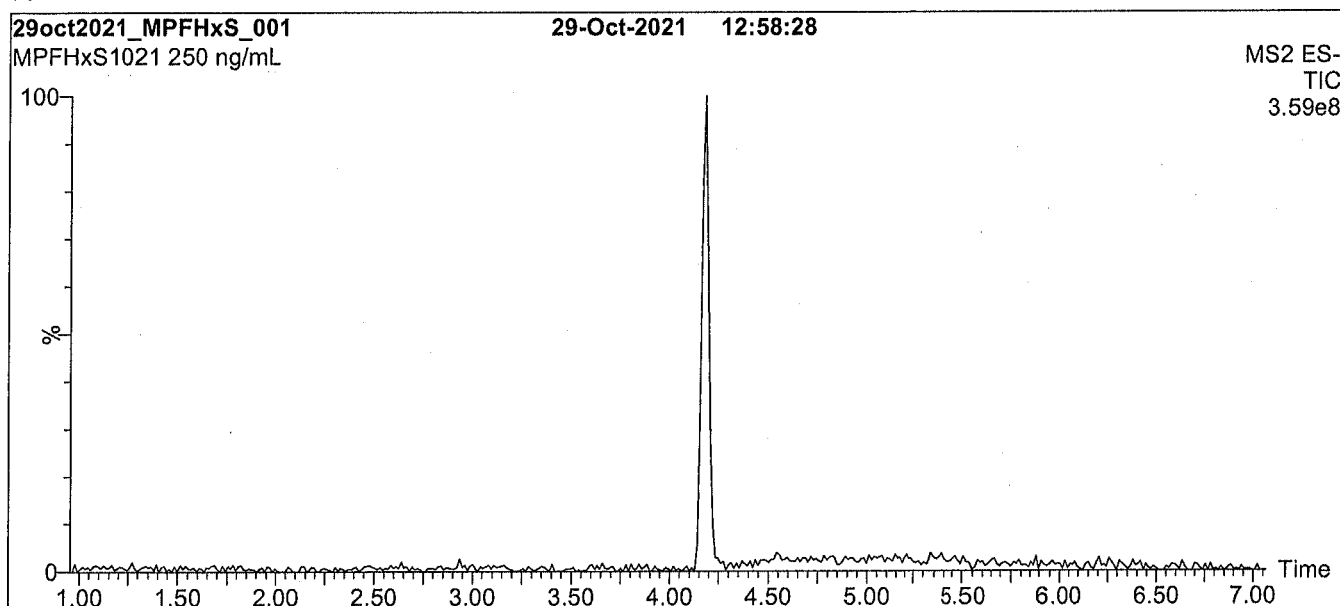
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Figure 1: MPFHxS; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

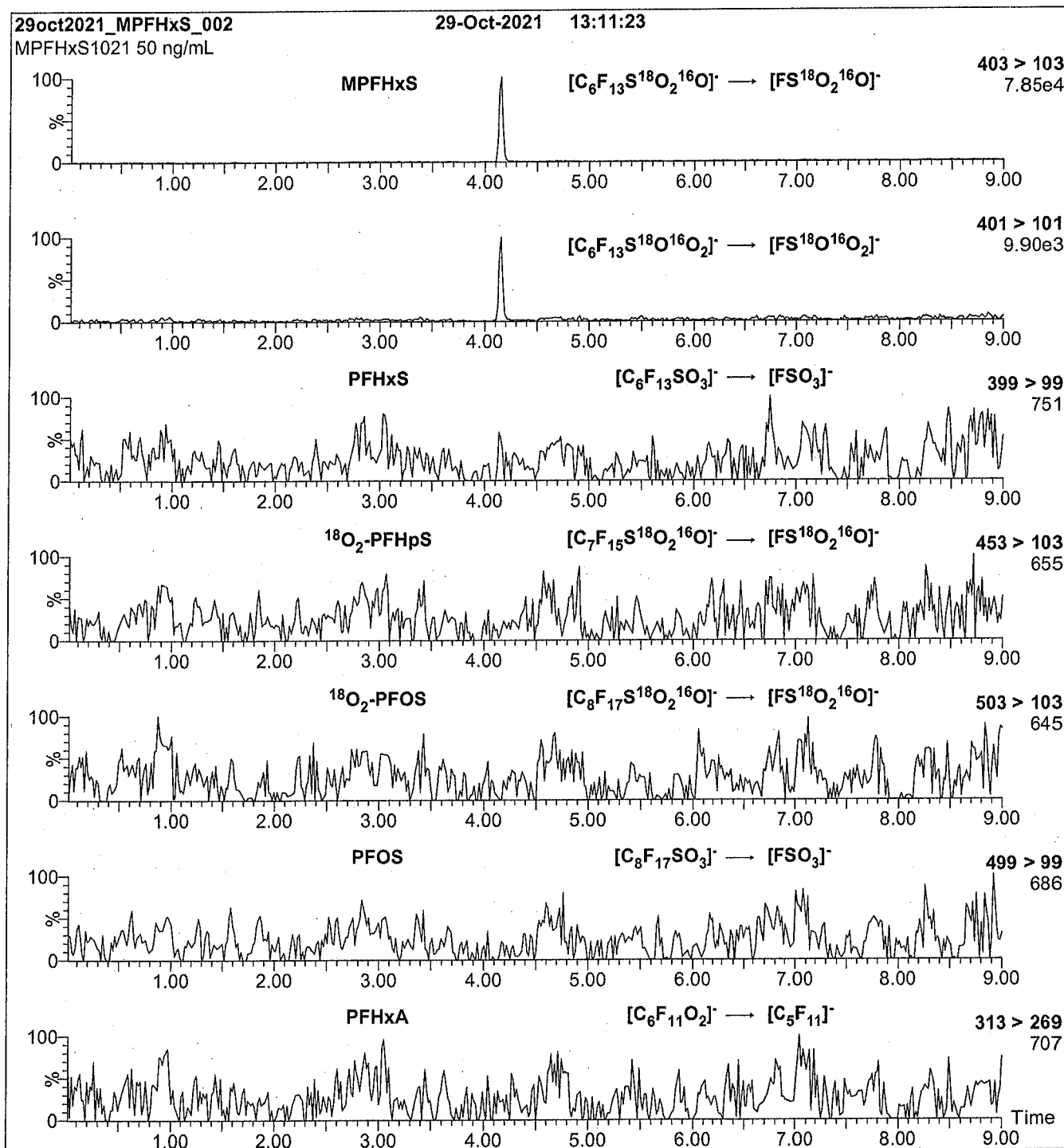
Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 9 min and hold for
1 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 10.00
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: MPFHxS; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (MPFHxS)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.16e-3

Collision Energy (eV) = 32

Analytical Standard Record

22A0122

Description:	PFAS - IIS MPFHxS 50ug/mL	Expires:	10/29/2026
Standard Type:	Analyte Spike	Prepared:	10/29/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:49 by HGH

Analyte	Parent	CAS Number	Concentration	Units
1802-PFHXS		1802-PFHXS	50	ug/mL

Analytical Standard Record

22A0122

Description:	PFAS - IIS MPFHxS 50ug/mL	Expires:	10/29/2026
Standard Type:	Analyte Spike	Prepared:	10/29/2021
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:49 by HGH

Analyte	Parent	CAS Number	Concentration	Units
1802-PFHXS		1802-PFHXS	50	ug/mL

Analytical Standard Record

22A0234

Description:	PFAS IIS 7C 5ug/mL	Expires:	01/20/2023
Standard Type:	Internal Standard	Prepared:	01/20/2022
Solvent:	MeOH/61252	Prepared By:	Dipti Gokal
Final Volume (mL):	12	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:49 by HGH
Comments:	mpfna had more left over than others.		

Analyte	Parent	CAS Number	Concentration	Units
13C3-PFBA	22A0116	13C3-PFBA	5	ug/mL
13C2-PFHxA	22A0117	13C2-PFHxA	5	ug/mL
13C5-PFNA	22A0118	13C5-PFNA	5	ug/mL
13C4-PFOA	22A0119	13C4-PFOA	5	ug/mL
13C2-PFDA	22A0120	13C2-PFDA	5	ug/mL
13C4-PFOS	22A0121	13C4-PFOS	5	ug/mL
18O2-PFHxS	22A0122	18O2-PFHxS	5	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mL)
22A0116	PFAS - IIS M3PFBA 50ug/mL	08/19/2021	Wellington Laboratories	M3PFBA0721	08/19/2026	01/20/2022 15:48 by HGH	1.2
22A0117	PFAS - IIS MPFHxA 50ug/mL	10/04/2021	Wellington Laboratories	MPFHxA0921	10/04/2026	01/20/2022 15:48 by HGH	1.2
22A0118	PFAS - IIS MPFNA 50ug/mL	10/29/2021	Wellington Laboratories	MPFNA1021	10/29/2026	01/20/2022 15:48 by HGH	1.2
22A0119	PFAS - IIS MPFOA 50ug/mL	12/07/2021	Wellington Laboratories	MPFOA1121	12/07/2026	01/20/2022 15:48 by HGH	1.2
22A0120	PFAS - IIS MPFDA 50ug/mL	12/08/2021	Wellington Laboratories	MPFDA1221	12/08/2026	01/20/2022 15:49 by HGH	1.2
22A0121	PFAS - IIS MPFOS 50ug/mL	08/18/2021	Wellington Laboratories	MPFOS0821	08/18/2026	01/20/2022 15:49 by HGH	1.2
22A0122	PFAS - IIS MPFHxS 50ug/mL	10/29/2021	Wellington Laboratories	MPFHxS1021	10/29/2026	01/20/2022 15:49 by HGH	1.2

Analytical Standard Record

22A0234

Description:	PFAS IIS 7C 5ug/mL	Expires:	01/20/2023
Standard Type:	Internal Standard	Prepared:	01/20/2022
Solvent:	MeOH/61252	Prepared By:	Dipti Gokal
Final Volume (mL):	12	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:49 by HGH
Comments:	mpfna had more left over than others.		

Analyte	Parent	CAS Number	Concentration	Units
13C3-PFBA	22A0116	13C3-PFBA	5	ug/mL
13C2-PFHxA	22A0117	13C2-PFHxA	5	ug/mL
13C5-PFNA	22A0118	13C5-PFNA	5	ug/mL
13C4-PFOA	22A0119	13C4-PFOA	5	ug/mL
13C2-PFDA	22A0120	13C2-PFDA	5	ug/mL
13C4-PFOS	22A0121	13C4-PFOS	5	ug/mL
18O2-PFHxS	22A0122	18O2-PFHxS	5	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mL)
22A0116	PFAS - IIS M3PFBA 50ug/mL	08/19/2021	Wellington Laboratories	M3PFBA0721	08/19/2026	01/20/2022 15:48 by HGH	1.2
22A0117	PFAS - IIS MPFHxA 50ug/mL	10/04/2021	Wellington Laboratories	MPFHxA0921	10/04/2026	01/20/2022 15:48 by HGH	1.2
22A0118	PFAS - IIS MPFNA 50ug/mL	10/29/2021	Wellington Laboratories	MPFNA1021	10/29/2026	01/20/2022 15:48 by HGH	1.2
22A0119	PFAS - IIS MPFOA 50ug/mL	12/07/2021	Wellington Laboratories	MPFOA1121	12/07/2026	01/20/2022 15:48 by HGH	1.2
22A0120	PFAS - IIS MPFDA 50ug/mL	12/08/2021	Wellington Laboratories	MPFDA1221	12/08/2026	01/20/2022 15:49 by HGH	1.2
22A0121	PFAS - IIS MPFOS 50ug/mL	08/18/2021	Wellington Laboratories	MPFOS0821	08/18/2026	01/20/2022 15:49 by HGH	1.2
22A0122	PFAS - IIS MPFHxS 50ug/mL	10/29/2021	Wellington Laboratories	MPFHxS1021	10/29/2026	01/20/2022 15:49 by HGH	1.2

Analytical Standard Record

22A0234

Description:	PFAS IIS 7C 5ug/mL	Expires:	01/20/2023
Standard Type:	Internal Standard	Prepared:	01/20/2022
Solvent:	MeOH/61252	Prepared By:	Dipti Gokal
Final Volume (mL):	12	Department:	PFAS
Vials:	1	Last Edit:	01/20/2022 15:49 by HGH
Comments:	mpfna had more left over than others.		

Analyte	Parent	CAS Number	Concentration	Units
13C3-PFBA	22A0116	13C3-PFBA	5	ug/mL
13C2-PFHxA	22A0117	13C2-PFHxA	5	ug/mL
13C5-PFNA	22A0118	13C5-PFNA	5	ug/mL
13C4-PFOA	22A0119	13C4-PFOA	5	ug/mL
13C2-PFDA	22A0120	13C2-PFDA	5	ug/mL
13C4-PFOS	22A0121	13C4-PFOS	5	ug/mL
18O2-PFHxS	22A0122	18O2-PFHxS	5	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mL)
22A0116	PFAS - IIS M3PFBA 50ug/mL	08/19/2021	Wellington Laboratories	M3PFBA0721	08/19/2026	01/20/2022 15:48 by HGH	1.2
22A0117	PFAS - IIS MPFHxA 50ug/mL	10/04/2021	Wellington Laboratories	MPFHxA0921	10/04/2026	01/20/2022 15:48 by HGH	1.2
22A0118	PFAS - IIS MPFNA 50ug/mL	10/29/2021	Wellington Laboratories	MPFNA1021	10/29/2026	01/20/2022 15:48 by HGH	1.2
22A0119	PFAS - IIS MPFOA 50ug/mL	12/07/2021	Wellington Laboratories	MPFOA1121	12/07/2026	01/20/2022 15:48 by HGH	1.2
22A0120	PFAS - IIS MPFDA 50ug/mL	12/08/2021	Wellington Laboratories	MPFDA1221	12/08/2026	01/20/2022 15:49 by HGH	1.2
22A0121	PFAS - IIS MPFOS 50ug/mL	08/18/2021	Wellington Laboratories	MPFOS0821	08/18/2026	01/20/2022 15:49 by HGH	1.2
22A0122	PFAS - IIS MPFHxS 50ug/mL	10/29/2021	Wellington Laboratories	MPFHxS1021	10/29/2026	01/20/2022 15:49 by HGH	1.2

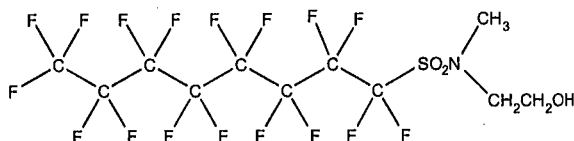


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-MeFOSE-M **LOT NUMBER:** NMeFOSE0921M
COMPOUND: 2-(N-methylperfluoro-1-octanesulfonamido)-ethanol **22C0307**

STRUCTURE: **CAS #:** 24448-09-7



MOLECULAR FORMULA: C₁₁H₈F₁₇NO₃S **MOLECULAR WEIGHT:** 557.22
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/22/2021 (HRGC/LRMS)
 09/23/2021 (LC/MS)
EXPIRY DATE: (mm/dd/yyyy) 09/23/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: HRGC/LRMS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- In order to see the molecular ion (adduct free), the LC mobile phase should be free of ammonium acetate buffer.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager **Date:** 09/28/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

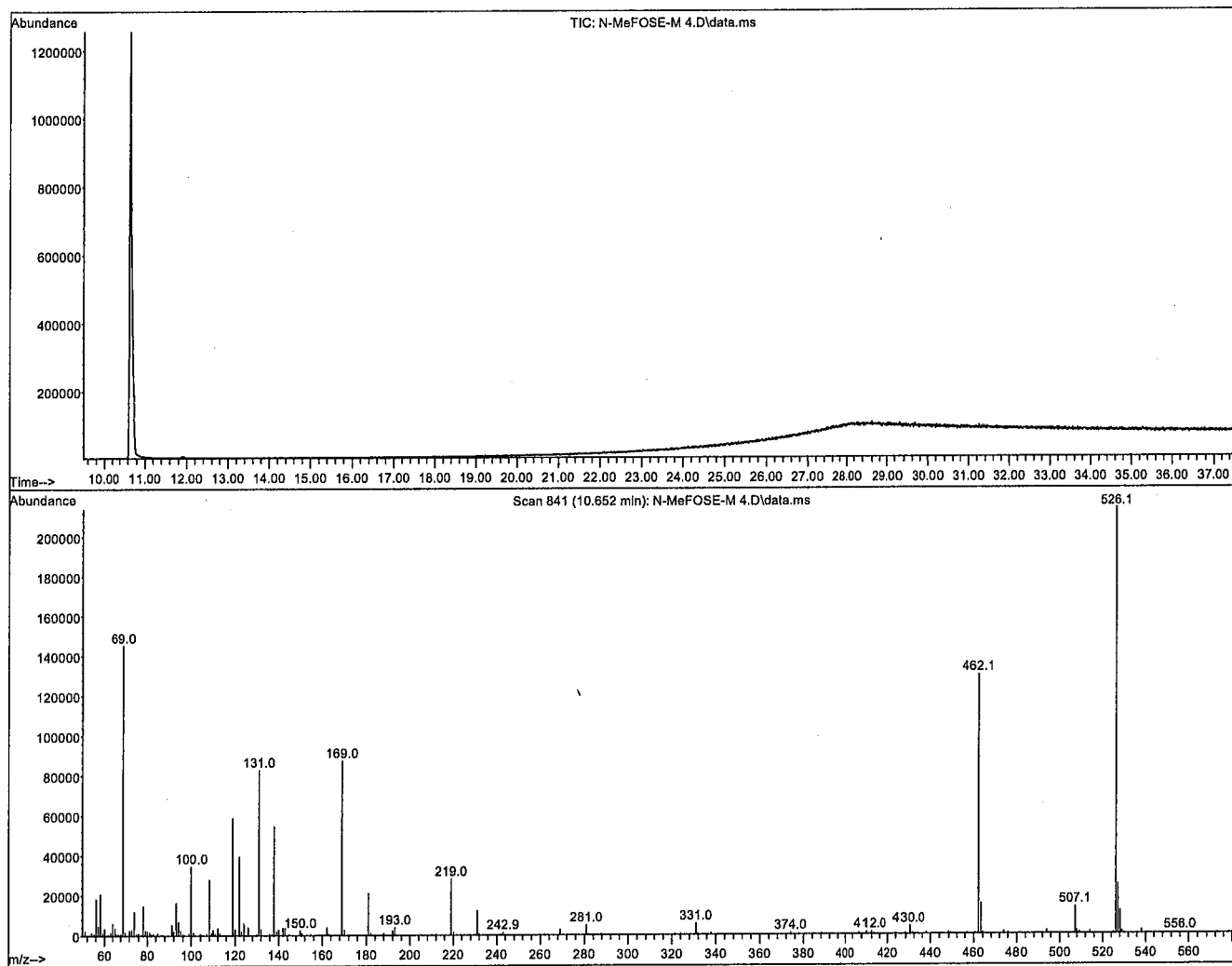
At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: N-MeFOSE-M; HRGC/LRMS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Agilent 7890A HRGC
 Agilent 5975C MSD

Chromatographic Conditions:

Column: 30 m DB-5 (0.25 mm id, 0.25 μ m film thickness) Agilent J&W

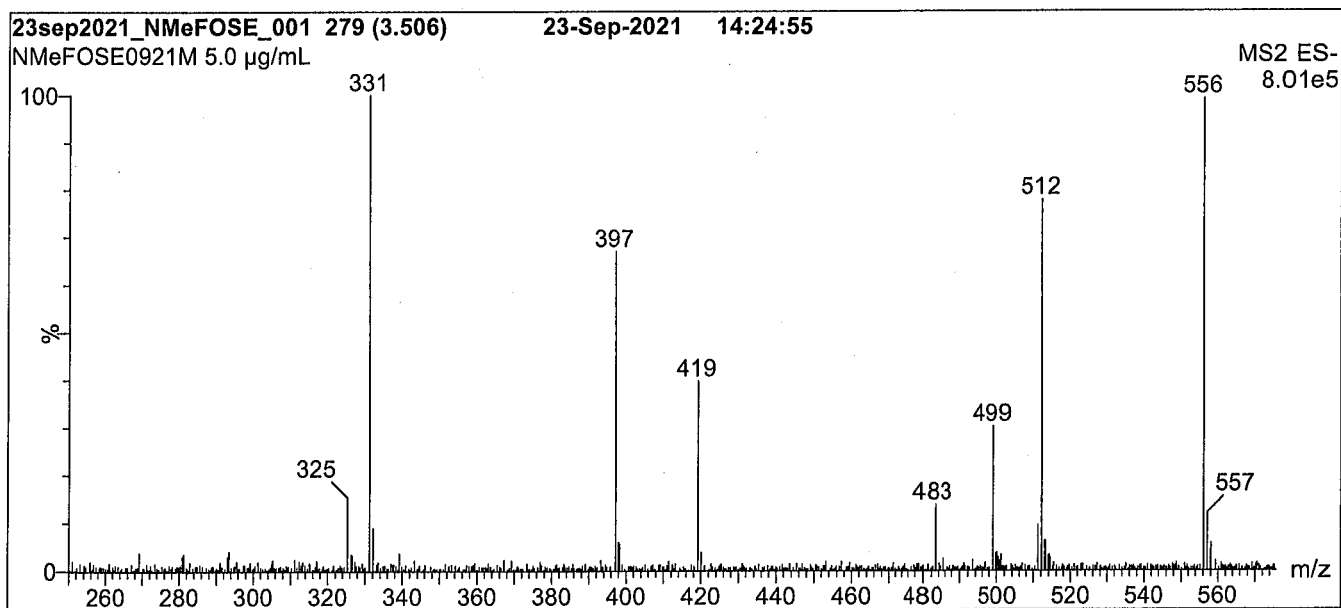
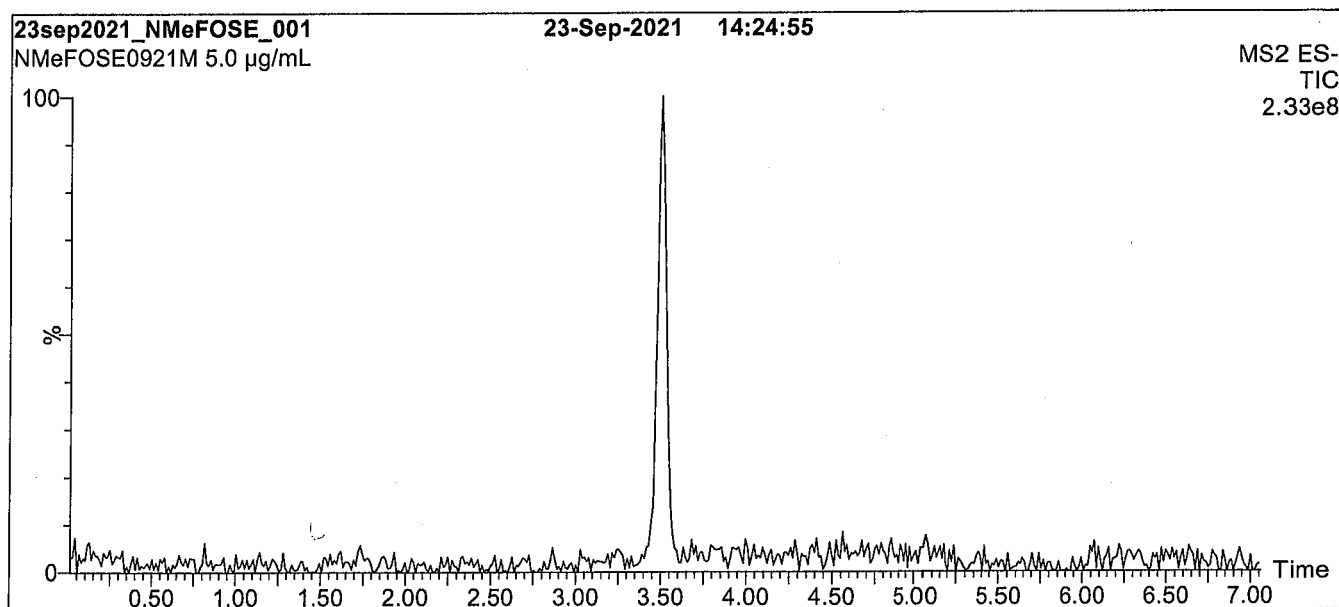
Flow: Constant at 1 mL/min

Injector: 250°C (Splitless Injection)

Oven: 100°C (5 min)
 10°C/min to 310°C
 310°C (10 min)

Ionization: EI+

Detector: 230°C
 Full Scan (50-1000 amu)

Figure 2: N-MeFOSE-M; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 2:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient

Start: 30% H₂O / 70% MeOH

Ramp to 90% organic over 8 min and hold for
1.5 min before returning to initial conditions in 1 min.

Time: 12 min

Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

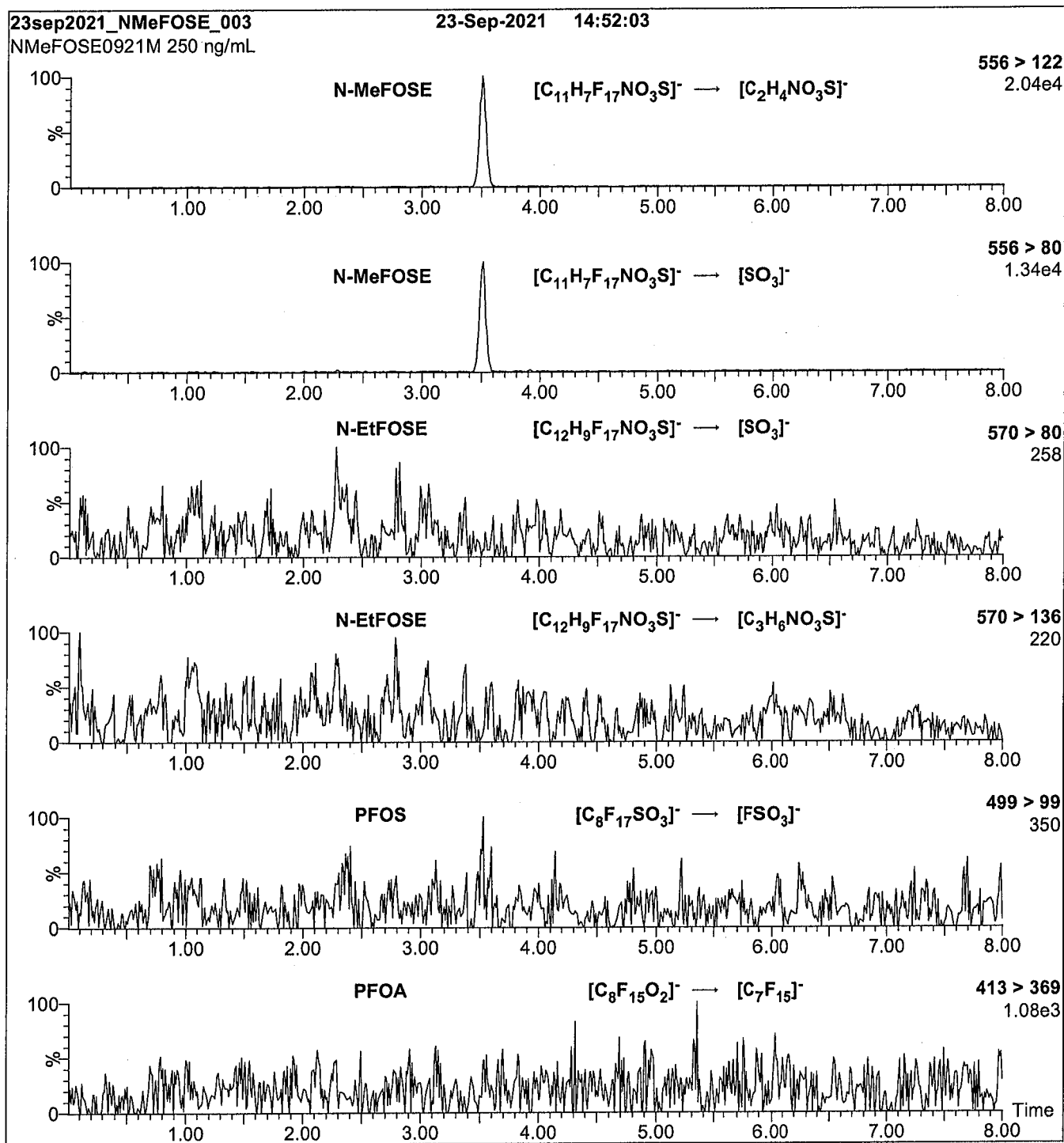
Source: Electrospray (negative)

Capillary Voltage (kV) = 2.00

Cone Voltage (V) = 65.00

Desolvation Temperature (°C) = 450

Desolvation Gas Flow (L/hr) = 1000

Figure 3: N-MeFOSE-M; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 3:**

Injection: On-column (N-MeFOSE-M)

Mobile phase: Same as Figure 2

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.14e-3

Collision Energy (eV) = 36

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Analytical Standard Record

22C0307

Description:	PFAS - SAS N-MeFOSE 50ug/mL	Expires:	09/23/2026
Standard Type:	Analyte Spike	Prepared:	03/15/2022
Solvent:	Methanol	Prepared By:	Wellington Laboratories (Lot#: NMeFOSE0921M)
Final Volume (mls):	1	Department:	PFAS
Vials:	1	Last Edit:	03/15/2022 15:59 by DAG

Analyte	Parent	CAS Number	Concentration	Units
NMeFOSE		24448-09-7	50	ug/mL

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products are compared to older lots in the same manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

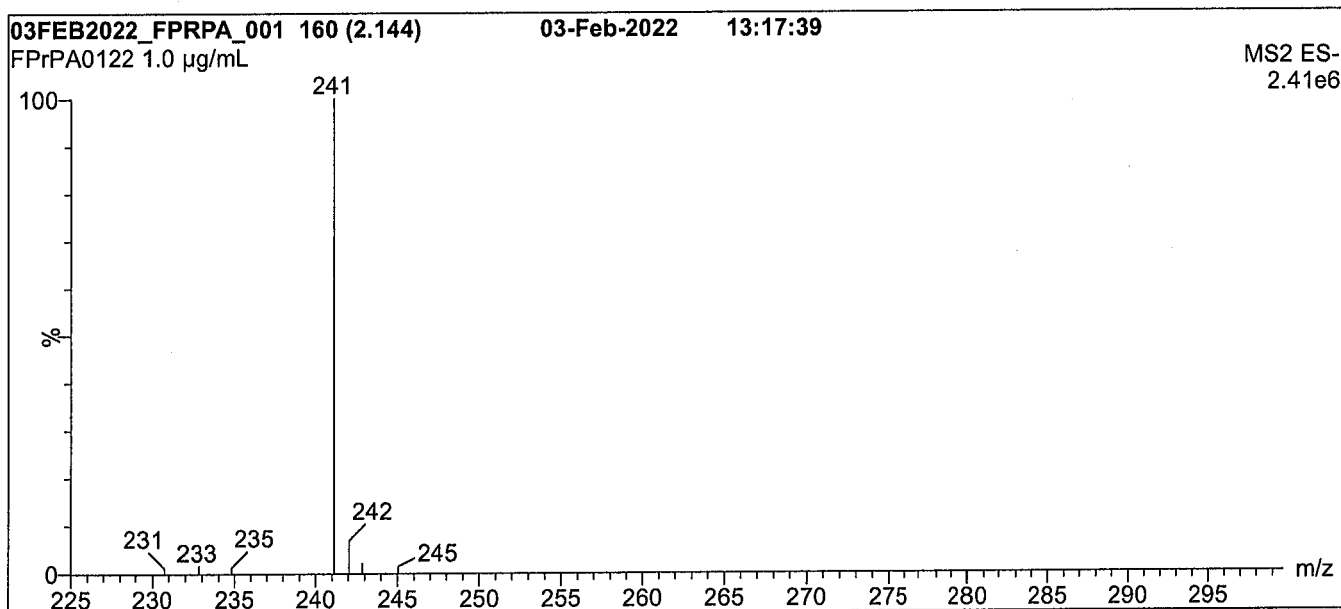
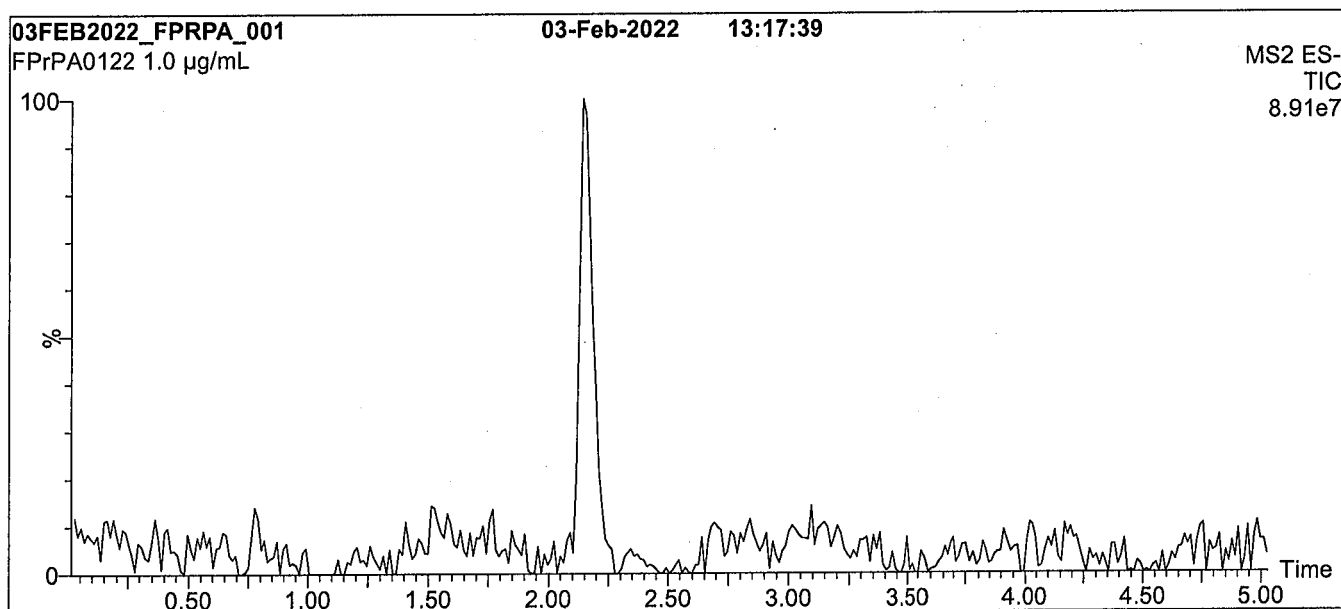
At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Figure 1: FPrPA; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 µm, 2.1 x 100 mm

Mobile phase: Gradient

Start: 60% H₂O / 40% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for 2 min
before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

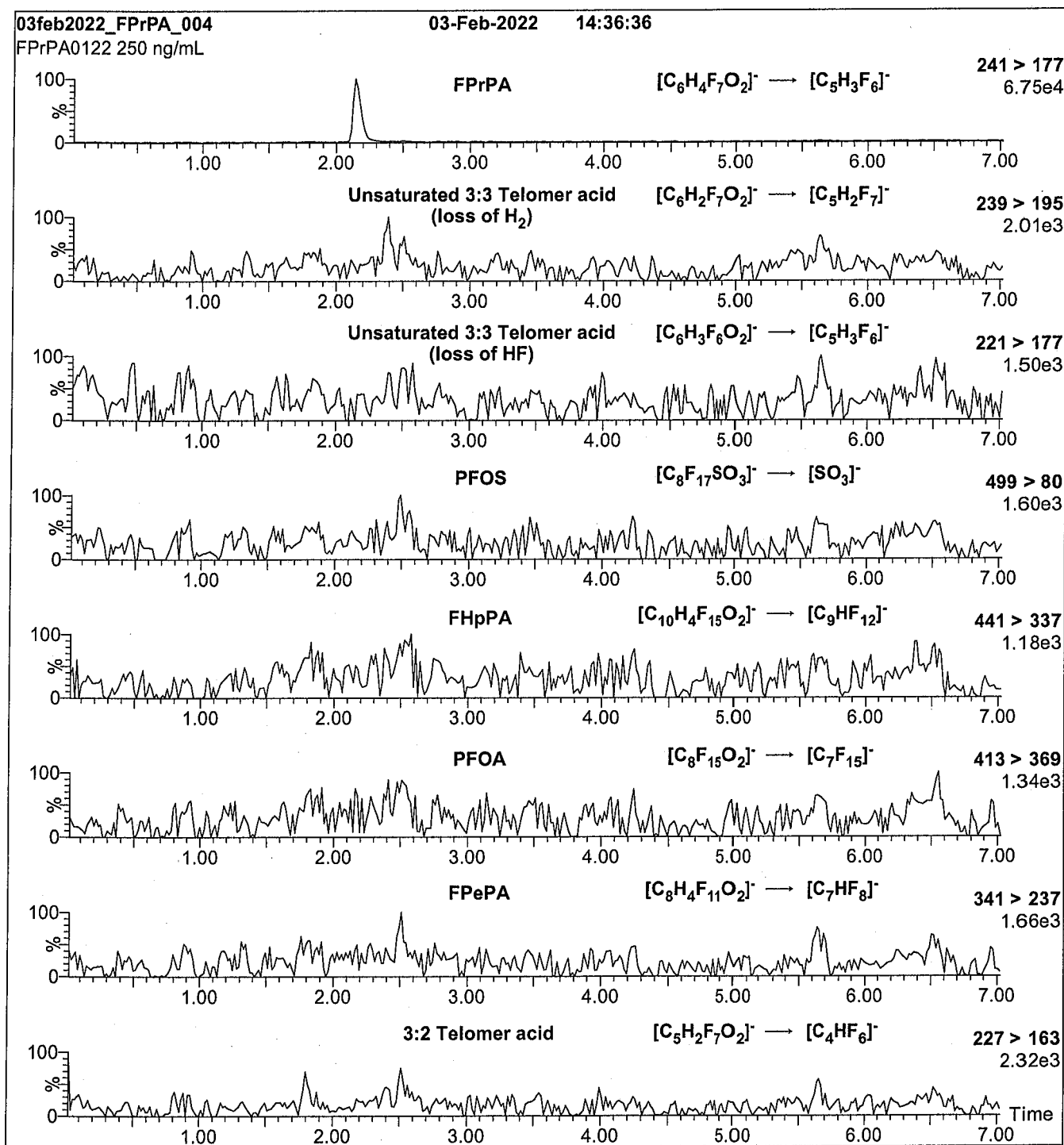
Source: Electrospray (negative)

Capillary Voltage (kV) = 2.00

Cone Voltage (V) = 10.00

Desolvation Temperature (°C) = 500

Desolvation Gas Flow (L/hr) = 1000

Figure 2: FPrPA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (FPrPA)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.33e-3

Collision Energy (eV) = 10

Analytical Standard Record

22C0308

Description:	PFAS - SAS FPrPA 50ug/mL	Expires:	02/03/2027
Standard Type:	Analyte Spike	Prepared:	03/15/2022
Solvent:	Methanol	Prepared By:	Wellington Laboratories (Lot#: FPrPA0122)
Final Volume (mls):	1	Department:	PFAS
Vials:	1	Last Edit:	03/15/2022 15:59 by DAG

Analyte	Parent	CAS Number	Concentration	Units
3:3FTCA		113507-82-7	50	ug/mL

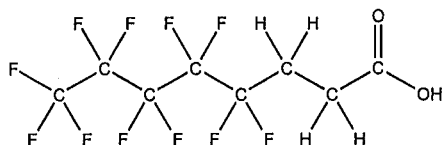


WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: FPePA **LOT NUMBER:** FPePA1221
COMPOUND: 3-Perfluoropentyl propanoic acid **22C0309**

STRUCTURE: **CAS #:** 914637-49-3



MOLECULAR FORMULA: $C_8H_5F_{11}O_2$ **MOLECULAR WEIGHT:** 342.11
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/mL}$ **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 01/05/2022
EXPIRY DATE: (mm/dd/yyyy) 01/05/2027
RECOMMENDED STORAGE: Refrigerate ampoule

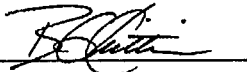
DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains <0.5% of the unsaturated 5:3 telomer acid ($C_8H_3F_{11}O_2$) as an impurity determined by ^1H NMR.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 01/06/2022
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

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UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

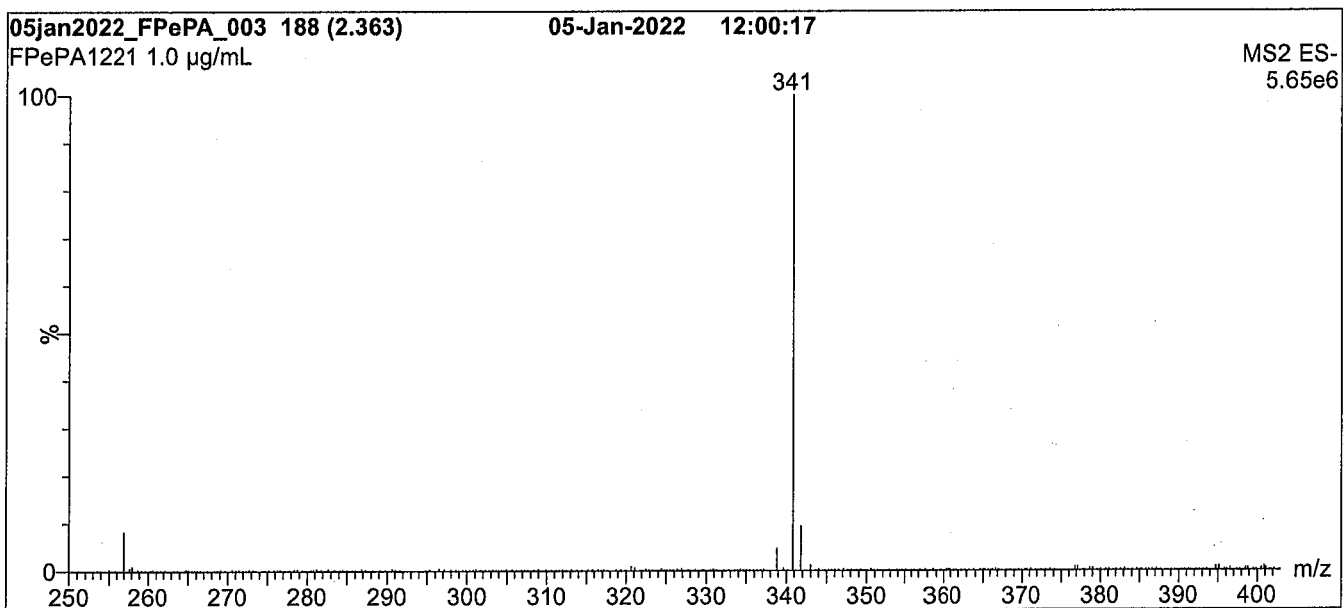
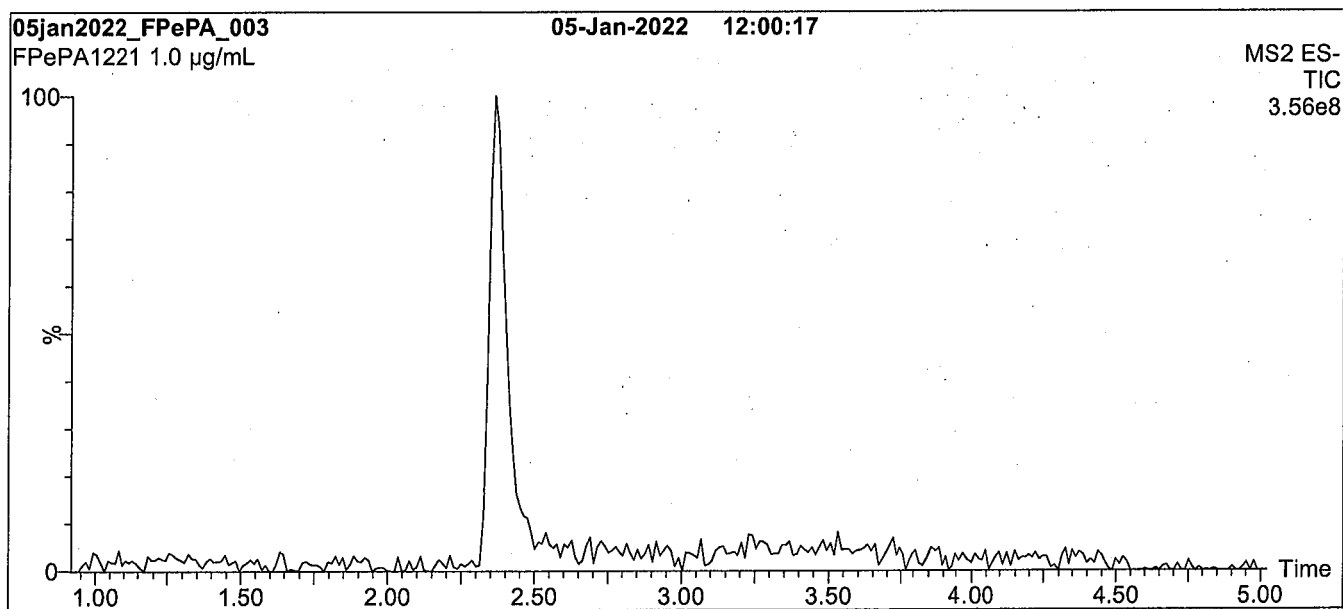
At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



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Figure 1: FPePA; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
 Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 µm, 2.1 x 100 mm

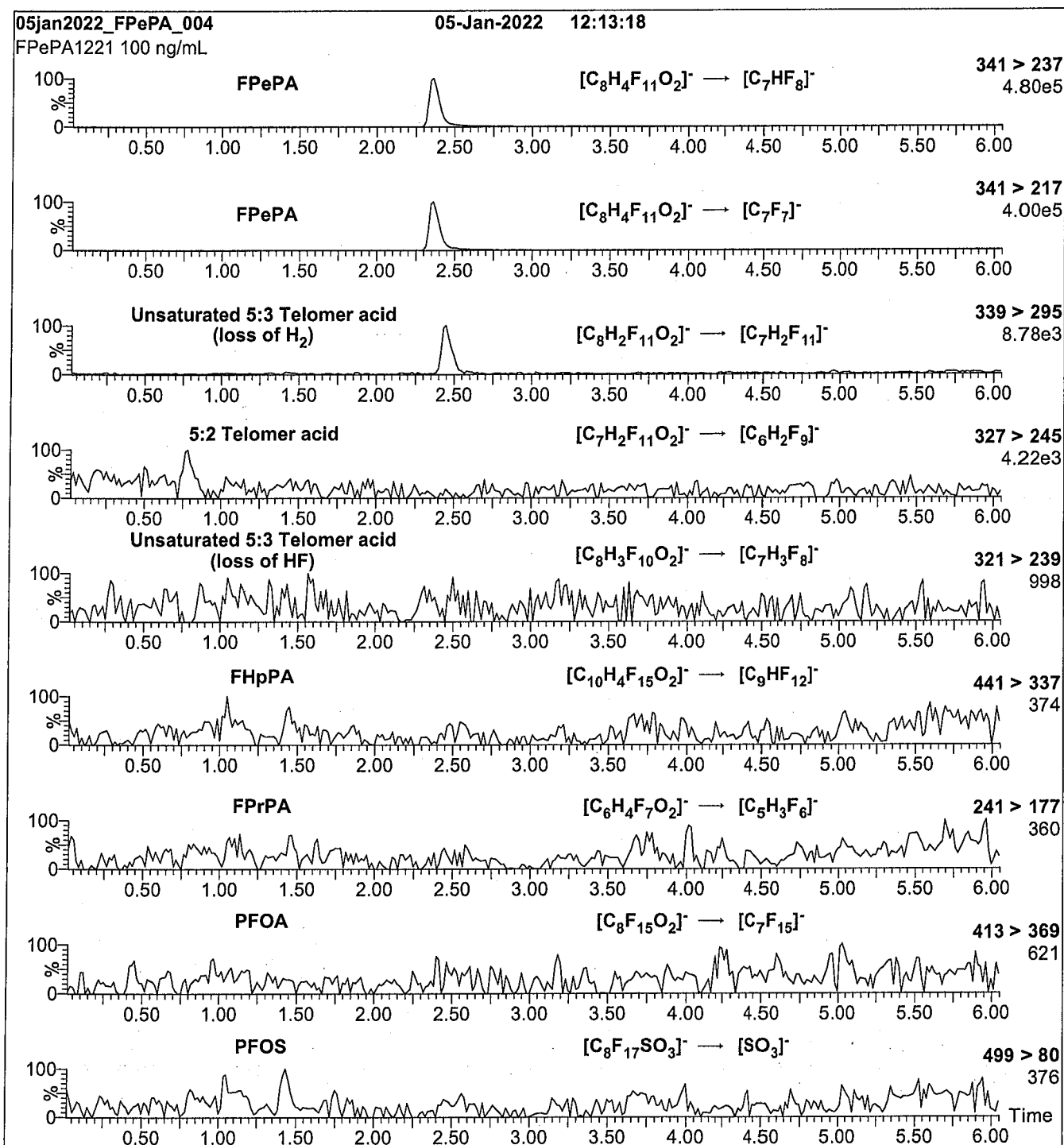
Mobile phase: Gradient
 Start: 45% H₂O / 55% (80:20 MeOH:ACN)
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 7 min and hold for
 3 min before returning to initial conditions in 0.75 min.
 Time: 12 min

Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
 Capillary Voltage (kV) = 0.50
 Cone Voltage (V) = 18.50
 Desolvation Temperature (°C) = 500
 Desolvation Gas Flow (L/hr) = 1000

Figure 2: FPePA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (FPePA)
Mobile phase: Same as Figure 1
Flow: 300 μ L/min

MS Parameters:

Collision Gas (mbar) = 3.09e-3
Collision Energy (eV) = 10

Analytical Standard Record

22C0309

Description:	PFAS - SAS FPePA 50ug/mL	Expires:	01/05/2027
Standard Type:	Analyte Spike	Prepared:	03/15/2022
Solvent:	Methanol	Prepared By:	Wellington Laboratories (Lot#:
Final Volume (mls):	1	Department:	PFAS1221)
Vials:	1	Last Edit:	03/15/2022 15:59 by DAG

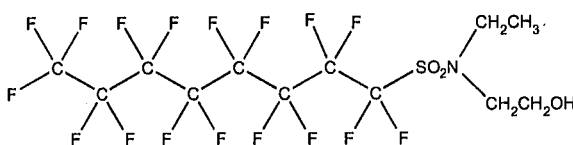
Analyte	Parent	CAS Number	Concentration	Units
5:3FTCA		914637-49-3	50	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-EtFOSE-M **LOT NUMBER:** NEtFOSE0921M
COMPOUND: 2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol **22C0310**
STRUCTURE: **CAS #:** 1691-99-2



MOLECULAR FORMULA: C₁₂H₁₀F₁₇NO₃S **MOLECULAR WEIGHT:** 571.25
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 09/22/2021 (HRGC/LRMS)
 09/23/2021 (LC/MS)
EXPIRY DATE: (mm/dd/yyyy) 09/23/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: HRGC/LRMS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- In order to see the molecular ion (adduct free), the LC mobile phase should be free of ammonium acetate buffer.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: 
 B.G. Chittim, General Manager

Date: 10/20/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
 519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compound it contains.

HANDLING:

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where x is expressed as a relative standard uncertainty of the individual parameter.

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LIMITED WARRANTY:

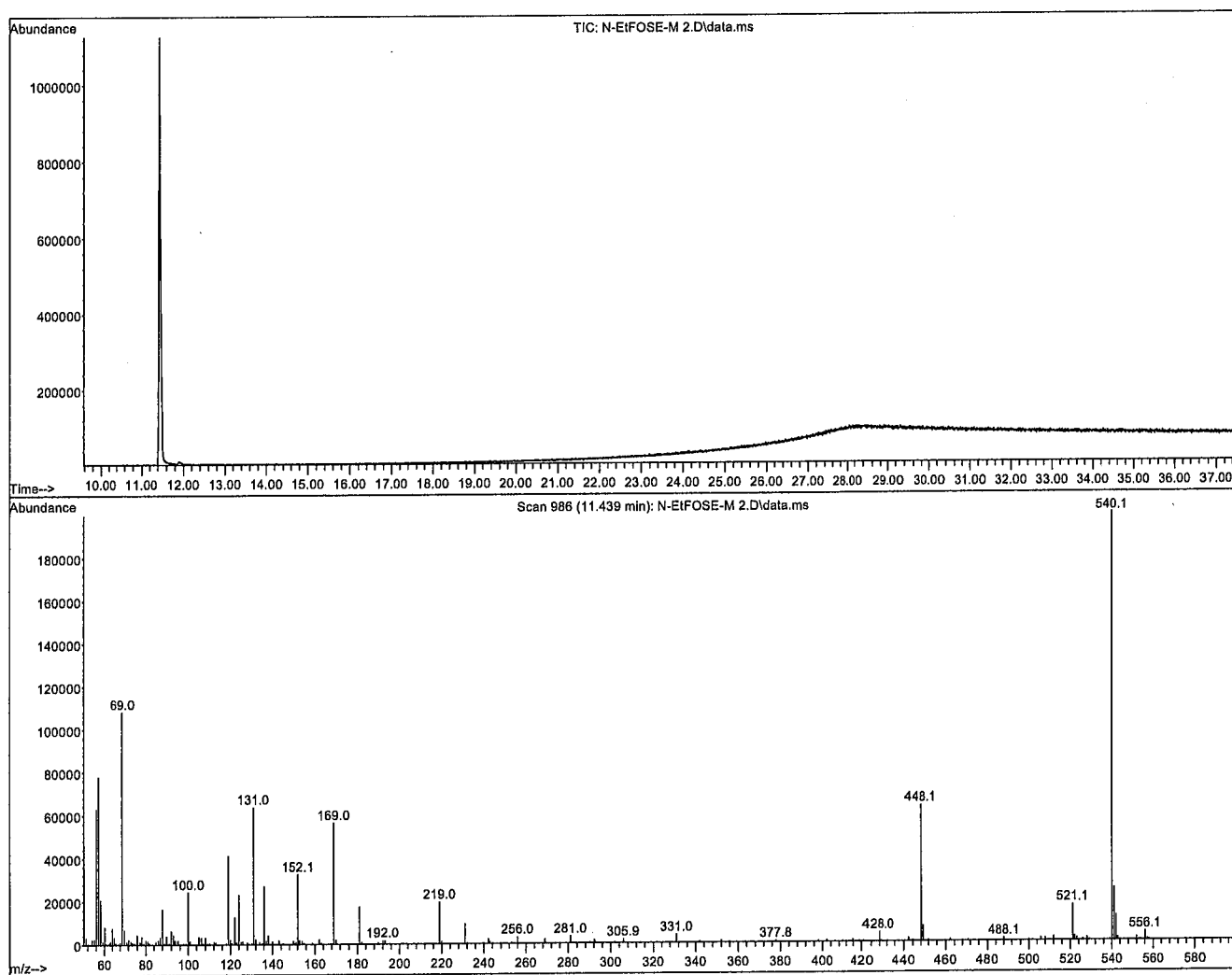
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QUALITY MANAGEMENT:

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Figure 1: N-EtFOSE-M; HRGC/LRMS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Agilent 7890A HRGC
 Agilent 5975C MSD

Chromatographic Conditions:

Column: 30 m DB-5 (0.25 mm id, 0.25 μ m film thickness) Agilent J&W

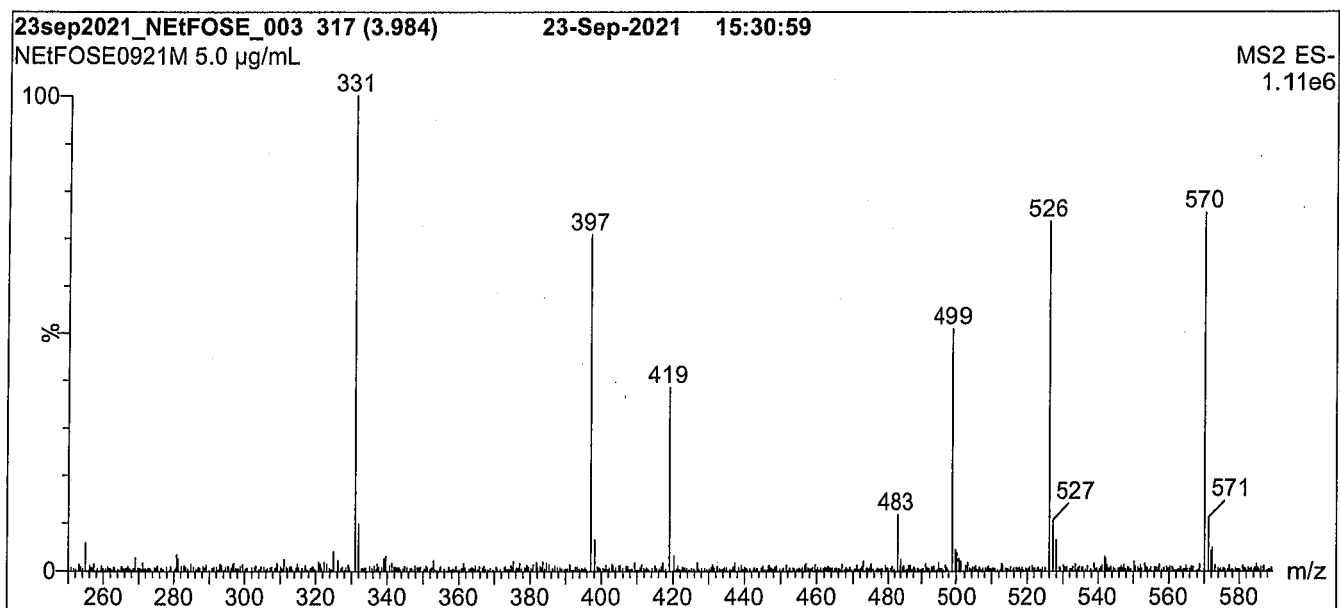
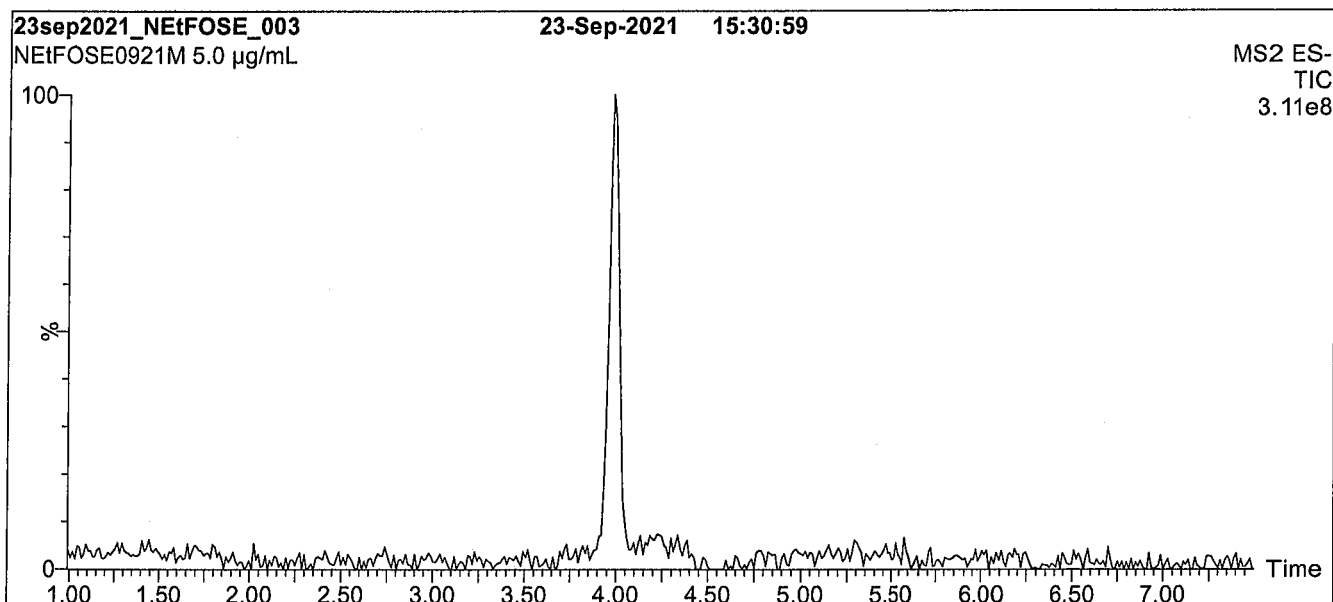
Flow: Constant at 1 mL/min

Injector: 250°C (Splitless Injection)

Oven: 100°C (5 min)
 10°C/min to 325°C
 325°C (10 min)

Ionization: EI+

Detector: 230°C
 Full Scan (50-1000 amu)

Figure 2: N-EtFOSE-M; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 2:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 µm, 2.1 x 100 mm

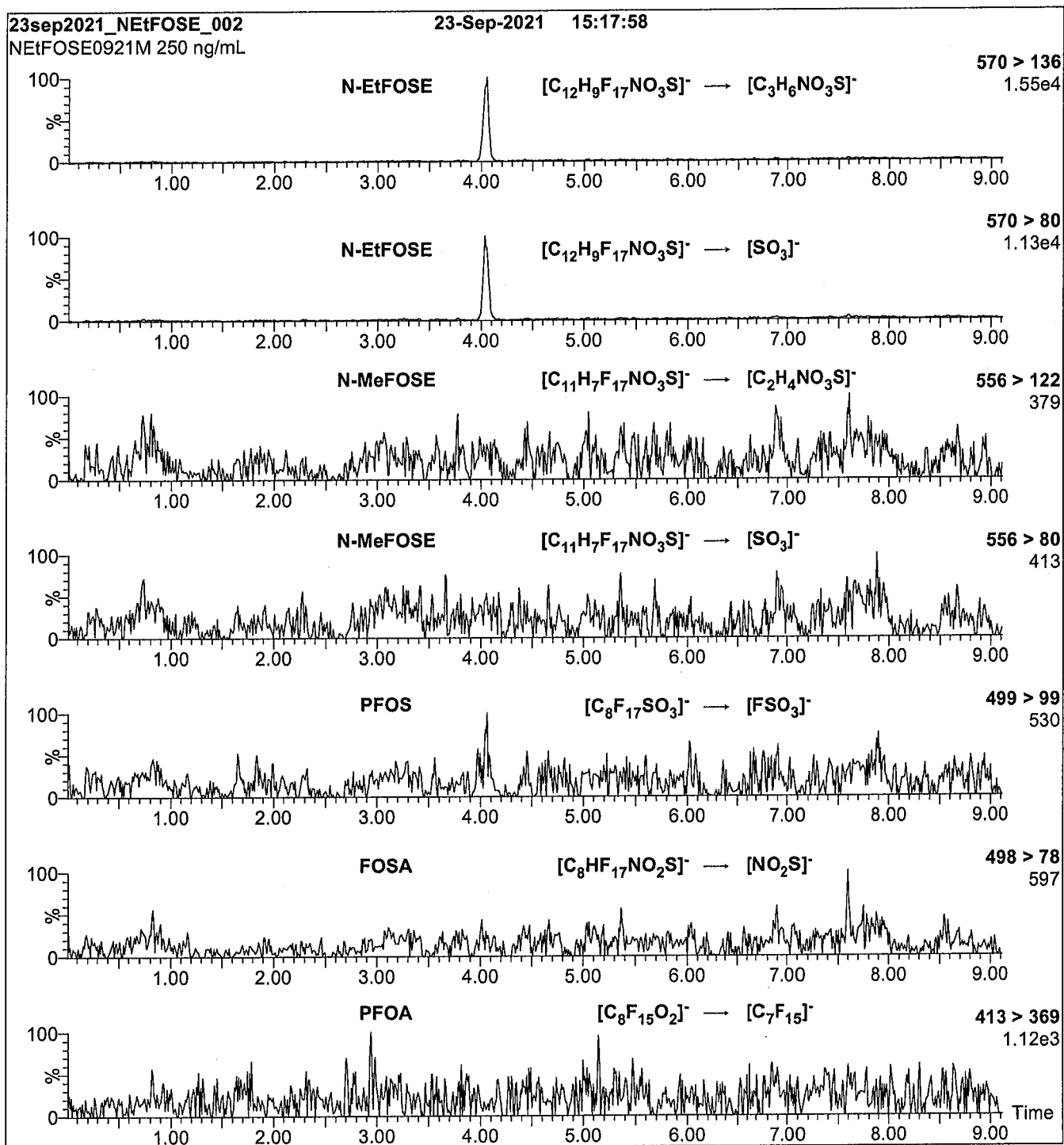
Mobile phase: Gradient
Start: 30% H₂O / 70% MeOH
Ramp to 90% organic over 8 min and hold for
1.5 min before returning to initial conditions in 1 min.
Time: 12 min

Flow: 300 µL/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = 65.00
Desolvation Temperature (°C) = 450
Desolvation Gas Flow (L/hr) = 1000

Figure 3: N-EtFOSE-M; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 3:**

Injection: On-column (N-EtFOSE-M)

Mobile phase: Same as Figure 2

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.14e-3

Collision Energy (eV) = 32

Analytical Standard Record

22C0310

Description:	PFAS - SAS NtFOSE 50ug/mL	Expires:	09/23/2026
Standard Type:	Analyte Spike	Prepared:	03/15/2022
Solvent:	Methanol	Prepared By:	Wellington Laboratories (Lot#:
Final Volume (mls):	1	Department:	PFAS (Lot# PFAS0921M)
Vials:	1	Last Edit:	03/15/2022 15:59 by DAG

Analyte	Parent	CAS Number	Concentration	Units
NtFOSE		1691-99-2	50	ug/mL

INTENDED USE:

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LIMITED WARRANTY:

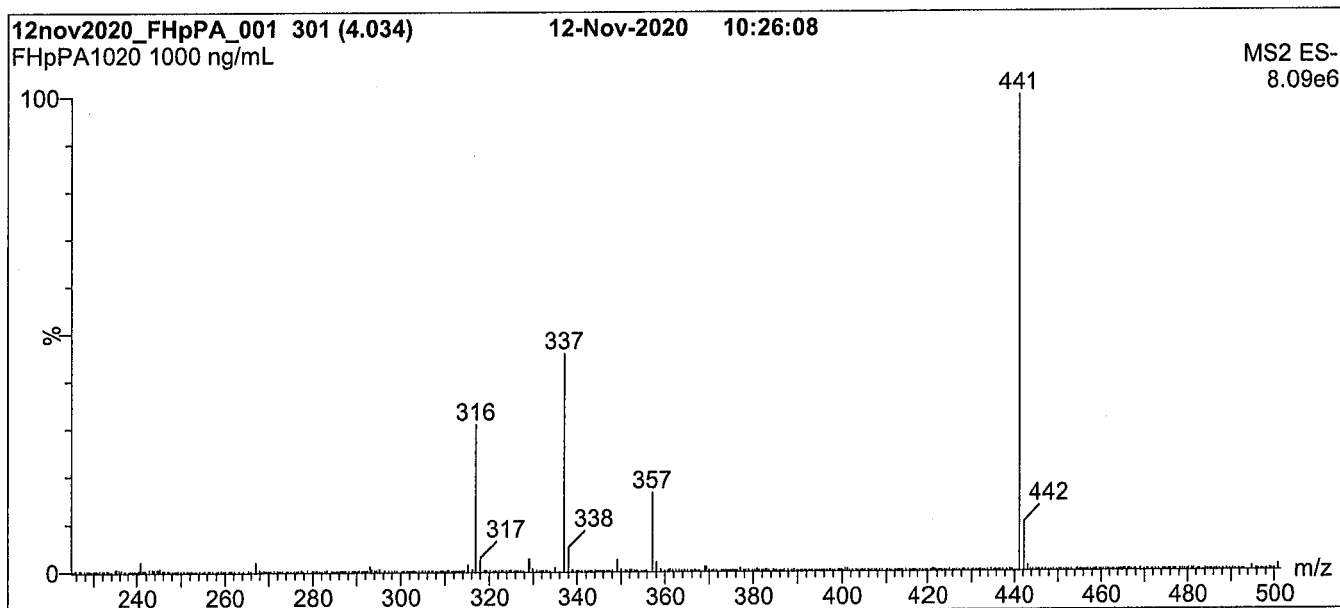
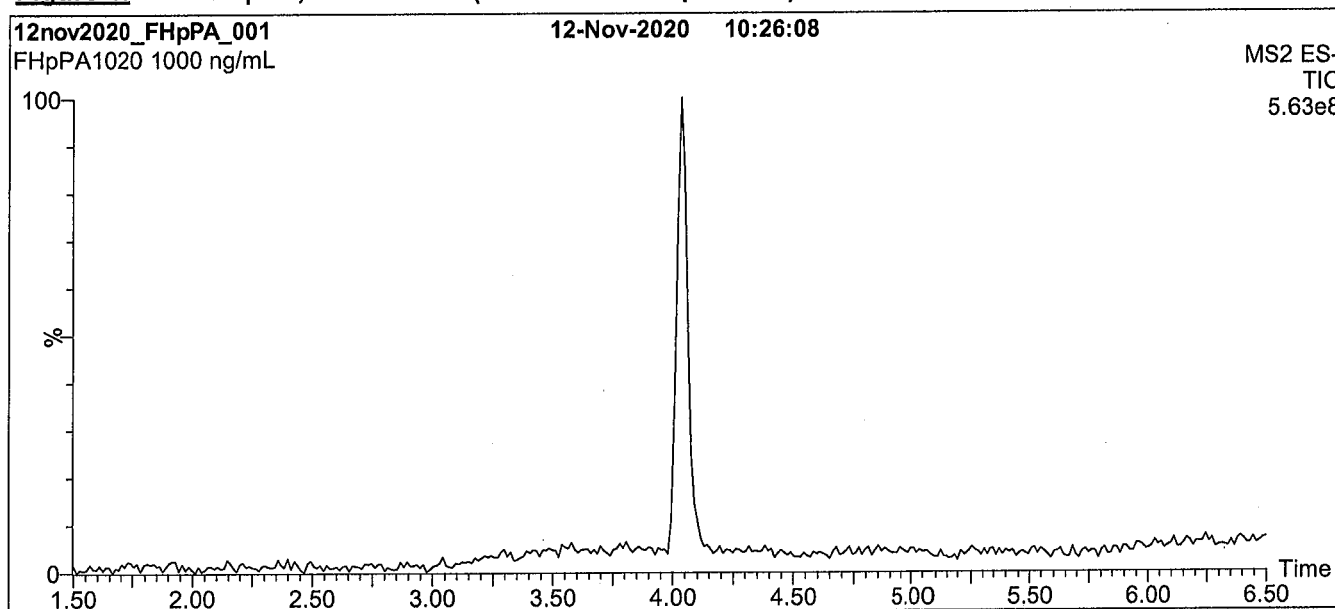
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QUALITY MANAGEMENT:

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Figure 1: FHpPA; LC/MS Data (TIC and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 45% H₂O / 55% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

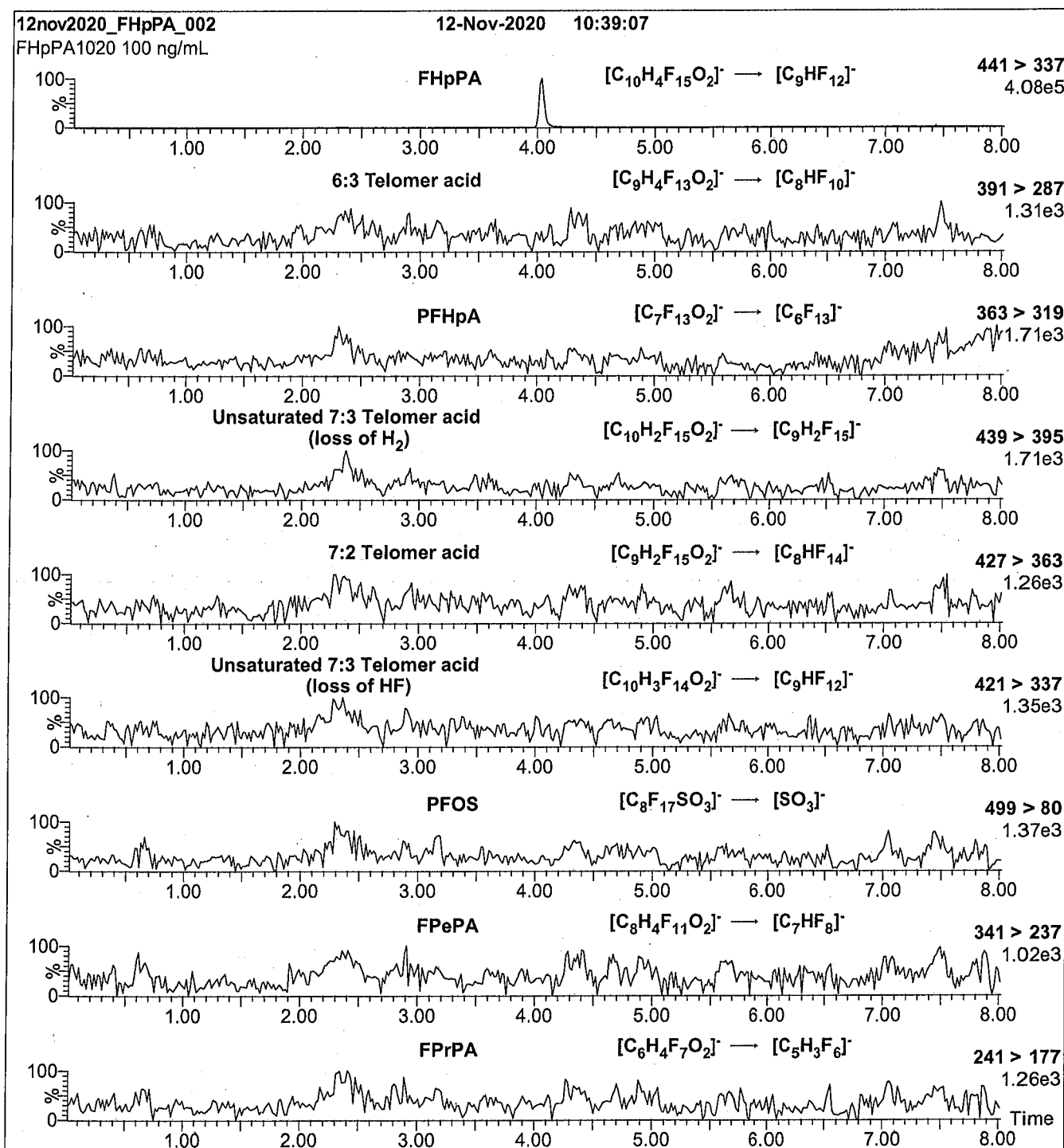
Source: Electrospray (negative)

Capillary Voltage (kV) = 0.50

Cone Voltage (V) = 28.50

Desolvation Temperature ($^{\circ}$ C) = 500

Desolvation Gas Flow (L/hr) = 1000

Figure 2: FHpPA; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (FHpPA)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.41e-3

Collision Energy (eV) = 8

Analytical Standard Record

22C0311

Description:	PFAS - SAS FHpPA 50ug/mL	Expires:	11/12/2025
Standard Type:	Analyte Spike	Prepared:	03/15/2022
Solvent:	Methanol	Prepared By:	Wellington Laboratories (Lot#:
Final Volume (mls):	1	Department:	PFAS (Lot# PA1020)
Vials:	1	Last Edit:	03/15/2022 16:00 by DAG

Analyte	Parent	CAS Number	Concentration	Units
7:3FTCA		812-70-4	50	ug/mL

Analytical Standard Record

22C0311

Description:	PFAS - SAS FHpPA 50ug/mL	Expires:	11/12/2025
Standard Type:	Analyte Spike	Prepared:	03/15/2022
Solvent:	Methanol	Prepared By:	Wellington Laboratories (Lot#:
Final Volume (mls):	1	Department:	PFAS (Lot# PA1020)
Vials:	1	Last Edit:	03/15/2022 16:00 by DAG

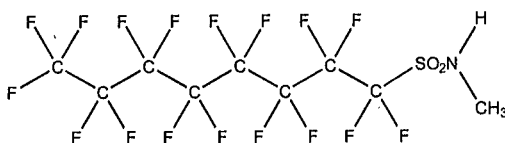
Analyte	Parent	CAS Number	Concentration	Units
7:3FTCA		812-70-4	50	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-MeFOSA-M **LOT NUMBER:** NMeFOSA0721M
COMPOUND: N-methylperfluoro-1-octanesulfonamide 22C0312
STRUCTURE: **CAS #:** 31506-32-8



MOLECULAR FORMULA: C₉H₄F₁₇NO₂S **MOLECULAR WEIGHT:** 513.17
CONCENTRATION: 50.0 ± 2.5 µg/mL **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 08/03/2021
EXPIRY DATE: (mm/dd/yyyy) 08/03/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Certified By: _____

B.G. Chittim, General Manager

Date: 08/04/2021
(mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

INTENDED USE:

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LIMITED WARRANTY:

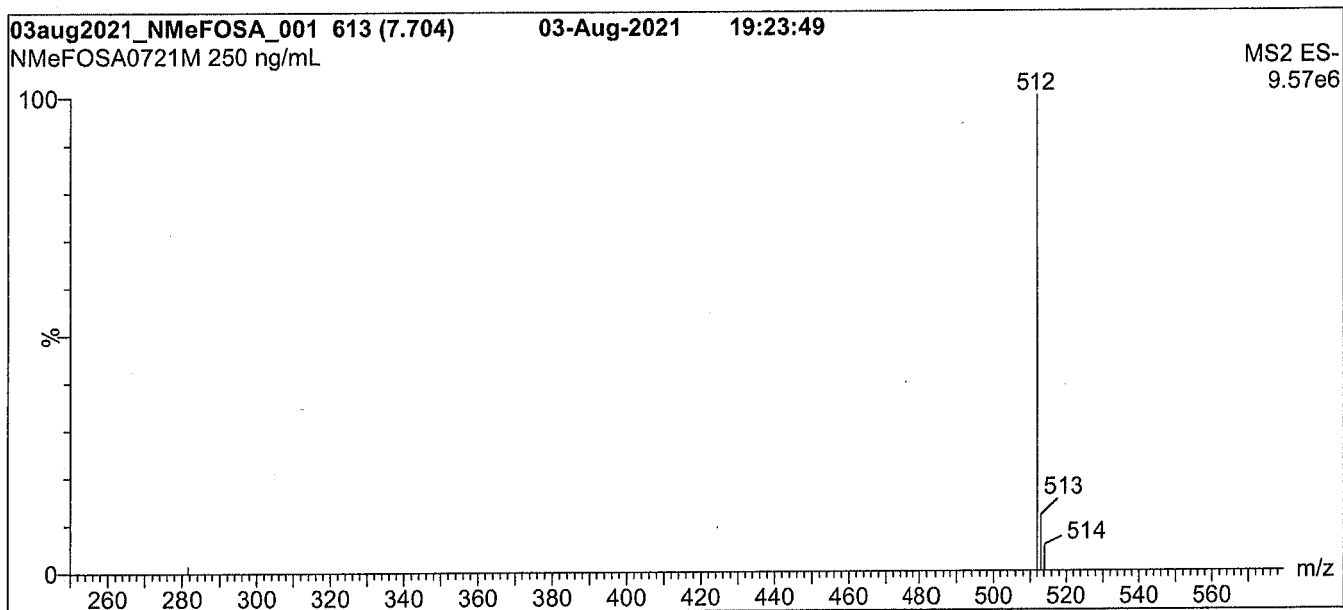
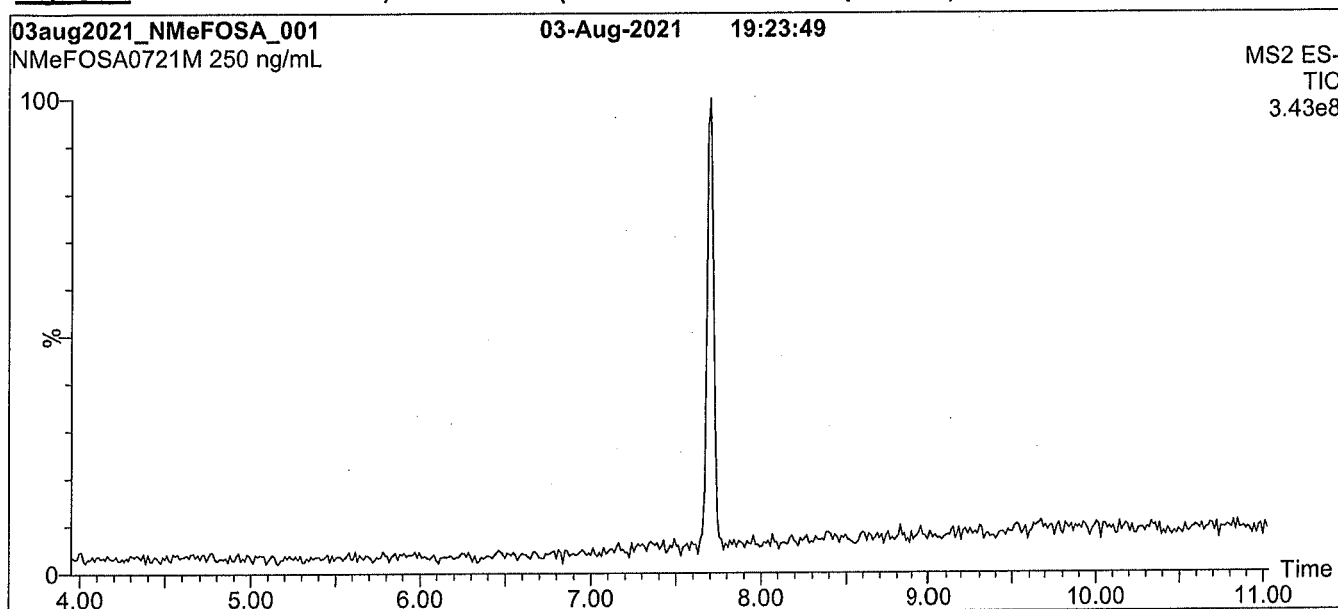
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Figure 1: N-MeFOSA-M; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

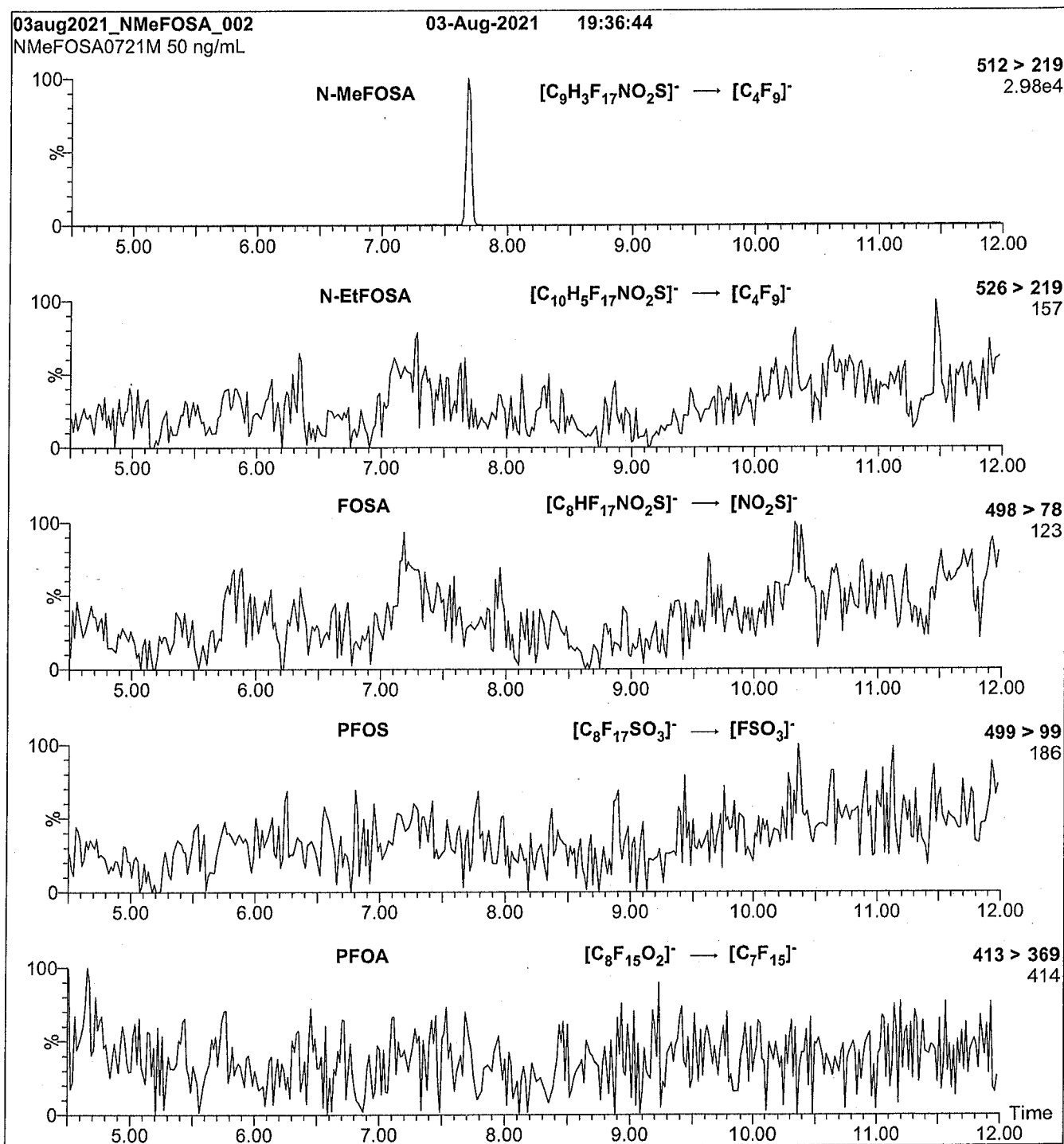
Mobile phase: Gradient
Start: 40% H₂O / 60% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (250 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 1.00
Cone Voltage (V) = 44.00
Desolvation Temperature (°C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: N-MeFOSA-M; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (N-MeFOSA-M)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.41e-3

Collision Energy (eV) = 24

Analytical Standard Record

22C0312

Description:	PFAS - SAS NMeFOSA 50ug/mL	Expires:	08/03/2026
Standard Type:	Analyte Spike	Prepared:	03/15/2022
Solvent:	Methanol	Prepared By:	Dipti Gokal
Final Volume (mls):	1	Department:	PFAS
Vials:	1	Last Edit:	03/15/2022 16:00 by DAG

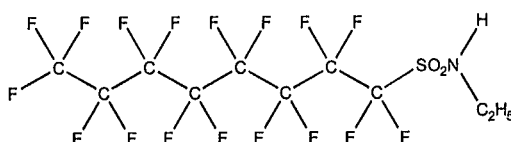
Analyte	Parent	CAS Number	Concentration	Units
NMeFOSA		31506-32-8	50	ug/mL



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE: N-EtFOSA-M **LOT NUMBER:** NEtFOSA0821M
COMPOUND: N-ethylperfluoro-1-octanesulfonamide **22C0313**
STRUCTURE: **CAS #:** 4151-50-2



MOLECULAR FORMULA: $C_{10}H_{17}F_{17}NO_2S$ **MOLECULAR WEIGHT:** 527.20
CONCENTRATION: $50.0 \pm 2.5 \mu\text{g/mL}$ **SOLVENT(S):** Methanol
CHEMICAL PURITY: >98%
LAST TESTED: (mm/dd/yyyy) 08/12/2021
EXPIRY DATE: (mm/dd/yyyy) 08/12/2026
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DOCUMENTATION/ DATA ATTACHED:

Figure 1: LC/MS Data (Full Scan and Mass Spectrum)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.

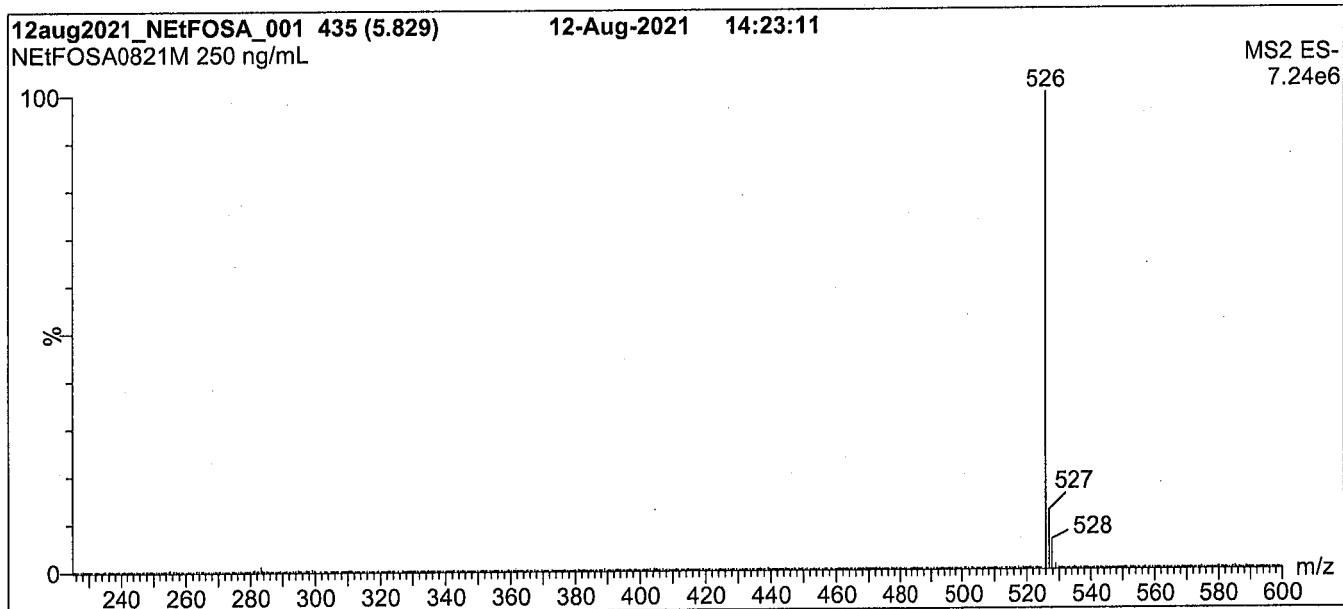
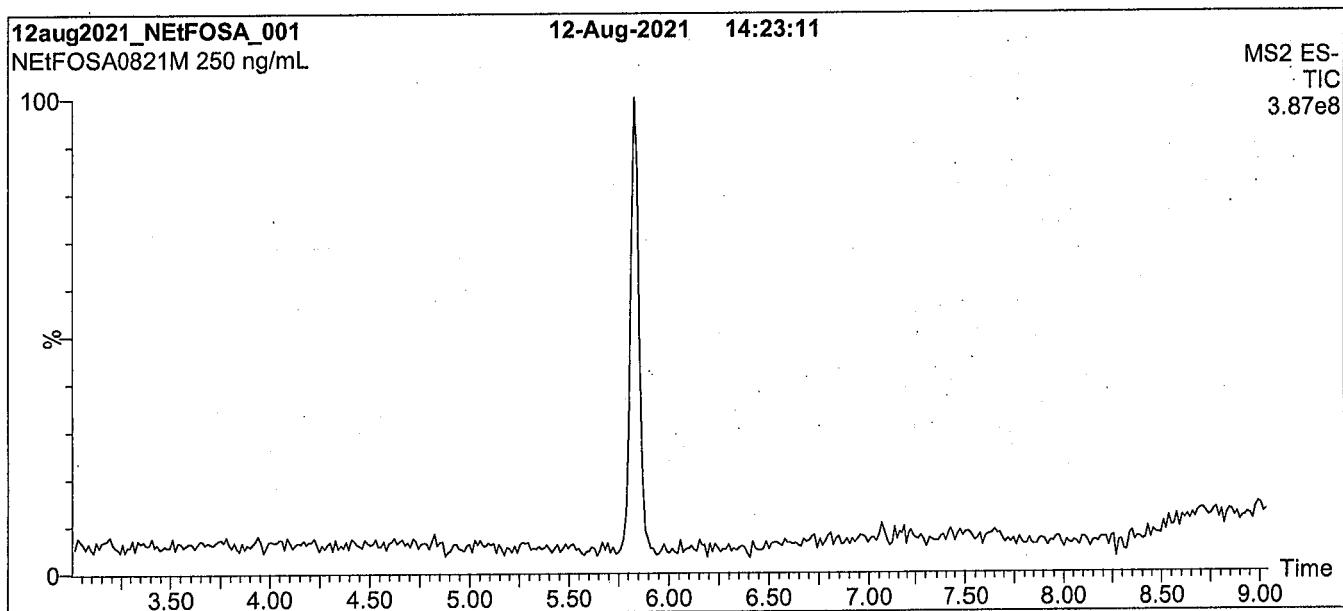
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Certified By: _____

B.G. Chittim, General Manager

Date: 08/16/2021
 (mm/dd/yyyy)

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
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Figure 1: N-EtFOSA-M; LC/MS Data (Full Scan and Mass Spectrum)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 30% H₂O / 70% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for
2 min before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 1.00
Cone Voltage (V) = 44.00
Desolvation Temperature ($^{\circ}$ C) = 500
Desolvation Gas Flow (L/hr) = 1000

Analytical Standard Record

22C0313

Description:	PFAS - SAS NETFOSA 50ug/mL	Expires:	08/12/2026
Standard Type:	Other	Prepared:	03/15/2022
Solvent:	Methanol	Prepared By:	Wellington Laboratories (Lot#:
Final Volume (mls):	1	Department:	NETFOSA0821M)
Vials:	1	Last Edit:	08/17/2022 10:49 by LYA

Analyte	Parent	CAS Number	Concentration	Units
NETFOSA		4151-50-2	50	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PFAC-MXF 22F0058

**Native Replacement PFAS
Solution/Mixture**

PRODUCT CODE: PFAC-MXF
LOT NUMBER: PFACMXF0122
SOLVENT(S): Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 01/10/2022
LAST TESTED: (mm/dd/yyyy) 01/11/2022
EXPIRY DATE: (mm/dd/yyyy) 01/11/2025
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

PFAC-MXF is a solution/mixture of sodium dodecafluoro-3H-4,8-dioxanonanoate (NaDONA), the major and minor components of F-53B (9Cl-PF3ONS and 11Cl-PF3OUdS), and GenX (HFPO-DA). The components and their concentrations are given in Table A.

The individual native components of this mixture all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
 Figure 1: LC/MS Data (SIR)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

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INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: PFAC-MXF; Components and Concentrations (ng/mL; ± 5% in Methanol/Water (<1%))

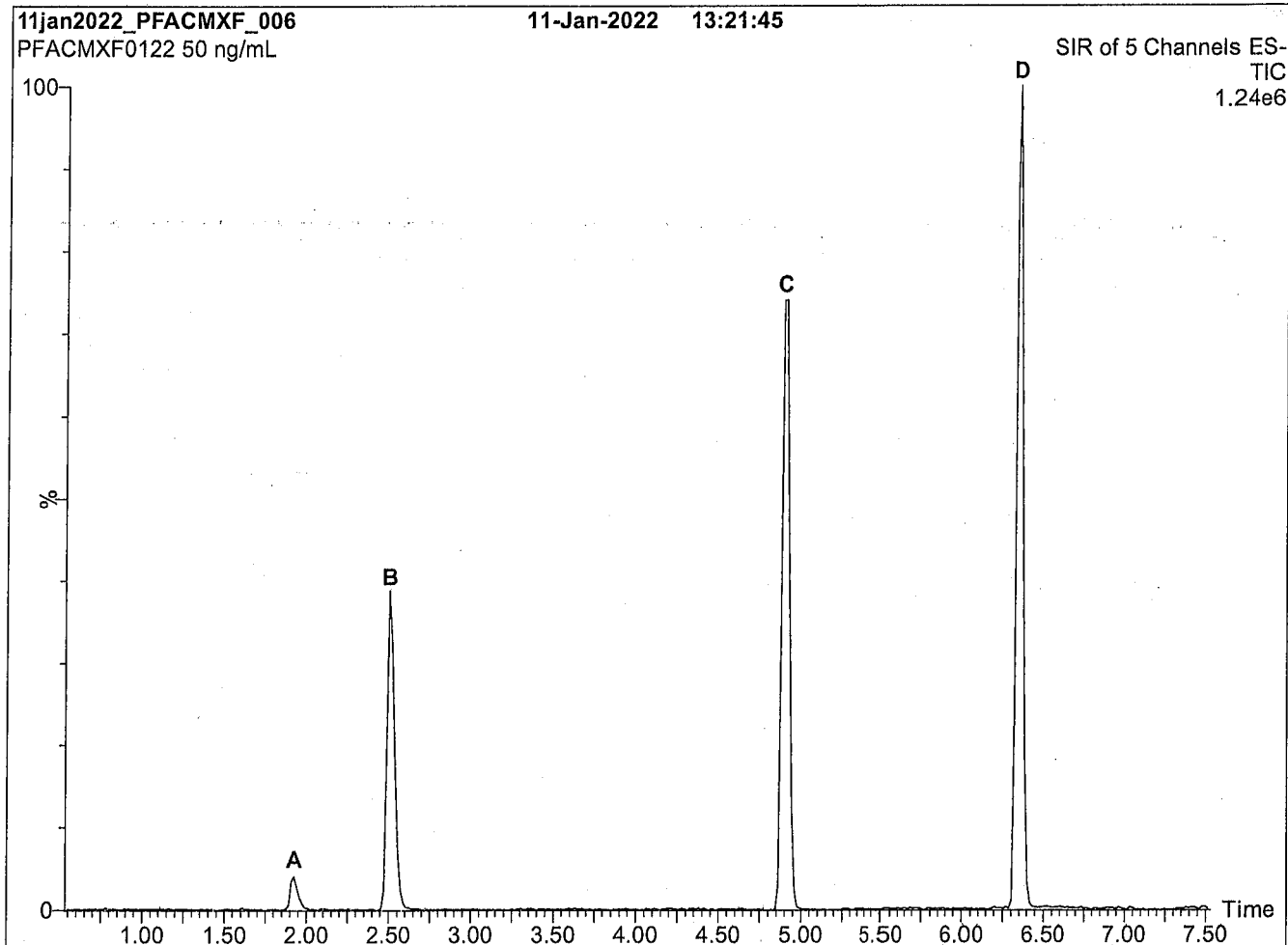
Compound	Acronym	Concentration* (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the acid	
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	HFPO-DA	2000		A
Sodium dodecafluoro-3H-4,8-dioxananoate	NaDONA	2000	1890	B
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000	1870	C
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000	1890	D

* Concentrations have been rounded to three significant figures.

Certified By: 

B.G. Chittim, General Manager

Date: 01/12/2022
(mm/dd/yyyy)

Figure 1: PFAC-MXF; LC/MS Data (SIR)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
 Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

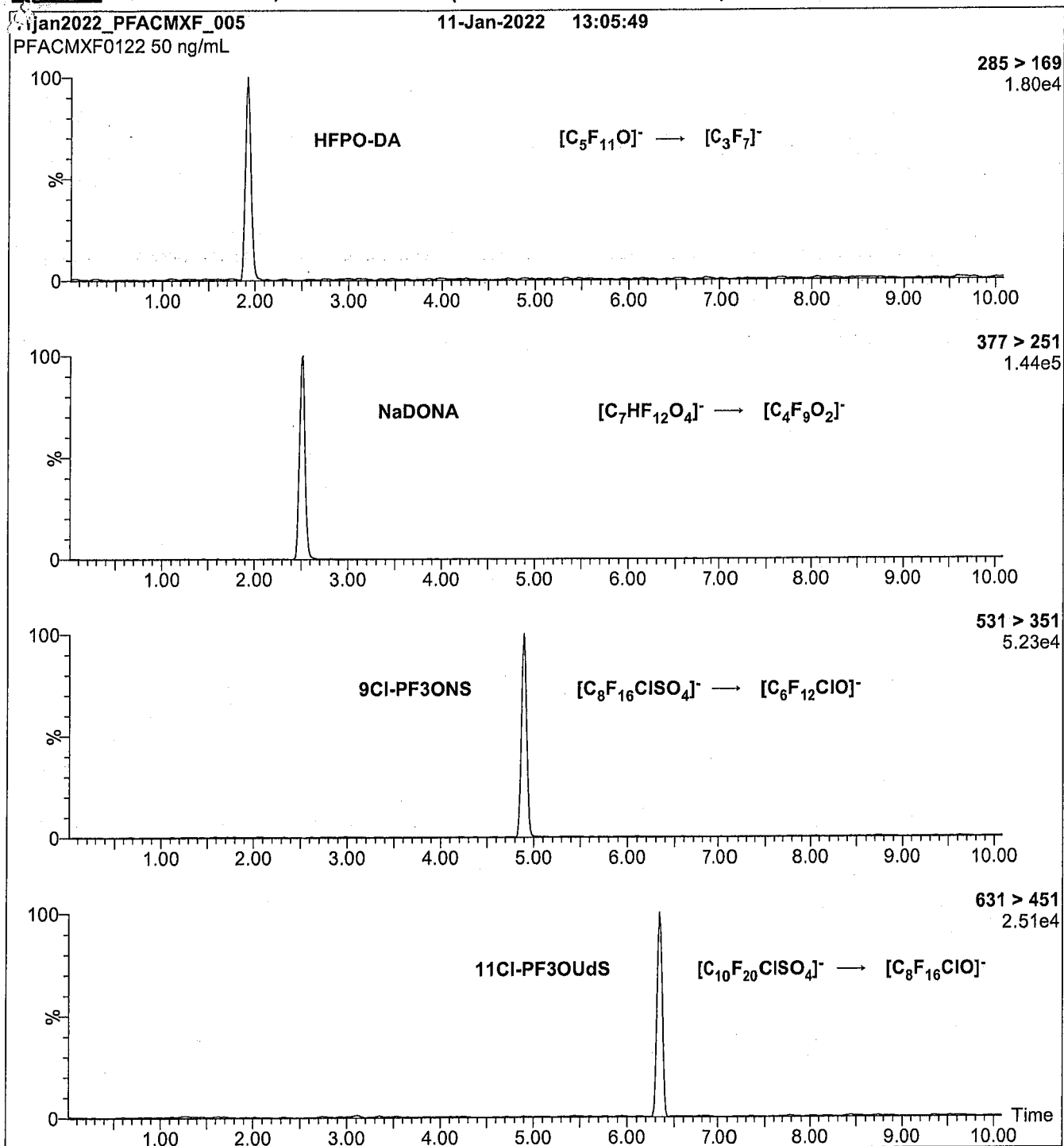
Mobile phase: Gradient
 Start: 45% H₂O / 55% (80:20 MeOH:ACN)
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min and hold for 2 min
 before returning to initial conditions in 0.75 min.
 Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: SIR

Source: Electrospray (negative)
 Capillary Voltage (kV) = 2.00
 Cone Voltage (V) = variable (15-74)
 Desolvation Temperature ($^{\circ}$ C) = 325
 Desolvation Gas Flow (L/hr) = 1000

Figure 2: PFAC-MXF; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (PFAC-MXF)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**Collision Gas (mbar) = 3.43×10^{-3}

Collision Energy (eV) = 6-60 (variable)

Analytical Standard Record

22F0058

Description:	PFAS - MIX MXF 2ug/mL	Expires:	01/11/2025
Standard Type:	Other	Prepared:	01/10/2022
Solvent:	MeOH	Prepared By:	Lizbeth Andres
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	09/15/2022 09:32 by DAG

Analyte	Parent	CAS Number	Concentration	Units
11CL-PF3OUDS		763051-92-9	1.89	ug/mL
9CL-PF3ONS		756426-58-1	1.87	ug/mL
ADONA		919005-14-4	1.89	ug/mL
HFPO-DA		13252-13-6	2	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PFAC-MXH 22F0059

**Native Per- and Poly-fluoroalkyl Substance
Solution/Mixture**

PRODUCT CODE: PFAC-MXH
LOT NUMBER: PFACMXH0921
SOLVENT(S): Methanol / Isopropanol (2%) / Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 09/09/2021
LAST TESTED: (mm/dd/yyyy) 09/14/2021
EXPIRY DATE: (mm/dd/yyyy) 09/14/2026
RECOMMENDED STORAGE: Refrigerate ampoule

DESCRIPTION:

PFAC-MXH is a solution/mixture of eleven native linear perfluoroalkylcarboxylic acids (C₄-C₁₄), eight native perfluoroalkanesulfonates (C₄, C₅, C₇, C₉, C₁₀ and C₁₂ linear; C₆ and C₈ linear and branched), three native fluorotelomer sulfonates (4:2, 6:2, and 8:2), two native linear and branched perfluorooctanesulfonamidoacetic acids, and perfluoro-1-octanesulfonamide (FOSA). The components and their concentrations are given in Table A.

The individual components of this mixture all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
 Table B: Isomeric Components and Percent Composition of br-NMeFOSAA
 Table C: Isomeric Components and Percent Composition of br-NEtFOSAA
 Table D: Isomeric Components and Percent Composition of PFHxSK
 Table E: Isomeric Components and Percent Composition of PFOSK
 Figure 1: LC/MS Data (SIR)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

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SYNTHESIS / CHARACTERIZATION:

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HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

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EXPIRY DATE / PERIOD OF VALIDITY:

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For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: PFAC-MXH; Components and Concentrations
($\mu\text{g/mL}$, $\pm 5\%$ in methanol / isopropanol (2%) / water (<1%))

Compound	Acronym	Concentration* ($\mu\text{g/mL}$)		Peak Assignment in Figure 1
		as the salt	as the acid	
Perfluoro-n-butanoic acid	PFBA	4.00		1
Perfluoro-n-pentanoic acid	PFPeA	2.00		2
Perfluoro-n-hexanoic acid	PFHxA	1.00		5
Perfluoro-n-heptanoic acid	PFHpA	1.00		7
Perfluoro-n-octanoic acid	PFOA	1.00		11
Perfluoro-n-nonanoic acid	PFNA	1.00		14
Perfluoro-n-decanoic acid	PFDA	1.00		18
Perfluoro-n-undecanoic acid	PFUdA	1.00		23
Perfluoro-n-dodecanoic acid	PFDoA	1.00		26
Perfluoro-n-tridecanoic acid	PFTrDA	1.00		27
Perfluoro-n-tetradecanoic acid	PFTeDA	1.00		29
Perfluoro-1-octanesulfonamide	FOSA	1.00		25
N-methylperfluorooctanesulfonamidoacetic acid ^a	N-MeFOSAA: linear isomer	0.760		20
	N-MeFOSAA: Σ branched isomers	0.240		17
N-ethylperfluorooctanesulfonamidoacetic acid ^b	N-EtFOSAA: linear isomer	0.775		22
	N-EtFOSAA: Σ branched isomers	0.225		21
Compound	Acronym	Concentration* ($\mu\text{g/mL}$)		Peak Assignment in Figure 1
		as the salt	as the acid	
Potassium perfluoro-1-butanedisulfonate	L-PFBS	1.00	0.887	3
Sodium perfluoro-1-pentanesulfonate	L-PFPeS	1.00	0.941	6
Potassium perfluorohexanesulfonate ^c	PFHxSK: linear isomer	0.811	0.741	9
	PFHxSK: Σ branched isomers	0.189	0.173	8
Sodium perfluoro-1-heptanesulfonate	L-PFHpS	1.00	0.953	12
Potassium perfluorooctanesulfonate ^d	PFOSK: linear isomer	0.788	0.732	15
	PFOSK: Σ branched isomers	0.211	0.196	13
Sodium perfluoro-1-nonanesulfonate	L-PFNS	1.00	0.962	19
Sodium perfluoro-1-decanedisulfonate	L-PFDs	1.00	0.965	24
Sodium perfluoro-1-dodecanedisulfonate	L-PFDoS	1.00	0.970	28
Sodium 1H,1H,2H,2H-perfluorohexanesulfonate	4:2Fts	4.00	3.75	4
Sodium 1H,1H,2H,2H-perfluorooctanesulfonate	6:2Fts	4.00	3.80	10
Sodium 1H,1H,2H,2H-perfluorodecanedisulfonate	8:2Fts	4.00	3.84	16

^a See Table B for percent composition of linear and branched N-MeFOSAA isomers.

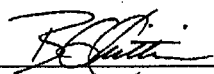
^b See Table C for percent composition of linear and branched N-EtFOSAA isomers.

^c See Table D for percent composition of linear and branched PFHxSK isomers.

^d See Table E for percent composition of linear and branched PFOSK isomers.

* Concentrations have been rounded to three significant figures.

Certified By: _____


B.G. Chittim, General Manager

Date: 09/23/2021

(mm/dd/yyyy)

Table B: br-NMeFOSAA; Isomeric Components and Percent Composition (by ¹⁹F-NMR)*

Isomer	Compound	Structure	Percent Composition by ¹⁹ F-NMR	
1	N-methylperfluoro-1-octanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_7\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	76.0	76.0
2	N-methylperfluoro-3-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_3\text{CF}(\text{CF}_2)_2\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	0.7	24.0
3	N-methylperfluoro-4-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_2\text{CF}(\text{CF}_2)_3\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	2.0	
4	N-methylperfluoro-5-methylheptanesulfonamidoacetic acid	$\text{CF}_3\text{CF}_2\text{CF}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	6.0	
5	N-methylperfluoro-6-methylheptanesulfonamidoacetic acid	$\text{CF}_3\text{CF}(\text{CF}_2)_5\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	14.0	
6	N-methylperfluoro-5,5-dimethylhexanesulfonamidoacetic acid	$\text{CF}_3\text{C}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$	0.2	
7	Other Unidentified Isomers		1.1	

* Percent of total N-methylperfluorooctanesulfonamidoacetic acid isomers only.

Table D: PFHxSK; Isomeric Components and Percent Composition (by ¹⁹F-NMR)*

Isomer	Compound	Structure	Percent Composition by ¹⁹ F-NMR	
1	Potassium perfluoro-1-hexanesulfonate	$\text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+$	81.1	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}_2\text{CF}(\text{SO}_3^-\text{K}^+) \\ \\ \text{CF}_3 \end{array}$	2.9	18.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}_2\text{CF}(\text{CF}_3)\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	1.4	
4	Potassium 3-trifluoromethylperfluoropentanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}_2\text{CF}(\text{CF}_3)\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	5.0	
5	Potassium 4-trifluoromethylperfluoropentanesulfonate	$\begin{array}{c} \text{CF}_3\text{CF}(\text{CF}_3)\text{CF}_2\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	8.9	
6	Potassium 3,3-di(trifluoromethyl)perfluorobutanesulfonate	$\begin{array}{c} \text{CF}_3 \\ \\ \text{CF}_3\text{C}(\text{CF}_3)\text{CF}_2\text{CF}_2\text{SO}_3^-\text{K}^+ \\ \\ \text{CF}_3 \end{array}$	0.2	
7	Other Unidentified Isomers		0.5	

* Percent of total perfluorohexanesulfonate isomers only.

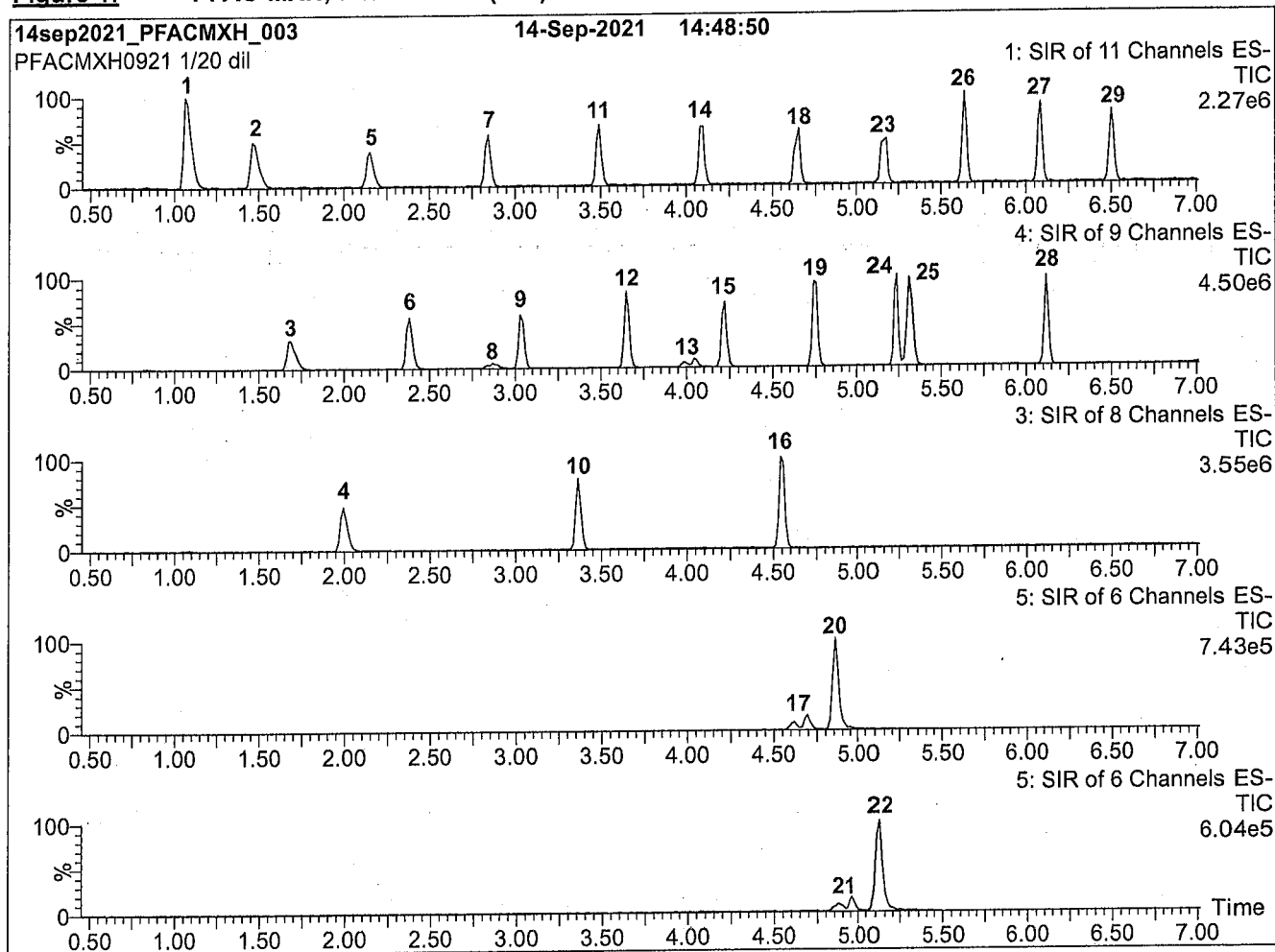
** Systematic Name: Potassium perfluorohexane-2-sulfonate.

Table E: PFOSK; Isomeric Components and Percent Composition (by ¹⁹F-NMR)*

Isomer	Compound	Structure	Percent Composition by ¹⁹ F-NMR	
1	Potassium perfluoro-1-octanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺	78.8	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF(SO ₃ ⁻)K ⁺ CF ₃	1.2	21.1
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF(CF ₃)SO ₃ ⁻ K ⁺ CF ₃	0.6	
4	Potassium 3-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF(CF ₃)CF ₂ SO ₃ ⁻ K ⁺ CF ₃	1.9	
5	Potassium 4-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF(CF ₃)CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	2.2	
6	Potassium 5-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF(CF ₃)CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	4.5	
7	Potassium 6-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF(CF ₃)CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	10.0	
8	Potassium 5,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₃ CCF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.2	
9	Potassium 4,4-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₃ CF ₂ CCF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.03	
10	Potassium 4,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₃ CF(CF ₃)CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.4	
11	Potassium 3,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₃ CF(CF ₃)CF ₂ CF(CF ₃)CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.07	

* Percent of total perfluorooctanesulfonate isomers only.

** Systematic Name: Potassium perfluorooctane-2-sulfonate.

Figure 1: PFAC-MXH; LC/MS Data (SIR)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient

Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 9 min and hold for 2 min
before returning to initial conditions in 1 min.
Time: 15 min

Flow: 300 μ L/min

MS Parameters:

Experiment: SIR

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.50
Cone Voltage (V) = variable (2-74)
Desolvation Temperature ($^{\circ}$ C) = 350
Desolvation Gas Flow (L/hr) = 1000

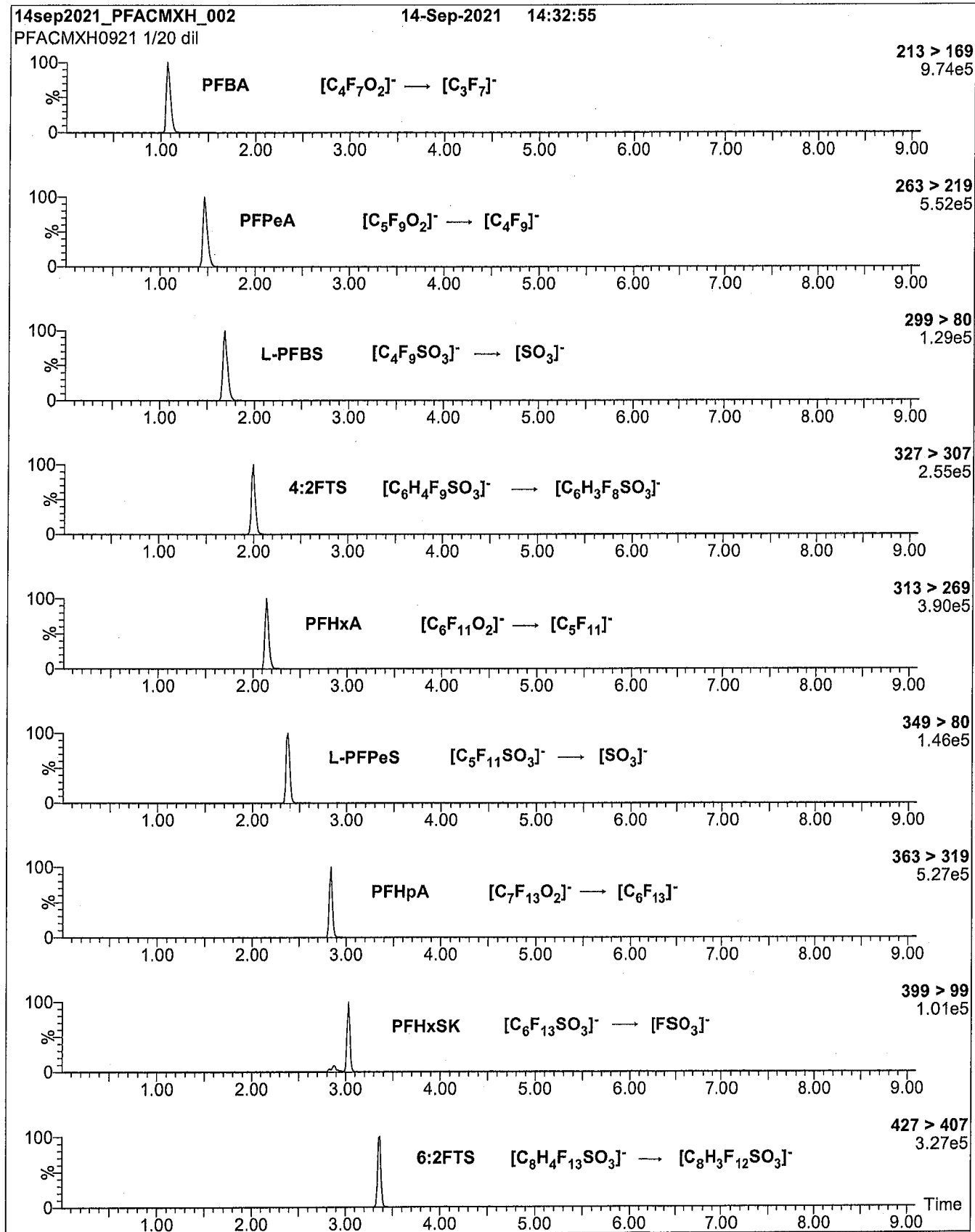
Figure 2: PFAC-MXH; LC/MS/MS Data (Selected MRM Transitions)

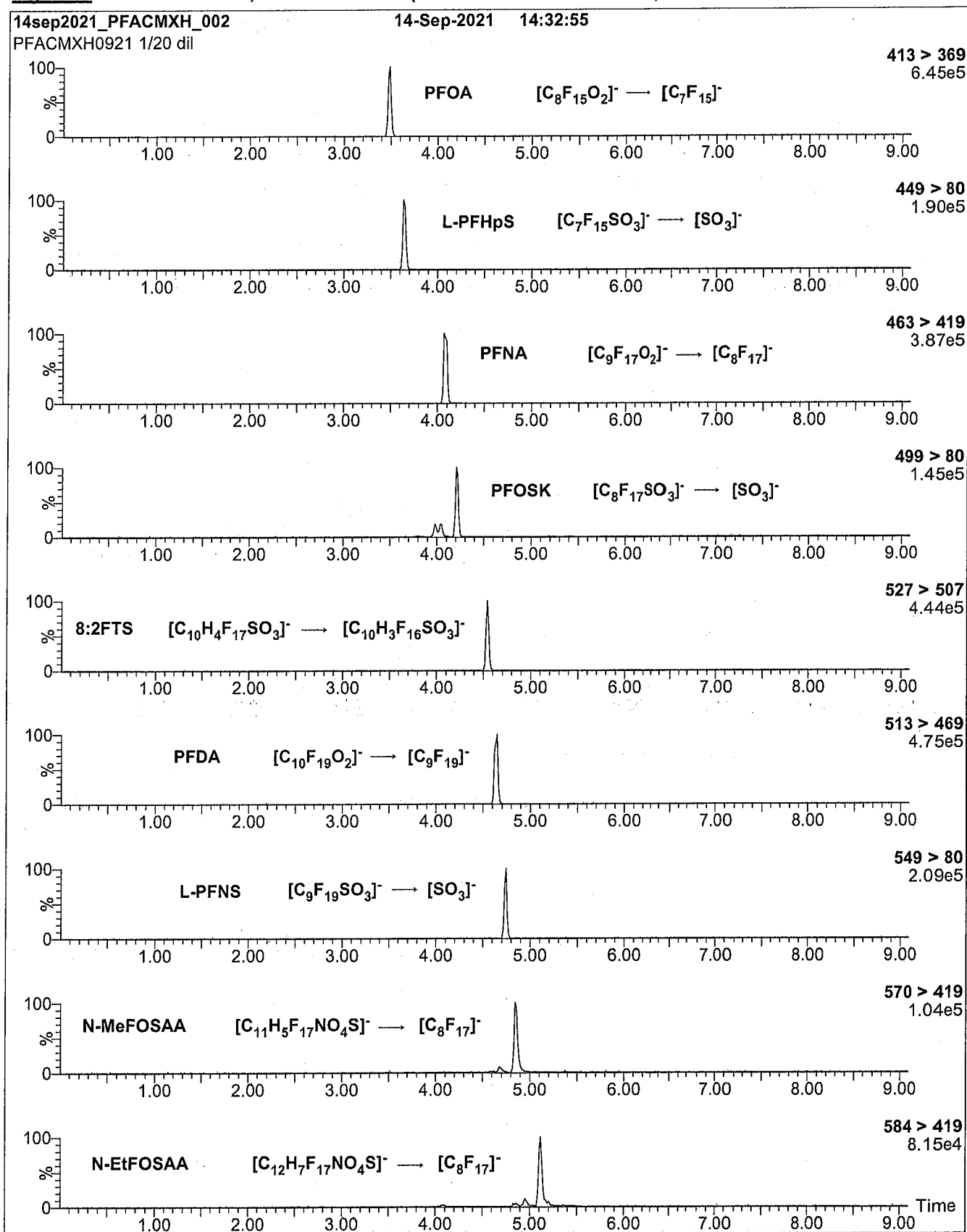
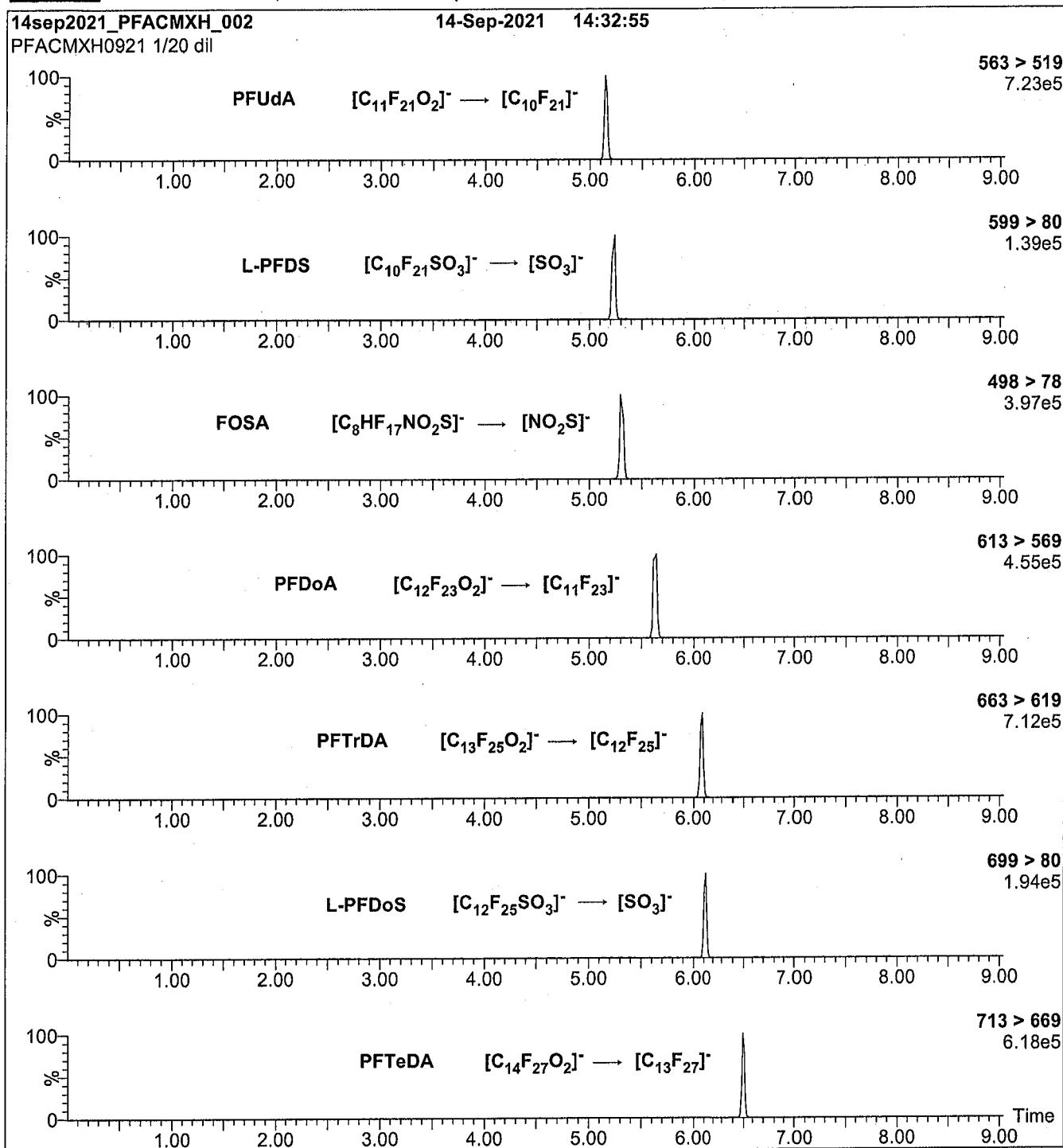
Figure 2: PFAC-MXH; LC/MS/MS Data (Selected MRM Transitions)

Figure 2: PFAC-MXH; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (PFAC-MXH)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.31e-3

Collision Energy (eV) = 6-60 (variable)

Analytical Standard Record

22F0059

Description:	PFAS - MIX MXH 2ug/mL	Expires:	09/14/2026
Standard Type:	Other	Prepared:	09/09/2021
Solvent:	MeOH	Prepared By:	Lizbeth Andres
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	09/15/2022 09:33 by DAG

Analyte	Parent	CAS Number	Concentration	Units
4:2FTS		757124-72-4	3.75	ug/mL
6:2FTS		27619-97-2	3.8	ug/mL
8:2FTS		39108-34-4	3.84	ug/mL
NETFOSAA		2991-50-6	1	ug/mL
NMeFOSAA		2355-31-9	1	ug/mL
PFBA		375-22-4	4	ug/mL
PFBS		375-73-5	0.887	ug/mL
PFDA		335-76-2	1	ug/mL
PFDOA		307-55-1	1	ug/mL
PFDOS		79780-39-5	0.97	ug/mL
PFDS		335-77-3	0.965	ug/mL
PFHPA		375-85-9	1	ug/mL
PFHPS		375-92-8	0.953	ug/mL
PFHXA		307-24-4	1	ug/mL
PFHXS		355-46-4	0.914	ug/mL
PFNA		375-95-1	1	ug/mL
PFNS		68259-12-1	0.962	ug/mL
PFOA		335-67-1	1	ug/mL
PFOS		1763-23-1	0.928	ug/mL
PFOSA		754-91-6	1	ug/mL
PFPEA		2706-90-3	2	ug/mL
PFPEs		630402-22-1	0.941	ug/mL
PFTEDA		376-06-7	1	ug/mL
PFTRDA		72629-94-8	1	ug/mL
PFUnA		2058-94-8	1	ug/mL

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**PFAC-MXG** 22F0061**Native Perfluoroalkyl Ether Carboxylic
Acids and Sulfonate Solution/Mixture**

PRODUCT CODE: PFAC-MXG
LOT NUMBER: PFACMXG0222
SOLVENT(S): Methanol/Water (<1%)
DATE PREPARED: (mm/dd/yyyy) 02/07/2022
LAST TESTED: (mm/dd/yyyy) 02/22/2022
EXPIRY DATE: (mm/dd/yyyy) 02/22/2027
RECOMMENDED STORAGE: Store ampoule in a cool, dark place

DESCRIPTION:

PFAC-MXG is a solution/mixture of three native perfluoroalkyl ether carboxylic acids and a native perfluoroalkyl ether sulfonate. The components and their concentrations are given in Table A.

The individual components all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

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INTENDED USE:

The products prepared by Wellington Laboratories Inc. are for laboratory use only. This certified reference material (CRM) was designed to be used as a standard for the identification and/or quantification of the specific chemical compounds it contains.

HANDLING:

This product should only be used by qualified personnel familiar with its potential hazards and trained in the handling of hazardous chemicals. Due care should be exercised to prevent unnecessary human contact or ingestion. All procedures should be carried out in a well-functioning fume hood and suitable gloves, eye protection, and clothing should be worn at all times. Waste should be disposed of according to national and regional regulations. Safety Data Sheets (SDSs) are available upon request.

SYNTHESIS / CHARACTERIZATION:

Our products are synthesized using single-product unambiguous routes whenever possible. They are then characterized, and their structures and purities confirmed, using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Isotopic purities of mass-labelled compounds are also confirmed using HRGC/HRMS and/or LC/MS/MS.

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

The maximum combined relative standard uncertainty of our reference standard solutions is calculated using the following equation:

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

$$u_c(y(x_1, x_2, \dots, x_n)) = \sqrt{\sum_{i=1}^n u(y, x_i)^2}$$

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of $\pm 5\%$ (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

All reference standard solutions are traceable to specific crystalline lots. The microbalances used for solution preparation are regularly calibrated by an external ISO/IEC 17025 accredited laboratory. In addition, their calibration is verified prior to each weighing using calibrated external weights traceable to an ISO/IEC 17025 accredited laboratory. All volumetric glassware used is calibrated, of Class A tolerance, and traceable to an ISO/IEC 17025 accredited laboratory. For certain products, traceability to international interlaboratory studies has also been established.

EXPIRY DATE / PERIOD OF VALIDITY:

Ongoing stability studies of this product have demonstrated stability in its composition and concentration, until the specified expiry date, in the unopened ampoule. Monitoring for any degradation or change in concentration of the listed analyte(s) is performed on a routine basis.

LIMITED WARRANTY:

At the time of shipment, all products are warranted to be free of defects in material and workmanship and to conform to the stated technical and purity specifications.

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A1226), and ISO 17034 by ANSI National Accreditation Board (ANAB; AR-1523).



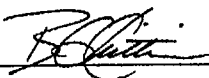
For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

Table A: PFAC-MXG; Components and Concentrations (ng/mL; \pm 5% in methanol/water (<1%))

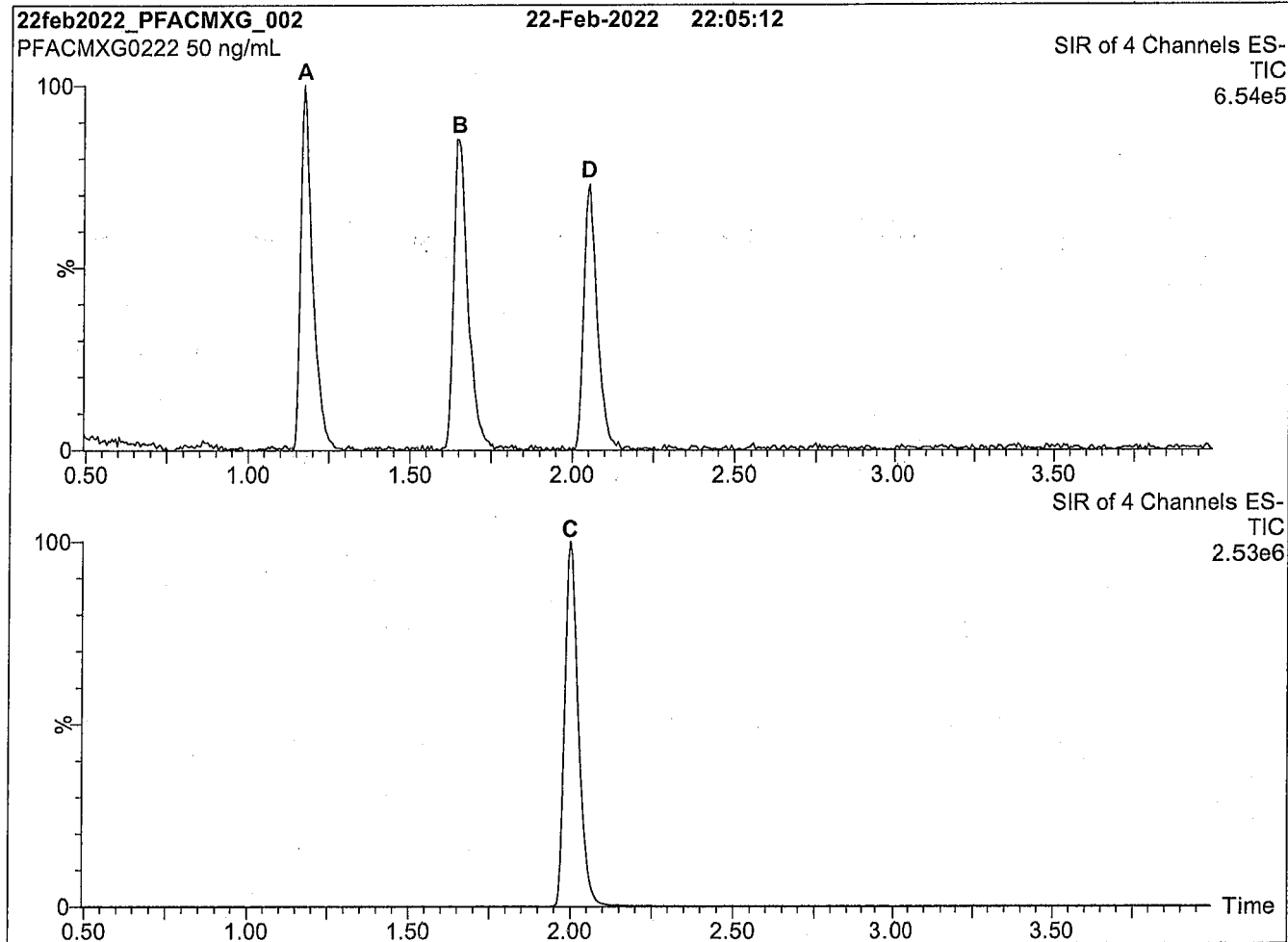
Compound	Acronym	Concentration (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Perfluoro-4-oxapentanoic acid	PF4OPeA	2000		A
Perfluoro-5-oxahexanoic acid	PF5OHxA	2000		B
Perfluoro-3,6-dioxaheptanoic acid	3,6-OPFHpA	2000		D
Compound	Acronym	Concentration* (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Potassium perfluoro(2-ethoxyethane)sulfonate	PFEESA	2000	1780	C

* Concentrations have been rounded to three significant figures.

Certified By: _____


B.G. Chittim, General Manager

Date: 03/03/2022
(mm/dd/yyyy)

Figure 1: PFAC-MXG; LC/MS Data (SIR)**Conditions for Figure 1:**

Waters Acquity Ultra Performance LC
Waters Xevo TQ-S micro MS

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

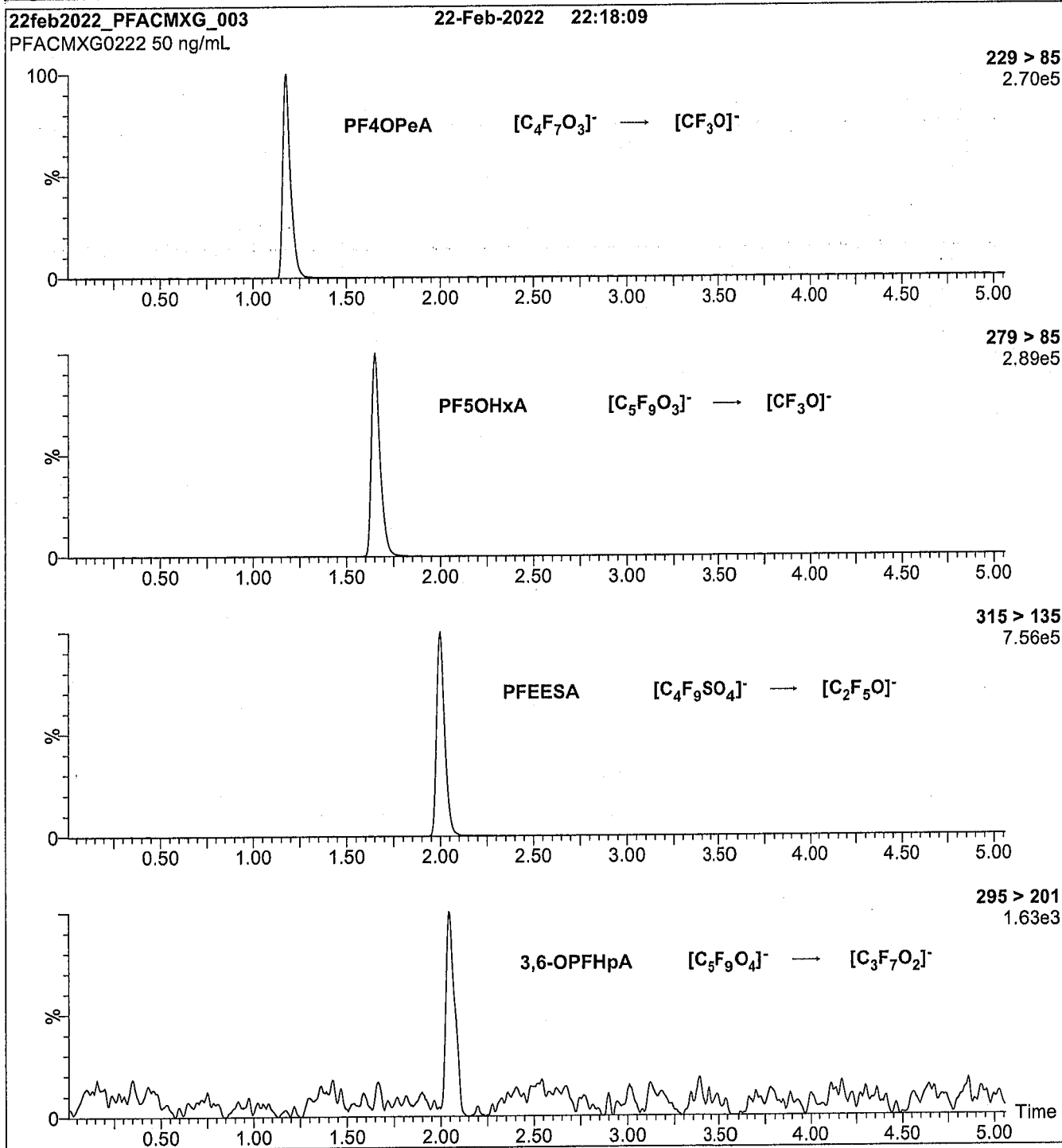
Mobile phase: Gradient
Start: 50% H₂O / 50% (80:20 MeOH:ACN)
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 8 min and hold for 2 min
before returning to initial conditions in 0.75 min.
Time: 12 min

Flow: 300 μ L/min

MS Parameters:

Experiment: SIR

Source: Electrospray (negative)
Capillary Voltage (kV) = 1.00
Cone Voltage (V) = variable (15-35)
Desolvation Temperature ($^{\circ}$ C) = 500
Desolvation Gas Flow (L/hr) = 1000

Figure 2: PFAC-MXG; LC/MS/MS Data (Selected MRM Transitions)**Conditions for Figure 2:**

Injection: On-column (PFAC-MXG)

Mobile phase: Same as Figure 1

Flow: 300 μ L/min**MS Parameters:**

Collision Gas (mbar) = 3.33e-3

Collision Energy (eV) = 8-48 (variable)

Analytical Standard Record

22F0061

Description: PFAS - MIX MXG 2ug/mL Expires: 02/22/2027
Standard Type: Other Prepared: 02/07/2022
Solvent: MeOH Prepared By: Lizbeth Andres
Final Volume (mls): 1 Department: PFAS
Vials: 1 Last Edit: 09/15/2022 09:34 by DAG
Comments: contains NFDHA PFMBA PFMPA PFEESA @ 2ug/mL

Analyte	Parent	CAS Number	Concentration	Units
NFDHA		151772-58-6	2	ug/mL
PFEESA		113507-82-7	1.78	ug/mL
PFMBA		863090-89-5	2	ug/mL
PFMPA		377-73-1	2	ug/mL

Analytical Standard Record

22I0153

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit		(mls)
22C0307	PFAS - SAS N-MeFOSE 50ug/mL	03/15/2022	Wellington Laboratories	NMeFOSE0921M	09/23/2026	03/15/2022 15:59	by DAG	0.096
22C0308	PFAS - SAS FPrPA 50ug/mL	03/15/2022	Wellington Laboratories	FPrPA0122	02/03/2027	03/15/2022 15:59	by DAG	0.096
22C0309	PFAS - SAS FPePA 50ug/mL	03/15/2022	Wellington Laboratories	FPePA1221	01/05/2027	03/15/2022 15:59	by DAG	0.096
22C0310	PFAS - SAS NEtFOSE 50ug/mL	03/15/2022	Wellington Laboratories	NEtFOSE0921M	09/23/2026	03/15/2022 15:59	by DAG	0.096
22C0311	PFAS - SAS FHpPA 50ug/mL	03/15/2022	Wellington Laboratories	HHpPA1020	11/12/2025	03/15/2022 16:00	by DAG	0.096
22C0312	PFAS - SAS NMeFOSA 50ug/mL	03/15/2022	Wellington Laboratories	NMeFOSA0721M	08/03/2026	03/15/2022 16:00	by DAG	0.096
22C0313	PFAS - SAS NEtFOSA 50ug/mL	03/15/2022	Wellington Laboratories	NEtFOSA0821M	08/12/2026	08/17/2022 10:49	by LYA	0.096
22F0058	PFAS - MIX MXF 2ug/mL	01/10/2022	Wellington Laboratories	PFACMXF0122	01/11/2025	09/15/2022 09:32	by DAG	1.2
22F0059	PFAS - MIX MXH 2ug/mL	09/09/2021	Wellington Laboratories	PFACMXH0921	09/14/2026	09/15/2022 09:33	by DAG	1.2
22F0061	PFAS - MIX MXG 2ug/mL	02/07/2022	Wellington Laboratories	PFACMXG0222	02/22/2027	09/15/2022 09:34	by DAG	1.2



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PFAC-MXG

Native Perfluoroalkyl Ether Carboxylic Acids and Sulfonate Solution/Mixture

<u>PRODUCT CODE:</u>	PFAC-MXG
<u>LOT NUMBER:</u>	PFACMXG0222
<u>SOLVENT(S):</u>	Methanol/Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	02/07/2022
<u>LAST TESTED:</u> (mm/dd/yyyy)	02/22/2022
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	02/22/2027
<u>RECOMMENDED STORAGE:</u>	Store ampoule in a cool, dark place

DESCRIPTION:

PFAC-MXG is a solution/mixture of three native perfluoroalkyl ether carboxylic acids and a native perfluoroalkyl ether sulfonate. The components and their concentrations are given in Table A.

The individual components all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

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Table A: PFAC-MXG; Components and Concentrations (ng/mL; \pm 5% in methanol/water (<1%))

Compound	Acronym	Concentration* (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Perfluoro-4-oxapentanoic acid	PF4OPeA	2000		A
Perfluoro-5-oxahexanoic acid	PF5OHxA	2000		B
Perfluoro-3,6-dioxaheptanoic acid	3,6-OPFHpA	2000		D
Compound	Acronym	Concentration* (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Potassium perfluoro(2-ethoxyethane)sulfonate	PFEESA	2000	1780	C

* Concentrations have been rounded to three significant figures.

Certified By: _____

B.G. Chittim, General Manager

Date: 03/03/2022

(mm/dd/yyyy)

Analytical Standard Record

22I0342

Description: PFAS - MIX MXG 2ug/mL Expires: 02/22/2027
Standard Type: Other Prepared: 02/07/2022
Solvent: MeOH Prepared By: Dipti Gokal
Final Volume (mls): 1 Department: PFAS
Vials: 1 Last Edit: 09/26/2022 09:55 by DAG
Comments: contains NFDHA PFMBA PFMPA PFEESA @ 2ug/mL

Analyte	Parent	CAS Number	Concentration	Units
NFDHA		151772-58-6	2	ug/mL
PFEESA		113507-82-7	1.78	ug/mL
PFMBA		863090-89-5	2	ug/mL
PFMPA		377-73-1	2	ug/mL

Analytical Standard Record

22I0343

Description:	PFAS - MIX MXF 2ug/mL	Expires:	01/11/2025
Standard Type:	Other	Prepared:	09/26/2022
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	09/26/2022 09:47 by DAG

Analyte	Parent	CAS Number	Concentration	Units
11CL-PF3OUDS		763051-92-9	1.89	ug/mL
9CL-PF3ONS		756426-58-1	1.87	ug/mL
ADONA		919005-14-4	1.89	ug/mL
HFPO-DA		13252-13-6	2	ug/mL



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CERTIFICATE OF ANALYSIS DOCUMENTATION

PFAC-MXF

Native Replacement PFAS Solution/Mixture

<u>PRODUCT CODE:</u>	PFAC-MXF
<u>LOT NUMBER:</u>	PFACMXF0122
<u>SOLVENT(S):</u>	Methanol / Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	01/10/2022
<u>LAST TESTED:</u> (mm/dd/yyyy)	01/11/2022
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	01/11/2025
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

PFAC-MXF is a solution/mixture of sodium dodecafluoro-3H-4,8-dioxanonanoate (NaDONA), the major and minor components of F-53B (9Cl-PF3ONS and 11Cl-PF3OUdS), and GenX (HFPO-DA). The components and their concentrations are given in Table A.

The individual native components of this mixture all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
 Figure 1: LC/MS Data (SIR)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acid to the methyl ester.

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Table A: PFAC-MXF; Components and Concentrations (ng/mL; \pm 5% in Methanol/Water (<1%))

Compound	Acronym	Concentration* (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the acid	
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid	HFPO-DA	2000		A
Sodium dodecafluoro-3H-4,8-dioxanonoate	NaDONA	2000	1890	B
Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	2000	1870	C
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	2000	1890	D

* Concentrations have been rounded to three significant figures.

Certified By: _____

B.G. Chittim, General Manager

Date: 01/12/2022
(mm/dd/yyyy)

Analytical Standard Record

22I0343

Description:	PFAS - MIX MXF 2ug/mL	Expires:	01/11/2025
Standard Type:	Other	Prepared:	01/10/2022
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	09/26/2022 09:54 by DAG

Analyte	Parent	CAS Number	Concentration	Units
11CL-PF3OUDS		763051-92-9	1.89	ug/mL
9CL-PF3ONS		756426-58-1	1.87	ug/mL
ADONA		919005-14-4	1.89	ug/mL
HFPO-DA		13252-13-6	2	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

APPL ID:2210334

PFAC-MXH

Native PFAS
Solution/Mixture

<u>PRODUCT CODE:</u>	PFAC-MXH
<u>LOT NUMBER:</u>	PFACMXH0822
<u>SOLVENT(S):</u>	Methanol/Isopropanol (2%)/Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	08/05/2022
<u>LAST TESTED:</u> (mm/dd/yyyy)	08/08/2022
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	08/08/2027
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

PFAC-MXH is a solution/mixture of 11 native linear perfluoroalkylcarboxylic acids (C₄-C₁₄), eight native perfluoroalkanesulfonates (C₄, C₅, C₇, C₉, C₁₀ and C₁₂ linear; C₆ and C₈ linear and branched), three native fluorotelomer sulfonates (4:2, 6:2, and 8:2), two native linear and branched perfluorooctanesulfonamidoacetic acids, and perfluoro-1-octanesulfonamide (FOSA). The components and their concentrations are given in Table A.

The individual components of this mixture all have chemical purities of >98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
 Table B: Isomeric Components and Percent Composition of N-MeFOSAA
 Table C: Isomeric Components and Percent Composition of N-EtFOSAA
 Table D: Isomeric Components and Percent Composition of PFHxSK
 Table E: Isomeric Components and Percent Composition of PFOSK
 Figure 1: LC/MS Data (SIR)
 Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

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Table A: PFAC-MXH; Components and Concentrations
(ng/mL, \pm 5% in methanol/isopropanol (2%)/water (<1%))

Compound	Acronym	Concentration* (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Perfluoro-n-butanoic acid	PFBA	4000		1
Perfluoro-n-pentanoic acid	PFPeA	2000		2
Perfluoro-n-hexanoic acid	PFHxA	1000		5
Perfluoro-n-heptanoic acid	PFHpA	1000		7
Perfluoro-n-octanoic acid	PFOA	1000		11
Perfluoro-n-nonanoic acid	PFNA	1000		14
Perfluoro-n-decanoic acid	PFDA	1000		18
Perfluoro-n-undecanoic acid	PFUdA	1000		24
Perfluoro-n-dodecanoic acid	PFDoA	1000		26
Perfluoro-n-tridecanoic acid	PFTrDA	1000		27
Perfluoro-n-tetradecanoic acid	PFTeDA	1000		29
Perfluoro-1-octanesulfonamide	FOSA	1000		23
N-methylperfluorooctanesulfonamidoacetic acid ^a	N-MeFOSAA: linear isomer	760		20
	N-MeFOSAA: Σ branched isomers	240		17
N-ethylperfluorooctanesulfonamidoacetic acid ^b	N-EtFOSAA: linear isomer	775		22
	N-EtFOSAA: Σ branched isomers	225		21
Compound	Acronym	Concentration* (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Potassium perfluoro-1-butanedisulfonate	L-PFBS	1000	887	3
Sodium perfluoro-1-pentadisulfonate	L-PFPeS	1000	941	6
Potassium perfluorohexanesulfonate ^c	PFHxSK: linear isomer	811	741	9
	PFHxSK: Σ branched isomers	189	173	8
Sodium perfluoro-1-heptadisulfonate	L-PFHpS	1000	953	12
Potassium perfluorooctanesulfonate ^d	PFOSK: linear isomer	788	732	15
	PFOSK: Σ branched isomers	211	196	13
Sodium perfluoro-1-nonadisulfonate	L-PFNS	1000	962	19
Sodium perfluoro-1-decadisulfonate	L-PFDS	1000	965	25
Sodium perfluoro-1-dodecadisulfonate	L-PFDoS	1000	970	28
Sodium 1H,1H,2H,2H-perfluorohexanesulfonate	4:2FTS	4000	3750	4
Sodium 1H,1H,2H,2H-perfluorooctanesulfonate	6:2FTS	4000	3800	10
Sodium 1H,1H,2H,2H-perfluorodecane sulfonate	8:2FTS	4000	3840	16

^a See Table B for percent composition of linear and branched N-MeFOSAA isomers.

^b See Table C for percent composition of linear and branched N-EtFOSAA isomers.

^c See Table D for percent composition of linear and branched PFHxSK isomers.

^d See Table E for percent composition of linear and branched PFOSK isomers.

* Concentrations have been rounded to three significant figures.

Certified By: 

B.G. Chittim, General Manager

Date: 08/09/2022

(mm/dd/yyyy)

Analytical Standard Record

22I0344

Description:	PFAS - MIX MXH 1-4ug/mL	Expires:	08/08/2027
Standard Type:	Other	Prepared:	08/05/2022
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	1.2	Department:	PFAS
Vials:	1	Last Edit:	09/26/2022 09:59 by DAG

Analyte	Parent	CAS Number	Concentration	Units
4:2FTS		757124-72-4	3.75	ug/mL
6:2FTS		27619-97-2	3.8	ug/mL
8:2FTS		39108-34-4	3.84	ug/mL
NETFOSAA		2991-50-6	1	ug/mL
NMeFOSAA		2355-31-9	1	ug/mL
PFBA		375-22-4	4	ug/mL
PFBS		375-73-5	0.887	ug/mL
PFDA		335-76-2	1	ug/mL
PFDOA		307-55-1	1	ug/mL
PFDOS		79780-39-5	0.97	ug/mL
PFDS		335-77-3	0.965	ug/mL
PFHPA		375-85-9	1	ug/mL
PFHPS		375-92-8	0.953	ug/mL
PFHXA		307-24-4	1	ug/mL
PFHXS		355-46-4	0.914	ug/mL
PFNA		375-95-1	1	ug/mL
PFNS		68259-12-1	0.962	ug/mL
PFOA		335-67-1	1	ug/mL
PFOS		1763-23-1	0.928	ug/mL
PFOSA		754-91-6	1	ug/mL
PFPEA		2706-90-3	2	ug/mL
PFPEs		630402-22-1	0.941	ug/mL
PFTEDA		376-06-7	1	ug/mL
PFTRDA		72629-94-8	1	ug/mL
PFUnA		2058-94-8	1	ug/mL

Analytical Standard Record

22J0448

Description:	PFAS - MIX 1633 20ng/mL	Expires:	04/25/2023
Standard Type:	Analyte Spike	Prepared:	10/27/2022
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	10	Department:	PFAS
Vials:	1	Last Edit:	10/27/2022 08:51 by DAG

Analyte	Parent	CAS Number	Concentration	Units
11CL-PF3OUDS	22I0153	763051-92-9	0.0378	ug/mL
3:3FTCA	22I0153	113507-82-7	0.08	ug/mL
4:2FTS	22I0153	757124-72-4	0.075	ug/mL
5:3FTCA	22I0153	914637-49-3	0.08	ug/mL
6:2FTS	22I0153	27619-97-2	0.076	ug/mL
7:3FTCA	22I0153	812-70-4	0.08	ug/mL
8:2FTS	22I0153	39108-34-4	0.0768	ug/mL
9CL-PF3ONS	22I0153	756426-58-1	0.0374	ug/mL
ADONA	22I0153	919005-14-4	0.0378	ug/mL
HFPO-DA	22I0153	13252-13-6	0.04	ug/mL
NETFOSA	22I0153	4151-50-2	0.08	ug/mL
NETFOSAA	22I0153	2991-50-6	0.02	ug/mL
NETFOSE	22I0153	1691-99-2	0.08	ug/mL
NFDHA	22I0153	151772-58-6	0.04	ug/mL
NMeFOSA	22I0153	31506-32-8	0.08	ug/mL
NMeFOSAA	22I0153	2355-31-9	0.02	ug/mL
NMeFOSE	22I0153	24448-09-7	0.08	ug/mL
PFBA	22I0153	375-22-4	0.08	ug/mL
PFBS	22I0153	375-73-5	0.0177	ug/mL
PFDA	22I0153	335-76-2	0.02	ug/mL
PFDOA	22I0153	307-55-1	0.02	ug/mL
PFDOS	22I0153	79780-39-5	0.0194	ug/mL
PFDS	22I0153	335-77-3	0.0193	ug/mL
PFEESA	22I0153	113507-82-7	0.0356	ug/mL
PFHPA	22I0153	375-85-9	0.02	ug/mL
PFHPS	22I0153	375-92-8	0.0191	ug/mL
PFHXA	22I0153	307-24-4	0.02	ug/mL
PFHXS	22I0153	355-46-4	0.0183	ug/mL
PFMBA	22I0153	863090-89-5	0.04	ug/mL
PFMPA	22I0153	377-73-1	0.04	ug/mL
PFNA	22I0153	375-95-1	0.02	ug/mL
PFNS	22I0153	68259-12-1	0.0192	ug/mL
PFOA	22I0153	335-67-1	0.02	ug/mL
PFOS	22I0153	1763-23-1	0.0186	ug/mL
PFOSA	22I0153	754-91-6	0.02	ug/mL
PFPEA	22I0153	2706-90-3	0.04	ug/mL
PFPEs	22I0153	630402-22-1	0.0188	ug/mL
PFTEDA	22I0153	376-06-7	0.02	ug/mL
PFTRDA	22I0153	72629-94-8	0.02	ug/mL
PFUnA	22I0153	2058-94-8	0.02	ug/mL

Analytical Standard Record

22J0448**Parent Standards used:**

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
22I0153	PFAS - MIX 1633 200ng/mL	09/13/2022	In house	x	01/11/2025	09/15/2022 09:34 by DAG	1

Analytical Standard Record

22J0552

Description: PFAS - MIX 1633 200ng/mL
 Standard Type: Analyte Spike
 Solvent: MeOH 62244
 Final Volume (mL): 6
 Vials: 1

Expires: 01/11/2025
 Prepared: 10/31/2022
 Prepared By: Dipti Gokal
 Department: PFAS
 Last Edit: 10/31/2022 14:57 by DAG

Analyte	Parent	CAS Number	Concentration	Units
NETFOSA	21J0007	4151-50-2	0.8	ug/mL
NMeFOSE	21J0014	24448-09-7	0.8	ug/mL
3:3FTCA	21L0004	113507-82-7	0.8	ug/mL
5:3FTCA	21L0005	914637-49-3	0.8	ug/mL
NETFOSE	21L0006	1691-99-2	0.8	ug/mL
7:3FTCA	21L0007	812-70-4	0.8	ug/mL
NMeFOSA	21L0008	31506-32-8	0.8	ug/mL
NFDHA	22I0342	151772-58-6	0.4	ug/mL
PFEESA	22I0342	113507-82-7	0.356	ug/mL
PFMBA	22I0342	863090-89-5	0.4	ug/mL
PFMPA	22I0342	377-73-1	0.4	ug/mL
11CL-PF3OUDS	22I0343	763051-92-9	0.378	ug/mL
9CL-PF3ONS	22I0343	756426-58-1	0.374	ug/mL
ADONA	22I0343	919005-14-4	0.378	ug/mL
HFPO-DA	22I0343	13252-13-6	0.4	ug/mL
4:2FTS	22I0344	757124-72-4	0.75	ug/mL
6:2FTS	22I0344	27619-97-2	0.76	ug/mL
8:2FTS	22I0344	39108-34-4	0.768	ug/mL
NETFOSAA	22I0344	2991-50-6	0.2	ug/mL
NMeFOSAA	22I0344	2355-31-9	0.2	ug/mL
PFBA	22I0344	375-22-4	0.8	ug/mL
PFBS	22I0344	375-73-5	0.177	ug/mL
PFDA	22I0344	335-76-2	0.2	ug/mL
PFDOA	22I0344	307-55-1	0.2	ug/mL
PFDOS	22I0344	79780-39-5	0.194	ug/mL
PFDS	22I0344	335-77-3	0.193	ug/mL
PFHPA	22I0344	375-85-9	0.2	ug/mL
PFHPS	22I0344	375-92-8	0.191	ug/mL
PFHXA	22I0344	307-24-4	0.2	ug/mL
PFHXS	22I0344	355-46-4	0.183	ug/mL
PFNA	22I0344	375-95-1	0.2	ug/mL
PFNS	22I0344	68259-12-1	0.192	ug/mL
PFOA	22I0344	335-67-1	0.2	ug/mL
PFOS	22I0344	1763-23-1	0.186	ug/mL
PFOSA	22I0344	754-91-6	0.2	ug/mL
PFPEA	22I0344	2706-90-3	0.4	ug/mL
PFPEs	22I0344	630402-22-1	0.188	ug/mL
PFTEDA	22I0344	376-06-7	0.2	ug/mL
PFTRDA	22I0344	72629-94-8	0.2	ug/mL
PFUnA	22I0344	2058-94-8	0.2	ug/mL

Analytical Standard Record

22J0552

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit		(mls)
21J0007	PFAS - SAS N-EtFOSA 50ug/mL	08/12/2021	Wellington Laboratories	NEtFOSA0821M	08/12/2026	10/31/2022 14:36	by DAG	0.096
21J0014	PFAS - SAS N-MeFOSE 50ug/mL	09/22/2021	Wellington Laboratories	NMeFOSE0921M	09/23/2026	10/31/2022 14:35	by DAG	0.096
21L0004	PFAS - SAS 3:3FTA 50ug/mL	12/07/2021	Wellington Laboratories	FPrPA1020	11/12/2025	10/31/2022 14:39	by DAG	0.096
21L0005	PFAS - SAS 5:3FTA 50ug/mL	12/07/2021	Wellington Laboratories	FPePA1120	11/11/2025	10/31/2022 14:41	by DAG	0.096
21L0006	PFAS - SAS EtFOSE 50ug/mL	12/07/2021	Wellington Laboratories	FPePA1120	09/23/2026	10/31/2022 14:41	by DAG	0.096
21L0007	PFAS - SAS 7:3FTA 50ug/mL	12/07/2021	Wellington Laboratories	FHpPA1020	11/12/2025	10/31/2022 14:42	by DAG	0.096
21L0008	PFAS - SAS N-MeFOSA 50ug/mL	12/07/2021	Wellington Laboratories	NMeFOSA0721M	08/03/2026	10/31/2022 14:42	by DAG	0.096
22I0342	PFAS - MIX MXG 2ug/mL	02/07/2022	Wellington Laboratories	PFACMXG0222	02/22/2027	10/31/2022 14:48	by DAG	1.2
22I0343	PFAS - MIX MXF 2ug/mL	01/10/2022	Wellington Laboratories	PFACMXF0122	01/11/2025	10/31/2022 14:55	by DAG	1.2
22I0344	PFAS - MIX MXH 1-4ug/mL	08/05/2022	Wellington Laboratories	PFACMXH0822	08/08/2027	10/31/2022 14:56	by DAG	1.2

Analytical Standard Record

22K0039

Description:	PFAS - MIX 1633 10ng/mL	Expires:	05/01/2023
Standard Type:	Analyte Spike	Prepared:	11/02/2022
Solvent:	MeOH	Prepared By:	Andonios Karas
Final Volume (mls):	10	Department:	PFAS
Vials:	1	Last Edit:	11/02/2022 12:56 by ABK

Analyte	Parent	CAS Number	Concentration	Units
11CL-PF3OUDS	22J0552	763051-92-9	0.0189	ug/mL
3:3FTCA	22J0552	113507-82-7	0.04	ug/mL
4:2FTS	22J0552	757124-72-4	0.0375	ug/mL
5:3FTCA	22J0552	914637-49-3	0.04	ug/mL
6:2FTS	22J0552	27619-97-2	0.038	ug/mL
7:3FTCA	22J0552	812-70-4	0.04	ug/mL
8:2FTS	22J0552	39108-34-4	0.0384	ug/mL
9CL-PF3ONS	22J0552	756426-58-1	0.0187	ug/mL
ADONA	22J0552	919005-14-4	0.0189	ug/mL
HFPO-DA	22J0552	13252-13-6	0.02	ug/mL
NETFOSA	22J0552	4151-50-2	0.04	ug/mL
NETFOSAA	22J0552	2991-50-6	0.01	ug/mL
NETFOSE	22J0552	1691-99-2	0.04	ug/mL
NFDHA	22J0552	151772-58-6	0.02	ug/mL
NMeFOSA	22J0552	31506-32-8	0.04	ug/mL
NMeFOSAA	22J0552	2355-31-9	0.01	ug/mL
NMeFOSE	22J0552	24448-09-7	0.04	ug/mL
PFBA	22J0552	375-22-4	0.04	ug/mL
PFBS	22J0552	375-73-5	0.00885	ug/mL
PFDA	22J0552	335-76-2	0.01	ug/mL
PFDOA	22J0552	307-55-1	0.01	ug/mL
PFDOS	22J0552	79780-39-5	0.0097	ug/mL
PFDS	22J0552	335-77-3	0.00965	ug/mL
PFEESA	22J0552	113507-82-7	0.0178	ug/mL
PFHPA	22J0552	375-85-9	0.01	ug/mL
PFHPS	22J0552	375-92-8	0.00955	ug/mL
PFHXA	22J0552	307-24-4	0.01	ug/mL
PFHXS	22J0552	355-46-4	0.00915	ug/mL
PFMBA	22J0552	863090-89-5	0.02	ug/mL
PFMPA	22J0552	377-73-1	0.02	ug/mL
PFNA	22J0552	375-95-1	0.01	ug/mL
PFNS	22J0552	68259-12-1	0.0096	ug/mL
PFOA	22J0552	335-67-1	0.01	ug/mL
PFOS	22J0552	1763-23-1	0.0093	ug/mL
PFOSA	22J0552	754-91-6	0.01	ug/mL
PFPEA	22J0552	2706-90-3	0.02	ug/mL
PFPEs	22J0552	630402-22-1	0.0094	ug/mL
PFTEDA	22J0552	376-06-7	0.01	ug/mL
PFTRDA	22J0552	72629-94-8	0.01	ug/mL
PFUnA	22J0552	2058-94-8	0.01	ug/mL

Analytical Standard Record

22K0039**Parent Standards used:**

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
22J0552	PFAS - MIX 1633 200ng/mL	10/31/2022	In house	x	01/11/2025	10/31/2022 15:40 by DAG	0.5



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

MPFAC-HIF-ES

Mass-Labelled PFAS Extraction Standard Solution/Mixture

<u>PRODUCT CODE:</u>	MPFAC-HIF-ES
<u>LOT NUMBER:</u>	MPFACHIFES0822
<u>SOLVENT(S):</u>	Methanol/Isopropanol (1%)/Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	07/20/2022
<u>LAST TESTED:</u> (mm/dd/yyyy)	08/02/2022
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	08/02/2025
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

MPFAC-HIF-ES is a solution/mixture of ten mass-labelled (^{13}C) perfluoroalkylcarboxylic acids (C_4 - C_{12} , C_{14}), three mass-labelled (^{13}C) perfluoroalkanesulfonates (C_4 , C_6 , and C_8), three mass-labelled (one ^{13}C and two ^2H) perfluoro-1-octanesulfonamides, three mass-labelled (^{13}C) fluorotelomer sulfonates (4:2, 6:2, and 8:2), two mass-labelled (^2H) perfluorooctanesulfonamidoacetic acids, two mass-labelled (^2H) perfluorooctanesulfonamidoethanols, and mass-labelled (^{13}C) hexafluoropropylene oxide dimer acid (GenX, M3HFPO-DA). The components and their concentrations are given in Table A.

The individual ^{13}C -labelled components all have chemical purities >98% and isotopic purities of $\geq 99\%$. The individual ^2H -labelled components all have chemical purities >98% and isotopic purities of $\geq 98\%$.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.


FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

Wellington Laboratories Inc., 345 Southgate Dr. Guelph ON N1G 3M5 CANADA
519-822-2436 • Fax: 519-822-2849 • info@well-labs.com

Table A: MPFAC-HIF-ES; Components and Concentrations
(ng/mL, ± 5% in methanol/isopropanol (1%)/water (<1%))

Compound	Acronym	Concentration (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Perfluoro-n-(¹³ C ₄)butanoic acid	MPFBA	2000		1
Perfluoro-n-(¹³ C ₅)pentanoic acid	M5PFPeA	1000		2
Perfluoro-n-(1,2,3,4,6- ¹³ C ₅)hexanoic acid	M5PFHxA	500		5
Perfluoro-n-(1,2,3,4- ¹³ C ₄)heptanoic acid	M4PFHpA	500		7
Perfluoro-n-(¹³ C ₈)octanoic acid	M8PFOA	500		10
Perfluoro-n-(¹³ C ₉)nonanoic acid	M9PFNA	250		11
Perfluoro-n-(1,2,3,4,5,6- ¹³ C ₆)decanoic acid	M6PFDA	250		14
Perfluoro-n-(1,2,3,4,5,6,7- ¹³ C ₇)undecanoic acid	M7PFUdA	250		17
Perfluoro-n-(1,2- ¹³ C ₂)dodecanoic acid	MPFD _o A	250		19
Perfluoro-n-(1,2- ¹³ C ₂)tetradecanoic acid	M2PFTeDA	250		23
Perfluoro-1-(¹³ C ₈)octanesulfonamide	M8FOSA	500		18
N-methyl-d ₃ -perfluoro-1-octanesulfonamide	d-N-MeFOSA	500		21
N-ethyl-d ₅ -perfluoro-1-octanesulfonamide	d-N-EtFOSA	500		24
N-methyl-d ₃ -perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000		15
N-ethyl-d ₅ -perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000		16
2-(N-methyl-d ₃ -perfluoro-1-octanesulfonamido)ethan-d ₄ -ol	d7-N-MeFOSE	5000		20
2-(N-ethyl-d ₅ -perfluoro-1-octanesulfonamido)ethan-d ₄ -ol	d9-N-EtFOSE	5000		22
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)(¹³ C ₃)propanoic acid	M3HFPO-DA	2000		6
Compound	Acronym	Concentration* (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Sodium perfluoro-1-(2,3,4- ¹³ C ₃)butanesulfonate	M3PFBS	500	466	3
Sodium perfluoro-1-(1,2,3- ¹³ C ₃)hexanesulfonate	M3PFHxS	500	474	8
Sodium perfluoro-1-(¹³ C ₈)octanesulfonate	M8PFOS	500	479	12
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)hexanesulfonate	M2-4:2FTS	1000	938	4
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)octanesulfonate	M2-6:2FTS	1000	951	9
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)decanesulfonate	M2-8:2FTS	1000	960	13

* Concentrations have been rounded to three significant figures.

Certified By: 
B.G. Chittim, General Manager

Date: 08/02/2022
(mm/dd/yyyy)



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

MPFAC-HIF-ES

Mass-Labelled PFAS Extraction Standard Solution/Mixture

<u>PRODUCT CODE:</u>	MPFAC-HIF-ES
<u>LOT NUMBER:</u>	MPFACHIFES0822
<u>SOLVENT(S):</u>	Methanol/Isopropanol (1%)/Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	07/20/2022
<u>LAST TESTED:</u> (mm/dd/yyyy)	08/02/2022
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	08/02/2025
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

MPFAC-HIF-ES is a solution/mixture of ten mass-labelled (^{13}C) perfluoroalkylcarboxylic acids (C_4 - C_{12} , C_{14}), three mass-labelled (^{13}C) perfluoroalkanesulfonates (C_4 , C_6 , and C_8), three mass-labelled (one ^{13}C and two ^2H) perfluoro-1-octanesulfonamides, three mass-labelled (^{13}C) fluorotelomer sulfonates (4:2, 6:2, and 8:2), two mass-labelled (^2H) perfluorooctanesulfonamidoacetic acids, two mass-labelled (^2H) perfluorooctanesulfonamidoethanols, and mass-labelled (^{13}C) hexafluoropropylene oxide dimer acid (GenX, M3HFPO-DA). The components and their concentrations are given in Table A.

The individual ^{13}C -labelled components all have chemical purities >98% and isotopic purities of $\geq 99\%$. The individual ^2H -labelled components all have chemical purities >98% and isotopic purities of $\geq 98\%$.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.


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Table A: MPFAC-HIF-ES; Components and Concentrations
(ng/mL, ± 5% in methanol/isopropanol (1%)/water (<1%))

Compound	Acronym	Concentration (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Perfluoro-n-(¹³ C ₄)butanoic acid	MPFBA	2000		1
Perfluoro-n-(¹³ C ₅)pentanoic acid	M5PFPeA	1000		2
Perfluoro-n-(1,2,3,4,6- ¹³ C ₅)hexanoic acid	M5PFHxA	500		5
Perfluoro-n-(1,2,3,4- ¹³ C ₄)heptanoic acid	M4PFHpA	500		7
Perfluoro-n-(¹³ C ₈)octanoic acid	M8PFOA	500		10
Perfluoro-n-(¹³ C ₉)nonanoic acid	M9PFNA	250		11
Perfluoro-n-(1,2,3,4,5,6- ¹³ C ₆)decanoic acid	M6PFDA	250		14
Perfluoro-n-(1,2,3,4,5,6,7- ¹³ C ₇)undecanoic acid	M7PFUdA	250		17
Perfluoro-n-(1,2- ¹³ C ₂)dodecanoic acid	MPFD _o A	250		19
Perfluoro-n-(1,2- ¹³ C ₂)tetradecanoic acid	M2PFTeDA	250		23
Perfluoro-1-(¹³ C ₈)octanesulfonamide	M8FOSA	500		18
N-methyl-d ₃ -perfluoro-1-octanesulfonamide	d-N-MeFOSA	500		21
N-ethyl-d ₅ -perfluoro-1-octanesulfonamide	d-N-EtFOSA	500		24
N-methyl-d ₃ -perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000		15
N-ethyl-d ₅ -perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000		16
2-(N-methyl-d ₃ -perfluoro-1-octanesulfonamido)ethan-d ₄ -ol	d7-N-MeFOSE	5000		20
2-(N-ethyl-d ₅ -perfluoro-1-octanesulfonamido)ethan-d ₄ -ol	d9-N-EtFOSE	5000		22
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)(¹³ C ₃)propanoic acid	M3HFPO-DA	2000		6
Compound	Acronym	Concentration* (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Sodium perfluoro-1-(2,3,4- ¹³ C ₃)butanesulfonate	M3PFBS	500	466	3
Sodium perfluoro-1-(1,2,3- ¹³ C ₃)hexanesulfonate	M3PFHxS	500	474	8
Sodium perfluoro-1-(¹³ C ₈)octanesulfonate	M8PFOS	500	479	12
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)hexanesulfonate	M2-4:2FTS	1000	938	4
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)octanesulfonate	M2-6:2FTS	1000	951	9
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)decanesulfonate	M2-8:2FTS	1000	960	13

* Concentrations have been rounded to three significant figures.

Certified By: 
B.G. Chittim, General Manager

Date: 08/02/2022
(mm/dd/yyyy)

Analytical Standard Record

22K0097

Description:	MPFAC-HIF-ES-EIS	Expires:	08/02/2025
Standard Type:	Other	Prepared:	07/20/2022
Solvent:	meoh	Prepared By:	Wellington Laboratories (Lot#: MPFACHIFES0822)
Final Volume (mls):	1.2	Department:	MPFACHIFES0822)
Vials:	1	Last Edit:	11/04/2022 10:47 by DAG

Analyte	Parent	CAS Number	Concentration	Units
13C2-4:2FTS		13C2-4:2FTS	1	ug/mL
13C2-6:2FTS		13C2-6:2FTS	1	ug/mL
13C2-8:2FTS		13C2-8:2FTS	1	ug/mL
13C2-PFDOA		13C2-PFDOA	0.25	ug/mL
13C2-PFTEDA		13C2-PFTEDA	0.25	ug/mL
13C3-HFPO-DA		13C3-HFPO-DA	2	ug/mL
13C3-PFBS		13C3-PFBS	0.5	ug/mL
13C3-PFHXS		13C3-PFHXS	0.5	ug/mL
13C4-PFBA		13C4-PFBA	2	ug/mL
13C4-PFHPA		13C4-PFHPA	0.5	ug/mL
13C5-PFHXA		13C5-PFHXA	0.5	ug/mL
13C5-PFPEA		13C5-PFPEA	1	ug/mL
13C6-PFDA		13C6-PFDA	0.25	ug/mL
13C7-PFUnA		13C7-PFUDA	0.25	ug/mL
13C8-PFOA		13C8-PFOA	0.5	ug/mL
13C8-PFOS		13C8-PFOS	0.5	ug/mL
13C8-PFOSA		13C8-PFOSA	0.5	ug/mL
13C9-PFNA		13C9-PFNA	0.25	ug/mL
D3-NMEFOSA		D3-NMEFOSA	0.5	ug/mL
D3-NMEFOSAA		D3-NMEFOSAA	1	ug/mL
D5-NETFOSA		D5-NETFOSA	0.5	ug/mL
D5-NETFOSAA		D5-NETFOSAA	1	ug/mL
D7-NMEFOSE		D7-NMEFOSE	5	ug/mL
D9-NETFOSSE		D9-NETFOSSE	5	ug/mL



WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

MPFAC-HIF-ES

Mass-Labelled PFAS Extraction Standard Solution/Mixture

<u>PRODUCT CODE:</u>	MPFAC-HIF-ES
<u>LOT NUMBER:</u>	MPFACHIFES0822
<u>SOLVENT(S):</u>	Methanol/Isopropanol (1%)/Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	07/20/2022
<u>LAST TESTED:</u> (mm/dd/yyyy)	08/02/2022
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	08/02/2025
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

MPFAC-HIF-ES is a solution/mixture of ten mass-labelled (^{13}C) perfluoroalkylcarboxylic acids (C_4 - C_{12} , C_{14}), three mass-labelled (^{13}C) perfluoroalkanesulfonates (C_4 , C_6 , and C_8), three mass-labelled (one ^{13}C and two ^2H) perfluoro-1-octanesulfonamides, three mass-labelled (^{13}C) fluorotelomer sulfonates (4:2, 6:2, and 8:2), two mass-labelled (^2H) perfluorooctanesulfonamidoacetic acids, two mass-labelled (^2H) perfluorooctanesulfonamidoethanols, and mass-labelled (^{13}C) hexafluoropropylene oxide dimer acid (GenX, M3HFPO-DA). The components and their concentrations are given in Table A.

The individual ^{13}C -labelled components all have chemical purities >98% and isotopic purities of $\geq 99\%$. The individual ^2H -labelled components all have chemical purities >98% and isotopic purities of $\geq 98\%$.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.


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Table A: MPFAC-HIF-ES; Components and Concentrations
(ng/mL, ± 5% in methanol/isopropanol (1%)/water (<1%))

Compound	Acronym	Concentration (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Perfluoro-n-(¹³ C ₄)butanoic acid	MPFBA	2000		1
Perfluoro-n-(¹³ C ₅)pentanoic acid	M5PFPeA	1000		2
Perfluoro-n-(1,2,3,4,6- ¹³ C ₅)hexanoic acid	M5PFHxA	500		5
Perfluoro-n-(1,2,3,4- ¹³ C ₄)heptanoic acid	M4PFHpA	500		7
Perfluoro-n-(¹³ C ₈)octanoic acid	M8PFOA	500		10
Perfluoro-n-(¹³ C ₉)nonanoic acid	M9PFNA	250		11
Perfluoro-n-(1,2,3,4,5,6- ¹³ C ₆)decanoic acid	M6PFDA	250		14
Perfluoro-n-(1,2,3,4,5,6,7- ¹³ C ₇)undecanoic acid	M7PFUdA	250		17
Perfluoro-n-(1,2- ¹³ C ₂)dodecanoic acid	MPFD _o A	250		19
Perfluoro-n-(1,2- ¹³ C ₂)tetradecanoic acid	M2PFTeDA	250		23
Perfluoro-1-(¹³ C ₈)octanesulfonamide	M8FOSA	500		18
N-methyl-d ₃ -perfluoro-1-octanesulfonamide	d-N-MeFOSA	500		21
N-ethyl-d ₅ -perfluoro-1-octanesulfonamide	d-N-EtFOSA	500		24
N-methyl-d ₃ -perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000		15
N-ethyl-d ₅ -perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000		16
2-(N-methyl-d ₃ -perfluoro-1-octanesulfonamido)ethan-d ₄ -ol	d7-N-MeFOSE	5000		20
2-(N-ethyl-d ₅ -perfluoro-1-octanesulfonamido)ethan-d ₄ -ol	d9-N-EtFOSE	5000		22
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)(¹³ C ₃)propanoic acid	M3HFPO-DA	2000		6
Compound	Acronym	Concentration* (ng/mL)		Peak Assignment in Figure 1
		as the salt	as the acid	
Sodium perfluoro-1-(2,3,4- ¹³ C ₃)butanesulfonate	M3PFBS	500	466	3
Sodium perfluoro-1-(1,2,3- ¹³ C ₃)hexanesulfonate	M3PFHxS	500	474	8
Sodium perfluoro-1-(¹³ C ₈)octanesulfonate	M8PFOS	500	479	12
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)hexanesulfonate	M2-4:2FTS	1000	938	4
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)octanesulfonate	M2-6:2FTS	1000	951	9
Sodium 1H,1H,2H,2H-perfluoro-(1,2- ¹³ C ₂)decanesulfonate	M2-8:2FTS	1000	960	13

* Concentrations have been rounded to three significant figures.

Certified By: 
B.G. Chittim, General Manager

Date: 08/02/2022
(mm/dd/yyyy)

Analytical Standard Record

22K0502

Description:	PFAS IIS 7C 40ng/mL	Expires:	01/20/2023
Standard Type:	Internal Standard	Prepared:	11/28/2022
Solvent:	MeOH/62286	Prepared By:	Dipti Gokal
Final Volume (mls):	25	Department:	PFAS
Vials:	1	Last Edit:	11/28/2022 15:10 by DAG

Analyte	Parent	CAS Number	Concentration	Units
13C2-PFDA	22A0234	13C2-PFDA	0.04	ug/mL
13C2-PFHXA	22A0234	13C2-PFHxA	0.04	ug/mL
13C3-PFBA	22A0234	13C3-PFBA	0.04	ug/mL
13C4-PFOA	22A0234	13C4-PFOA	0.04	ug/mL
13C4-PFOS	22A0234	13C4-PFOS	0.04	ug/mL
13C5-PFNA	22A0234	13C5-PFNA	0.04	ug/mL
18O2-PFHXS	22A0234	18O2-PFHXS	0.04	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
22A0234	PFAS IIS 7C 5ug/mL	01/20/2022	In house	*	01/20/2023	01/20/2022 15:49 by HGH	0.2

Analytical Standard Record

22K0503

Description:	1633- IIS Static 1ng/mL	Expires:	01/20/2023
Standard Type:	Internal Standard	Prepared:	11/28/2022
Solvent:	MeOH/62286	Prepared By:	Dipti Gokal
Final Volume (mL):	2	Department:	PFAS
Vials:	1	Last Edit:	11/28/2022 15:11 by DAG

Analyte	Parent	CAS Number	Concentration	Units
13C2-PFDA	22K0502	13C2-PFDA	0.001	ug/mL
13C2-PFHXA	22K0502	13C2-PFHxA	0.001	ug/mL
13C3-PFBA	22K0502	13C3-PFBA	0.001	ug/mL
13C4-PFOA	22K0502	13C4-PFOA	0.001	ug/mL
13C4-PFOS	22K0502	13C4-PFOS	0.001	ug/mL
13C5-PFNA	22K0502	13C5-PFNA	0.001	ug/mL
18O2-PFHXS	22K0502	18O2-PFHXS	0.001	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mL)
22K0502	PFAS IIS 7C 40ng/mL	11/28/2022	In house	*	01/20/2023	11/28/2022 15:10 by DAG	0.05

Analytical Standard Record

22L0117

Description:	MPFAC-HIF-ES 20.0ng/mL	Expires:	06/05/2023
Standard Type:	Surrogate Spike	Prepared:	12/07/2022
Solvent:	MeOH/62244	Prepared By:	Dipti Gokal
Final Volume (mls):	10	Department:	PFAS
Vials:	3	Last Edit:	12/07/2022 10:55 by DAG
Comments:	Half the concentration of previous EIS solution used for 1633/B-15. Double the spiking volume from 100 uL to 200 uL		

Analyte	Parent	CAS Number	Concentration	Units
13C2-4:2FTS	22K0097	13C2-4:2FTS	0.04	ug/mL
13C2-6:2FTS	22K0097	13C2-6:2FTS	0.04	ug/mL
13C2-8:2FTS	22K0097	13C2-8:2FTS	0.04	ug/mL
13C2-PFDOA	22K0097	13C2-PFDOA	0.01	ug/mL
13C2-PFTEDA	22K0097	13C2-PFTEDA	0.01	ug/mL
13C3-HFPO-DA	22K0097	13C3-HFPO-DA	0.08	ug/mL
13C3-PFBS	22K0097	13C3-PFBS	0.02	ug/mL
13C3-PFHXS	22K0097	13C3-PFHXS	0.02	ug/mL
13C4-PFBA	22K0097	13C4-PFBA	0.08	ug/mL
13C4-PFHPA	22K0097	13C4-PFHPA	0.02	ug/mL
13C5-PFHXA	22K0097	13C5-PFHXA	0.02	ug/mL
13C5-PFPEA	22K0097	13C5-PFPEA	0.04	ug/mL
13C6-PFDA	22K0097	13C6-PFDA	0.01	ug/mL
13C7-PFUhA	22K0097	13C7-PFUJA	0.01	ug/mL
13C8-PFOA	22K0097	13C8-PFOA	0.02	ug/mL
13C8-PFOS	22K0097	13C8-PFOS	0.02	ug/mL
13C8-PFOSA	22K0097	13C8-PFOSA	0.02	ug/mL
13C9-PFNA	22K0097	13C9-PFNA	0.01	ug/mL
D3-NMEFOSA	22K0097	D3-NMEFOSA	0.02	ug/mL
D3-NMEFOSAA	22K0097	D3-NMEFOSAA	0.04	ug/mL
D5-NETFOSA	22K0097	D5-NETFOSA	0.02	ug/mL
D5-NETFOSAA	22K0097	D5-NETFOSAA	0.04	ug/mL
D7-NMEFOSE	22K0097	D7-NMEFOSE	0.2	ug/mL
D9-NETFOSAE	22K0097	D9-NETFOSAE	0.2	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
22K0097	MPFAC-HIF-ES-EIS	07/20/2022	Wellington Laboratories	MPFACHIFES0822	08/02/2025	11/04/2022 12:17 by DAG	0.4

Analytical Standard Record

22L0269

Description:	PFAS - MIX 1633 10ng/mL	Expires:	06/12/2023
Standard Type:	Analyte Spike	Prepared:	12/14/2022
Solvent:	MeOH	Prepared By:	Dipti Gokal
Final Volume (mls):	10	Department:	PFAS
Vials:	1	Last Edit:	12/14/2022 12:00 by DAG

Analyte	Parent	CAS Number	Concentration	Units
11CL-PF3OUDS	22J0552	763051-92-9	0.0189	ug/mL
3:3FTCA	22J0552	113507-82-7	0.04	ug/mL
4:2FTS	22J0552	757124-72-4	0.0375	ug/mL
5:3FTCA	22J0552	914637-49-3	0.04	ug/mL
6:2FTS	22J0552	27619-97-2	0.038	ug/mL
7:3FTCA	22J0552	812-70-4	0.04	ug/mL
8:2FTS	22J0552	39108-34-4	0.0384	ug/mL
9CL-PF3ONS	22J0552	756426-58-1	0.0187	ug/mL
ADONA	22J0552	919005-14-4	0.0189	ug/mL
HFPO-DA	22J0552	13252-13-6	0.02	ug/mL
NETFOSA	22J0552	4151-50-2	0.04	ug/mL
NETFOSAA	22J0552	2991-50-6	0.01	ug/mL
NETFOSE	22J0552	1691-99-2	0.04	ug/mL
NFDHA	22J0552	151772-58-6	0.02	ug/mL
NMeFOSA	22J0552	31506-32-8	0.04	ug/mL
NMeFOSAA	22J0552	2355-31-9	0.01	ug/mL
NMeFOSE	22J0552	24448-09-7	0.04	ug/mL
PFBA	22J0552	375-22-4	0.04	ug/mL
PFBS	22J0552	375-73-5	0.00885	ug/mL
PFDA	22J0552	335-76-2	0.01	ug/mL
PFDOA	22J0552	307-55-1	0.01	ug/mL
PFDOS	22J0552	79780-39-5	0.0097	ug/mL
PFDS	22J0552	335-77-3	0.00965	ug/mL
PFEESA	22J0552	113507-82-7	0.0178	ug/mL
PFHPA	22J0552	375-85-9	0.01	ug/mL
PFHPS	22J0552	375-92-8	0.00955	ug/mL
PFHXA	22J0552	307-24-4	0.01	ug/mL
PFHXS	22J0552	355-46-4	0.00915	ug/mL
PFMBA	22J0552	863090-89-5	0.02	ug/mL
PFMPA	22J0552	377-73-1	0.02	ug/mL
PFNA	22J0552	375-95-1	0.01	ug/mL
PFNS	22J0552	68259-12-1	0.0096	ug/mL
PFOA	22J0552	335-67-1	0.01	ug/mL
PFOS	22J0552	1763-23-1	0.0093	ug/mL
PFOSA	22J0552	754-91-6	0.01	ug/mL
PFPEA	22J0552	2706-90-3	0.02	ug/mL
PFPEs	22J0552	630402-22-1	0.0094	ug/mL
PFTEDA	22J0552	376-06-7	0.01	ug/mL
PFTRDA	22J0552	72629-94-8	0.01	ug/mL
PFUnA	22J0552	2058-94-8	0.01	ug/mL

Analytical Standard Record

22L0269**Parent Standards used:**

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
22J0552	PFAS - MIX 1633 200ng/mL	10/31/2022	In house	x	01/11/2025	10/31/2022 15:40 by DAG	0.5

Analytical Standard Record

22L0272

Description:	MPFAC-HIF-ES 20.0ng/mL	Expires:	06/12/2023
Standard Type:	Surrogate Spike	Prepared:	12/14/2022
Solvent:	MeOH/62244	Prepared By:	Andonios Karas
Final Volume (mls):	10	Department:	PFAS
Vials:	3	Last Edit:	12/14/2022 13:55 by ABK
Comments:	Half the concentration of previous EIS solution used for 1633/B-15. Double the spiking volume from 100 uL to 200 uL		

Analyte	Parent	CAS Number	Concentration	Units
13C2-4:2FTS	22K0095	13C2-4:2FTS	0.04	ug/mL
13C2-6:2FTS	22K0095	13C2-6:2FTS	0.04	ug/mL
13C2-8:2FTS	22K0095	13C2-8:2FTS	0.04	ug/mL
13C2-PFDOA	22K0095	13C2-PFDOA	0.01	ug/mL
13C2-PFTEDA	22K0095	13C2-PFTEDA	0.01	ug/mL
13C3-HFPO-DA	22K0095	13C3-HFPO-DA	0.08	ug/mL
13C3-PFBS	22K0095	13C3-PFBS	0.02	ug/mL
13C3-PFHXS	22K0095	13C3-PFHXS	0.02	ug/mL
13C4-PFBA	22K0095	13C4-PFBA	0.08	ug/mL
13C4-PFHPA	22K0095	13C4-PFHPA	0.02	ug/mL
13C5-PFHXA	22K0095	13C5-PFHXA	0.02	ug/mL
13C5-PFPEA	22K0095	13C5-PFPEA	0.04	ug/mL
13C6-PFDA	22K0095	13C6-PFDA	0.01	ug/mL
13C7-PFUhA	22K0095	13C7-PFUJA	0.01	ug/mL
13C8-PFOA	22K0095	13C8-PFOA	0.02	ug/mL
13C8-PFOS	22K0095	13C8-PFOS	0.02	ug/mL
13C8-PFOSA	22K0095	13C8-PFOSA	0.02	ug/mL
13C9-PFNA	22K0095	13C9-PFNA	0.01	ug/mL
D3-NMEFOSA	22K0095	D3-NMEFOSA	0.02	ug/mL
D3-NMEFOSAA	22K0095	D3-NMEFOSAA	0.04	ug/mL
D5-NETFOSA	22K0095	D5-NETFOSA	0.02	ug/mL
D5-NETFOSAA	22K0095	D5-NETFOSAA	0.04	ug/mL
D7-NMEFOSE	22K0095	D7-NMEFOSE	0.2	ug/mL
D9-NETFOSSE	22K0095	D9-NETFOSSE	0.2	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
22K0095	MPFAC-HIF-ES-EIS	07/20/2022	Wellington Laboratories	MPFACHIFES0822	08/02/2025	11/04/2022 12:16 by DAG	0.4

Analytical Standard Record

22L0273

Description:	MPFAC-HIF-ES 20.0ng/mL	Expires:	06/12/2023
Standard Type:	Surrogate Spike	Prepared:	12/14/2022
Solvent:	MeOH/62244	Prepared By:	Andonios Karas
Final Volume (mls):	10	Department:	PFAS
Vials:	3	Last Edit:	12/14/2022 13:55 by ABK
Comments:	Half the concentration of previous EIS solution used for 1633/B-15. Double the spiking volume from 100 uL to 200 uL		

Analyte	Parent	CAS Number	Concentration	Units
13C2-4:2FTS	22K0095	13C2-4:2FTS	0.04	ug/mL
13C2-6:2FTS	22K0095	13C2-6:2FTS	0.04	ug/mL
13C2-8:2FTS	22K0095	13C2-8:2FTS	0.04	ug/mL
13C2-PFDOA	22K0095	13C2-PFDOA	0.01	ug/mL
13C2-PFTEDA	22K0095	13C2-PFTEDA	0.01	ug/mL
13C3-HFPO-DA	22K0095	13C3-HFPO-DA	0.08	ug/mL
13C3-PFBS	22K0095	13C3-PFBS	0.02	ug/mL
13C3-PFHXS	22K0095	13C3-PFHXS	0.02	ug/mL
13C4-PFBA	22K0095	13C4-PFBA	0.08	ug/mL
13C4-PFHPA	22K0095	13C4-PFHPA	0.02	ug/mL
13C5-PFHXA	22K0095	13C5-PFHXA	0.02	ug/mL
13C5-PFPEA	22K0095	13C5-PFPEA	0.04	ug/mL
13C6-PFDA	22K0095	13C6-PFDA	0.01	ug/mL
13C7-PFUhA	22K0095	13C7-PFUJA	0.01	ug/mL
13C8-PFOA	22K0095	13C8-PFOA	0.02	ug/mL
13C8-PFOS	22K0095	13C8-PFOS	0.02	ug/mL
13C8-PFOSA	22K0095	13C8-PFOSA	0.02	ug/mL
13C9-PFNA	22K0095	13C9-PFNA	0.01	ug/mL
D3-NMEFOSA	22K0095	D3-NMEFOSA	0.02	ug/mL
D3-NMEFOSAA	22K0095	D3-NMEFOSAA	0.04	ug/mL
D5-NETFOSA	22K0095	D5-NETFOSA	0.02	ug/mL
D5-NETFOSAA	22K0095	D5-NETFOSAA	0.04	ug/mL
D7-NMEFOSE	22K0095	D7-NMEFOSE	0.2	ug/mL
D9-NETFOSSE	22K0095	D9-NETFOSSE	0.2	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
22K0095	MPFAC-HIF-ES-EIS	07/20/2022	Wellington Laboratories	MPFACHIFES0822	08/02/2025	11/04/2022 12:16 by DAG	0.4

Analytical Standard Record

22L0359

Description:	MPFAC-HIF-ES 20.0ng/mL	Expires:	06/19/2023
Standard Type:	Surrogate Spike	Prepared:	12/21/2022
Solvent:	MeOH/62244	Prepared By:	Dipti Gokal
Final Volume (mls):	10	Department:	PFAS
Vials:	3	Last Edit:	12/21/2022 10:46 by DAG
Comments:	Half the concentration of previous EIS solution used for 1633/B-15. Double the spiking volume from 100 uL to 200 uL		

Analyte	Parent	CAS Number	Concentration	Units
13C2-4:2FTS	22K0096	13C2-4:2FTS	0.04	ug/mL
13C2-6:2FTS	22K0096	13C2-6:2FTS	0.04	ug/mL
13C2-8:2FTS	22K0096	13C2-8:2FTS	0.04	ug/mL
13C2-PFDOA	22K0096	13C2-PFDOA	0.01	ug/mL
13C2-PFTEDA	22K0096	13C2-PFTEDA	0.01	ug/mL
13C3-HFPO-DA	22K0096	13C3-HFPO-DA	0.08	ug/mL
13C3-PFBS	22K0096	13C3-PFBS	0.02	ug/mL
13C3-PFHXS	22K0096	13C3-PFHXS	0.02	ug/mL
13C4-PFBA	22K0096	13C4-PFBA	0.08	ug/mL
13C4-PFHPA	22K0096	13C4-PFHPA	0.02	ug/mL
13C5-PFHXA	22K0096	13C5-PFHXA	0.02	ug/mL
13C5-PFPEA	22K0096	13C5-PFPEA	0.04	ug/mL
13C6-PFDA	22K0096	13C6-PFDA	0.01	ug/mL
13C7-PFUHA	22K0096	13C7-PFUHA	0.01	ug/mL
13C8-PFOA	22K0096	13C8-PFOA	0.02	ug/mL
13C8-PFOS	22K0096	13C8-PFOS	0.02	ug/mL
13C8-PFOSA	22K0096	13C8-PFOSA	0.02	ug/mL
13C9-PFNA	22K0096	13C9-PFNA	0.01	ug/mL
D3-NMEFOSA	22K0096	D3-NMEFOSA	0.02	ug/mL
D3-NMEFOSAA	22K0096	D3-NMEFOSAA	0.04	ug/mL
D5-NETFOSA	22K0096	D5-NETFOSA	0.02	ug/mL
D5-NETFOSAA	22K0096	D5-NETFOSAA	0.04	ug/mL
D7-NMEFOSE	22K0096	D7-NMEFOSE	0.2	ug/mL
D9-NETFOSAE	22K0096	D9-NETFOSAE	0.2	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
22K0096	MPFAC-HIF-ES-EIS	07/20/2022	Wellington Laboratories	MPFACHIFES0822	08/02/2025	11/04/2022 12:16 by DAG	0.4